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Impressum



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Abstract

The simulation of heavy cluster ($A \geq 4$) emission in nucleon induced reactions was performed using the coalescence model combined with the intranuclear cascade evaporation model and pick-up coalescence model combined with hybrid precompound and evaporation model.

^7Be production cross-sections for neutron and proton induced reactions were calculated for 274 stable targets from C to Bi at primary particle energies up to 200 MeV. The data obtained supplement the content of existing activation data files and can be used for the calculation of ^7Be production rates in nucleon induced reactions at intermediate energies.

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1. Introduction

An emission of heavy clusters or intermediate mass fragments (IMF) from excited nuclei plays a special important role in nucleon induced reactions at intermediate energies. The emission results in appearing of specific residual nuclei and is essentially a predominant or single source of their production.

A modeling of IMF emission, i.e. products heavier than ^4He , is a challenging task hindered by a complexity of relevant processes as a lack of knowledge about the mechanism. On the other hand, the role of such reactions for applications [1-3] leaves no doubt of need for the modeling.

In many codes, especially implementing a pre-equilibrium model and designed for relative low primary energies, the emission of heavy clusters is ignored, which results in a marked deviation of calculations from experimental data. As an example, Figure 1 and 2 show distributions of residuals for the reaction $p+\text{Fe}$ induced by protons with the energy 300 MeV and for the reaction and $p+\text{Au}$ induced by 160.6 MeV protons calculated using different codes without consideration of IMF emission, TALYS [4], DISCA-C [5], and CASCADE [6,7].

The present work concerns the modeling of heavy cluster emission using different models, which application depends on the type of main model describing an interaction of nucleons with nuclei. An exciton pick-up coalescence model combined with hybrid pre-equilibrium model, and the coalescence model combined with intranuclear cascade model are used for the simulation of non-equilibrium cluster emission. Models describing the cluster emission were implemented in computer codes [7,8], which success for the simulation of nuclear reactions at intermediate energies was demonstrated in many studies.

Using methods discussed below and computer codes modified the calculations of yields, energy and angular distributions of heavy clusters were performed for targets from C to Bi for nucleon induced reactions at energies up to 3 GeV. The cross-sections of $(p,x)^7\text{Be}$ and $(n,x)^7\text{Be}$ reactions were calculated for 274 stable targets at energies up to 200 MeV. Obtained data supplement a content of existing activation data libraries, which do not contain corresponding information.

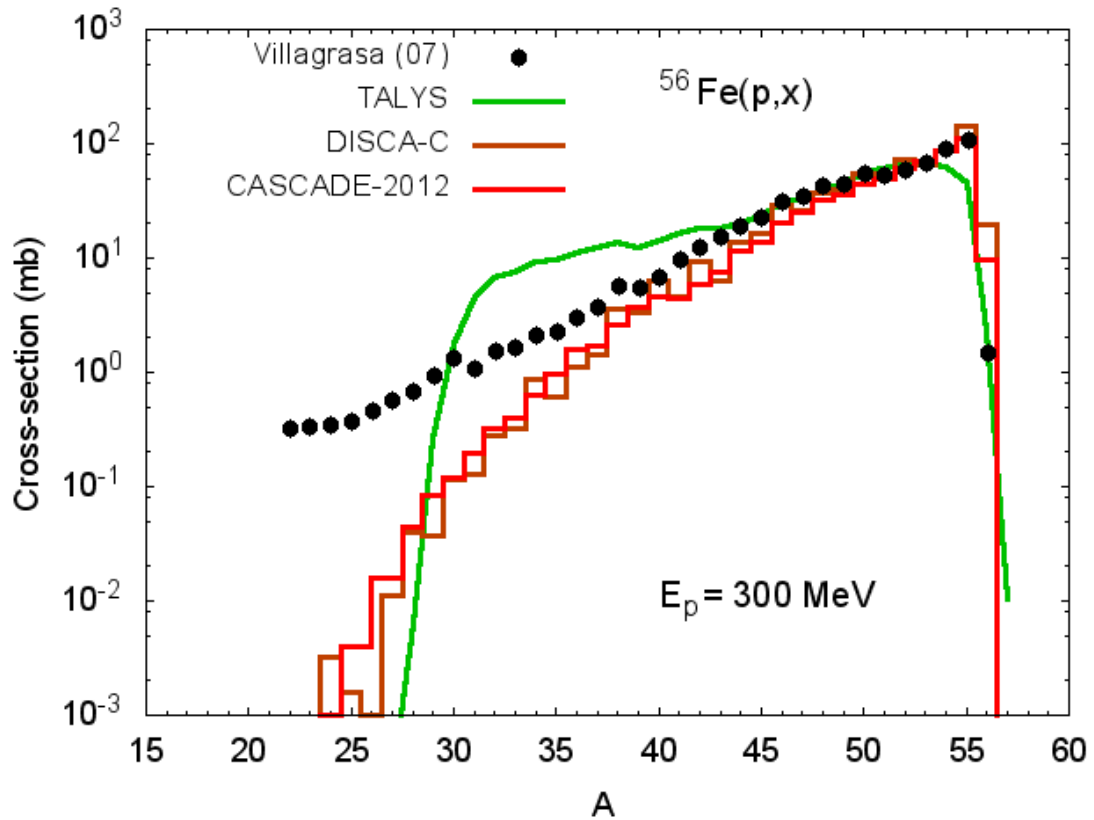


Fig.1 Example of calculated mass distribution of residuals without the modelling of IMF emission. Experimental data are from Ref.[122]. See explanations in the text.

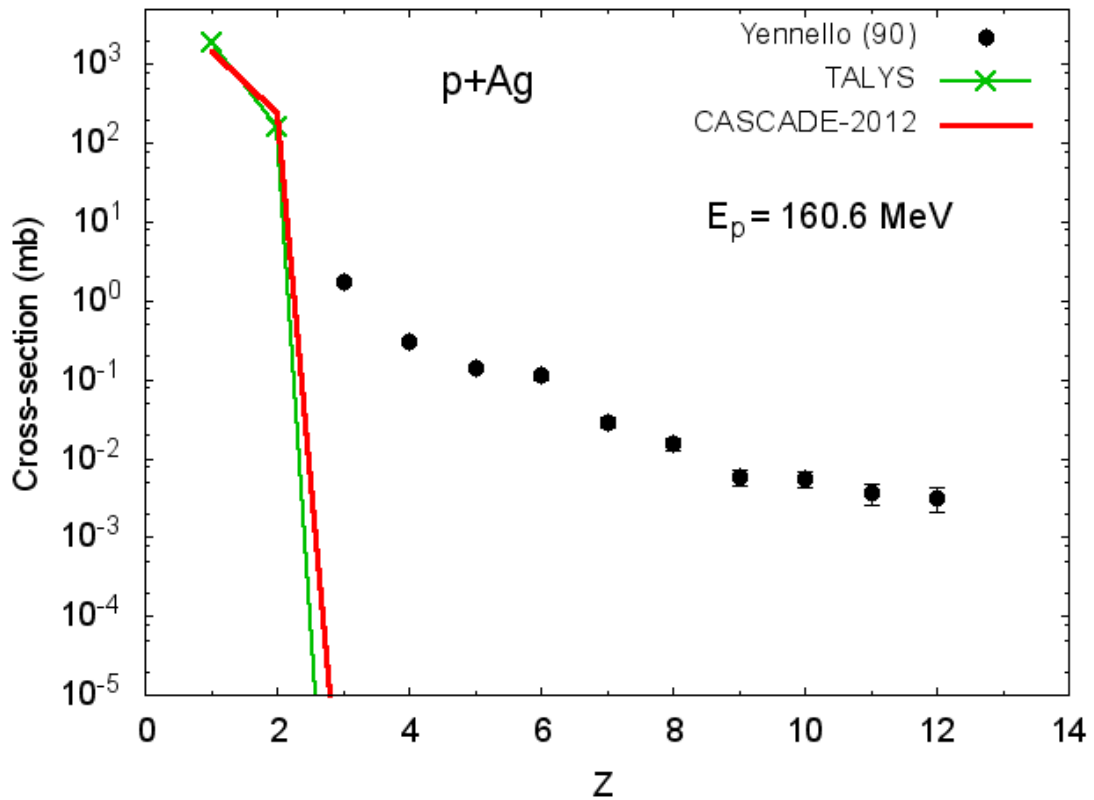


Fig.2 Example of calculated atomic number distribution of residuals without the modelling of IMF emission. Experimental data are from Ref.[128]. See explanations in the text.

The Chapter 2 describes the modeling of IMF using intranuclear cascade evaporation model, the Chapter 3 discusses the simulation of heavy cluster emission applying the hybrid precompound model and evaporation model. The approximate methods for the estimation of IMF production cross-sections are discussed in Chapter 4. Chapter 5 presents results of calculations for $(n,x)^7\text{Be}$ and $(p,x)^7\text{Be}$ reactions. Appendices A,B contain the calculated cross-sections for ^7Be production in nucleon induced reactions for 274 target nuclei.

Experimental data from Refs.[9-129] were used for the comparison with results of calculations using nuclear models and approximate methods.

2. Modeling of heavy cluster emission using intranuclear cascade evaporation model

2.1 Brief description of models used for the simulation

Semi-classical character of intranuclear cascade model (INC) enables its effective use for the modeling of heavy cluster emission in a combination with knock-out and coalescence models [130].

A direct use of the knock-out model is associated not so much with the problem of rewriting of the code to include new types of objects and interactions, but with an uncertainty of the predicted yields and distributions of emitted clusters. The modeling assumes a use of a number of unknown parameters as a cluster “pre-formation” probability and ones describing energy and angular distributions of products of n +cluster interactions in the nucleus. An experience of the use of knock-out model to describe the α -particle emission in nucleon induced reactions up to hundreds MeV applying the INC model [5] indicates a need to consider other than knock-out reaction mechanisms to reach an agreement with experimental data. These problems postpone the implementation of the consistent knock-out model for heavy cluster emission to the near future. Though an approximate variant of the model is discussed in Chapter 4.

A relative success of the coalescence model [3,131,132] used for the simulation of cluster emission with $A \leq 4$ in nucleon induced reactions is an argument attempting to use the model for the prediction of heavy cluster emission. An observed deviation of calculated and experimental values will be attributed both to the approximate nature of the model and the presence of other mechanisms of cluster formation.

The double differential cross-section for non-equilibrium emission of IMF is estimated in the present work following Refs [132-135]

$$\frac{d^2\sigma_x^{\text{non}}}{d\varepsilon_x d\Omega} \propto P_0^{3(A-1)} \frac{(\varepsilon_n - E_C)^{1/2}}{\varepsilon_n^{A/2}} \left(\frac{d^2\sigma_n^{\text{non}}}{d\varepsilon_n d\Omega} \right)^A, \quad (1)$$

where A is a number of nucleons in emitted x -cluster, E_C is the Coulomb potential for the outgoing fragment, $d^2\sigma_n^{\text{non}}/d\varepsilon_n d\Omega$ is the double differential cross-section of non-equilibrium neutrons, P_0 is the ‘‘coalescence’’ radius obtained from the comparison with available measured data.

The present works applies a ‘‘two-step’’ modelling of cluster formation [131, 132]. On the first step the nucleon distributions $d^2\sigma^{\text{non}}/d\varepsilon d\Omega$ are calculated. On the second one the cluster emission is modelled using Eq.(1) and the new nucleon distribution is calculated. Such modelling improves the energy balance and yields of residuals in nuclear reactions comparing with the original formulation [133-135].

The equilibrium emission of nucleons and clusters is simulated using the Weisskopf-Ewing model. Inverse reaction cross-sections are estimated according to Refs.[7,136].

2.2 New version of CASCADE code

Calculations were performed using a new version of the CASCADE code [7]. A main modification of the code concerns the simulation of non-equilibrium and equilibrium emission of fragments with $A > 4$. Changes and improvements of CASCADE are briefly listed below

- the modeling of emission of six ejectiles (n, p, d, t, ^3He , α -particle) was supplemented by fragments with $Z < 20$. Particles and fragments included in default input set are shown in Table 1. The list can be extended up to 700 fragments

- two "independent" versions of the code used in KIT implementing the approximate knock-out model and the coalescence model were unified. A type of the model used for the simulation of non-equilibrium cluster emission is selected in the input data file

- the procedure considering the decay of short-lived nuclei, like ^8Be , was added to the code, which improves the calculation of yields of residuals and cluster production cross-sections for light targets

- the calculation of nonelastic cross-sections was improved. The old approximation is still available by selecting an input parameter

- the set of default model parameters including ones for knock-out and coalescence models responsible for light and heavy cluster emission was added to the code. The values can be modified in the input data file or in the code

- the use of external data files with additional parameters, like effective displacement threshold energy, was simplified

- a number of improvement has been made for the optimal count of important reaction characteristics and for the flexible work with the code

- a number of "bugs" concerning rare but possible events, which cause the code stop was fixed.

The main specific features of the calculations concerning the use of the INC model implemented in CASCADE can be found in Refs.[7,132]. The calculation of yields of light clusters and nucleons and the comparison with measured data was discussed in many works, see, for example, Refs.[131,132,137,138].

The results of the modeling of heavy cluster emission are discussed below. Calculations were performed using default set of model parameters responsible for the fragment emission. These parameters can be modified for outgoing d,t, ^3He , and α -particles in the input data file and in the code and for other emitted fragments in

the code. A detail explanation to the change of default parameters is given in the code text in comments.

Table 1. Particles and nuclei, which emission is simulated and included in default input set of new version of the CASCADE code

Z																	
0	n																
1	p	d	t														
2	³ He	⁴ He	⁶ He														
3	⁶ Li	⁷ Li	⁸ Li	⁹ Li													
4	⁷ Be	⁹ Be	¹⁰ Be	¹¹ Be	¹² Be	¹³ Be											
5	⁸ B	¹⁰ B	¹¹ B	¹² B	¹³ B	¹⁴ B	¹⁵ B										
6	⁹ C	¹⁰ C	¹¹ C	¹² C	¹³ C	¹⁴ C	¹⁵ C	¹⁶ C	¹⁷ C	¹⁸ C							
7	¹² N	¹³ N	¹⁴ N	¹⁵ N	¹⁶ N	¹⁷ N	¹⁸ N	¹⁹ N	²⁰ N	²¹ N							
8	¹³ O	¹⁴ O	¹⁵ O	¹⁶ O	¹⁷ O	¹⁸ O	¹⁹ O	²⁰ O	²¹ O	²² O	²³ O	²⁴ O					
9	¹⁷ F	¹⁸ F	¹⁹ F	²⁰ F	²¹ F	²² F	²³ F	²⁴ F	²⁵ F	²⁶ F	²⁷ F						
10	¹⁷ Ne	¹⁸ Ne	¹⁹ Ne	²⁰ Ne	²¹ Ne	²² Ne	²³ Ne	²⁴ Ne	²⁵ Ne	²⁶ Ne	²⁷ Ne	²⁸ Ne	²⁹ Ne				
11	²⁰ Na	²¹ Na	²² Na	²³ Na	²⁴ Na	²⁵ Na	²⁶ Na	²⁷ Na	²⁸ Na	²⁹ Na	³⁰ Na	³¹ Na	³² Na				
12	²⁰ Mg	²¹ Mg	²² Mg	²³ Mg	²⁴ Mg	²⁵ Mg	²⁶ Mg	²⁷ Mg	²⁸ Mg	²⁹ Mg	³⁰ Mg	³¹ Mg	³² Mg	³³ Mg			
13	²² Al	²³ Al	²⁴ Al	²⁵ Al	²⁶ Al	²⁷ Al	²⁸ Al	²⁹ Al	³⁰ Al	³¹ Al	³² Al	³³ Al	³⁴ Al	³⁵ Al	³⁶ Al		
14	²² Si	²³ Si	²⁴ Si	²⁵ Si	²⁶ Si	²⁷ Si	²⁸ Si	²⁹ Si	³⁰ Si	³¹ Si	³² Si	³³ Si	³⁴ Si	³⁵ Si	<...> ³⁸ Si		
<...>																	
20	³⁵ Ca	³⁶ Ca	³⁷ Ca	³⁸ Ca	³⁹ Ca	⁴⁰ Ca	⁴¹ Ca	⁴² Ca	⁴³ Ca	⁴⁴ Ca	⁴⁵ Ca	⁴⁶ Ca	⁴⁷ Ca	⁴⁸ Ca	<...> ⁵¹ Ca		

2.3 Comparison with experimental data

Examples of calculations performed using the new version of CASCADE code are shown in Figs.3-23.

Figs.3-7 presents double differential cross-sections of ⁶He and ⁷Be emission in 1.2 GeV proton induced reactions on Ni and Au. Figs.8-15 show production cross-sections of ⁶He, ⁶Li, ⁷Li, ⁸Li, ⁹Li, ⁷Be, ⁹Be, and ¹⁰Be for reaction on different targets from Al to Bi irradiated with protons of energy 1.2 GeV. Examples of calculated atomic mass- and atomic number distributions of fragments are shown in Figs.16-19 for ⁵⁶Fe and Ag irradiated with protons of different energies.

Figs.20-23 presents calculated ⁷Be production cross-sections for proton induced reactions on ²⁷Al, Fe, ⁹³Nb, and ¹⁹⁷Au at incident energies up to 3 GeV.

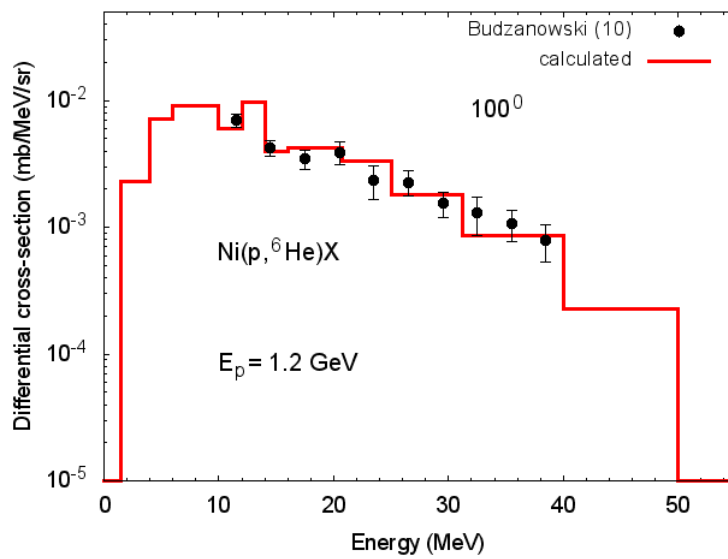
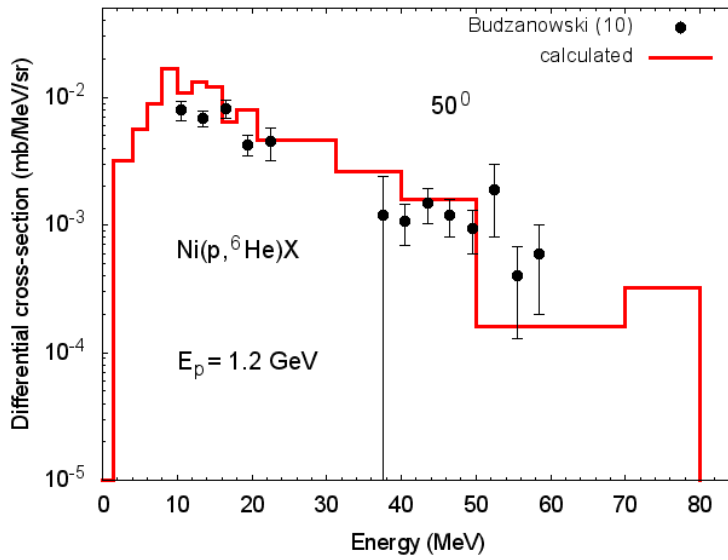
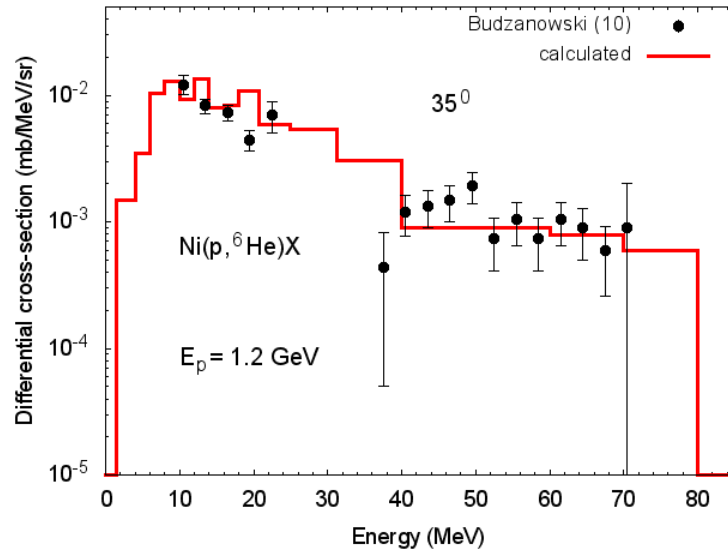


Fig.3 Calculated and experimental double differential cross-section of ${}^6\text{He}$ production in p+Ni interactions at the primary proton energy 1.2 GeV. Experimental data are from Ref[36].

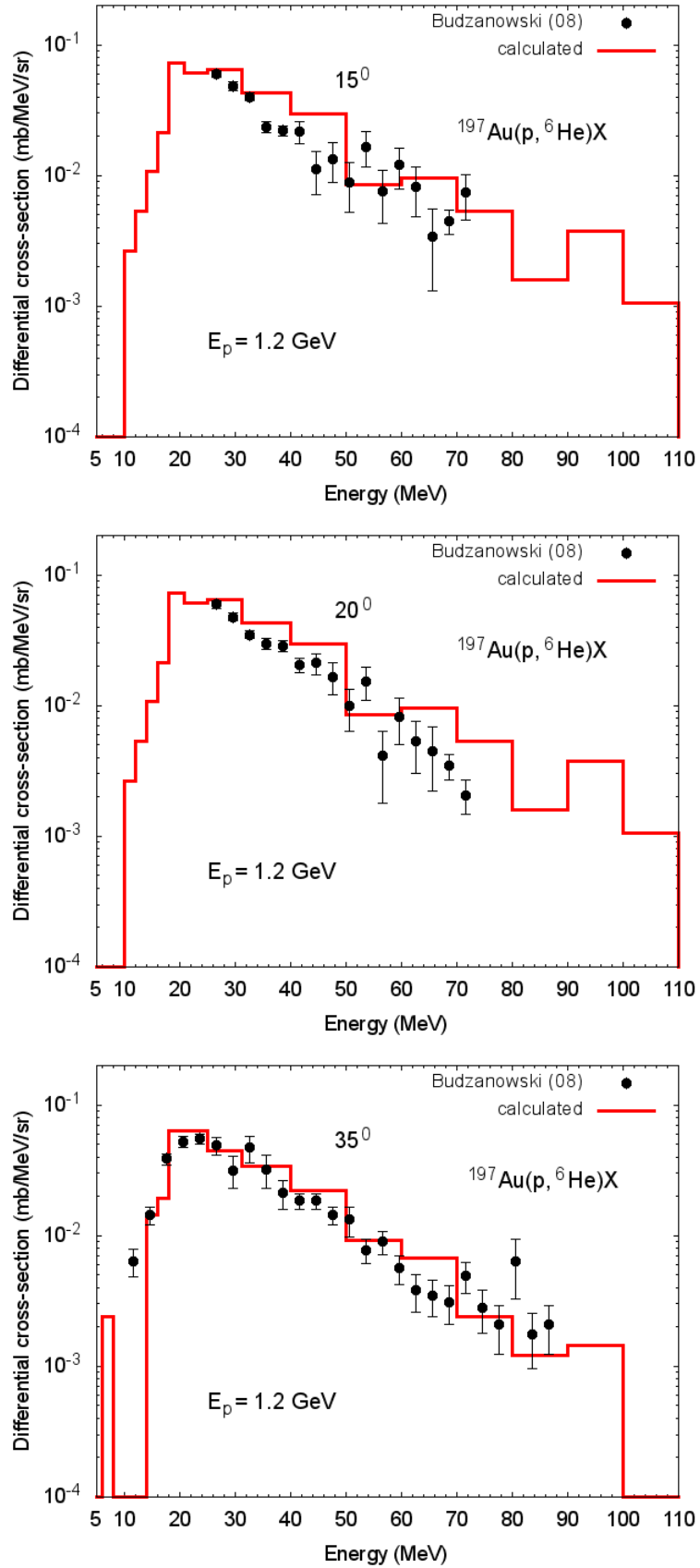


Fig.4 Calculated and experimental double differential cross-section of ${}^6\text{He}$ production for $p+\text{Au}$ reaction at 15° , 20° , and 35° at the primary proton energy 1.2 GeV. Experimental data are from Ref.[34].

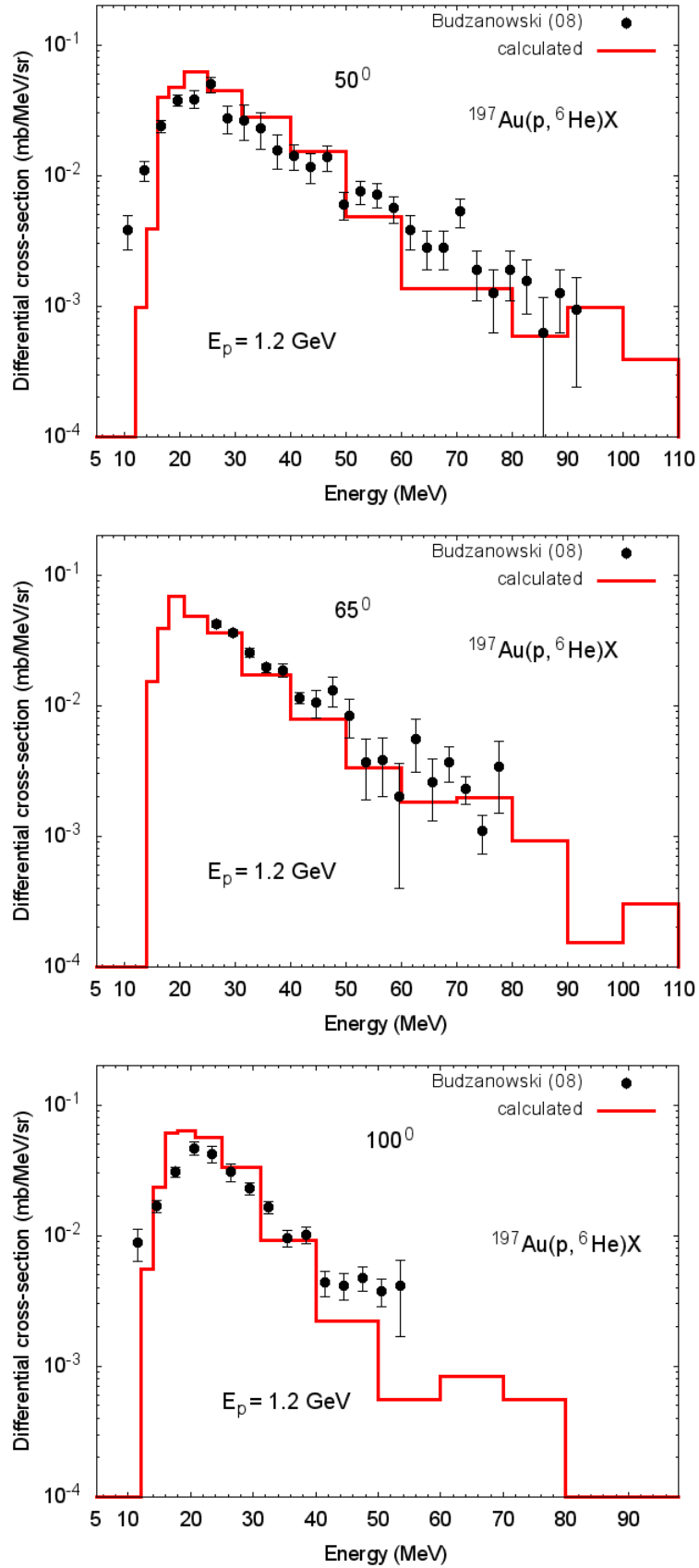


Fig.5 Calculated and experimental double differential cross-section of ${}^6\text{He}$ production for $p+\text{Au}$ reaction at 50° , 65° , and 100° at the primary proton energy 1.2 GeV. Experimental data are from Ref[34].

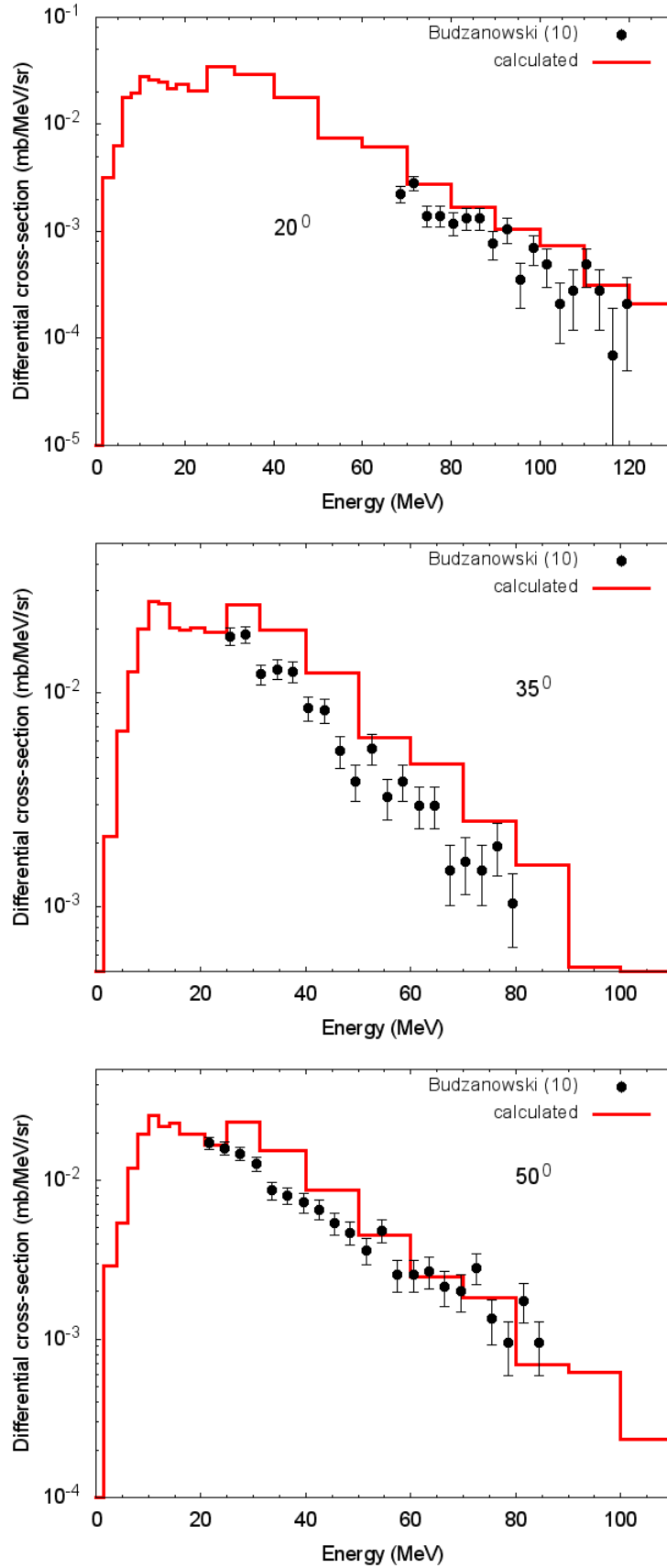


Fig.6 Calculated and experimental double differential cross-section of ${}^7\text{Be}$ production for $p+\text{Ni}$ reaction at 20° , 35° , and 50° at the primary proton energy 1.2 GeV. Experimental data are from Ref[36].

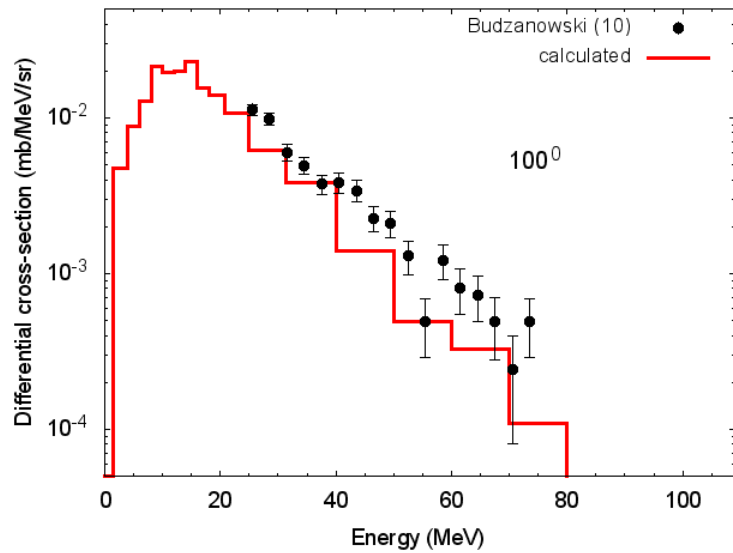
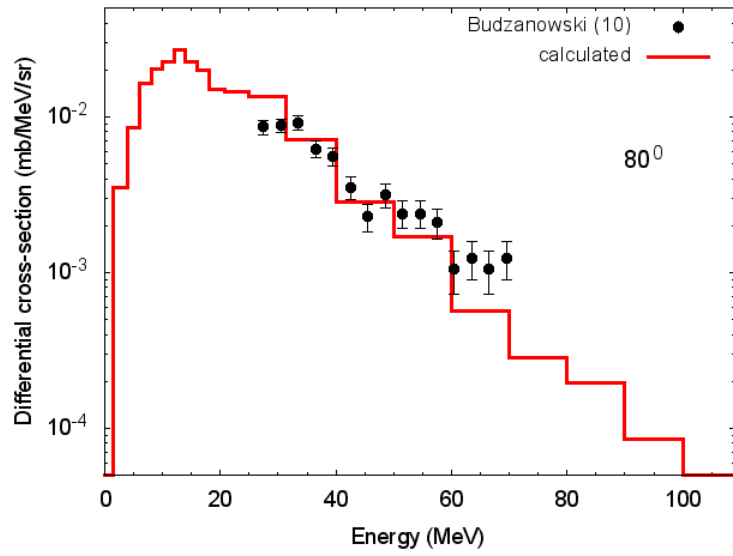
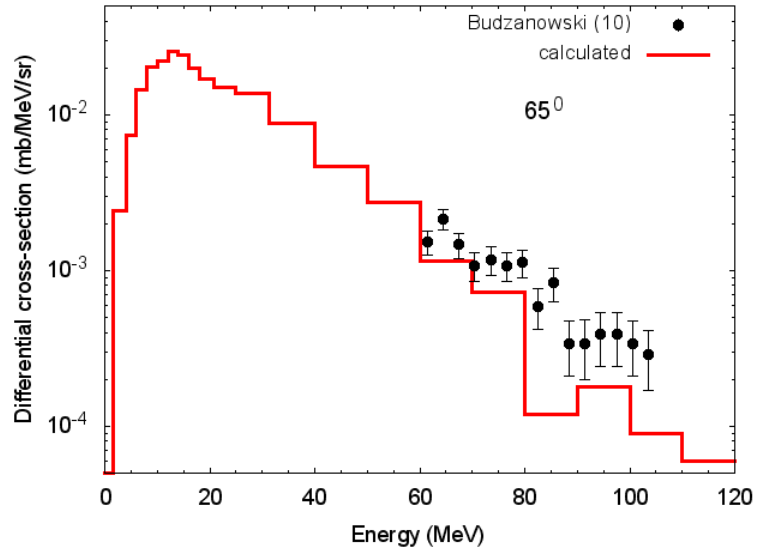


Fig.7 Calculated and experimental double differential cross-section of ${}^7\text{Be}$ production for p+Ni reaction at 65° , 80° , and 100° at the primary proton energy 1.2 GeV. Experimental data are from Ref.[36].

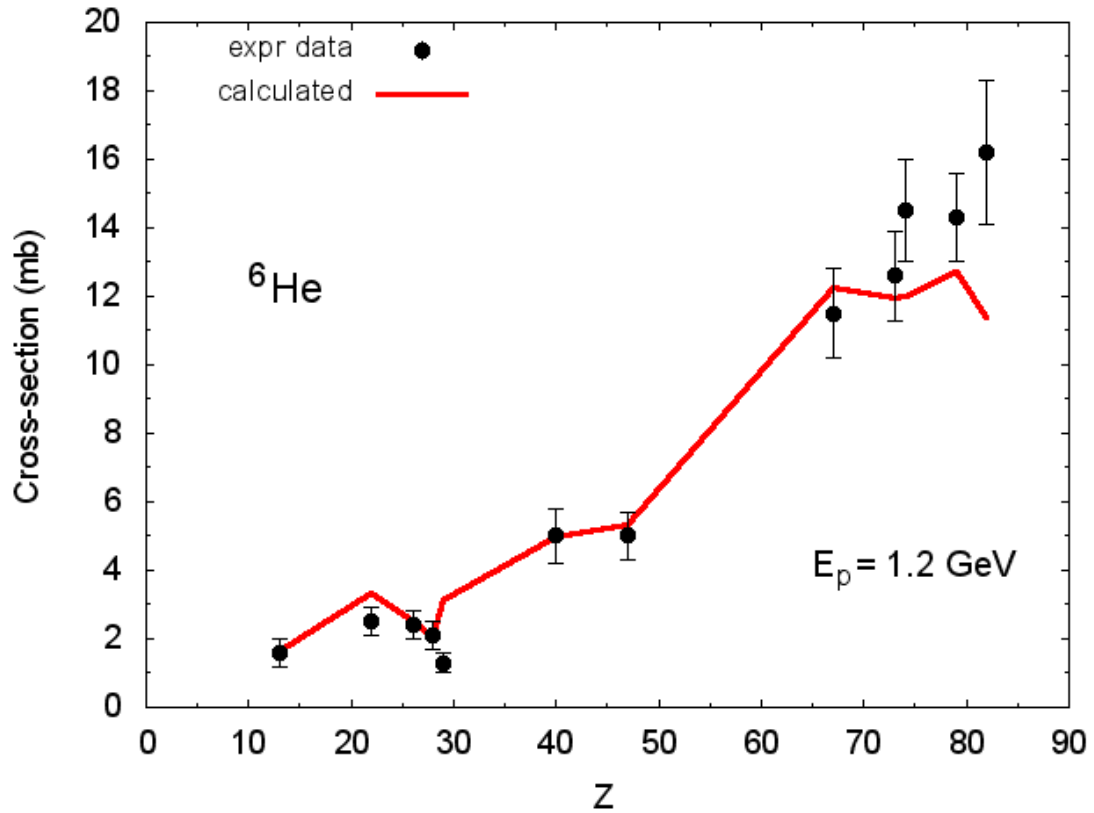


Fig.8 Production cross-section of ${}^6\text{He}$ with kinetic energies up to 100 MeV in 1.2 GeV proton induced reactions on targets from Al to Bi calculated in the present work and measured in Ref.[49].

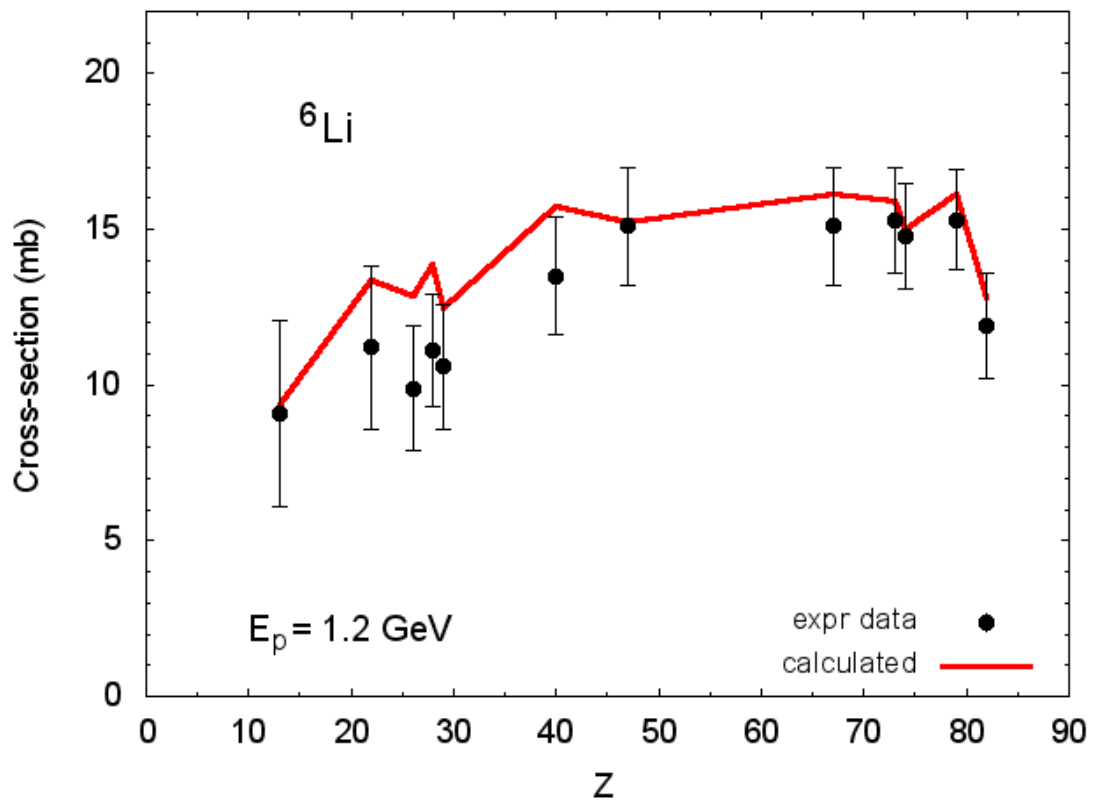


Fig.9 Production cross-section of ${}^6\text{Li}$ with kinetic energies up to 100 MeV in 1.2 GeV proton induced reactions on targets from Al to Bi calculated in the present work and measured in Ref.[49].

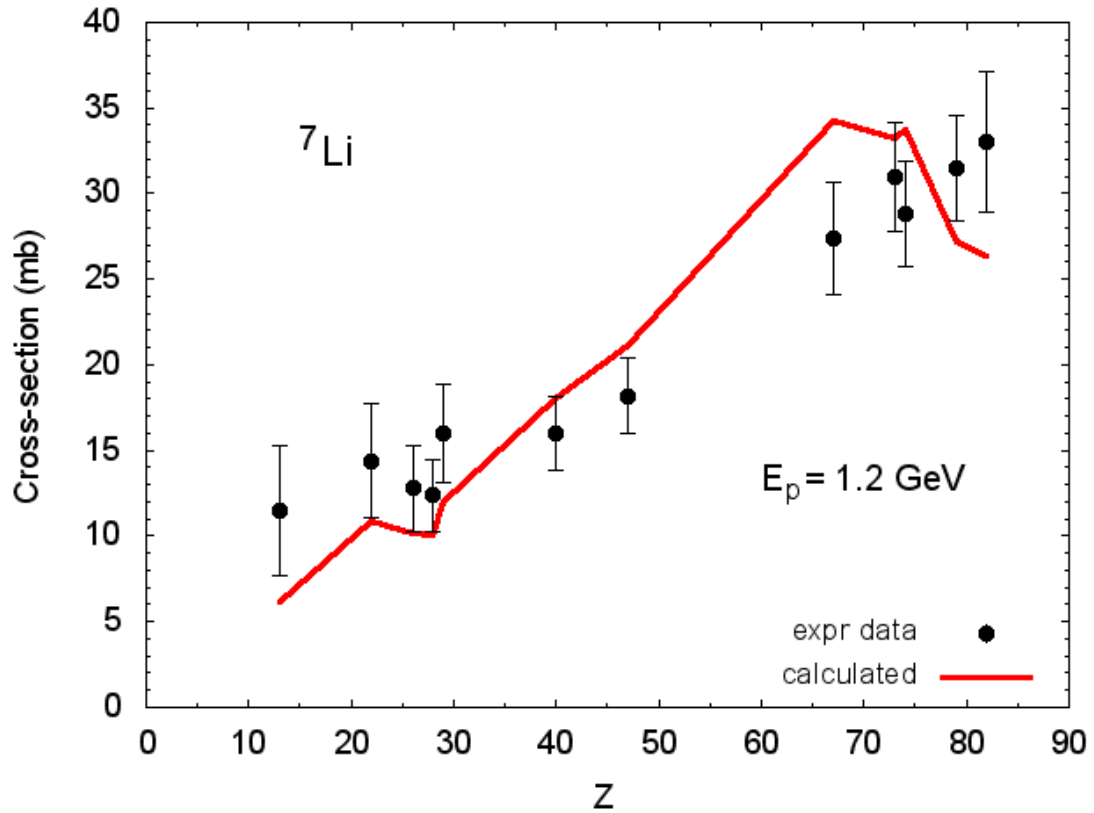


Fig.10 Production cross-section of ${}^7\text{Li}$ with kinetic energies up to 100 MeV in 1.2 GeV proton induced reactions on targets from Al to Bi calculated in the present work and measured in Ref.[49].

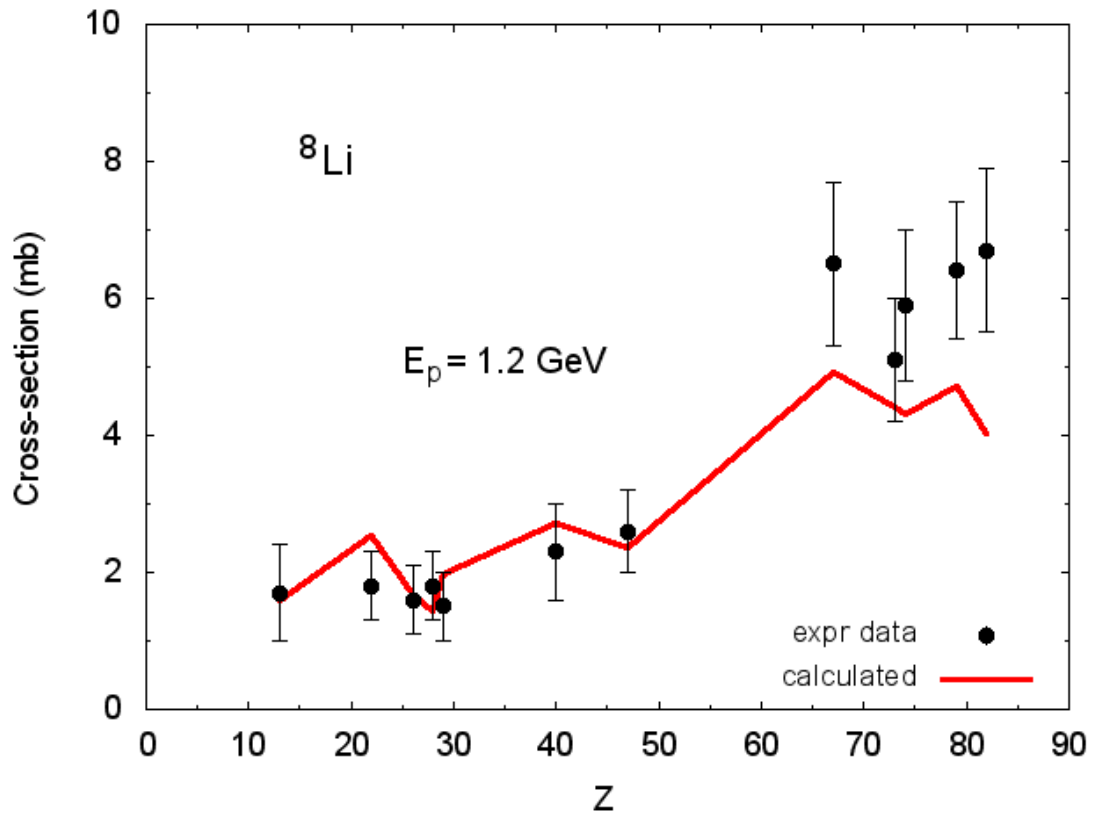


Fig.11 Production cross-section of ${}^8\text{Li}$ with kinetic energies up to 100 MeV in 1.2 GeV proton induced reactions on targets from Al to Bi calculated in the present work and measured in Ref.[48].

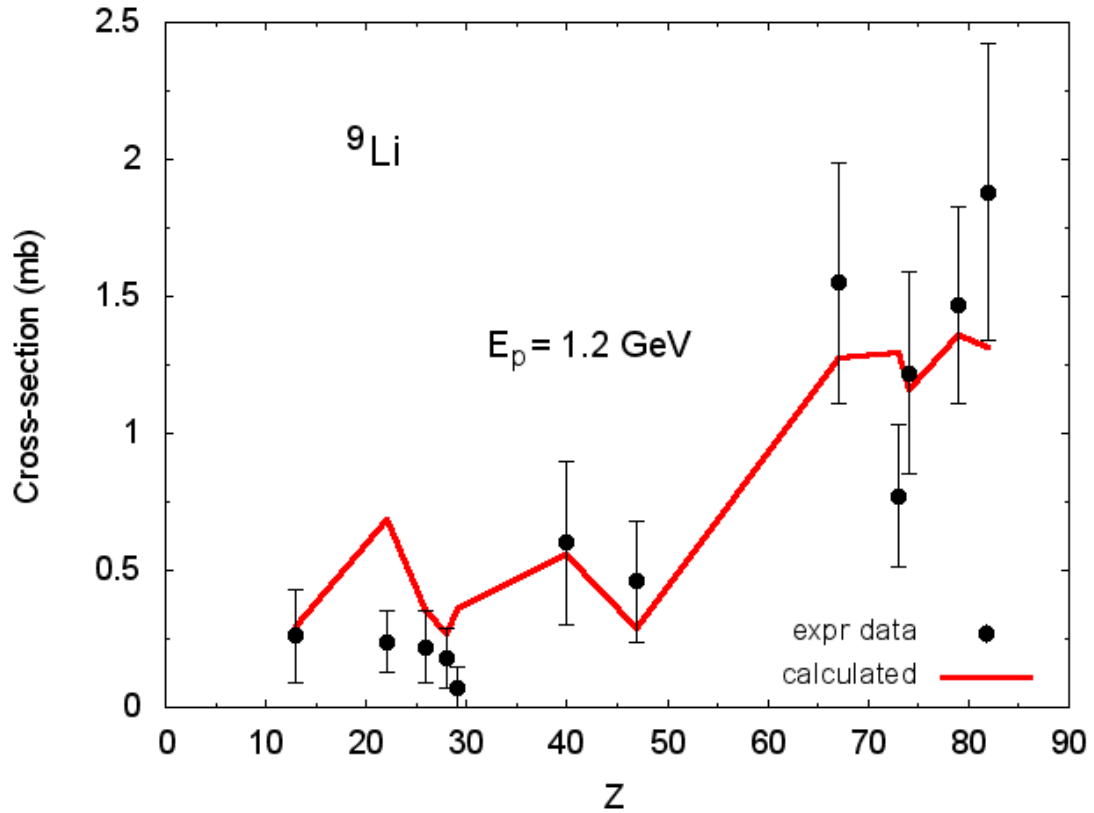


Fig.12 Production cross-section of ${}^9\text{Li}$ with kinetic energies up to 100 MeV in 1.2 GeV proton induced reactions on targets from Al to Bi calculated in the present work and measured in Ref.[49].

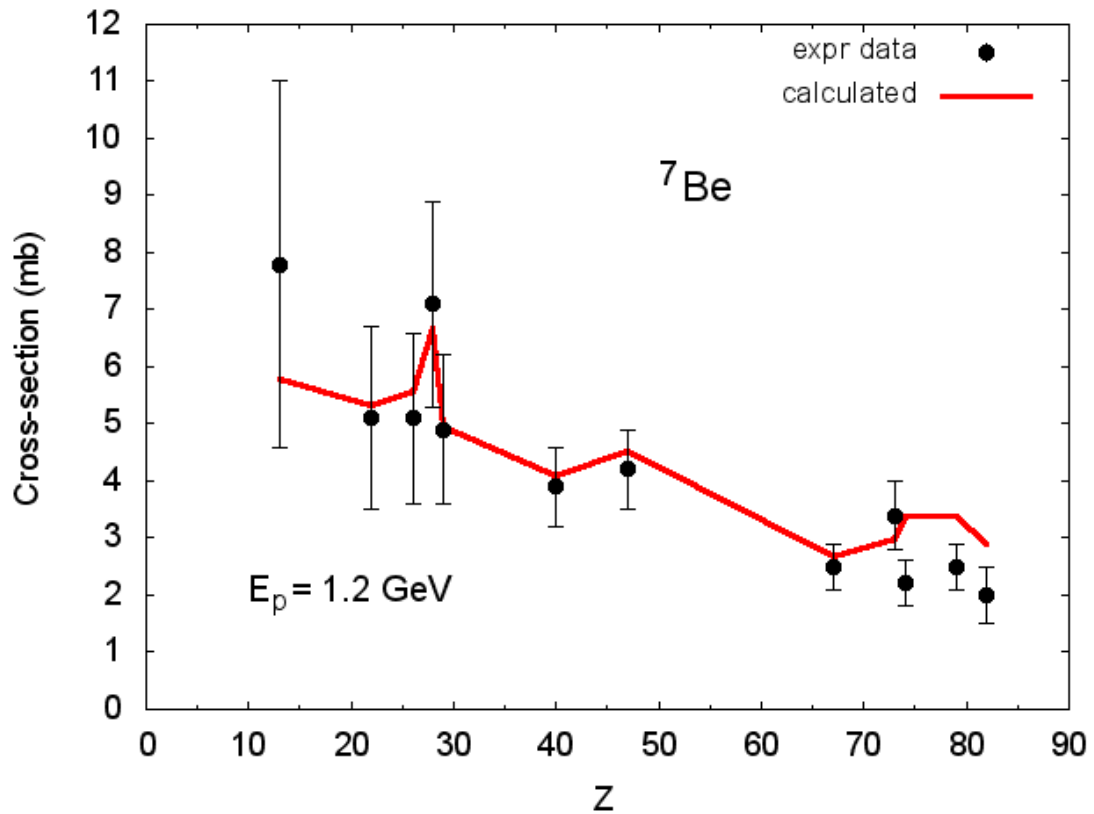


Fig.13 Production cross-section of ${}^7\text{Be}$ with kinetic energies up to 100 MeV in 1.2 GeV proton induced reactions on targets from Al to Bi calculated in the present work and measured in Ref.[49].

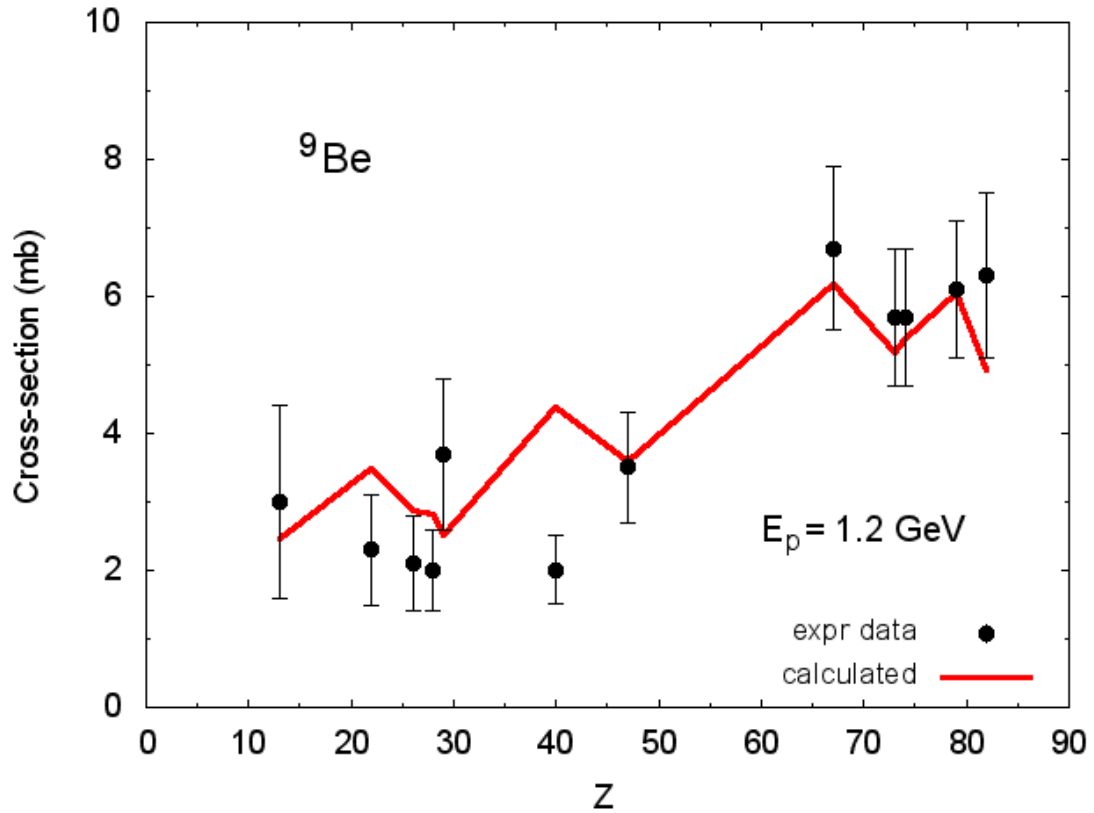


Fig.14 Production cross-section of ${}^9\text{Be}$ with kinetic energies up to 100 MeV in 1.2 GeV proton induced reactions on targets from Al to Bi calculated in the present work and measured in Ref.[49].

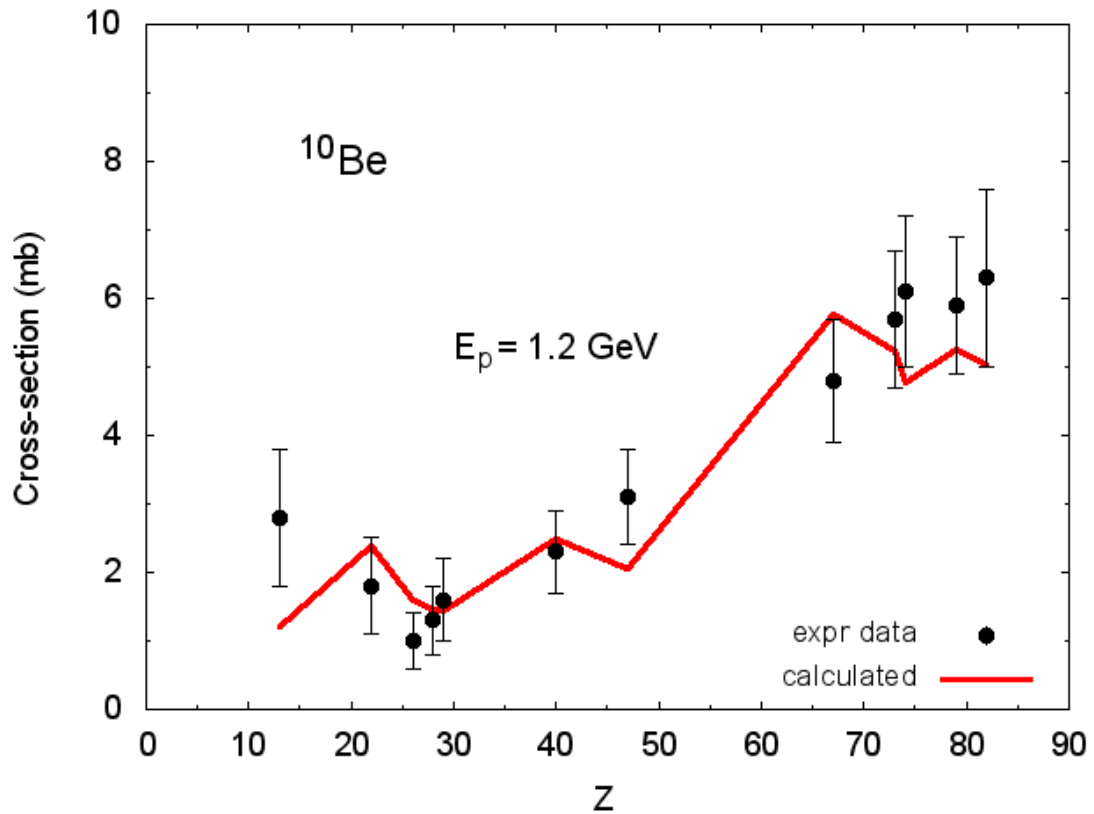


Fig.15 Production cross-section of ${}^{10}\text{Be}$ with kinetic energies up to 100 MeV in 1.2 GeV proton induced reactions on targets from Al to Bi calculated in the present work and measured in Ref.[49].

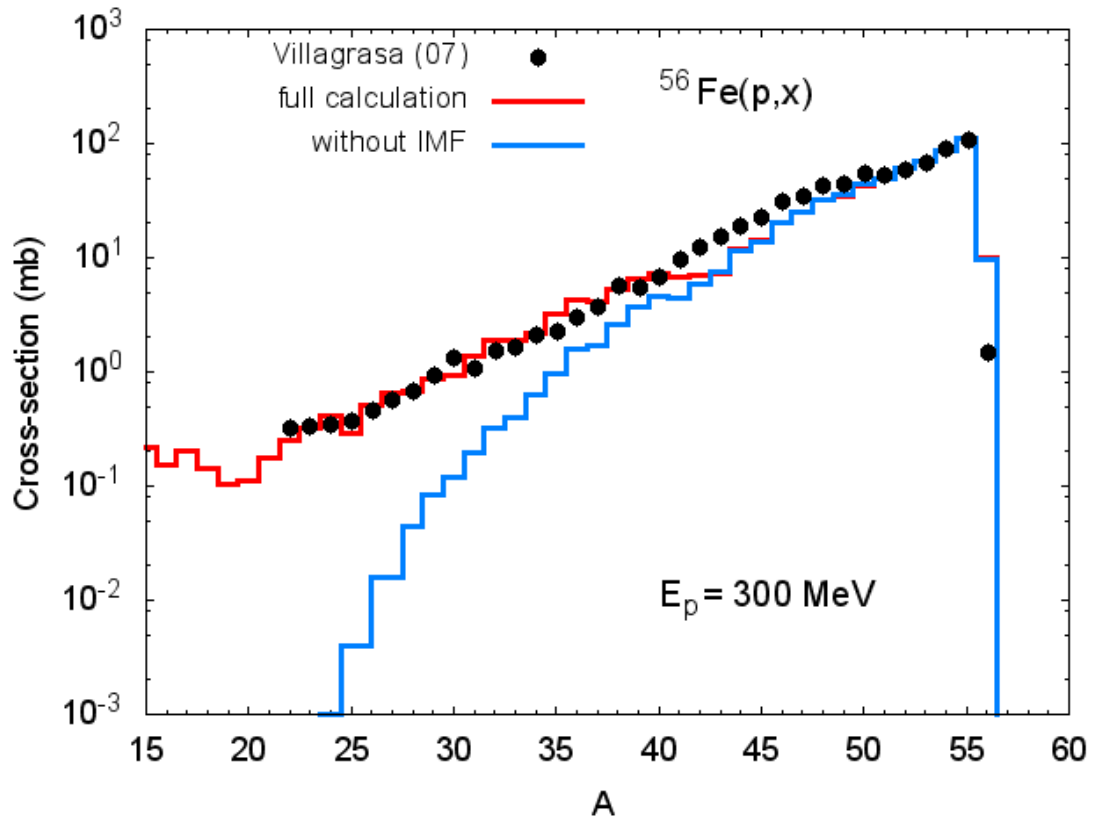


Fig.16 Mass distribution of fragments for 0.3 GeV proton induced reaction on ^{56}Fe calculated with and without consideration of heavy cluster emission. Experimental data are cited by Ref.[122].

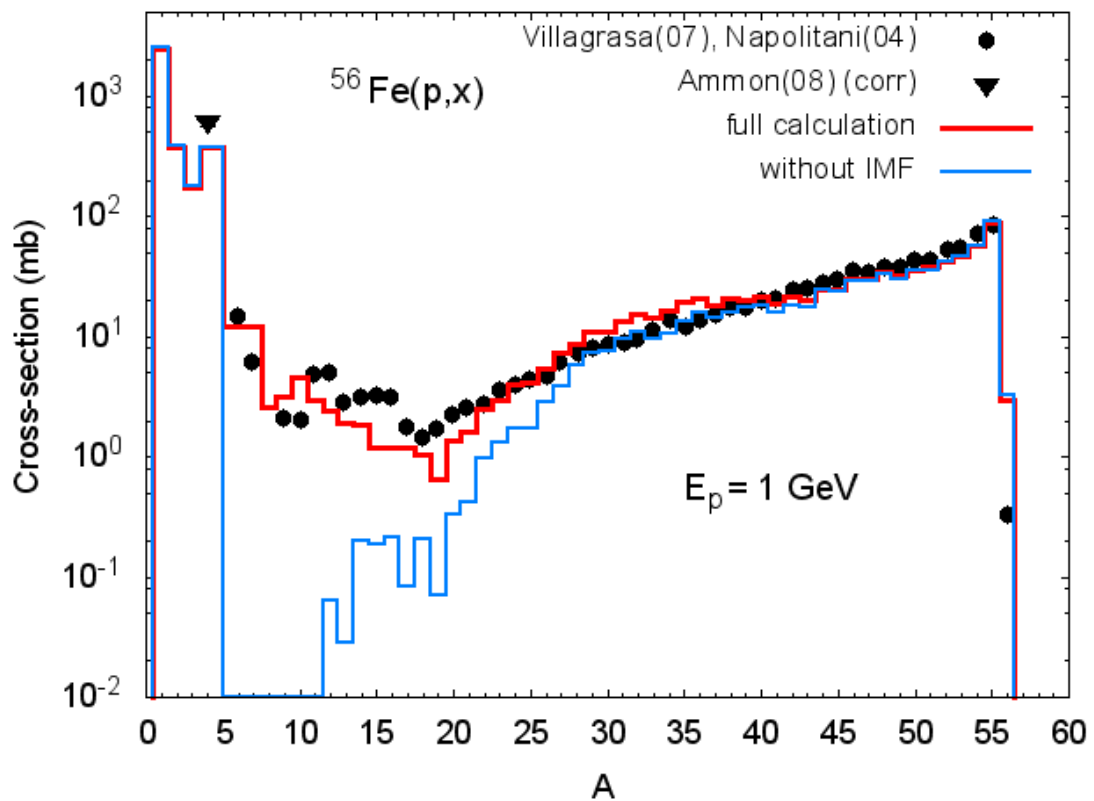


Fig.17 Mass distribution of fragments for 1 GeV proton induced reaction on ^{56}Fe calculated with and without consideration of heavy cluster emission. Experimental data are cited by Refs.[19,77,122].

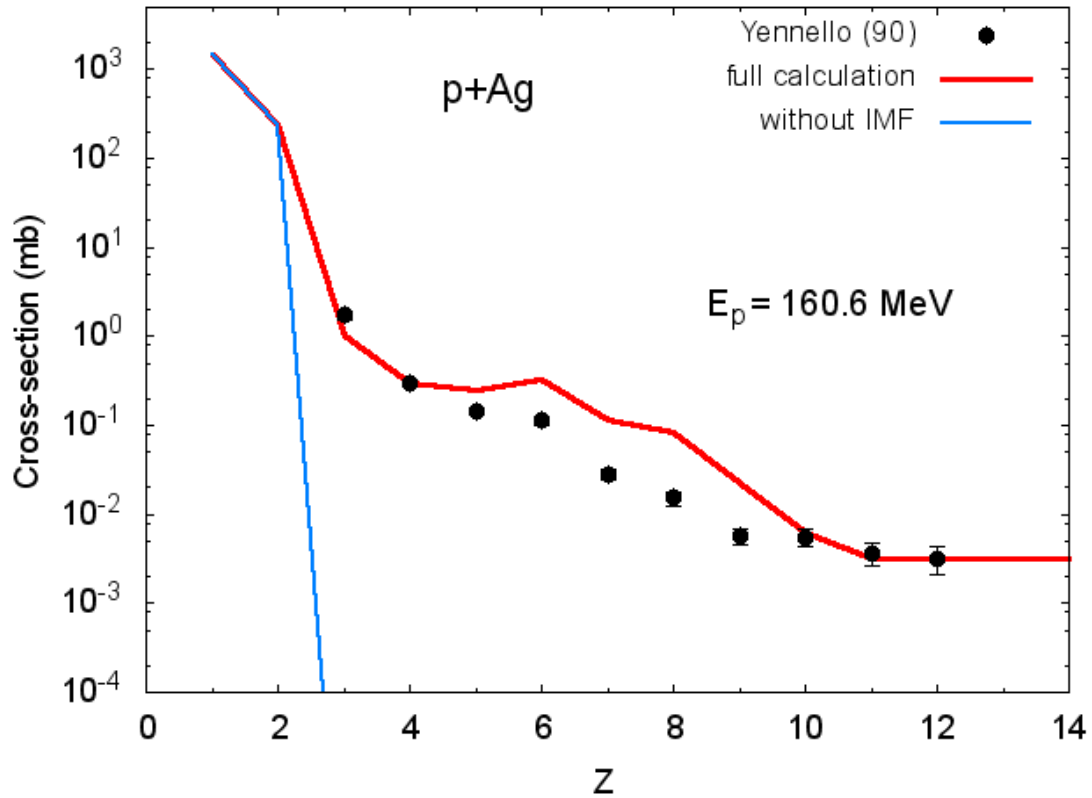


Fig.18 Atomic number distribution of fragments for 160.6 MeV proton induced reaction on Ag calculated with and without consideration of heavy cluster emission. Experimental data are taken from Ref.[128].

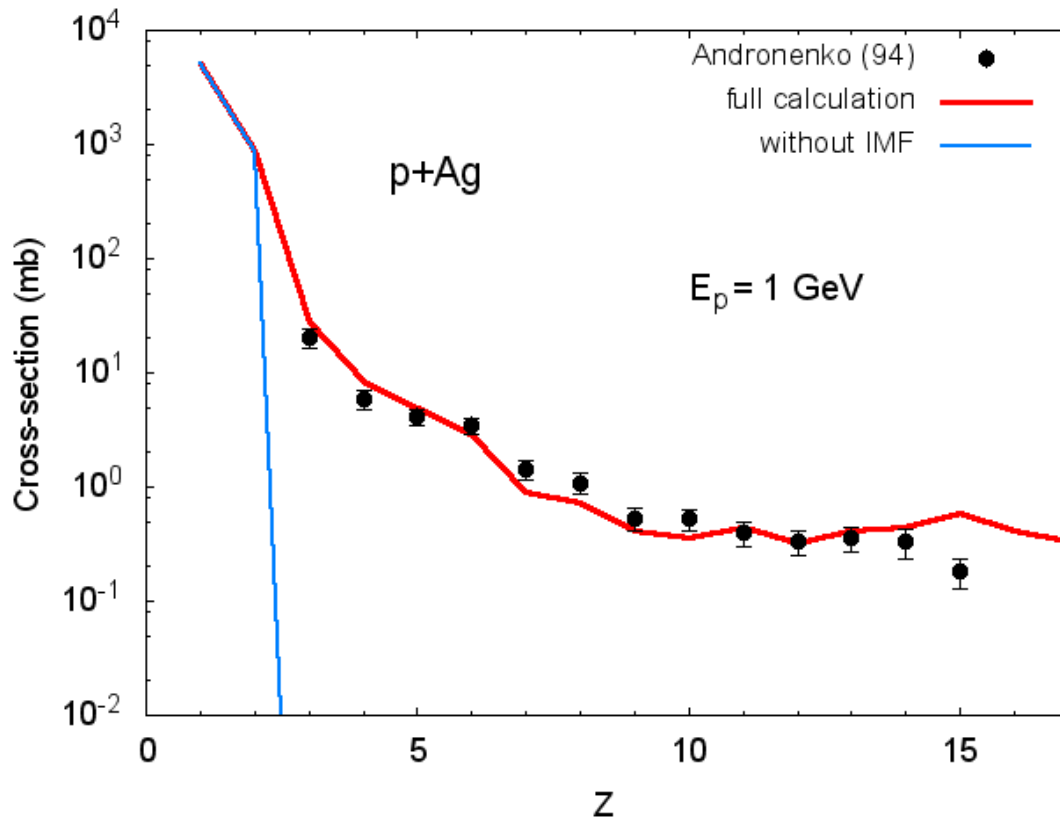


Fig.19 Atomic number distribution of fragments for 1 GeV proton induced reaction on Ag calculated with and without consideration of heavy cluster emission. Experimental data are taken from Ref.[20,61].

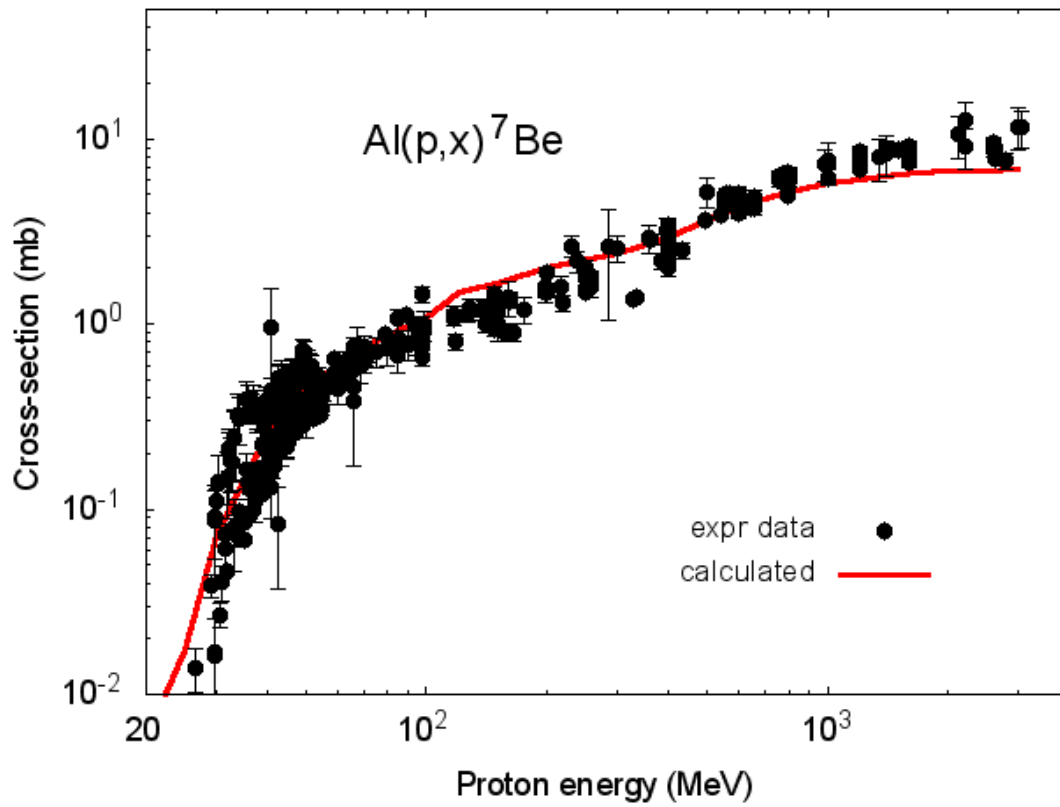


Fig.20 Cross-section of $^{27}\text{Al}(p,x)^7\text{Be}$ reaction calculated in the present work and measured data. See details in the text.

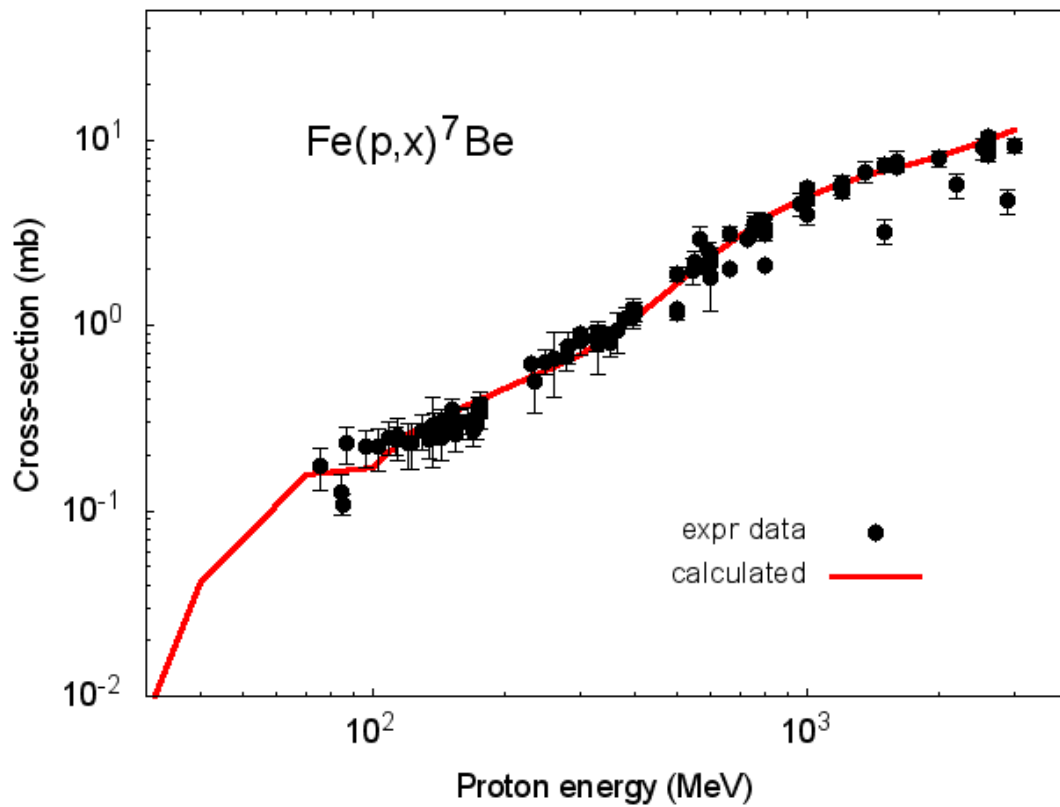


Fig.21 Cross-section of $^{56}\text{Fe}(p,x)^7\text{Be}$ reaction calculated in the present work and measured data.

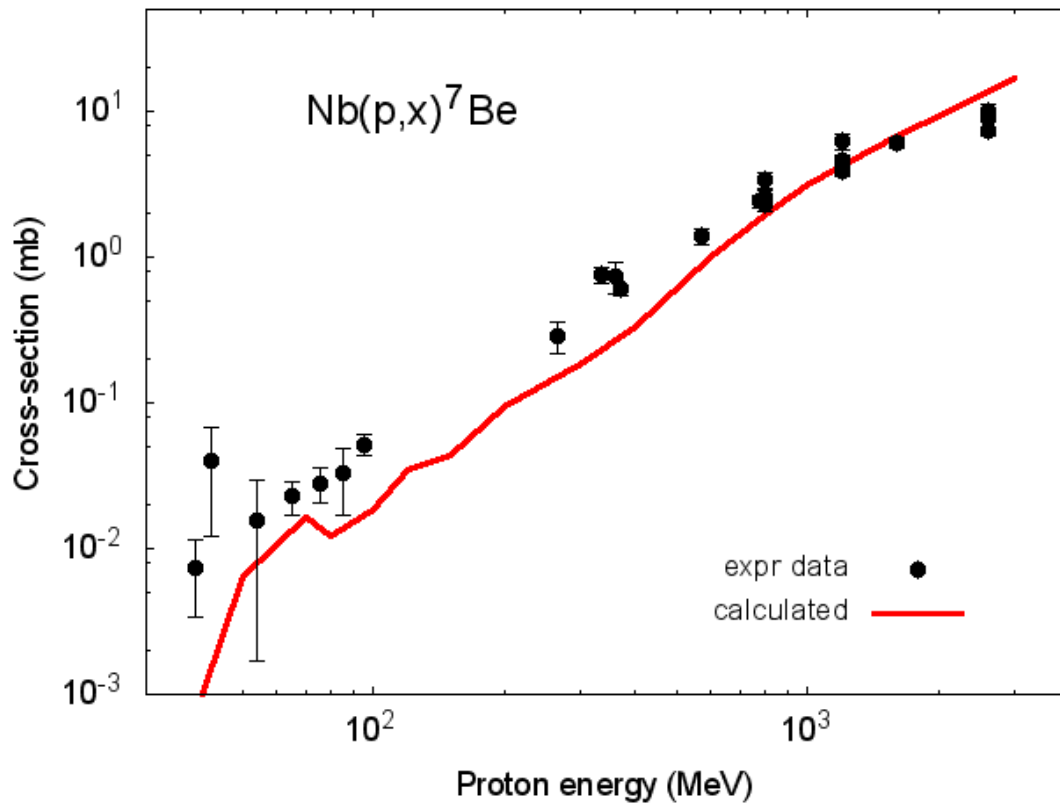


Fig.22 Cross-section of $^{93}\text{Nb}(p,x)^7\text{Be}$ reaction calculated in the present work and measured data.

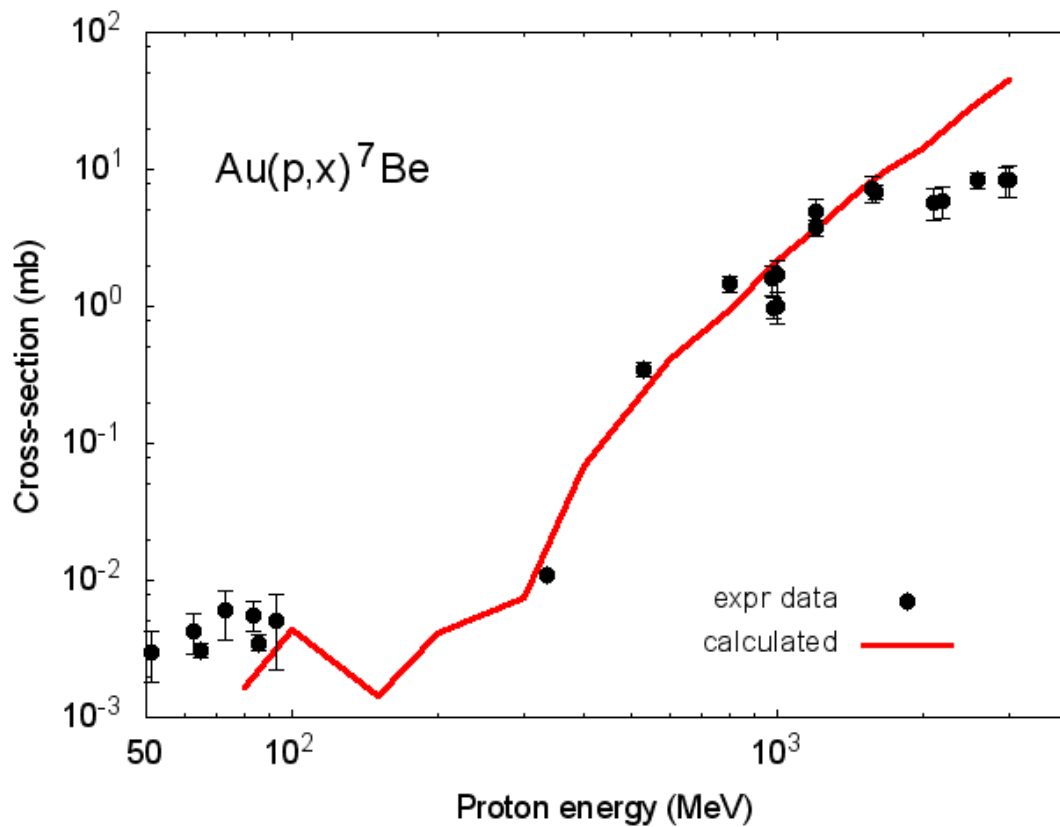


Fig.23 Cross-section of $^{197}\text{Au}(p,x)^7\text{Be}$ reaction calculated in the present work and measured data.

Figs.3-23 show a relative good agreement between calculated and experimental values. The agreement is observed for reactions and primary energy ranges, where the equilibrium formation of clusters dominates, for example, for $^{27}\text{Al}(p,x)^7\text{Be}$ reaction, Fig 20, and for energies, where the main origin of cluster production is the non-elastic emission, for example, at primary proton energies below 100 MeV for $^{93}\text{Nb}(p,x)^7\text{Be}$ reaction, Fig.22.

The comparison with experimental data shows a certain success of the modeling of heavy cluster emission using the new version of the CASCADE code. The agreement between the calculated and measured values can serve as an additional argument for the use of the combination of the coalescence and the intranuclear cascade evaporation model at intermediate energies. However, the observed difference between results of modeling and experimental data at proton incident energies below 100 MeV for $^{93}\text{Nb}(p,x)^7\text{Be}$, Fig.22, and $^{197}\text{Au}(p,x)^7\text{Be}$, Fig.23, indicates a possible existence of non- coalescence mechanism for the IMF formation. Such a mechanism is discussed below.

3. Modeling of heavy cluster emission using hybrid precompound model

The use of coalescence model is justified at relative high energies of primary nucleons. The simulation of heavy cluster emission at incident particle energies below 100- 150 MeV requires the application of more advanced methods describing a competition of various processes resulting to the non-equilibrium emission of IMF.

One of the successful methods of modeling is the use of “coalescence pick-up model“ [139,140] adopted for the simulation of heavy cluster emission in Ref.[141]. The brief description of the model and modifications made in the ALICE code used for numerical calculations are given below.

3.1 Model description

The main assumption of the model is that the emission of heavy clusters is a results of the non-equilibrium process involving the particle pick-up and coalescence, and

the evaporation after the precompound phase of the reaction is finished.

The non-equilibrium energy distribution of emitted fragments is calculated using the hybrid exciton model [142] as discussed in Ref.[141]

$$\frac{d\sigma}{d\varepsilon_x} = \sigma_{\text{non}}(E_0) \sum_{n=n_0} \sum_{k+m=A_x} F_{k,m}(\varepsilon_x + Q_x) \frac{\omega(\mathbf{p}-\mathbf{k}, \mathbf{h}, U)}{\omega(\mathbf{p}, \mathbf{h}, E)} \times \frac{\lambda_x^e(\varepsilon_x)}{\lambda_x^e(\varepsilon_x) + \lambda_x^+(\varepsilon_x)} g_x D(n), \quad (2)$$

where σ_{non} is the cross-section of nonelastic interaction of the nucleus and the primary particle with the kinetic energy E_0 ; $F_{k,m}$ is the formation factor of fragment “x” consisting of A_x nucleons with “k” particle above and “m” below the Fermi level, $A_x=k+m$; $\omega(\mathbf{p}, \mathbf{h}, E)$ is the exciton level density with “p” particles and “h” holes; the residual excitation energy U is equal to $E - Q_x - \varepsilon_x$, and E is the excitation energy of the composite nucleus, Q_x is the separation energy for the “x”-cluster; ε_x is the channel emission energy corresponding to the fragment emission; λ_x^e is the cluster emission rate; λ_x^+ is the intranuclear transition rate for the absorption of the formed “x”-cluster in the nucleus; g_x is the density of single states for the cluster; $D(n)$ is the factor describing the “depletion” of the n -exciton state due to the particle emission; n_0 is the initial exciton number, (for nucleon induced reactions $n_0 = 3$).

The cluster emission rate is calculated with the following formula

$$\lambda_x^e = \frac{(2S_x + 1) \mu_x \varepsilon_x \sigma_x^{\text{inv}}(\varepsilon_x)}{\pi^2 \hbar^3 g_x}, \quad (3)$$

where S_x and μ_x are spin and reduced mass of the outgoing fragment; σ_x^{inv} is the inverse reaction cross-section for the fragment. The absorption rate is equal to

$$\lambda_x^+ = 2 W_x^{\text{opt}} / \hbar, \quad (4)$$

where W_x^{opt} is the imaginary part of the optical potential for the “x”-cluster.

The form factors $F_{k,m}$ are evaluated as proposed in Ref.[143]

$$F_{k,m}(\varepsilon) = \alpha \rho(k, m, \varepsilon, \varepsilon_0), \quad (5)$$

with ρ -function obtained in Ref.[144]

$$\rho(k, m, \varepsilon, \varepsilon_0) = \frac{g^{k+m}}{(k+m-1)!k!m!} \sum_{i=0}^m {}_m C_i (-1)^i \Theta(\varepsilon - i\varepsilon_0) (\varepsilon - i\varepsilon_0)^{k+m-1}, \quad (6)$$

here $\Theta(x)$ is the Heaviside function, ε_0 is a model parameter [143] concerning the pick-up process. The value of α in Eq.(5) is chosen to meet the normalization condition

$$\sum_{k+m=A_x} F_{k,m} = 1. \quad (7)$$

Fig.24 and Fig.25 shows $F_{k,m}$ values calculated for ${}^7\text{Be}$ and ${}^{12}\text{C}$. The value of ε_0 equal to 6.7 MeV corresponds to default input value for ${}^{56}\text{Fe}(p,x){}^7\text{Be}$ reaction adopted in the ALICE/ASH code, see below. The $F_{7,0}$ value in Fig.24 and $F_{12,0}$ in Fig.25 concern the “pure” coalescence mechanism of cluster production. The properties of $F_{k,m}$ were discussed in Ref.[141].

The calculation of inverse cross-sections for emitted fragments for targets with $Z > 8$ is carried out using the parabolic model [145]. Fig.26 and Fig.27 show examples of calculated cross-sections for nonelastic interactions of primary ${}^7\text{Be}$ with ${}^{50}\text{V}$ and ${}^{191}\text{Os}$. The data presented are used for the simulation of proton induced reactions ${}^{56}\text{Fe}(p,x){}^7\text{Be}$ and ${}^{197}\text{Au}(p,x){}^7\text{Be}$. For the comparison Figs.26,27 show the cross-sections evaluated using the approximate approach of Barashenkov, Polanski [146].

As the default option of ALICE/ASH code a sharp cutoff approximation [142,8] is applied for the calculation of inverse reaction cross-sections for targets with the atomic number $Z \leq 8$.

The evaporation model implemented in the ALICE/ASH code [8] is used for the simulation of equilibrium emission of heavy clusters.

3.2 New version of ALICE/ASH code

For the first time the ALICE/ASH code was applied for the simulation of heavy cluster emission in the work [141] devoted to the calculation of cross-sections with emission of ${}^7\text{Be}$ in proton induced reactions at primary energies below 100 MeV.

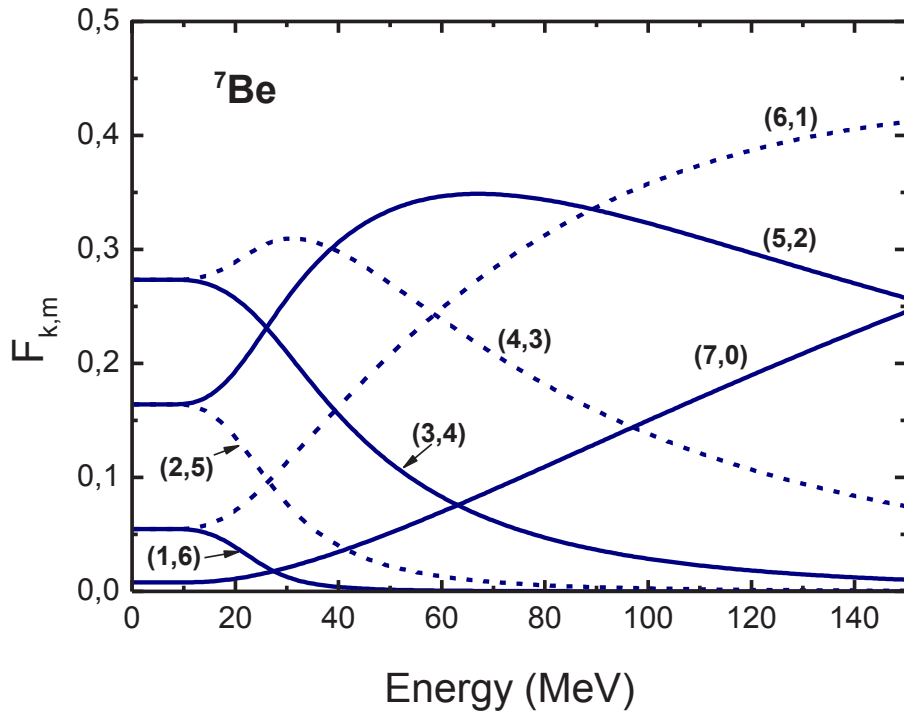


Fig.24 Probability of ${}^7\text{Be}$ formation $F_{k,m}$ calculated using Eqs.(5)-(7) with $\varepsilon_0=6.7$ MeV. Pair of numbers corresponds “k,m”. See explanations in the text.

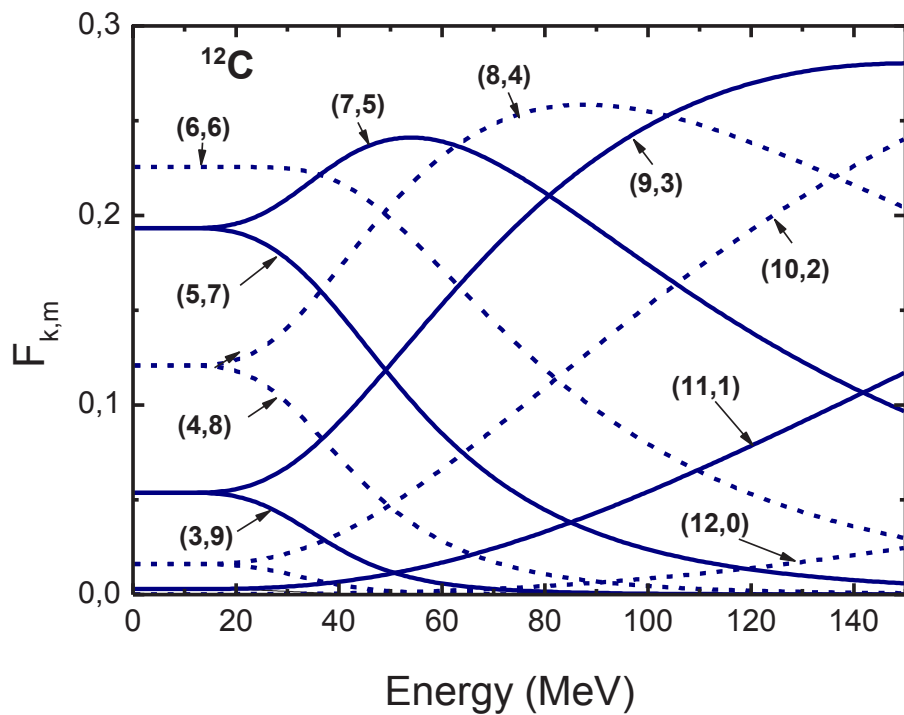


Fig.25 Probability of ${}^{12}\text{C}$ formation $F_{k,m}$ calculated using Eqs.(5)-(7) with $\varepsilon_0=6.7$ MeV. Pair of numbers corresponds “k,m”. Short dashed line without designation shows $F_{2,10}$. The $F_{1,11}$ value not shown in Figure is relatively small and does not exceed 0.003. See other explanations in the text.

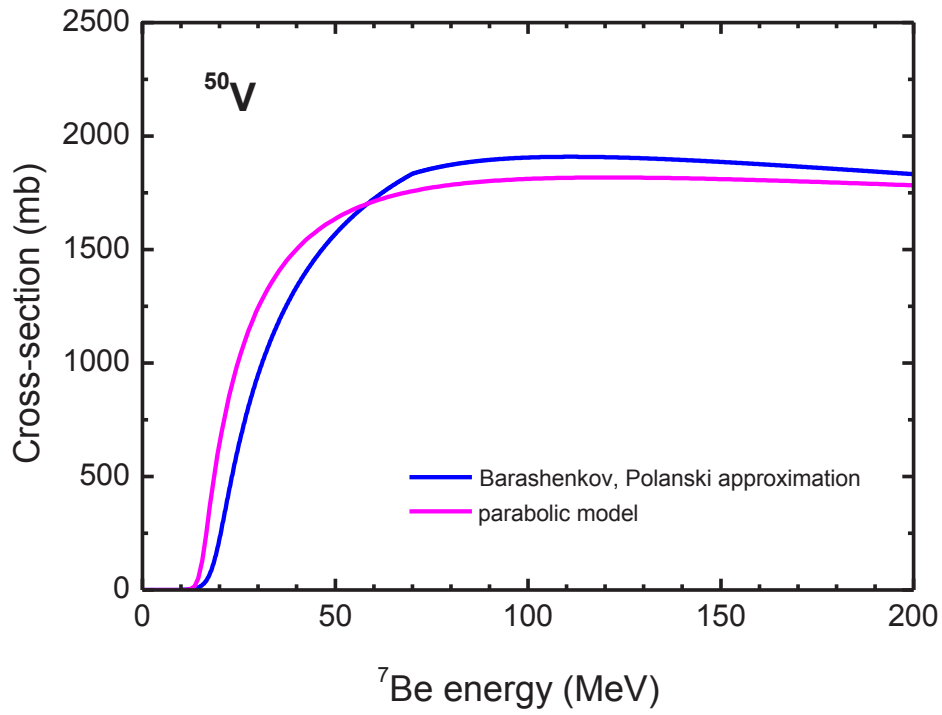


Fig.26 Cross-section of nonelastic ${}^7\text{Be}$ interactions with ${}^{50}\text{V}$ calculated using the parabolic model [145] and evaluated using the Barashenkov, Polanski approximation [146] See explanations in the text.

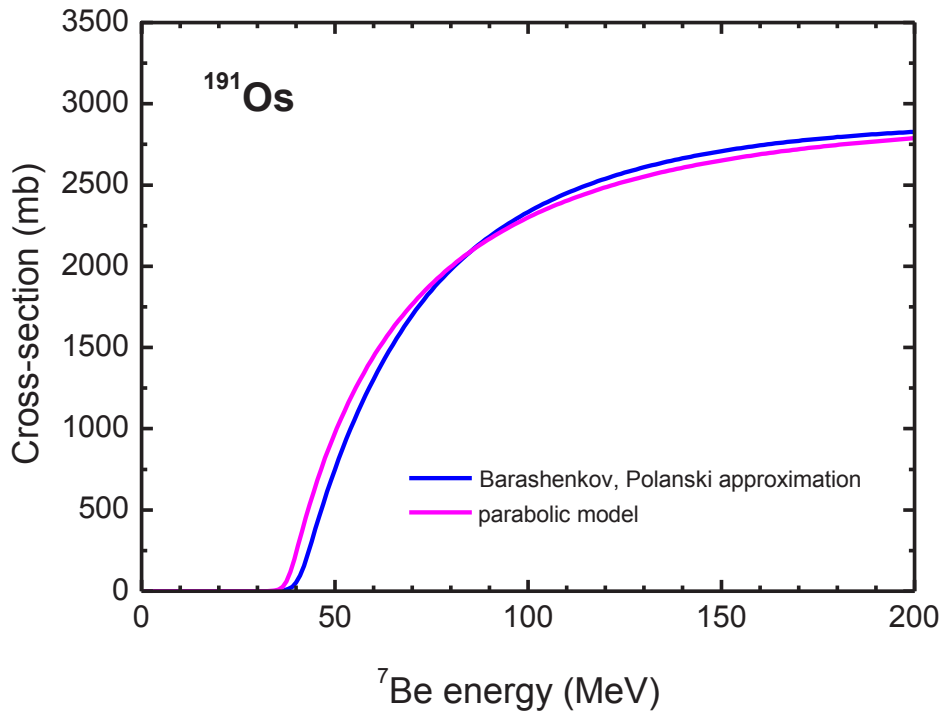


Fig.27 Cross-section of nonelastic ${}^7\text{Be}$ interactions with ${}^{191}\text{Os}$. See captions to Fig.26.

In the present work the application of ALICE/ASH [8] was extended for the modeling of the emission of various intermediate mass fragments. Changes and improvements of the code are briefly summarized below

- a new algorithm for the simulation of non-equilibrium and equilibrium emission of heavy clusters was added to the code. The current limitation concerns the modeling of the emission of fragments with the mass number A_x below 33. The A_x number can be increased by a change of the dimension of variables in the common block IWACLU

- the set of default model parameters responsible non-equilibrium and evaporation emission of IMF was added to the code. The possible change of default values is explained in comments to the code text in details

- a maximal number of residual nuclei NA, NZ involved in calculations and the value ED of the energy step of the integration can be now calculated in the code providing optimal values

- a number of former limitations [8,142] as for example a number of initial energies for a fixed target in a single input data set, were discarded

- printing of results was optimized for a number of important applications.

The next Section shows some examples of the use of new ALICE/ASH code for the calculation of reaction cross-sections with the emission of heavy clusters.

3.3 Comparison with experimental data

Calculations were performed with the default set of model parameters adopted in the new version of ALICE/ASH.

Calculated $(p,x)^7\text{Be}$ reaction cross-sections for 23 targets are shown in Figs.28-50. Figures illustrate the total ^7Be production cross-section and the contribution of ^7Be pre-equilibrium emission in the total cross-section. The contribution for relatively light targets is rather small comparing with one of the equilibrium emission, grows up with the atomic mass number of the nucleus, and dominates for heavy targets, like Ta.

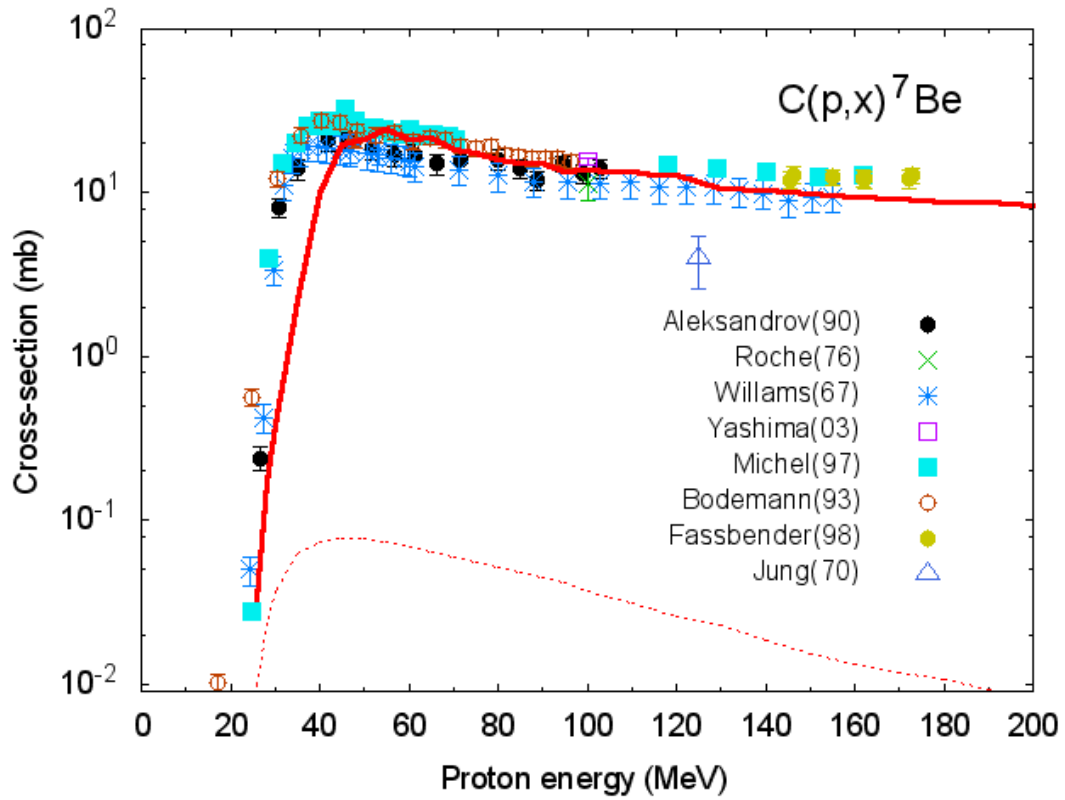


Fig.28 ^7Be production cross-section in proton induced reactions on natural C calculated using the ALICE/ASH code: the total cross-section (solid line), the contribution of pre-equilibrium emission of ^7Be (dashed line).

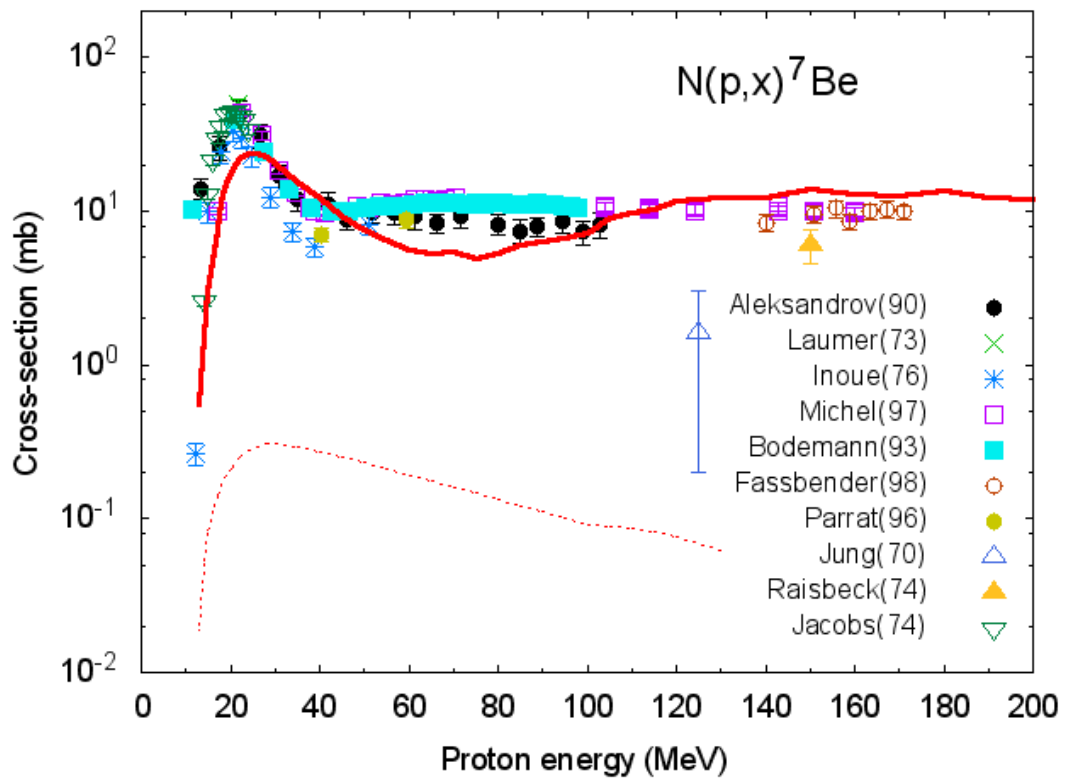


Fig.29 ^7Be production cross-section in proton induced reactions on natural N. See captions to Fig.28.

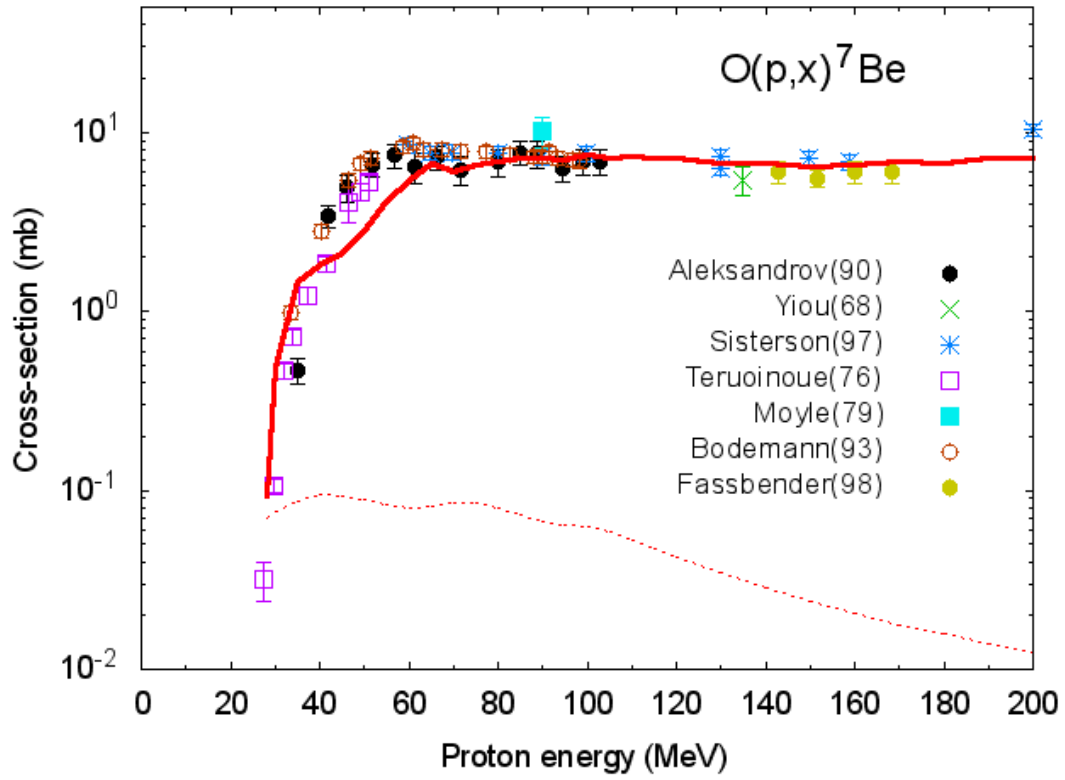


Fig.30 ^7Be production cross-section in proton induced reactions on natural O. See captions to Fig.28.

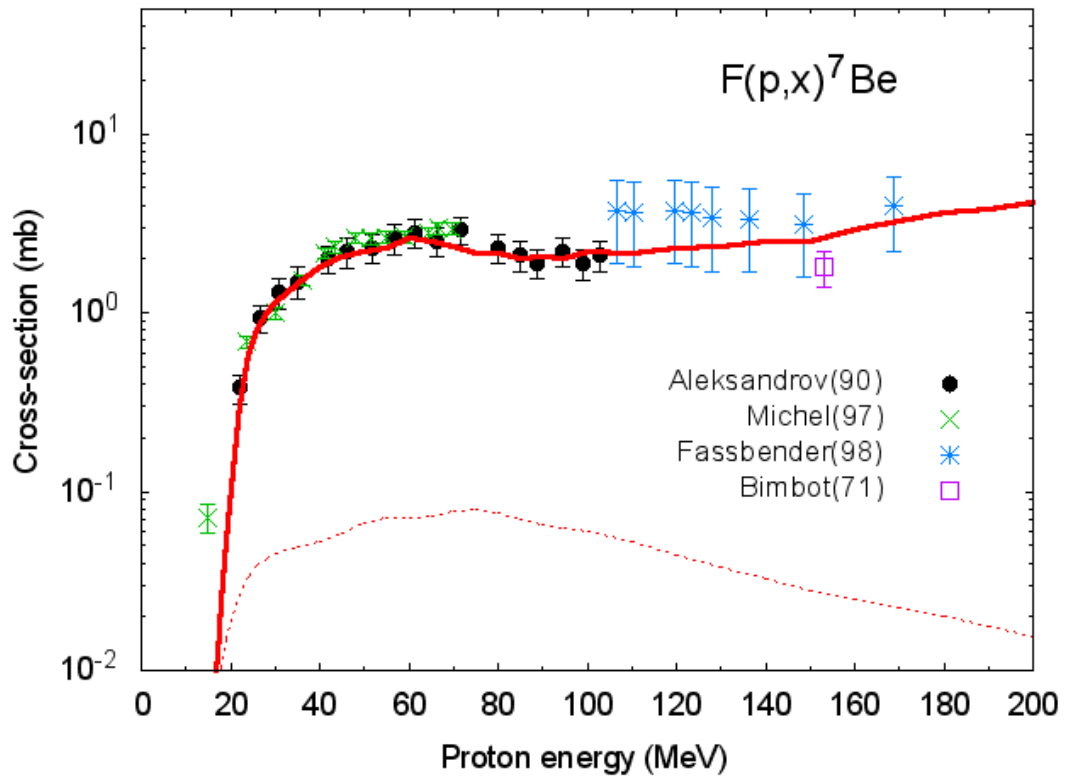


Fig.31 ^7Be production cross-section in proton induced reactions on ^{19}F . See captions to Fig.28.

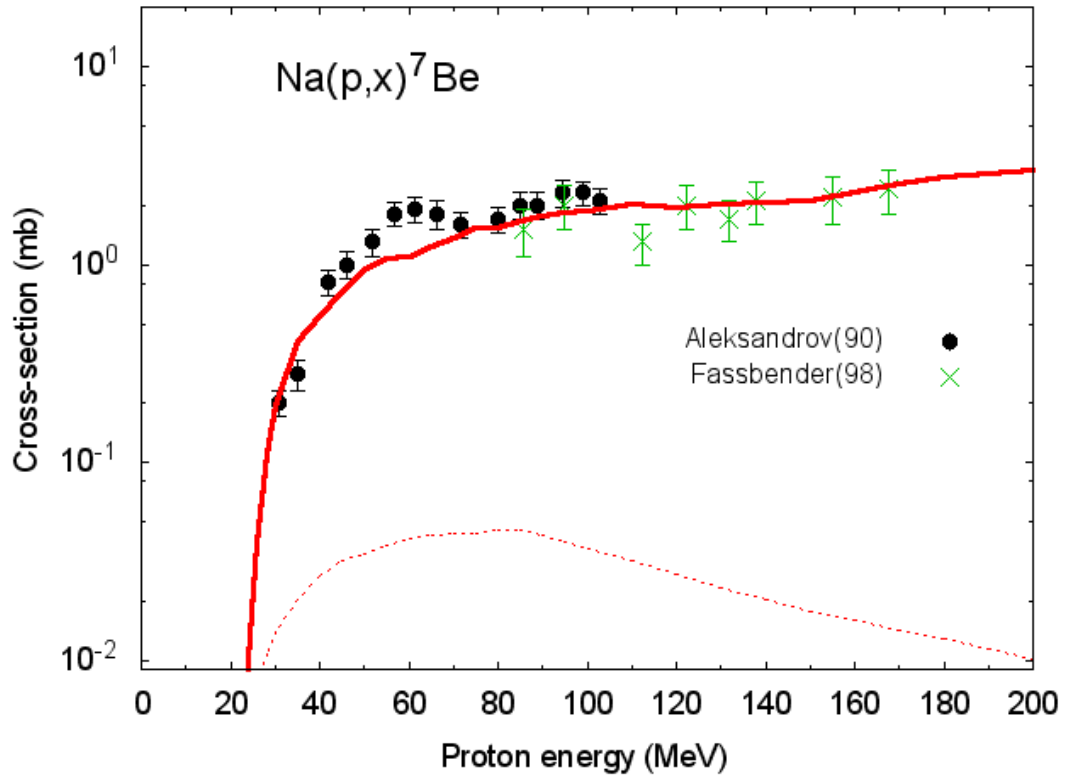


Fig.32 ⁷Be production cross-section in proton induced reactions on ²³Na. See captions to Fig.28.

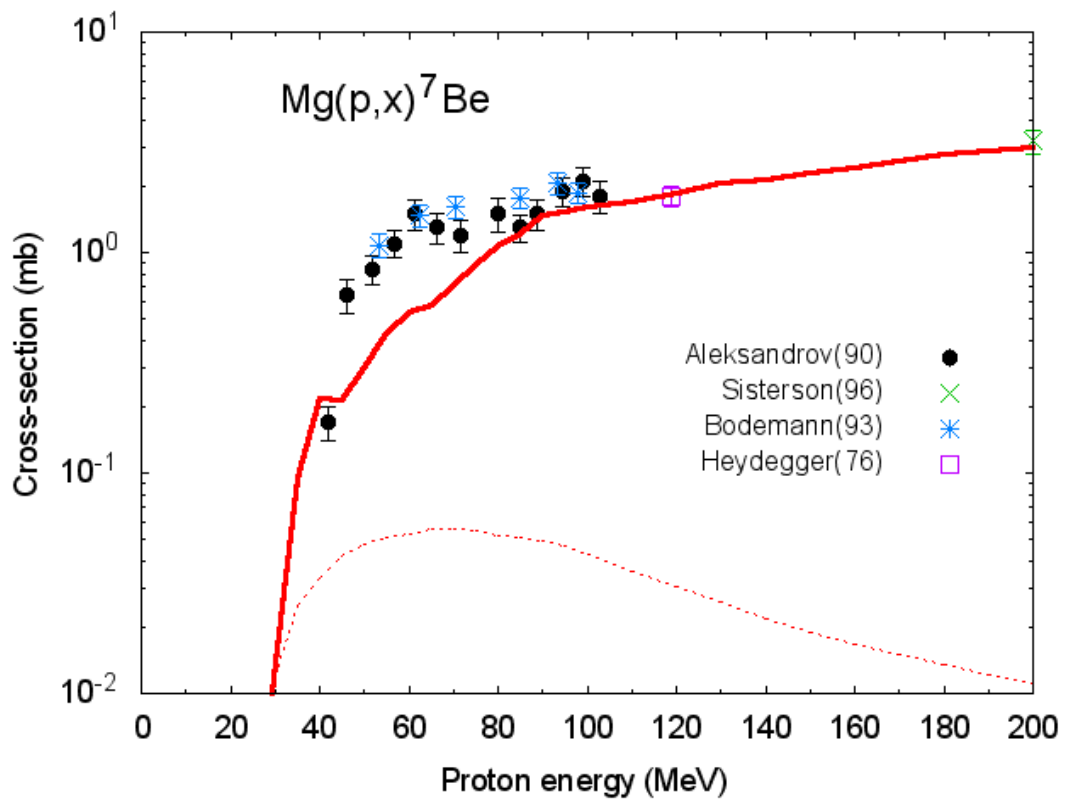


Fig.33 ⁷Be production cross-section in proton induced reactions on natural Mg. See captions to Fig.28.

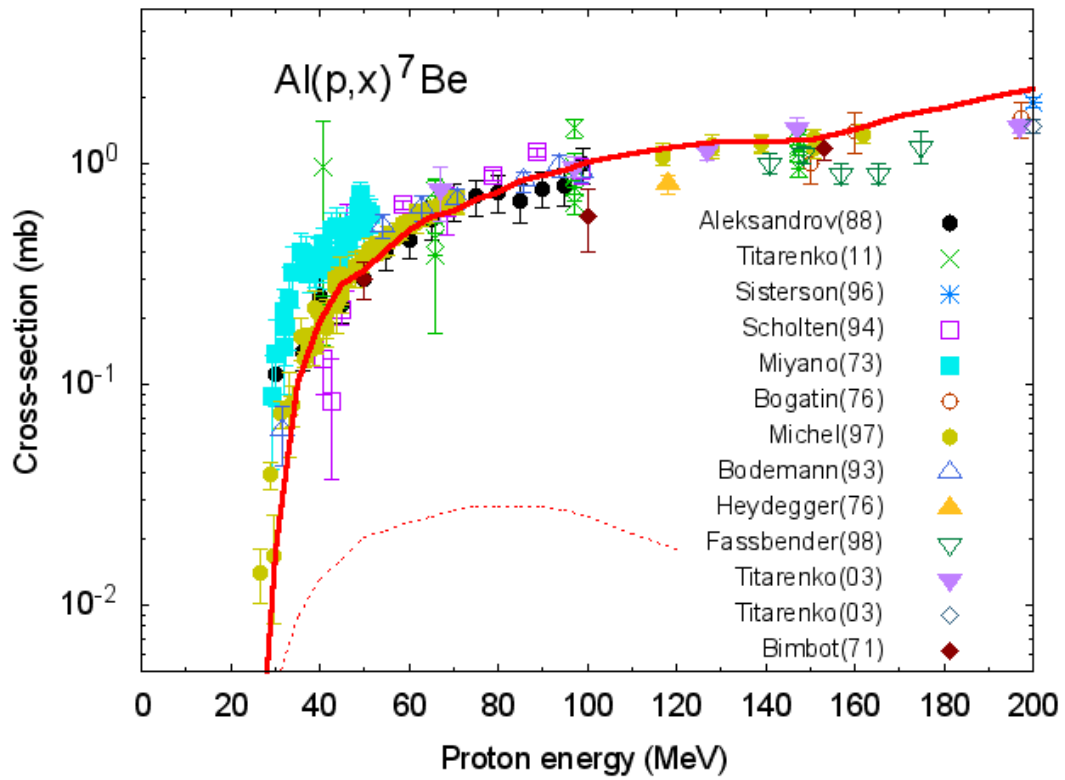


Fig.34 ^7Be production cross-section in proton induced reactions on ^{27}Al . See captions to Fig.28.

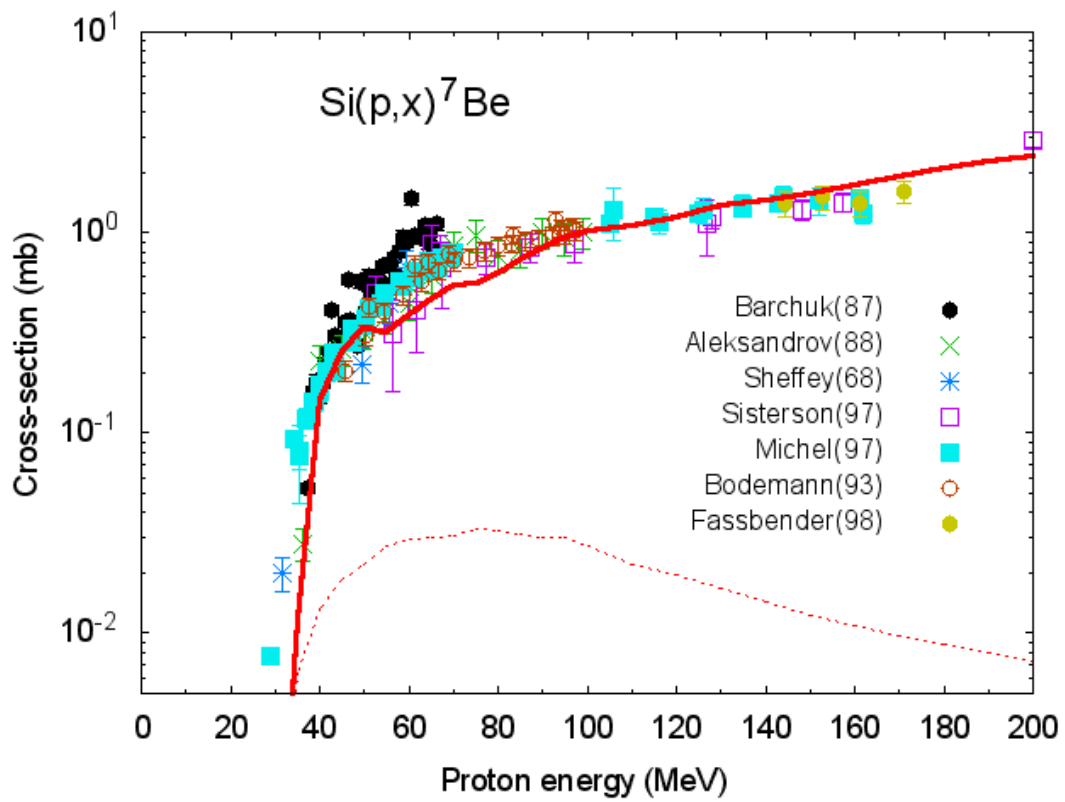


Fig.35 ^7Be production cross-section in proton induced reactions on natural Si. See captions to Fig.28.

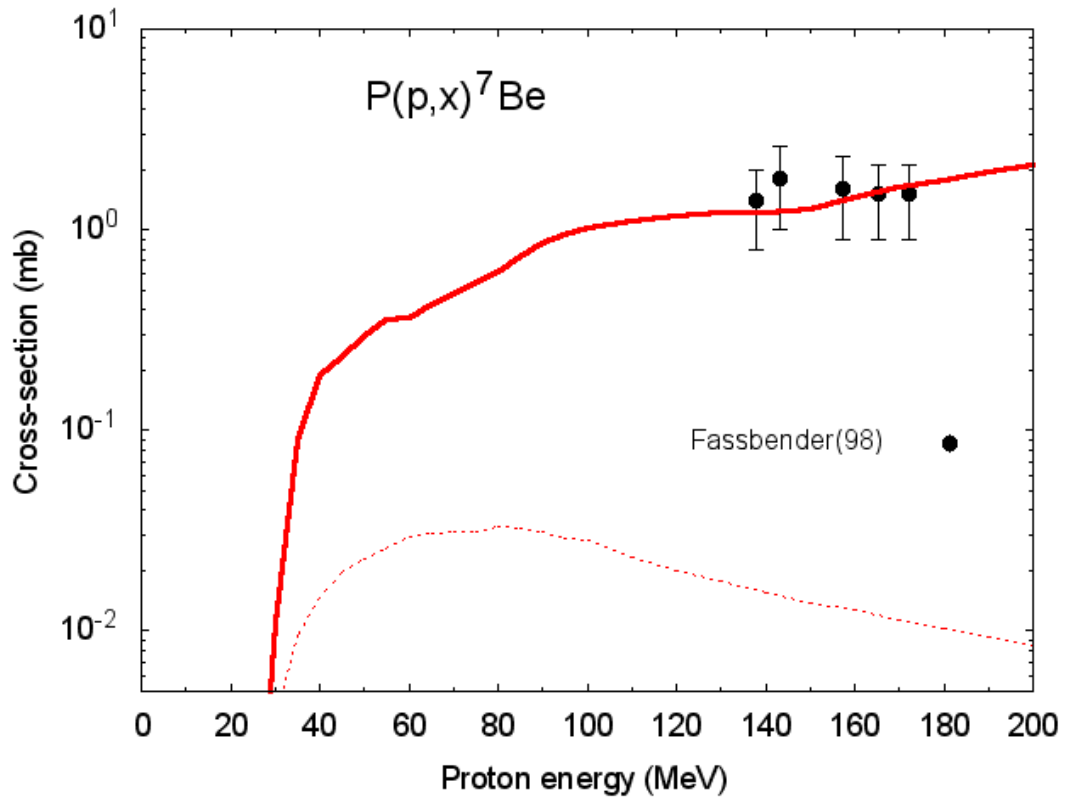


Fig.36 ${}^7\text{Be}$ production cross-section in proton induced reactions on ${}^{31}\text{P}$. See captions to Fig.28.

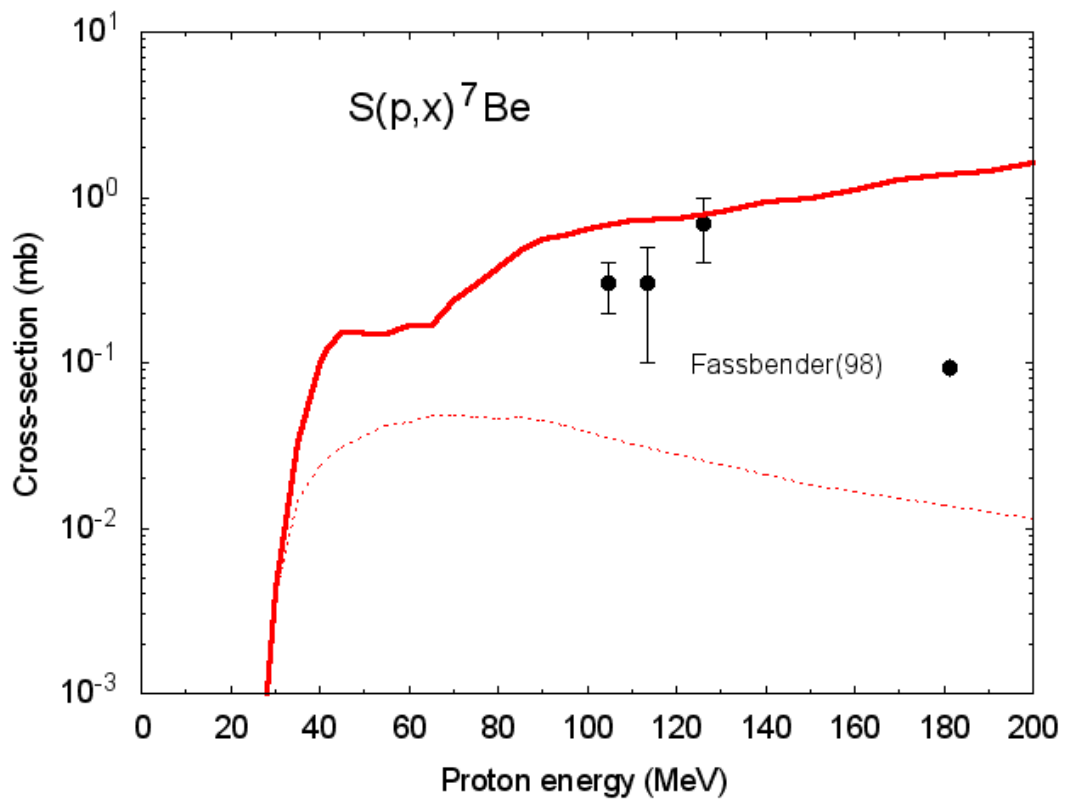


Fig.37 ${}^7\text{Be}$ production cross-section in proton induced reactions on natural S. See captions to Fig.28.

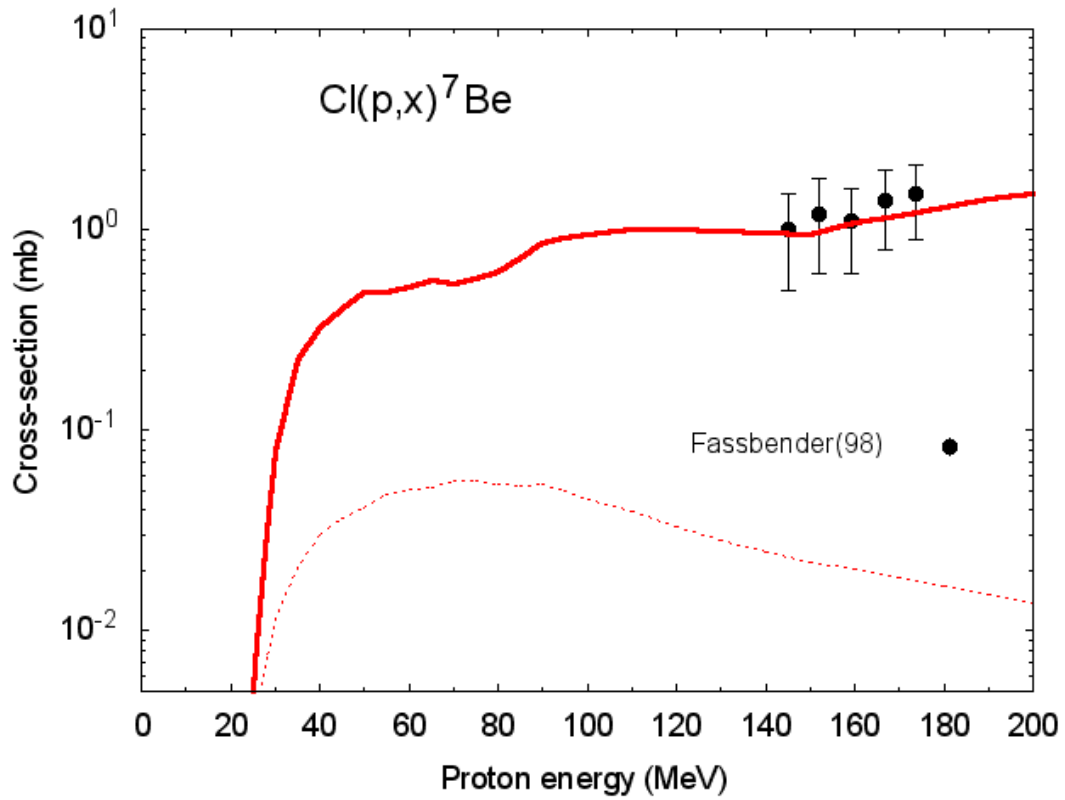


Fig.38 ${}^7\text{Be}$ production cross-section in proton induced reactions on natural Cl. See captions to Fig.28.

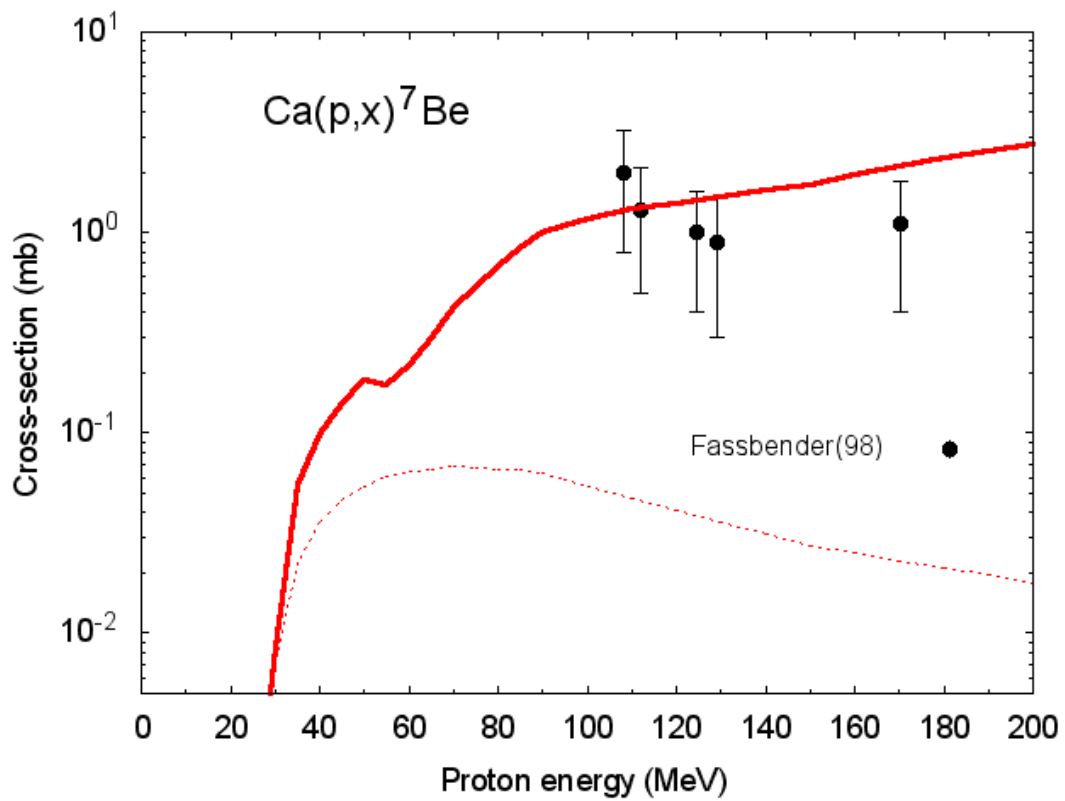


Fig.39 ${}^7\text{Be}$ production cross-section in proton induced reactions on natural Ca. See captions to Fig.28.

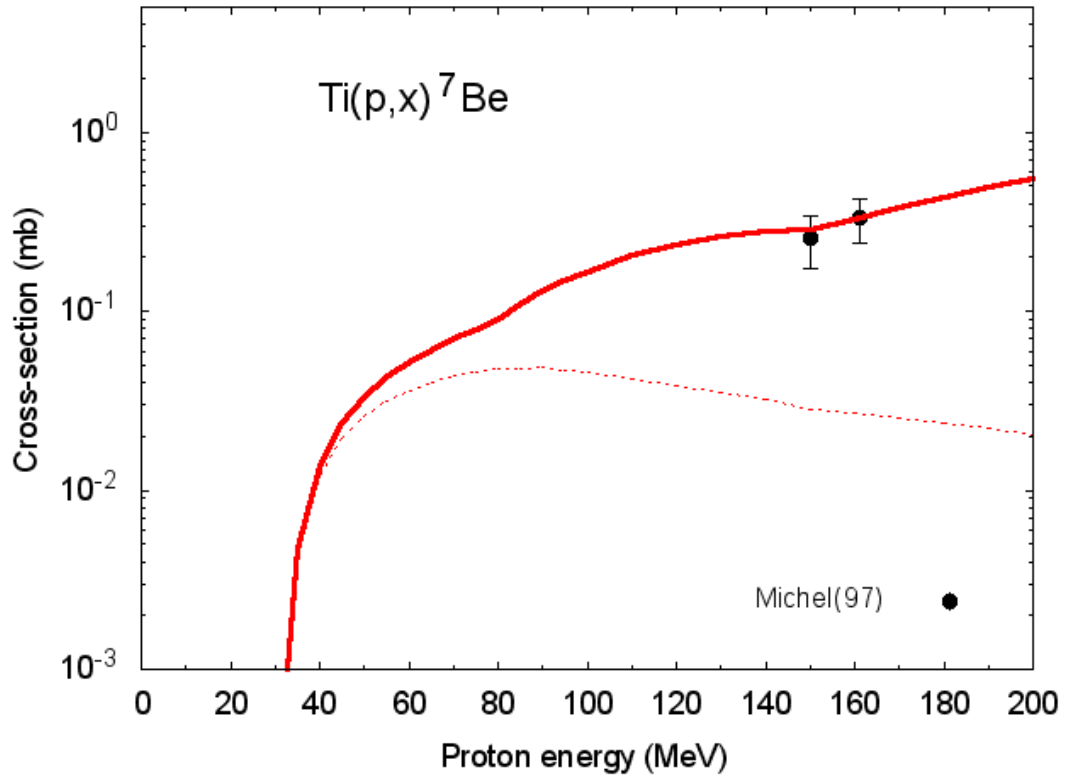


Fig.40 ${}^7\text{Be}$ production cross-section in proton induced reactions on natural Ti. See captions to Fig.28.

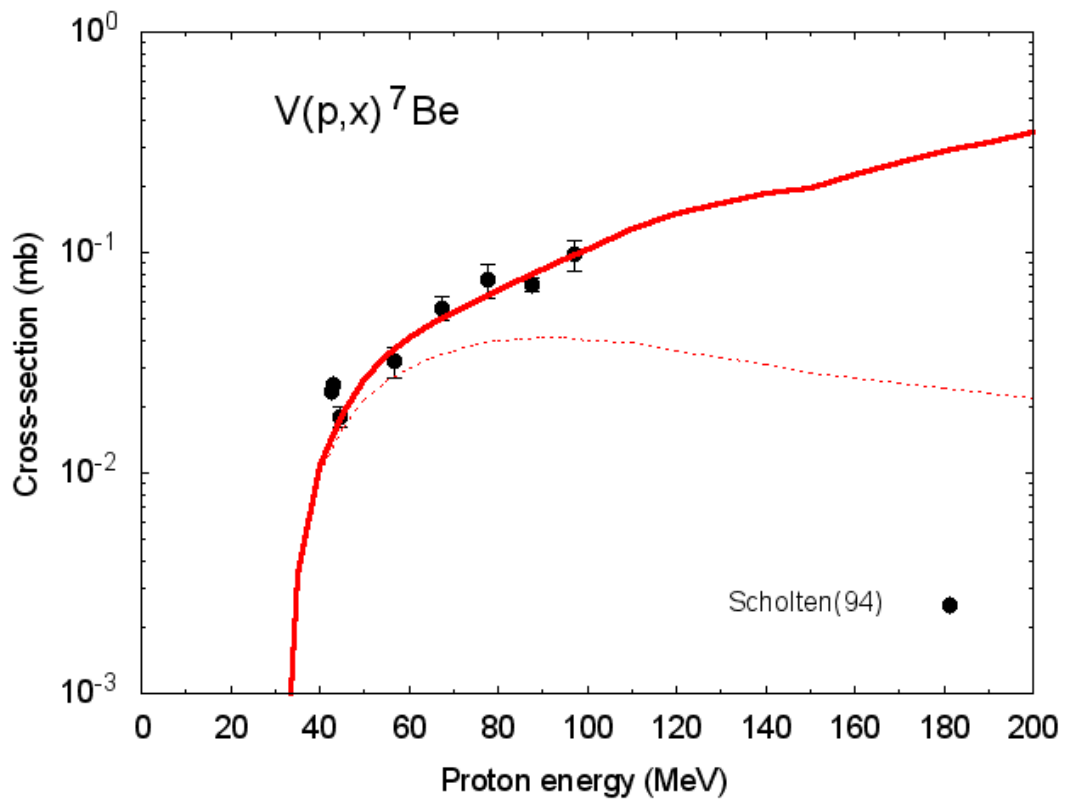


Fig.41 ${}^7\text{Be}$ production cross-section in proton induced reactions on natural V. See captions to Fig.28.

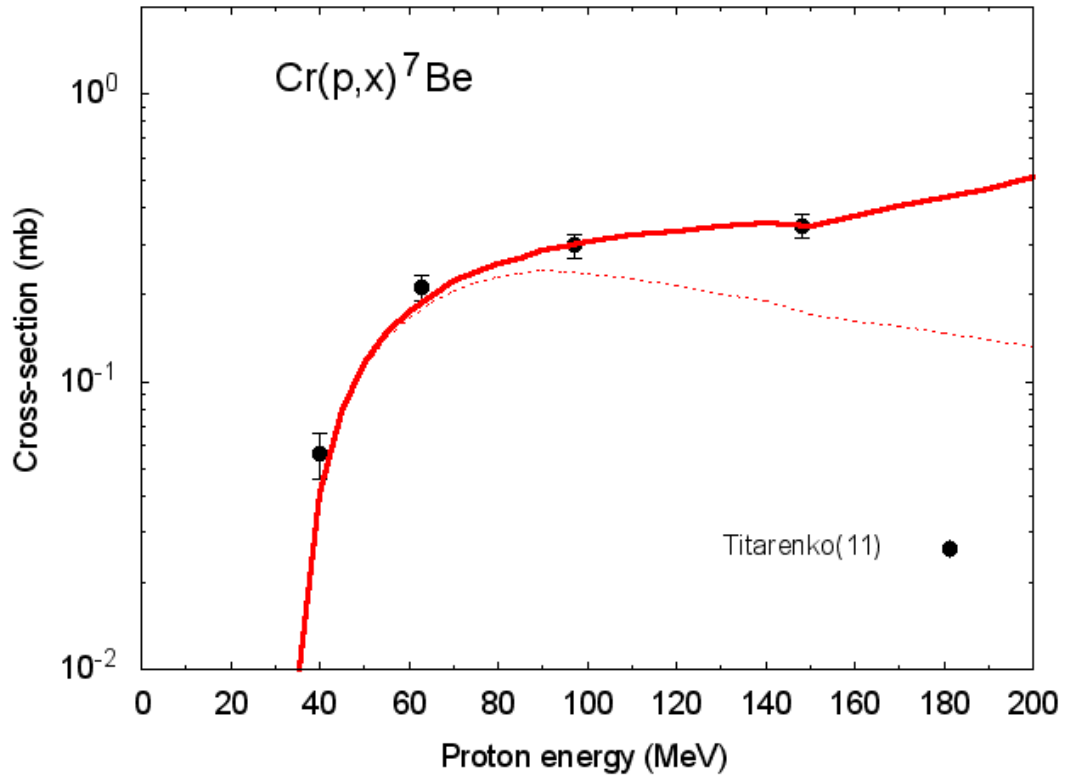


Fig.42 ⁷Be production cross-section in proton induced reactions on natural Cr. See captions to Fig.28.

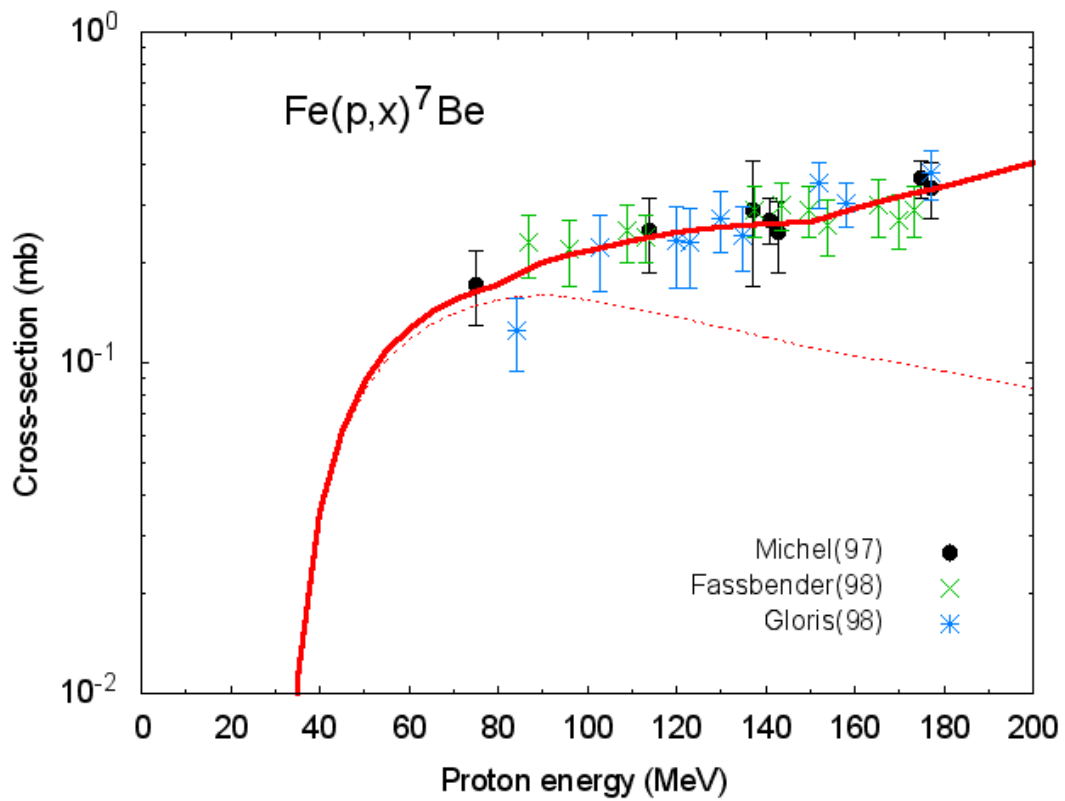


Fig.43 ⁷Be production cross-section in proton induced reactions on natural Fe. See captions to Fig.28.

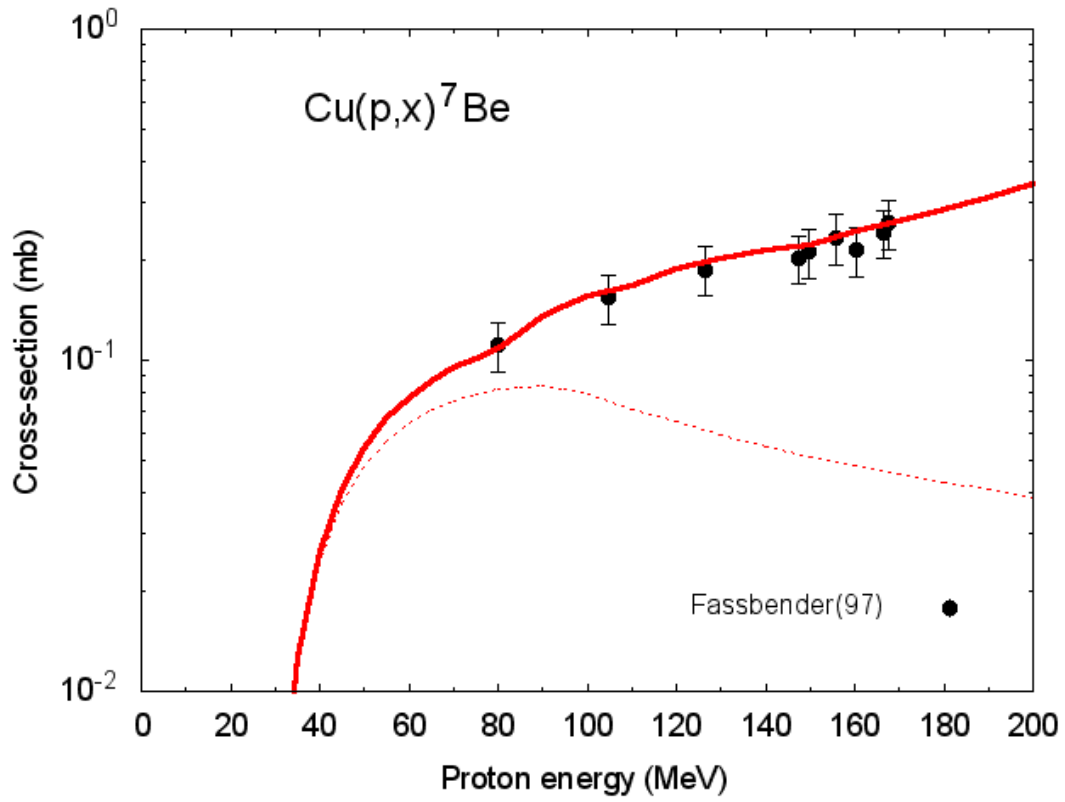


Fig.44 ^7Be production cross-section in proton induced reactions on natural Cu. See captions to Fig.28.

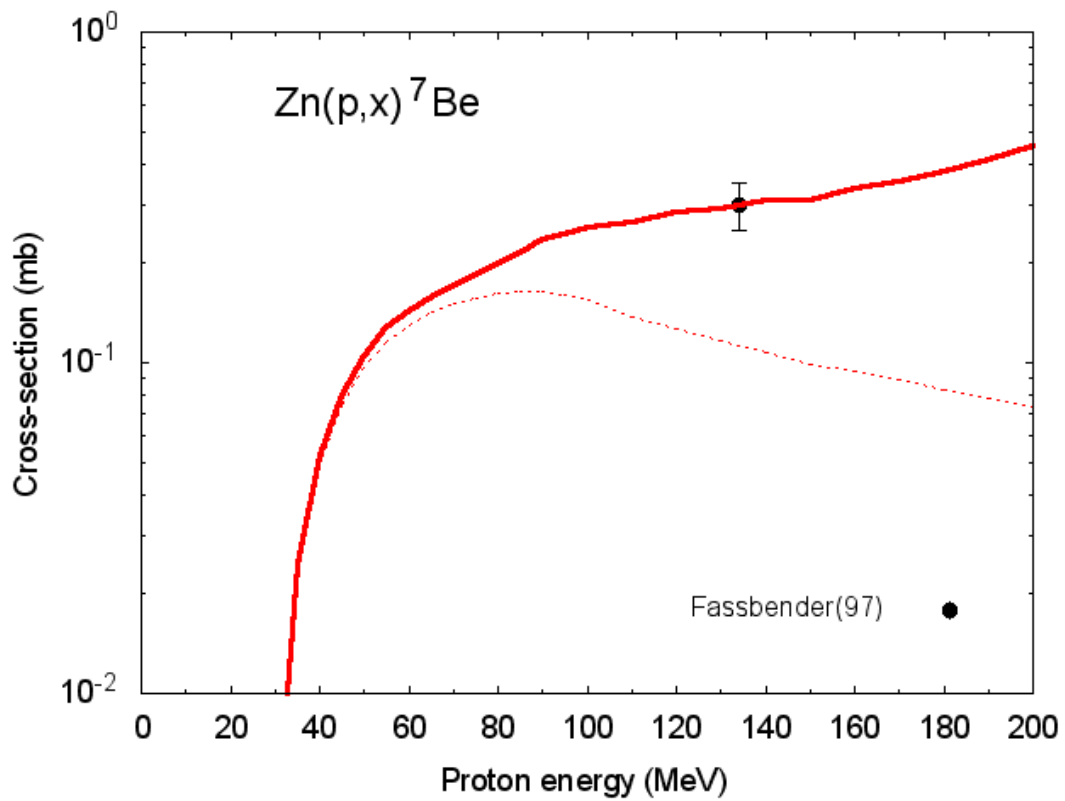


Fig.45 ^7Be production cross-section in proton induced reactions on natural Zn. See captions to Fig.28.

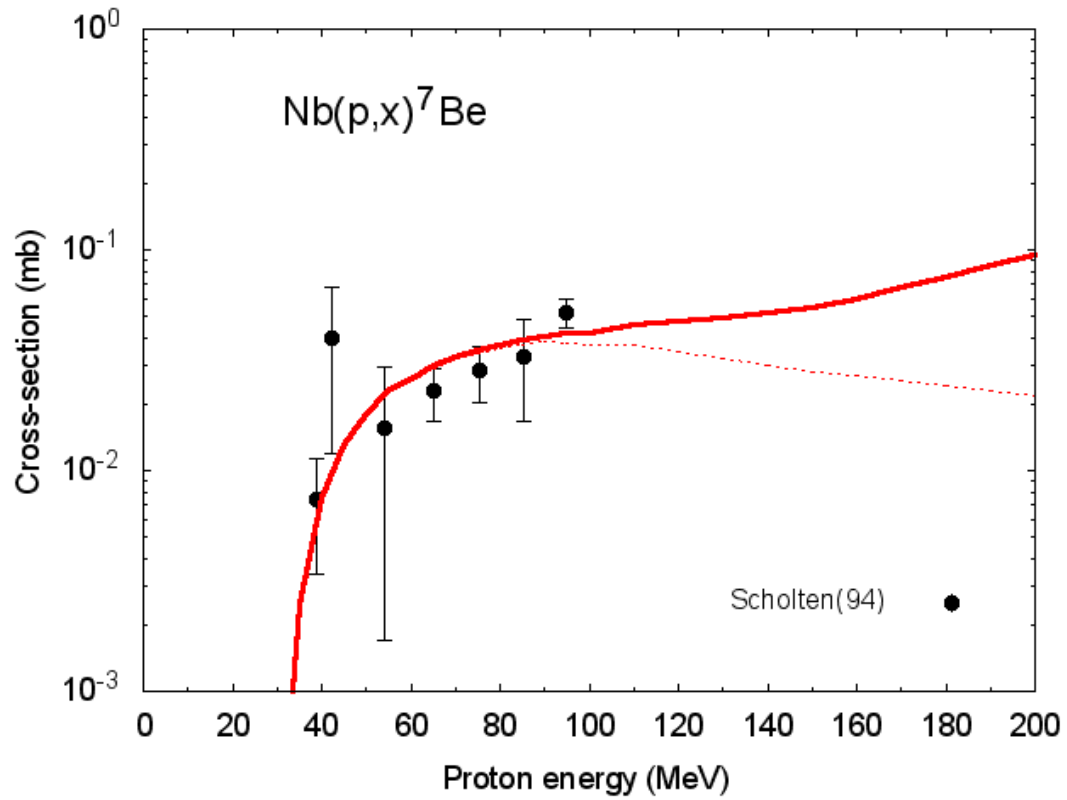


Fig.46 ⁷Be production cross-section in proton induced reactions on ⁹³Nb. See captions to Fig.28.

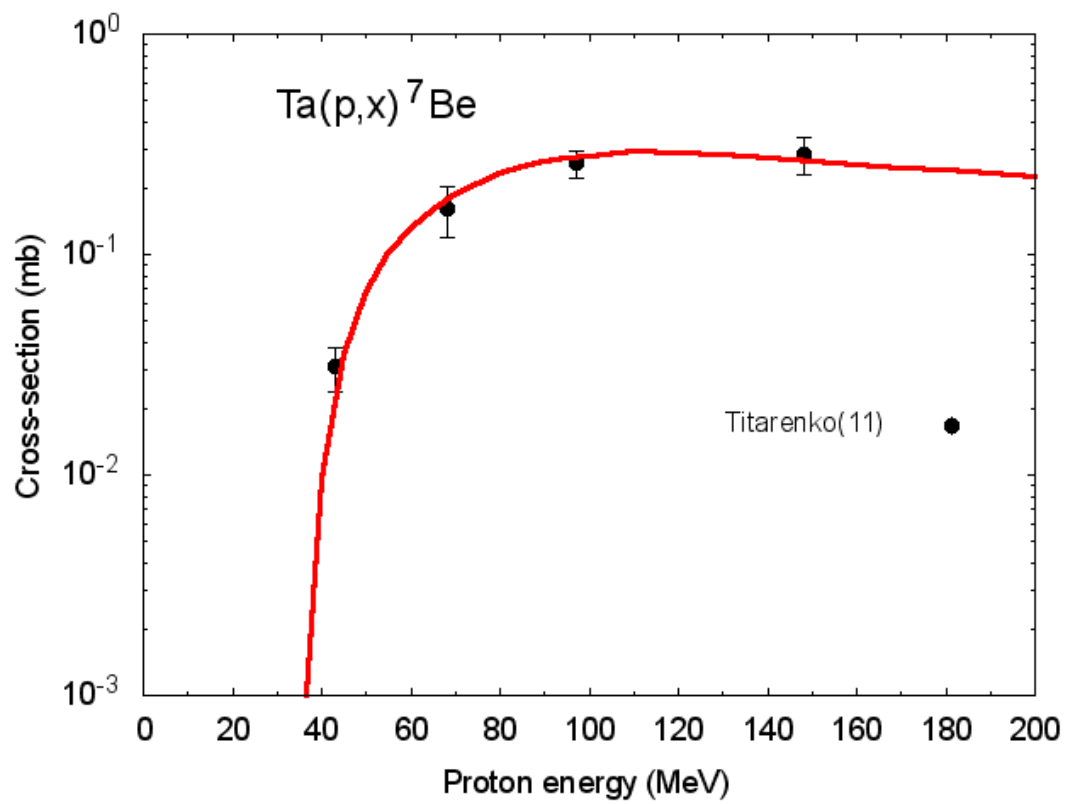


Fig.47 ⁷Be production cross-section in proton induced reactions on natural Ta. See captions to Fig.28.

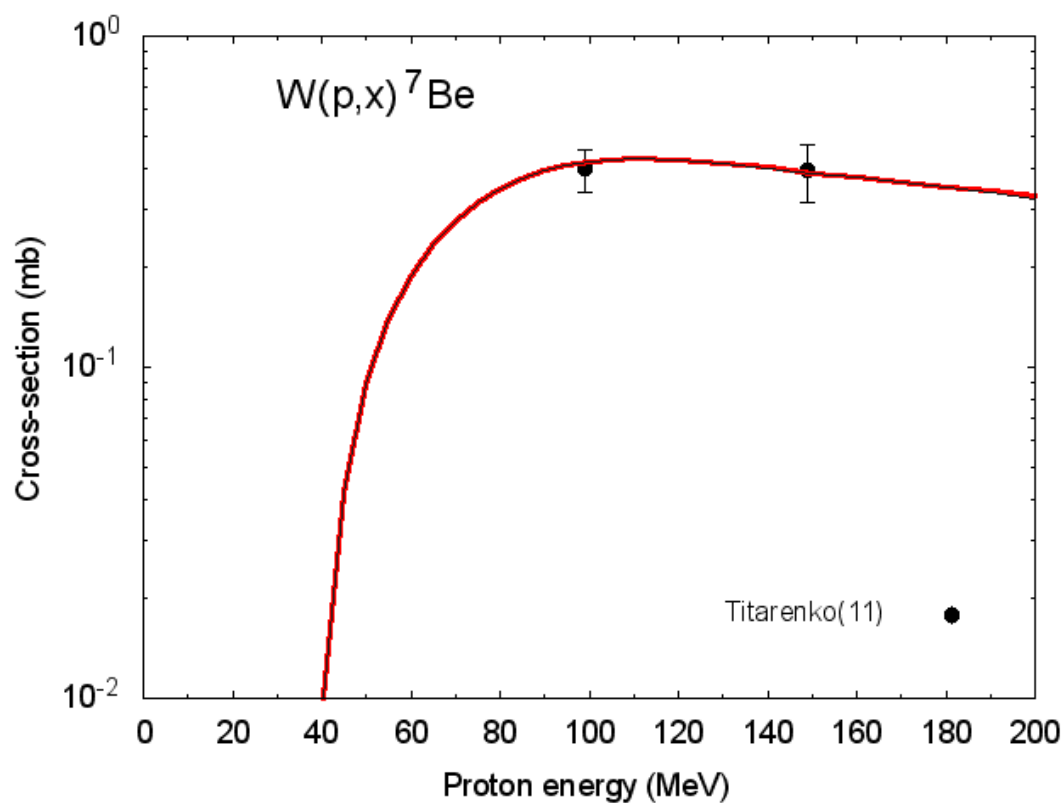


Fig.48 ⁷Be production cross-section in proton induced reactions on natural W. See captions to Fig.28.

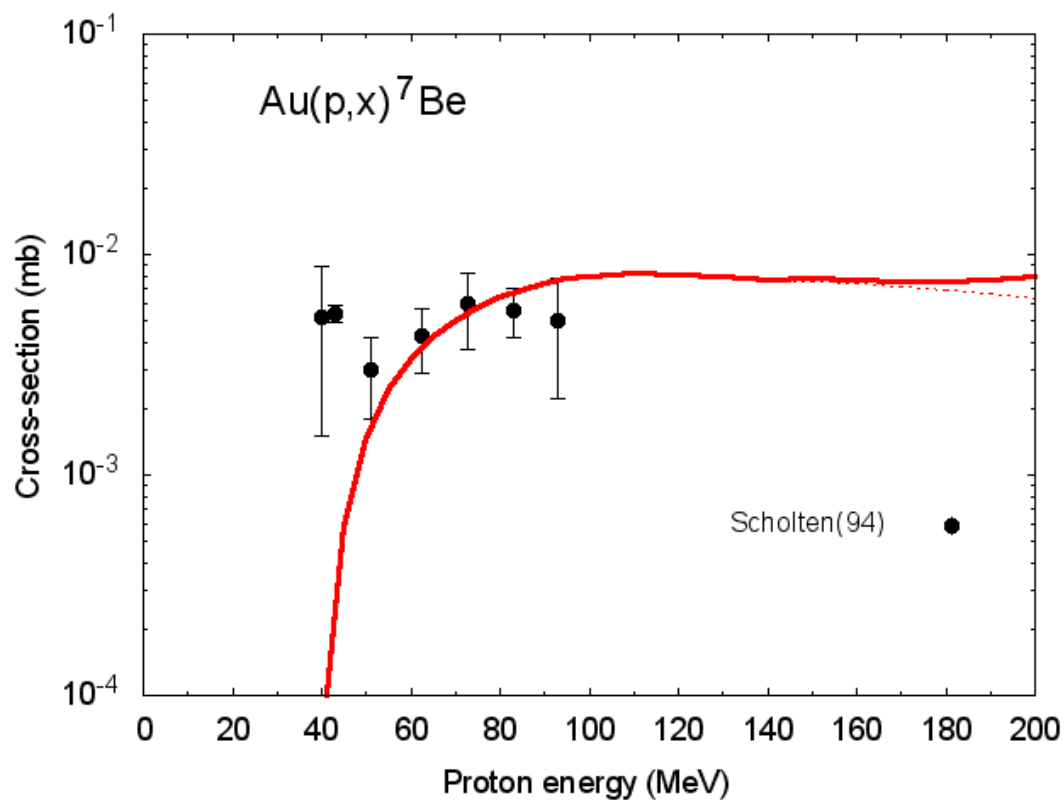


Fig.49 ⁷Be production cross-section in proton induced reactions on ¹⁹⁷Au. See captions to Fig.28.

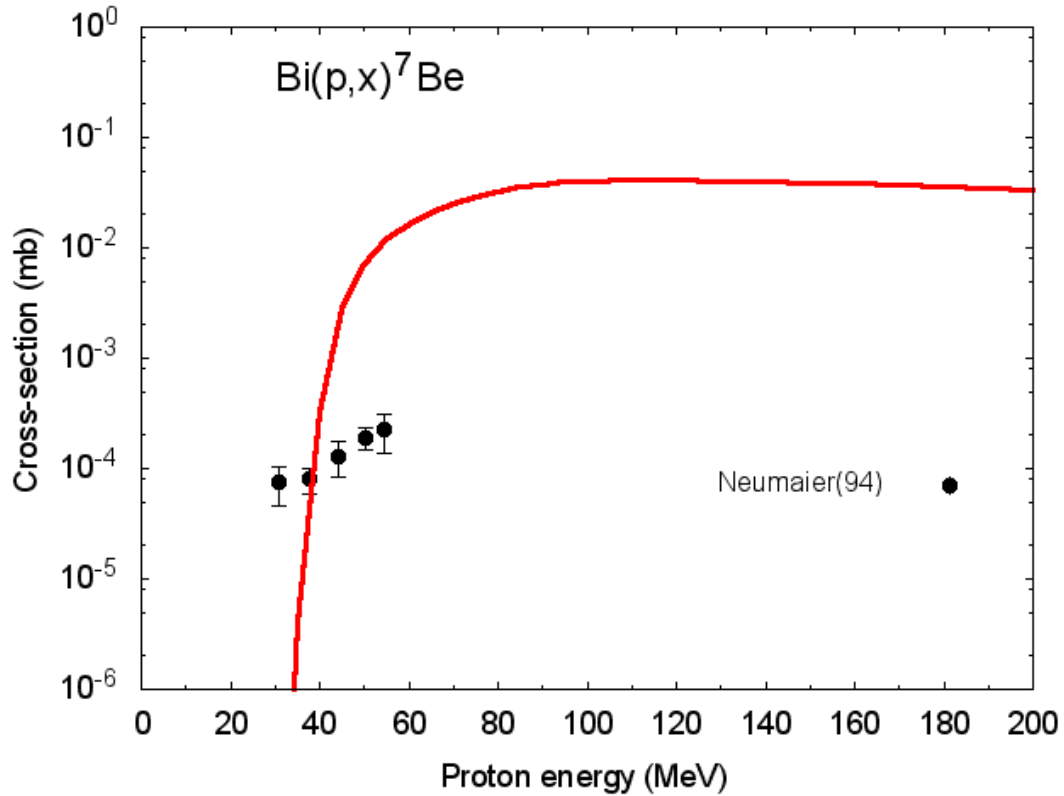


Fig.50 ${}^7\text{Be}$ production cross-section in proton induced reactions on ${}^{209}\text{Bi}$. See captions to Fig.28.

The agreement with experimental data is rather good except a number of light targets and ${}^{209}\text{Bi}$. The case of ${}^{209}\text{Bi}$ was discussed in Ref.[141]. To a certain extent the difference of calculated and measured cross-sections for light targets can be attributed to the method used for the inverse reaction cross-section calculation for ${}^7\text{Be}$.

The observed agreement of calculations and measured data justifies a further use of the ALICE/ASH code for the evaluation of cross-sections for reactions with the emission of heavy clusters in nucleon induced reactions at projectile energies up to 200 MeV.

4. Approximate methods for the evaluation of heavy cluster yields in nuclear reactions

The use of methods of simulation discussed above assumes their implementation in computer codes. It is a challenging task due to the incorporating of new algorithms of simulation in existing programs or the writing new ones.

A quick and relatively accurate estimate of the yield of heavy clusters in nuclear reactions can be made using approximate methods. Their use does not imply significant changes of existing codes.

Two different approximation models are discussed below. The first is so called “nuclear bond breakdown” model (NBBD) [147], the second one is the simple knock-out model [138].

4.1 NBBD model

According to Ref.[147] the emission of heavy clusters is a result of the breakdown of “nuclear bonds” of cluster after the interaction of cluster with emitting nucleons. The idea led the authors [147] to the following formula

$$\sigma_{\text{frag}}(E_p) = \sigma_{\text{non}} n_0 (A / A_{\text{frag}}) (N_{\text{casc}} / A)^{m_0 (Q_{\text{frag}} + V_{\text{frag}})}, \quad (8)$$

where σ_{non} is the cross-section of nonelastic interactions of primary nucleons with the energy E_p and the target nucleus; A and A_{frag} are the number of nucleons in the target and in the emitted fragment, correspondingly; N_{casc} is the average number of nucleons emitted before equilibrium; Q_{frag} is the separation energy of the fragment and V_{frag} is the corresponding Coulomb potential, n_0 and m_0 are the model parameters obtained from the comparison with experimental data.

In the present work the N_{casc} value is estimated following Ref.[148]

$$N_{\text{casc}} = (1 + A^{1/2}) \exp\{-(0.087 A^{2/3} + 4.15)E_1\} \quad (9)$$

$$E_1 = \exp\{(-0.72 (1 + \ln A)^{-0.4}) \ln(E_p/3.68)\}, \quad (10)$$

where the primary proton energy E_p is taken in MeV.

The model discussed was used with some success for the estimation of the contribution of non-equilibrium emission in the yield of ^3He and ^4He in nucleon induced reactions at intermediate energies in Ref.[149].

Figs.51-56 show the Z- and A- distributions of fragments calculated using the NBBD approach for various nuclear reactions induced by intermediate energy protons. The yield of other residuals was calculated using TALYS, DISC-C, and

CASCADE codes. The simulation of equilibrium emission of IMF was not performed in the codes. Figs.57-62 show the $(p,x)^7\text{Be}$ reaction cross-sections for different targets at primary proton energies up to 3 GeV estimated using NBBB. The values of n_0 and m_0 parameters were obtained in the present work.

There is a relatively good agreement of calculated yields of IMF and measured data. Apparently, calculated cross-sections shown in Figs.57-62 effectively contain contributions of equilibrium and non-equilibrium emission of IMF, as follows from more advanced model calculations discussed in Chapters 2,3.

In this respect NBBB differs from an approach discussed below, where the agreement with experimental data is observed only after the adding of estimated values and contributions of the equilibrium emission of clusters in the production cross-section calculated using the codes.

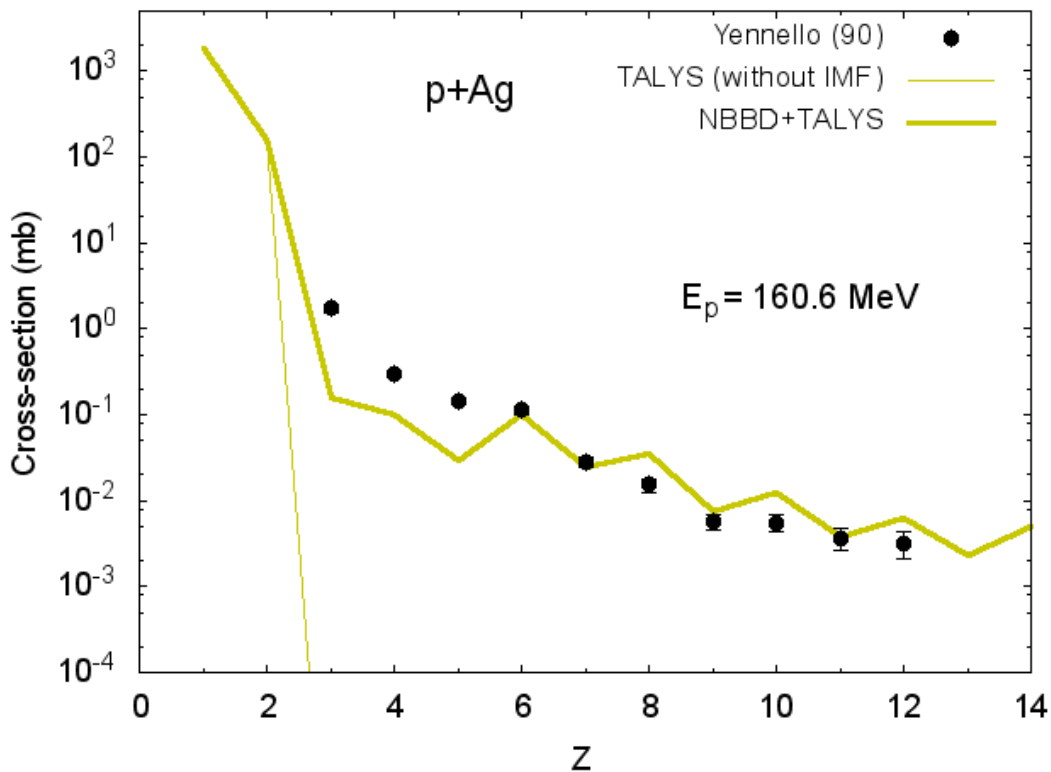


Fig.51 Z-distribution of residuals in the p+Ag reaction at the incident proton energy 160.6 MeV calculated using the NBBB model and models from the TALYS code (thick line), and using the TALYS code only (thin line). TALYS calculations do not include the modelling of IMF emission. See explanations in the text.

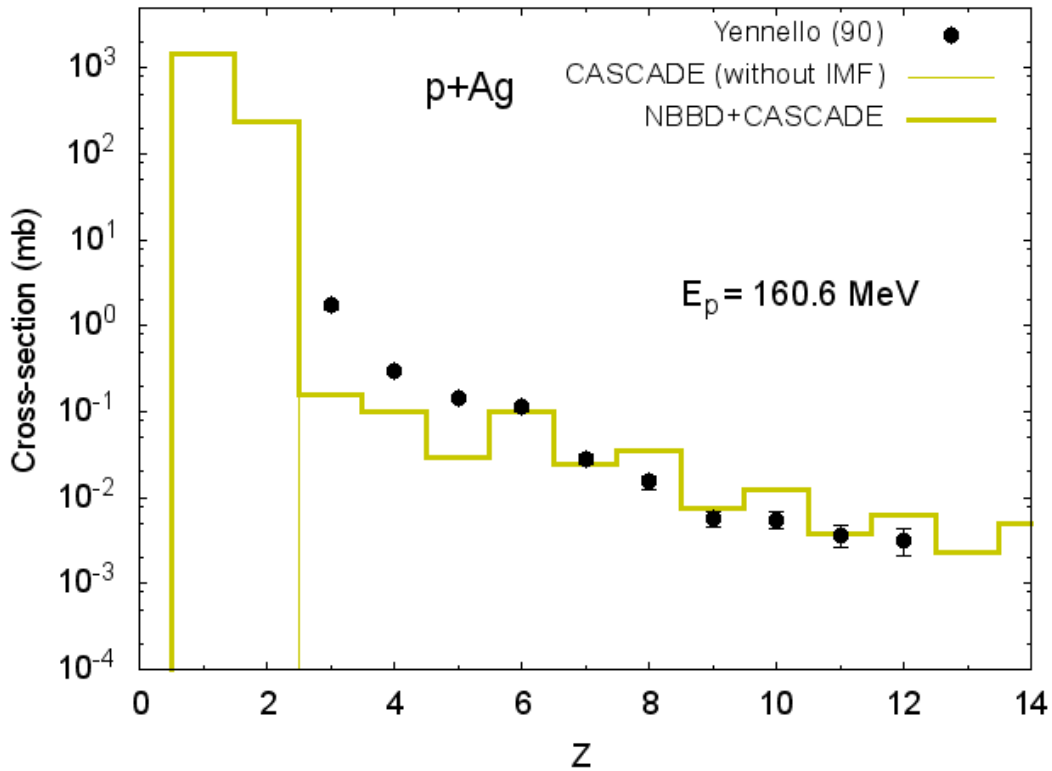


Fig.52 Z-distribution of residuals in the p+Ag reaction at 160.6 MeV calculated using NBBD and models from CASCADE (thick line), and using the CASCADE code only (thin line). Here, CASCADE calculations do not include the modelling of IMF emission.

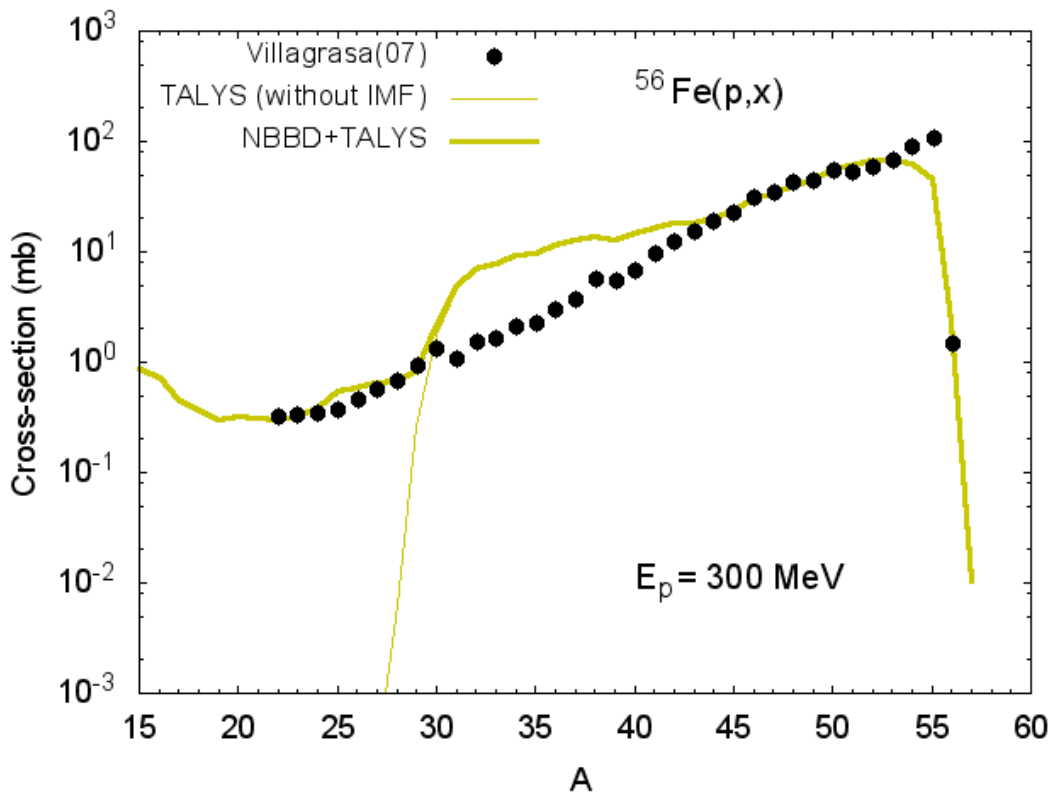


Fig.53 A-distribution of residuals in the p+⁵⁶Fe reaction at the incident proton energy 300 MeV calculated using the NBBD model and models from the TALYS code (thick line), and using the TALYS code only (thin line). TALYS calculations do not include the modelling of IMF emission.

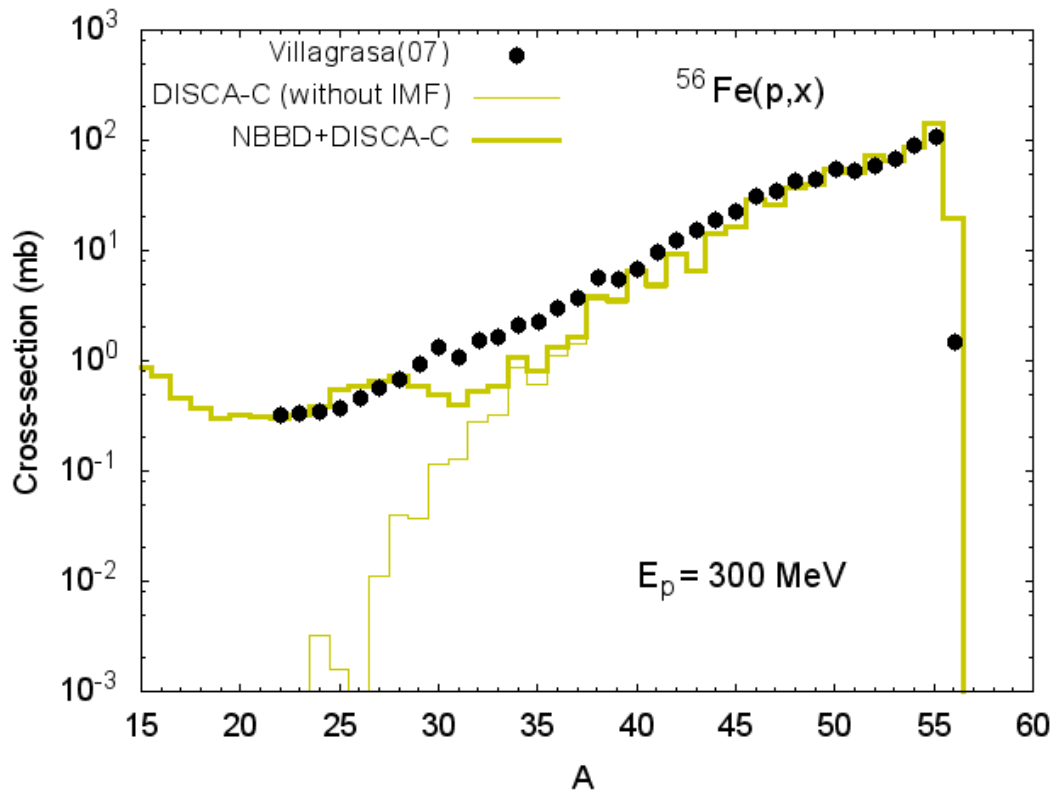


Fig.54 The same as in Fig.53 but for the DISCA-C code

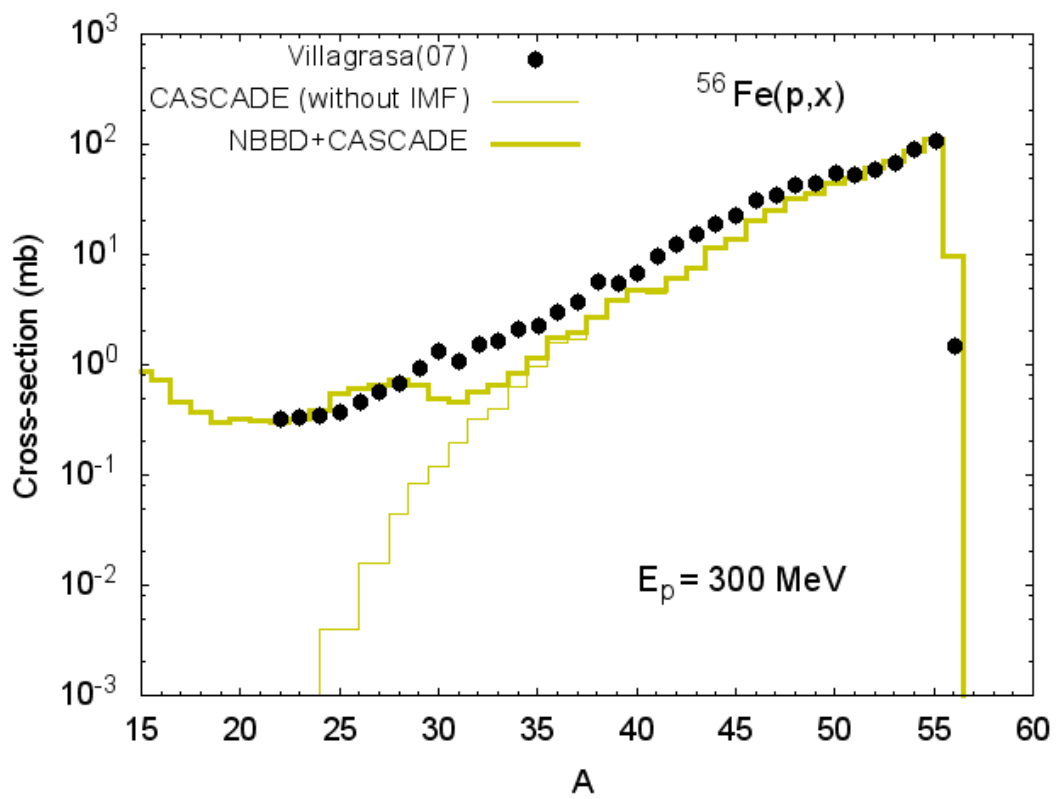


Fig.55 The same as in Fig.53 but for the CASCADE code

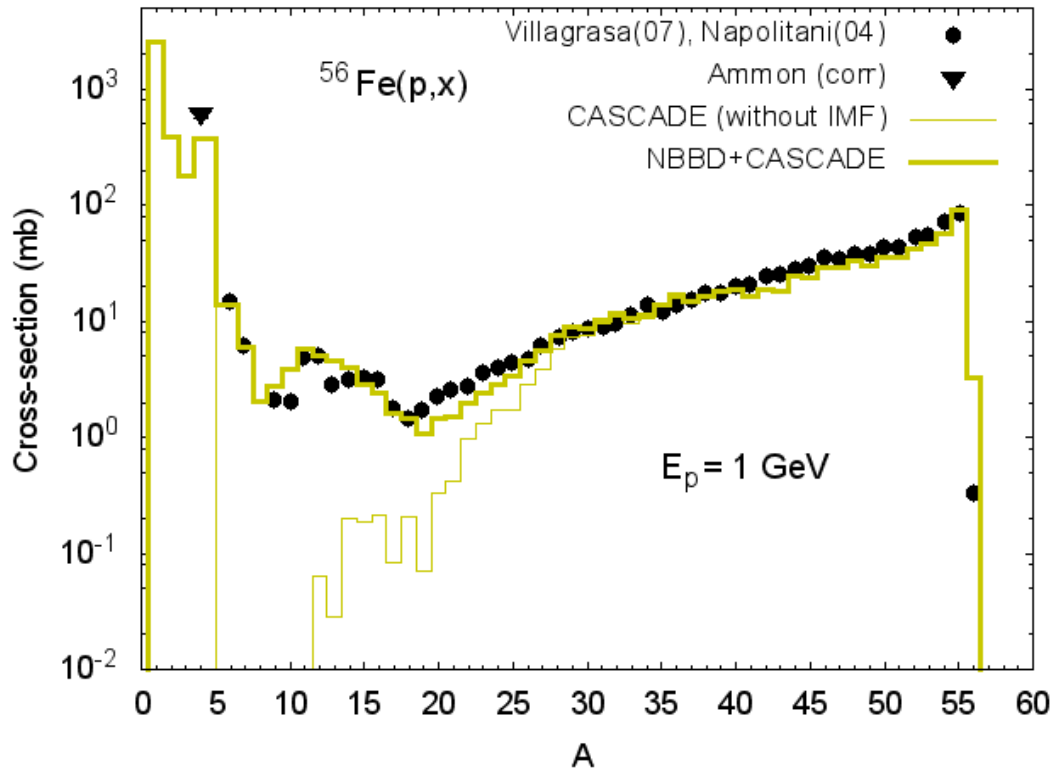


Fig.56 A-distribution of residuals in the $p+^{56}\text{Fe}$ reaction at the incident proton energy 1 GeV calculated using the NBBD model and models from the CASCADE code (thick line), and using the CASCADE code only (thin line). Here CASCADE calculations do not include the modelling of IMF emission.

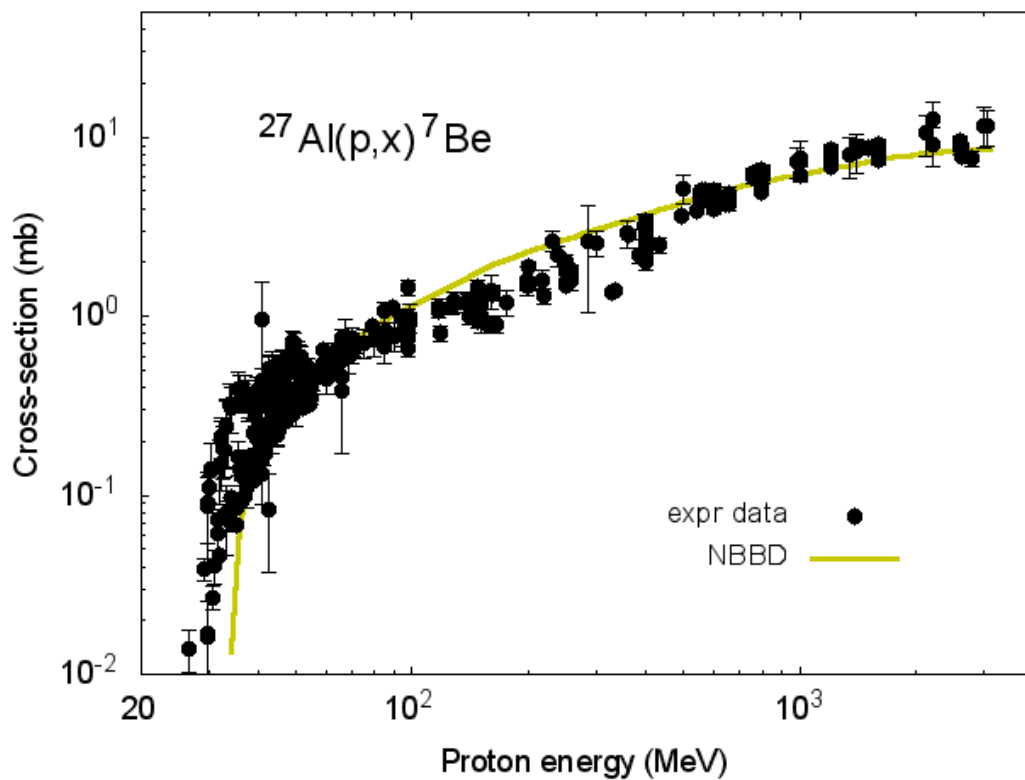


Fig.57 Cross-section of $^{27}\text{Al}(p,x)^7\text{Be}$ reaction calculated using the NBBD model.

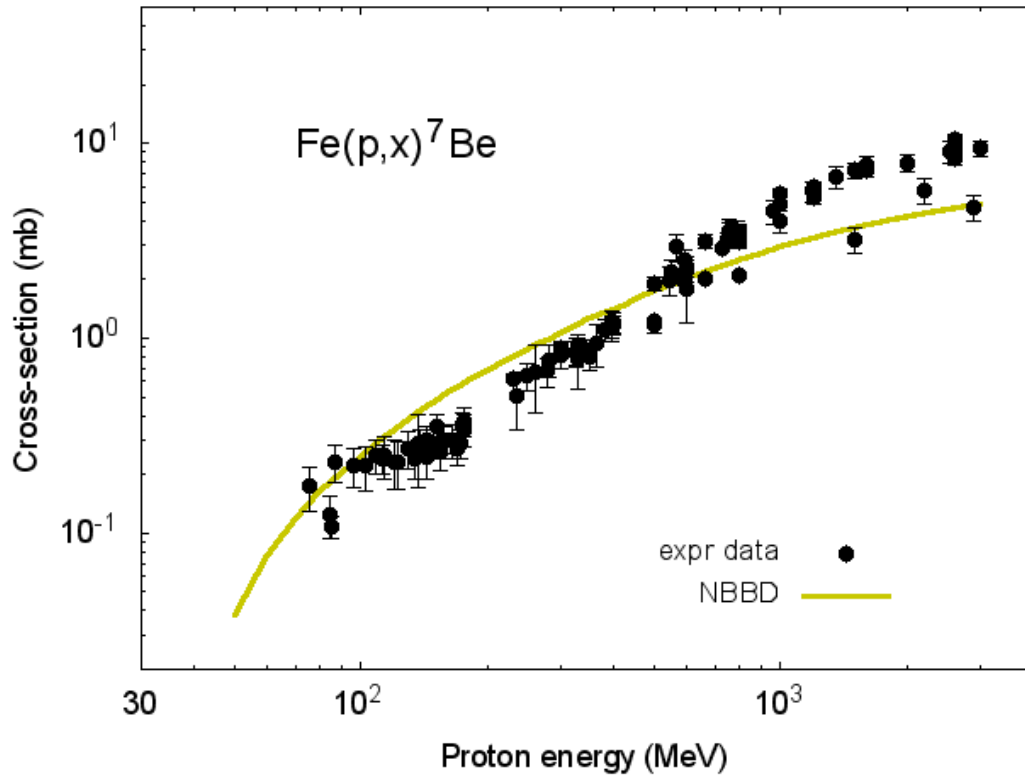


Fig.58 Cross-section of $\text{Fe}(p,x)^7\text{Be}$ reaction calculated using the NBBD model.

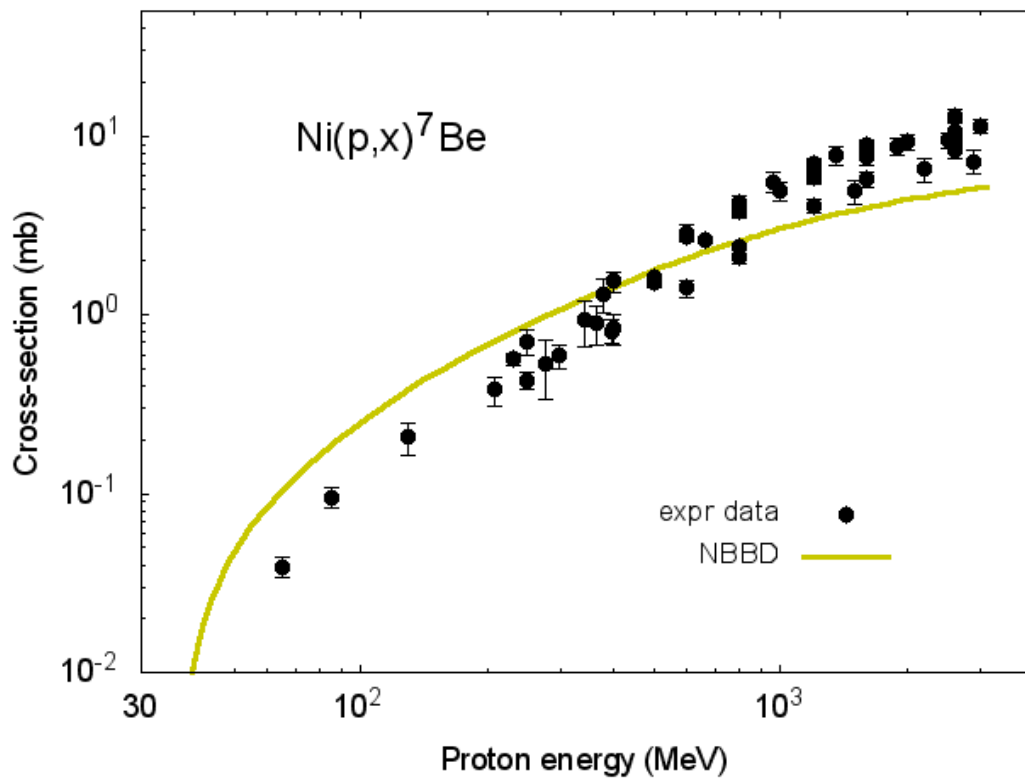


Fig.59 Cross-section of $\text{Ni}(p,x)^7\text{Be}$ reaction calculated using the NBBD model.

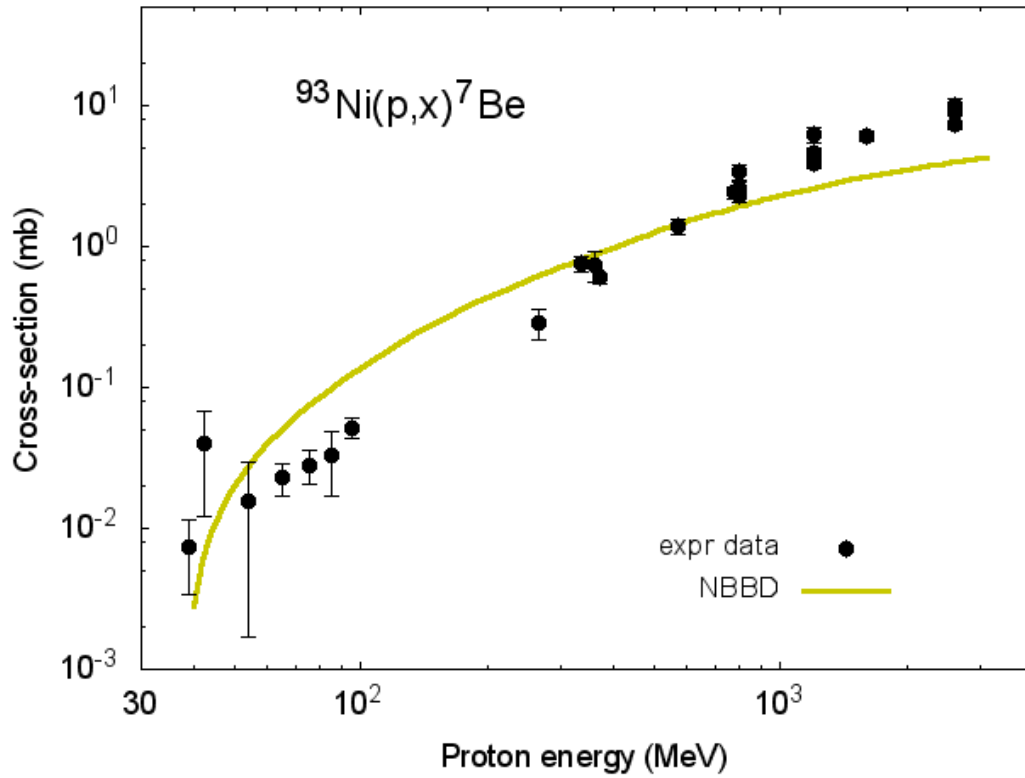


Fig.60 Cross-section of $^{93}\text{Ni}(p,x)^7\text{Be}$ reaction calculated using the NBBD model.

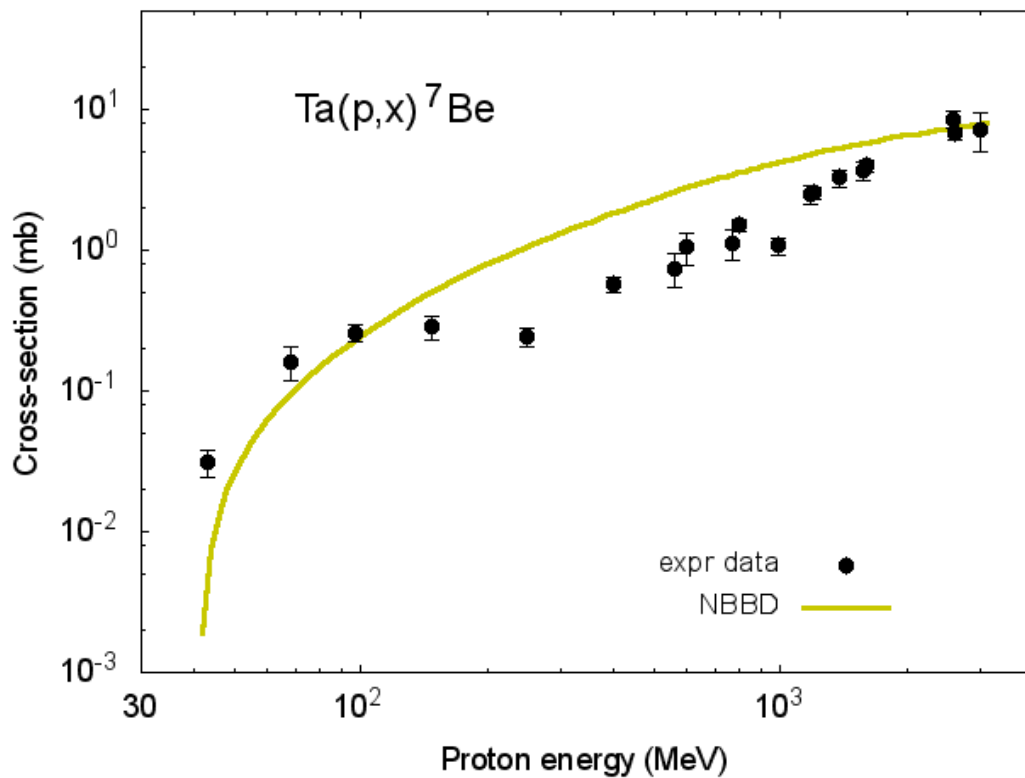


Fig.61 Cross-section of $\text{Ta}(p,x)^7\text{Be}$ reaction calculated using the NBBD model.

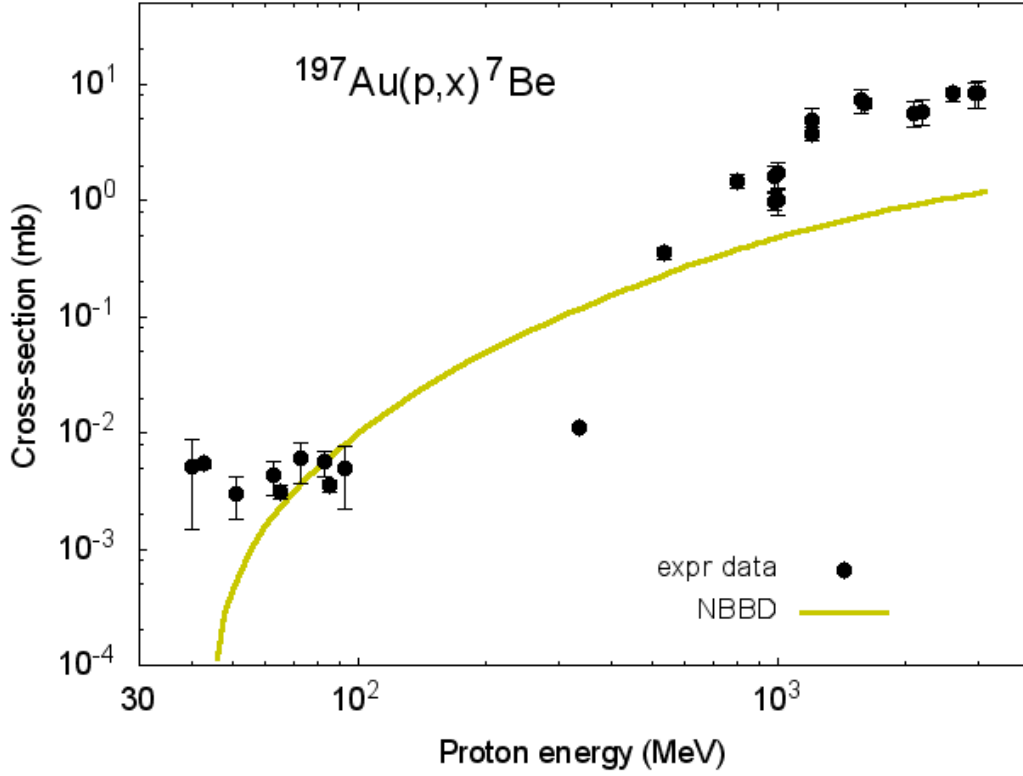


Fig.62 Cross-section of $^{197}\text{Au}(p,x)^7\text{Be}$ reaction calculated using the NBBD model.

4.2 Simple knock-out model

Following Ref.[138] the contribution of non-equilibrium processes to the production cross-section of the fragment in nuclear reactions induced by intermediate energy nucleon can be estimated using the expression

$$\sigma_{\text{frag}}^{\text{pre}}(E_p) = \sigma_{\text{non}} \gamma \left(1 - (V_{\text{frag}} + Q_{\text{frag}})/E_p\right) \sigma_{\text{n,frag}} A^{2/3} N_{\text{case}}, \quad (11)$$

where $\sigma_{\text{n,frag}}$ is the “effective” cross-section for nucleon interactions with the fragment, γ is the parameter.

The approach has been used in Ref.[138] to estimate the fraction of non-equilibrium emission in the ^3He and ^4He production cross-sections in nucleon induced reactions on targets Fe, Ta, W, and Au at energies up to 10 GeV.

In the present work Eq.(11) is used for the comparison with experimental cross-sections of ^7Be production for various targets irradiated with intermediate energy protons.

The contribution of equilibrium emission to ${}^7\text{Be}$ yield was calculated using the CASCADE code, N_{casc} was estimated using Eqs.(9),(10), and $\sigma_{\text{n,frag}}$ using approximate approach from Ref.[146].

Figs.63-67 show calculated cross-sections for proton induced reactions $(\text{p,x}){}^7\text{Be}$ on Al, Fe, Nb; Ta, and Au. The values of γ -parameter is taken equal to 9.7×10^{-9} for Al, Fe, and Nb, 16×10^{-9} for Ta, and 5.9×10^{-10} for Au.

Figs.63-67 show rather good agreement between experimental cross-sections and results of calculations. The agreement achieved using adopted values of γ -parameter leaves the question about the contribution of other than knock-out processes in the non-equilibrium ${}^7\text{Be}$ emission open.

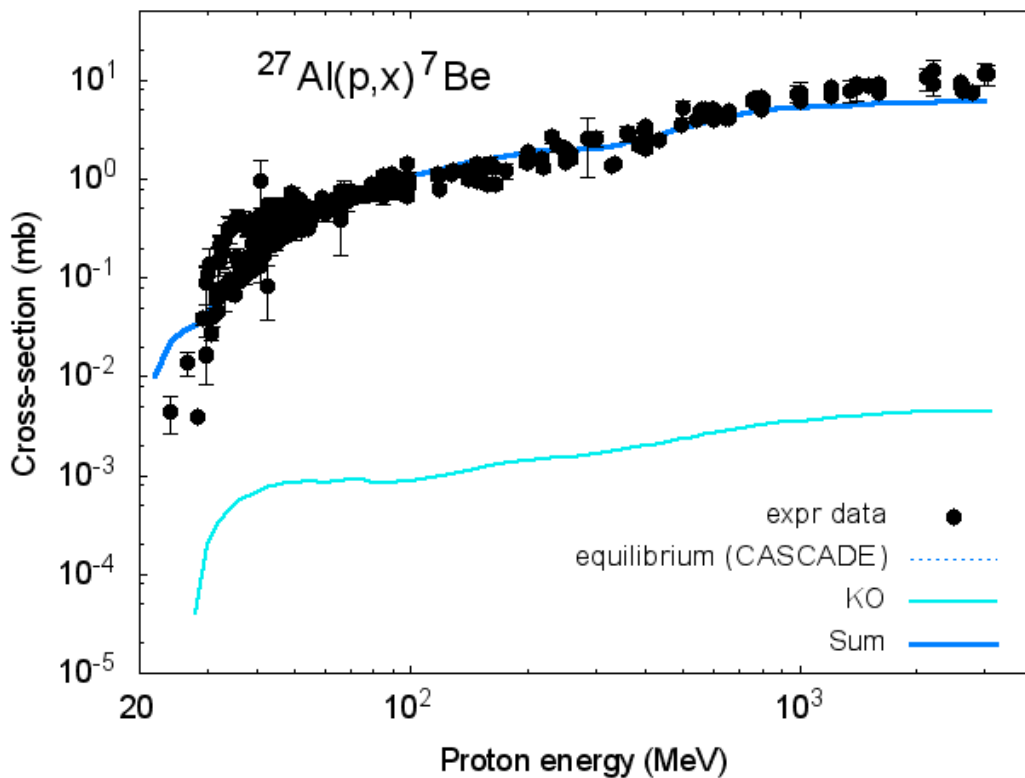


Fig.63 Calculated ${}^{27}\text{Al}(\text{p,x}){}^7\text{Be}$ reaction cross-section. The contribution of the non-equilibrium emission of ${}^7\text{Be}$ in the cross-section is estimated using discussed phenomenological knock-out model (KO), the contribution of the equilibrium ${}^7\text{Be}$ emission is calculated using the CASCADE code.

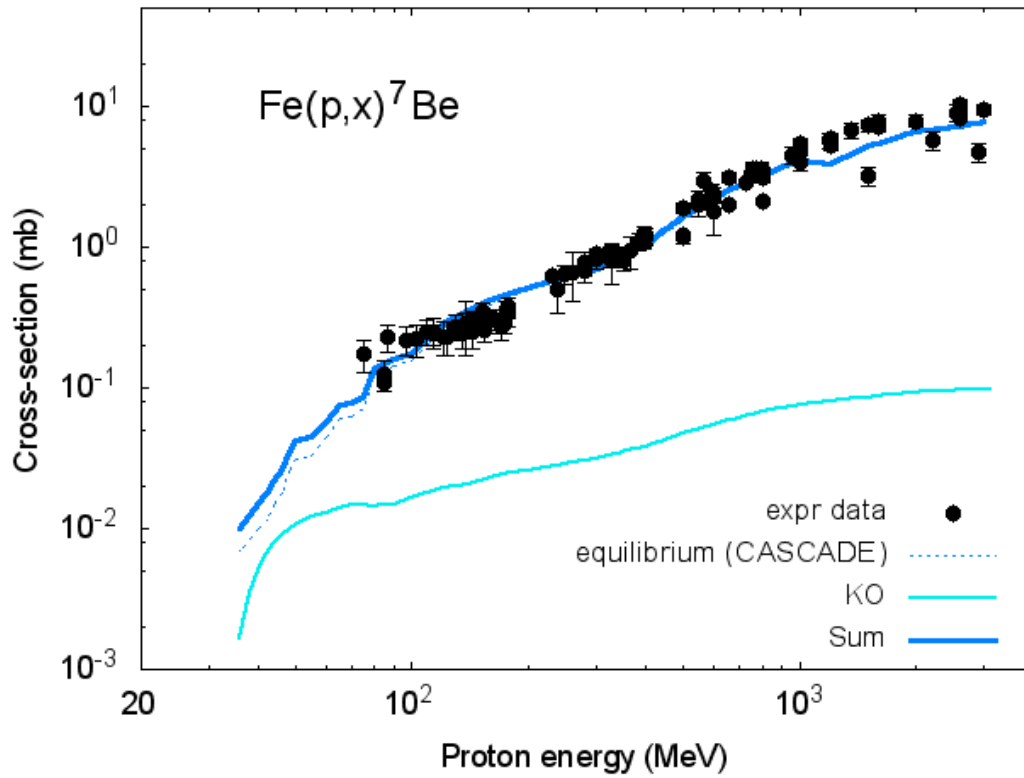


Fig.64 Calculated $\text{Fe}(p,x)^7\text{Be}$ reaction cross-section. See captions to Fig.63.

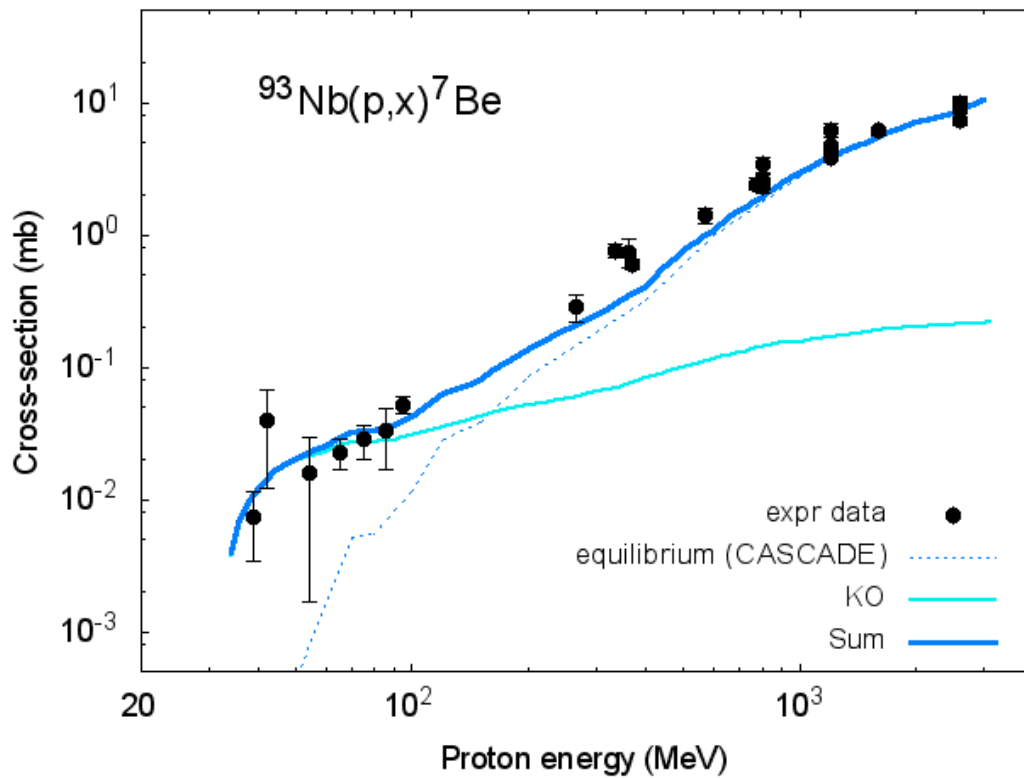


Fig.65 Calculated $^{93}\text{Nb}(p,x)^7\text{Be}$ reaction cross-section. See captions to Fig.63.

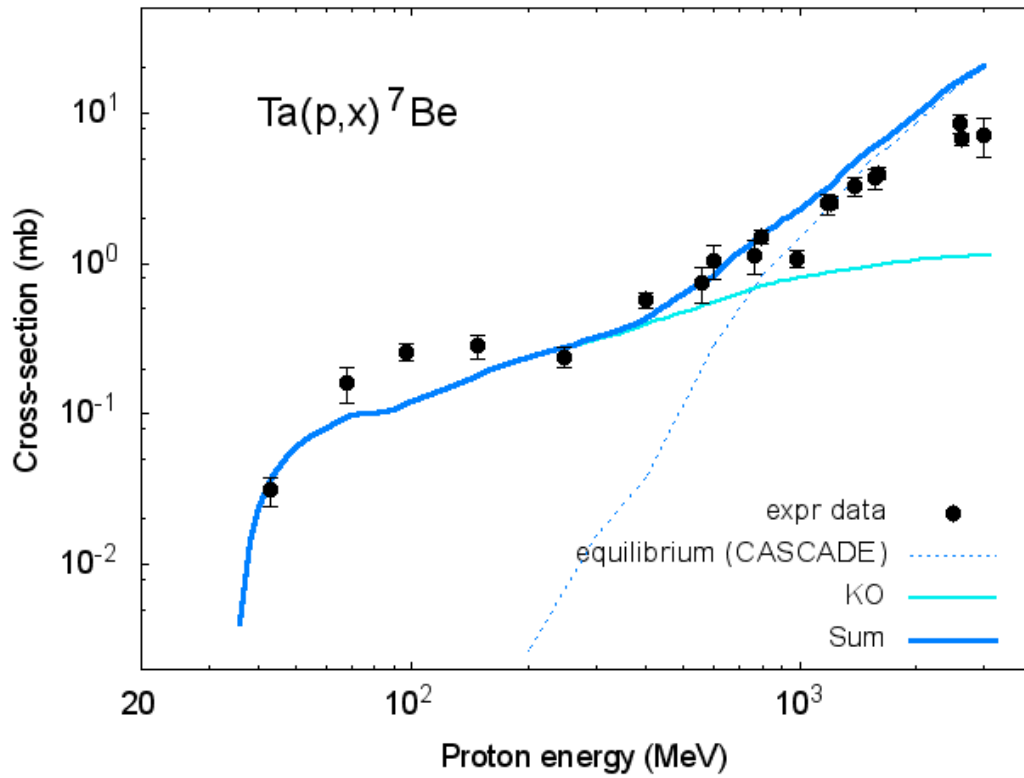


Fig.66 Calculated $\text{Ta}(p,x)^7\text{Be}$ reaction cross-section. See captions to Fig.63.

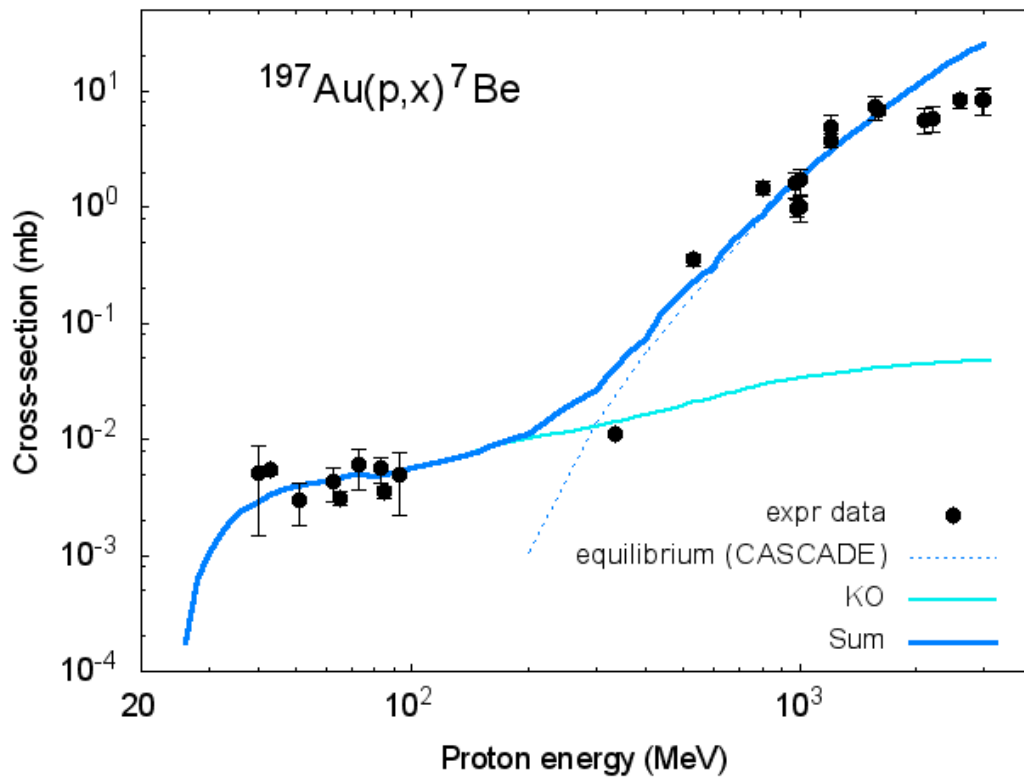


Fig.67. Calculated $^{197}\text{Au}(p,x)^7\text{Be}$ reaction cross-section. See captions to Fig.63.

5. Calculation of ${}^7\text{Be}$ production cross-sections for neutron and proton induced reactions at energies up to 200 MeV

To supplement available evaluated activation data files by the ${}^7\text{Be}$ production cross-sections at intermediate energies the calculations of $(n,x){}^7\text{Be}$ and $(p,x){}^7\text{Be}$ cross-sections were performed using the ALICE/ASH code for 274 stable targets from C to Bi.

Calculations for each target included the procedure of the estimation of errors and correlations using the Monte Carlo method [150,151]. The model parameters responsible for the ${}^7\text{Be}$ emission, Chapter 4, were selected by a random choice and corresponding results of cross-section calculations were used for the calculation of a covariance matrix

$$V_{ij} = N^{-1} \sum_{k=1}^N (\sigma_{ik} - \sigma_{i0})(\sigma_{jk} - \sigma_{j0}), \quad (12)$$

where σ_{ik} is the cross-section corresponding to the “i”-th primary particle energy in the “k”-th set of calculations, σ_{i0} is the cross-section obtained using the “best” set of model parameters adopted as default ones in ALICE/ASH, N is the total number of sets of calculations with randomly selected model parameters.

The corresponding correlation matrix is equal to

$$C_{ij} = V_{ij} (V_{ii} \times V_{jj})^{-1/2} \quad (13)$$

Figs.68-70 show examples of calculated $(n,x){}^7\text{Be}$ cross-sections for ${}^{27}\text{Al}$, ${}^{56}\text{Fe}$, and ${}^{184}\text{W}$. Corresponding correlation matrices are shown in Figs.71-73.

Calculated ${}^7\text{Be}$ production cross-sections and estimated errors are presented in Appendix A for neutron induced reactions and in Appendix B for proton induced reactions. The sample Fortran routine to read the data is given in Appendix C.

Data obtained can be used for the estimation of ${}^7\text{Be}$ production rate in materials irradiated with neutrons and protons at energies up to 200 MeV.

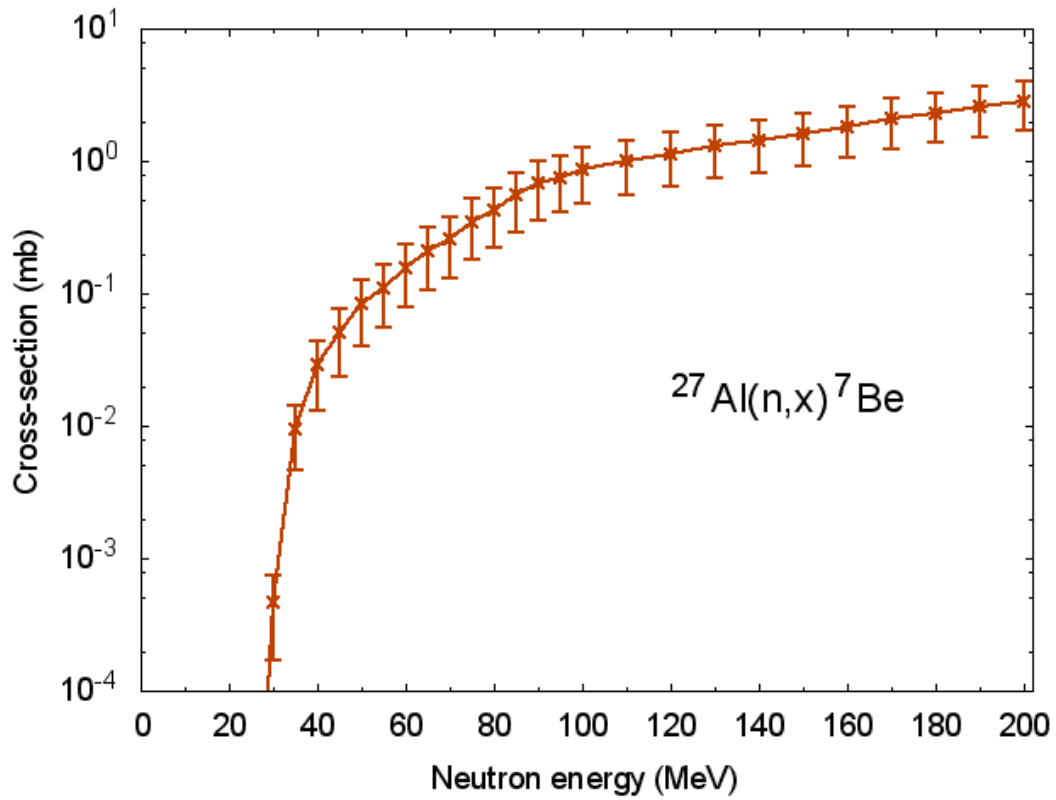


Fig.68. Calculated $^{27}\text{Al}(n,x)^7\text{Be}$ reaction cross-section. See explanations in the text

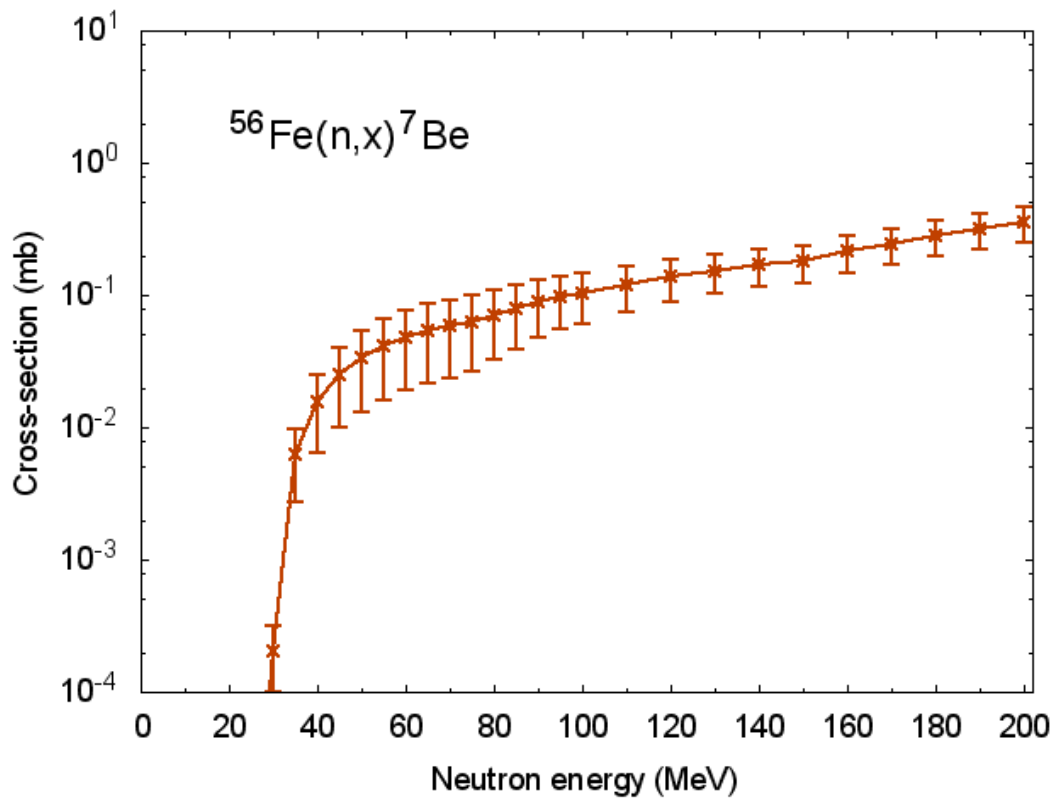


Fig.69. Calculated $^{56}\text{Fe}(n,x)^7\text{Be}$ reaction cross-section. See explanations in the text

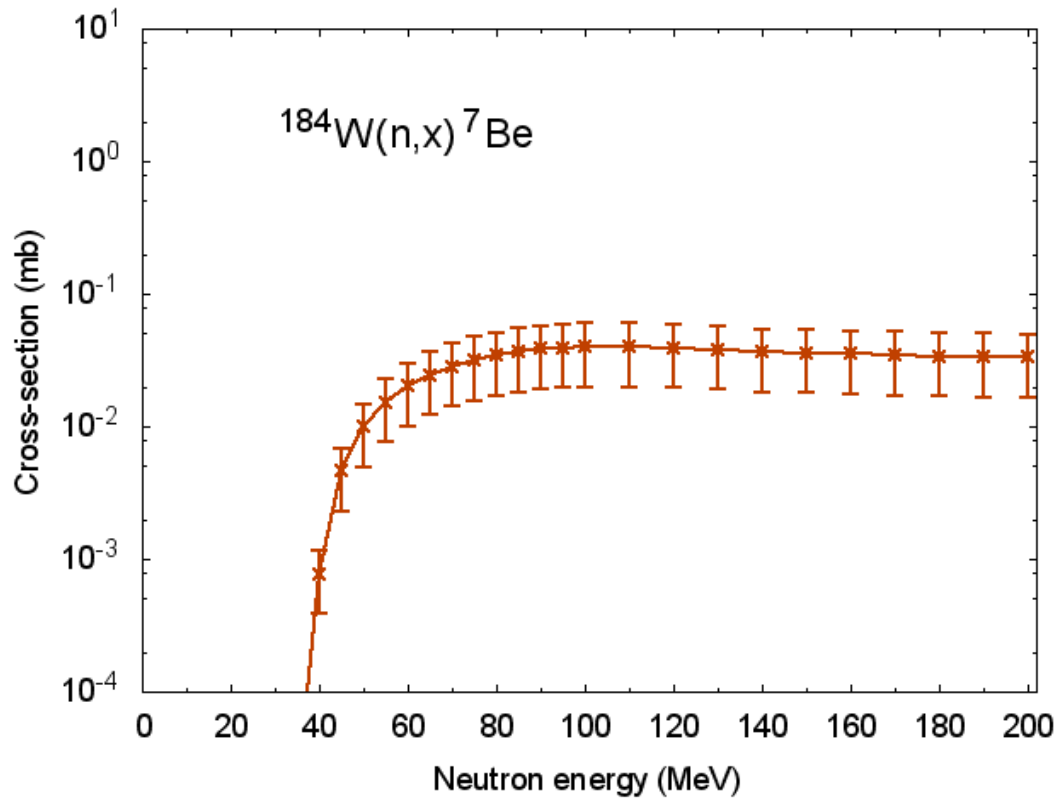


Fig.70. Calculated $^{184}\text{W}(n,x)^7\text{Be}$ reaction cross-section. See explanations in the text

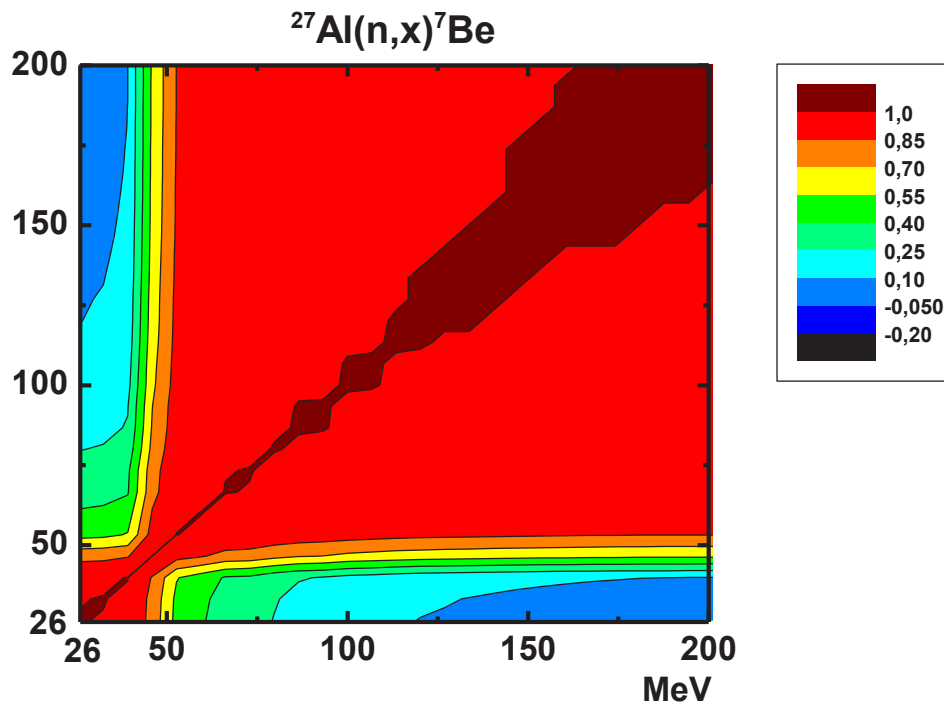


Fig.71 Calculated correlation matrix for $^{27}\text{Al}(n,x)^7\text{Be}$ reaction cross-section.

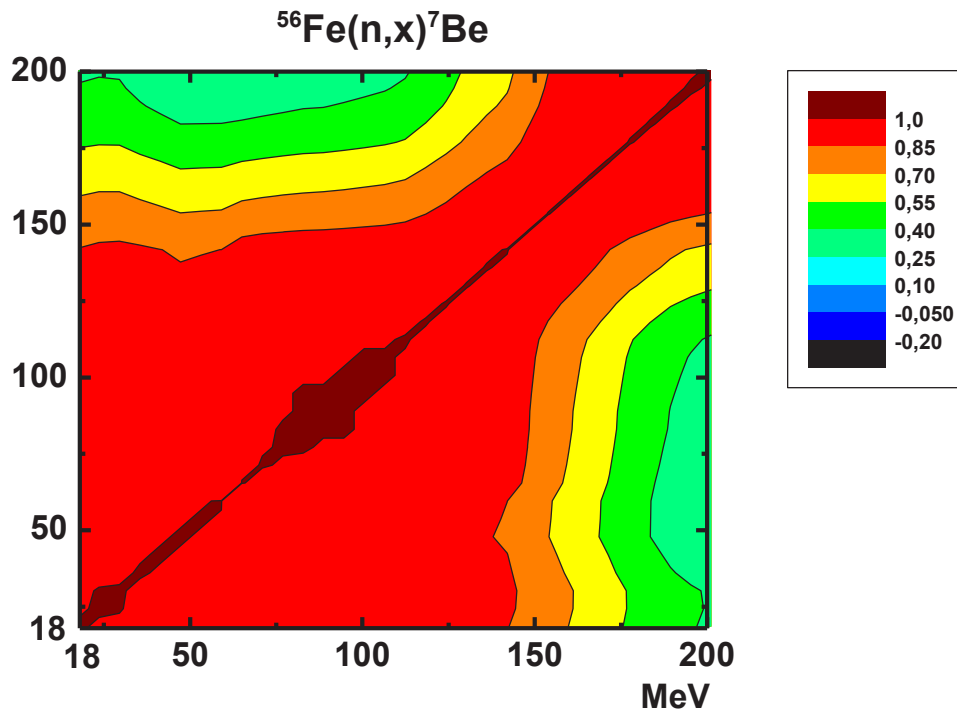


Fig.72 Calculated correlation matrix for $^{56}\text{Fe}(n,x)^7\text{Be}$ reaction cross-section.

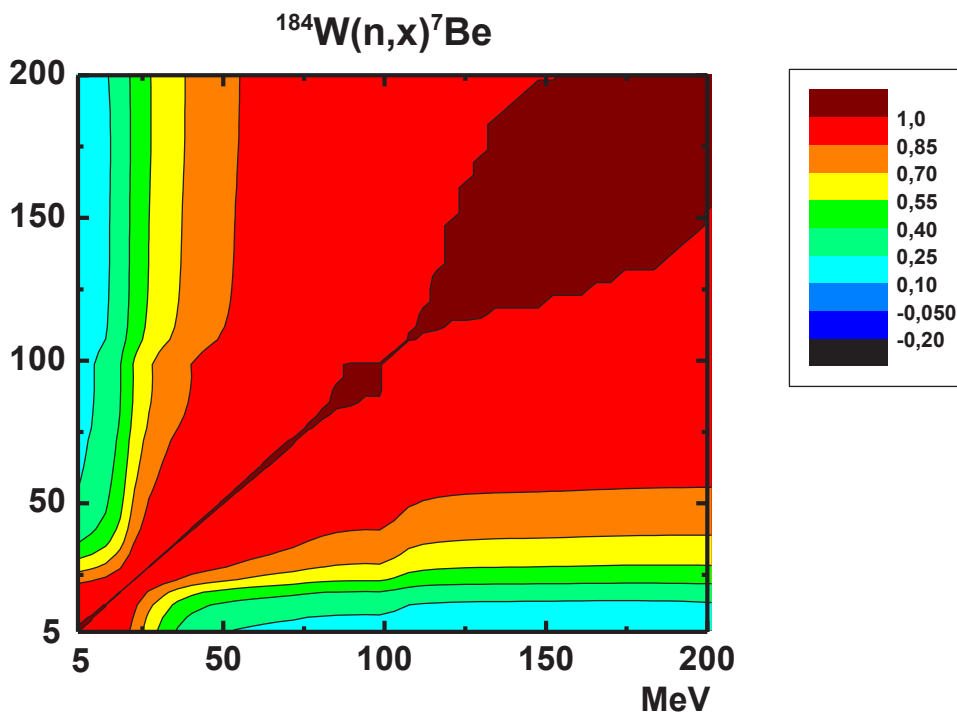


Fig.73 Calculated correlation matrix for $^{184}\text{W}(n,x)^7\text{Be}$ reaction cross-section.

6. Conclusion

The simulation of heavy cluster ($A \geq 4$) emission in nucleon induced reactions has been performed using the coalescence model combined with the intranuclear cascade evaporation model and pick-up coalescence model combined with hybrid precompound and evaporation model.

The range of applications of CASCADE and ALICE/ASH codes was extended to perform the simulation of heavy cluster emission at intermediate and high energies of primary particles. Available experimental data were applied to obtain the number of model parameters responsible for the cluster emission.

The agreement observed between results of calculation and measured data demonstrates promising application of models discussed for predicting intermediate fragment distributions in nucleon induced reactions at intermediate and high energies.

In addition to nuclear models two approximate approach for the calculation of heavy cluster yields were discussed. These approaches can be used for quick and rather accurate estimations.

Using the modified version of the ALICE/ASH code the ${}^7\text{Be}$ production cross-section for neutron and proton induced reactions were calculated for 274 stable targets from C to Bi at primary particle energies up to 200 MeV (Appendices A,B;C). The data obtained supplement the content of existing activation data files and can be used for the calculation of ${}^7\text{Be}$ production rates in nucleon induced reactions at intermediate energies.

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Appendix A: Calculated (n,x)⁷Be reaction cross-sections for 274 targets at the primary neutron energies up to 200 MeV

For each target the first record contains the atomic number and atomic mass number of the projectile (IZP, IAP), the atomic number and atomic mass number of the target nucleus (IZT, IAT), the number (N) of triples E_i, σ_i, dσ_i, and symbols describing the interaction. The Fortran format is (5i10), IZP, IAP, IZT, IAT, N. Next records for the target contain the energy of the projectile E_i in MeV, the calculated cross-section σ_i(E) in mb (XS), and the calculated error of the cross-section dσ_i(E) in mb (DXS). The Fortran format to read the data is (8E10.0), (E(I), XS(I), DXS(I), I=1, N).

The sample Fortran routine to read data is given in Appendix C.

0	1	6	12	27	n+C12		
2.742E+01	0.000E+00	0.000E+00	2.800E+01	3.397E-04	1.545E-04	3.000E+01	5.528E-02
2.764E-02	3.500E+01	3.590E+00	4.547E-01	4.000E+01	1.807E+01	7.978E-01	4.500E+01
3.520E+01	3.731E+00	5.000E+01	4.419E+01	6.585E+00	5.500E+01	4.898E+01	8.532E+00
6.000E+01	5.106E+01	1.007E+01	6.500E+01	5.190E+01	1.069E+01	7.000E+01	4.920E+01
1.122E+01	7.500E+01	4.867E+01	1.159E+01	8.000E+01	4.731E+01	1.168E+01	8.500E+01
4.543E+01	1.149E+01	9.000E+01	4.296E+01	1.101E+01	9.500E+01	4.023E+01	1.076E+01
1.000E+02	4.040E+01	1.054E+01	1.100E+02	3.758E+01	1.000E+01	1.200E+02	3.647E+01
9.738E+00	1.300E+02	3.443E+01	9.451E+00	1.400E+02	3.363E+01	9.162E+00	1.500E+02
3.074E+01	8.820E+00	1.600E+02	2.994E+01	8.464E+00	1.700E+02	3.013E+01	8.224E+00
1.800E+02	2.979E+01	7.932E+00	1.900E+02	3.048E+01	7.705E+00	2.000E+02	3.073E+01
7.519E+00							
0	1	6	13	25	n+C13		
3.305E+01	0.000E+00	0.000E+00	3.500E+01	7.140E-03	3.570E-03	4.000E+01	2.086E-01
8.544E-02	4.500E+01	1.608E+00	3.397E-01	5.000E+01	4.497E+00	5.895E-01	5.500E+01
8.683E+00	5.758E-01	6.000E+01	1.238E+01	4.838E-01	6.500E+01	1.500E+01	7.514E-01
7.000E+01	1.786E+01	1.193E+00	7.500E+01	1.883E+01	1.976E+00	8.000E+01	2.141E+01
2.755E+00	8.500E+01	2.271E+01	3.288E+00	9.000E+01	2.297E+01	3.609E+00	9.500E+01
2.315E+01	3.852E+00	1.000E+02	2.283E+01	4.091E+00	1.100E+02	2.229E+01	4.436E+00
1.200E+02	2.359E+01	4.837E+00	1.300E+02	2.317E+01	4.856E+00	1.400E+02	2.257E+01
4.902E+00	1.500E+02	2.146E+01	5.051E+00	1.600E+02	2.112E+01	5.017E+00	1.700E+02
2.123E+01	5.172E+00	1.800E+02	2.054E+01	5.070E+00	1.900E+02	2.053E+01	4.956E+00
2.000E+02	2.115E+01	4.927E+00					
0	1	7	14	27	n+N14		
2.760E+01	0.000E+00	0.000E+00	2.800E+01	5.276E-04	2.638E-04	3.000E+01	1.426E-02
7.130E-03	3.500E+01	1.140E-01	5.700E-02	4.000E+01	2.837E-01	1.419E-01	4.500E+01
4.612E-01	2.306E-01	5.000E+01	6.853E-01	3.427E-01	5.500E+01	9.694E-01	4.847E-01
6.000E+01	1.660E+00	5.452E-01	6.500E+01	2.628E+00	4.715E-01	7.000E+01	4.376E+00
3.581E-01	7.500E+01	5.741E+00	3.791E-01	8.000E+01	6.534E+00	5.661E-01	8.500E+01
8.874E+00	7.253E-01	9.000E+01	1.013E+01	9.337E-01	9.500E+01	1.016E+01	1.147E+00
1.000E+02	1.210E+01	1.266E+00	1.100E+02	1.490E+01	1.828E+00	1.200E+02	1.917E+01
2.275E+00	1.300E+02	2.168E+01	2.780E+00	1.400E+02	2.161E+01	3.431E+00	1.500E+02
2.395E+01	3.988E+00	1.600E+02	2.703E+01	4.486E+00	1.700E+02	2.555E+01	4.804E+00
1.800E+02	2.653E+01	5.242E+00	1.900E+02	2.826E+01	5.593E+00	2.000E+02	2.654E+01
5.690E+00							
0	1	7	15	25	n+N15		
3.469E+01	0.000E+00	0.000E+00	3.500E+01	5.283E-05	2.269E-05	4.000E+01	1.748E-02
8.740E-03	4.500E+01	4.456E-02	2.228E-02	5.000E+01	8.350E-02	4.175E-02	5.500E+01
1.448E-01	7.240E-02	6.000E+01	2.168E-01	1.084E-01	6.500E+01	3.041E-01	1.520E-01
7.000E+01	4.343E-01	2.137E-01	7.500E+01	7.341E-01	2.029E-01	8.000E+01	9.492E-01
2.266E-01	8.500E+01	1.705E+00	1.928E-01	9.000E+01	2.317E+00	1.878E-01	9.500E+01
2.804E+00	1.783E-01	1.000E+02	3.683E+00	2.123E-01	1.100E+02	4.705E+00	3.283E-01
1.200E+02	5.219E+00	4.578E-01	1.300E+02	6.580E+00	4.642E-01	1.400E+02	8.377E+00
5.403E-01	1.500E+02	8.972E+00	8.366E-01	1.600E+02	1.152E+01	1.040E+00	1.700E+02

1.211E+01	1.285E+00	1.800E+02	1.400E+01	1.523E+00	1.900E+02	1.718E+01	1.751E+00
2.000E+02	1.676E+01	2.097E+00					
0	1	8	16	27			n+O16
2.662E+01	0.000E+00	0.000E+00	2.800E+01	3.749E-03	1.875E-03	3.000E+01	3.648E-02
1.824E-02	3.500E+01	1.822E-01	9.110E-02	4.000E+01	3.634E-01	1.817E-01	4.500E+01
7.796E-01	3.898E-01	5.000E+01	1.844E+00	5.632E-01	5.500E+01	3.716E+00	8.441E-01
6.000E+01	5.633E+00	1.251E+00	6.500E+01	7.702E+00	1.736E+00	7.000E+01	9.284E+00
2.367E+00	7.500E+01	1.032E+01	2.821E+00	8.000E+01	1.112E+01	3.193E+00	8.500E+01
1.131E+01	3.432E+00	9.000E+01	1.140E+01	3.598E+00	9.500E+01	1.196E+01	3.897E+00
1.000E+02	1.160E+01	3.858E+00	1.100E+02	1.096E+01	3.729E+00	1.200E+02	1.062E+01
3.604E+00	1.300E+02	1.016E+01	3.532E+00	1.400E+02	1.016E+01	3.495E+00	1.500E+02
9.437E+00	3.431E+00	1.600E+02	1.001E+01	3.535E+00	1.700E+02	1.071E+01	3.382E+00
1.800E+02	1.087E+01	3.495E+00	1.900E+02	1.184E+01	3.484E+00	2.000E+02	1.244E+01
3.512E+00							
0	1	8	17	25			n+O17
3.038E+01	0.000E+00	0.000E+00	3.500E+01	6.165E-02	3.083E-02	4.000E+01	1.790E-01
8.950E-02	4.500E+01	3.041E-01	1.520E-01	5.000E+01	4.419E-01	2.210E-01	5.500E+01
7.307E-01	3.334E-01	6.000E+01	1.118E+00	2.963E-01	6.500E+01	1.919E+00	3.526E-01
7.000E+01	3.142E+00	4.365E-01	7.500E+01	4.048E+00	5.907E-01	8.000E+01	4.933E+00
7.651E-01	8.500E+01	6.264E+00	1.081E+00	9.000E+01	6.419E+00	1.263E+00	9.500E+01
7.029E+00	1.415E+00	1.000E+02	7.337E+00	1.572E+00	1.100E+02	7.701E+00	1.772E+00
1.200E+02	7.964E+00	1.954E+00	1.300E+02	8.354E+00	2.055E+00	1.400E+02	8.332E+00
2.077E+00	1.500E+02	8.383E+00	2.189E+00	1.600E+02	9.217E+00	2.252E+00	1.700E+02
9.120E+00	2.411E+00	1.800E+02	9.524E+00	2.476E+00	1.900E+02	9.671E+00	2.544E+00
2.000E+02	1.038E+01	2.631E+00					
0	1	8	18	24			n+O18
3.544E+01	0.000E+00	0.000E+00	4.000E+01	9.984E-03	4.992E-03	4.500E+01	4.348E-02
2.174E-02	5.000E+01	1.075E-01	5.375E-02	5.500E+01	1.849E-01	9.245E-02	6.000E+01
2.251E-01	1.125E-01	6.500E+01	3.233E-01	1.616E-01	7.000E+01	5.031E-01	2.515E-01
7.500E+01	7.700E-01	3.366E-01	8.000E+01	1.347E+00	3.503E-01	8.500E+01	1.915E+00
4.467E-01	9.000E+01	2.716E+00	5.229E-01	9.500E+01	3.211E+00	6.015E-01	1.000E+02
3.565E+00	7.080E-01	1.100E+02	4.235E+00	9.446E-01	1.200E+02	4.749E+00	1.192E+00
1.300E+02	5.109E+00	1.350E+00	1.400E+02	5.435E+00	1.461E+00	1.500E+02	5.716E+00
1.611E+00	1.600E+02	6.075E+00	1.818E+00	1.700E+02	6.644E+00	1.963E+00	1.800E+02
6.870E+00	2.107E+00	1.900E+02	7.707E+00	2.358E+00	2.000E+02	7.769E+00	2.423E+00
0	1	9	19	27			n+F19
2.712E+01	0.000E+00	0.000E+00	2.800E+01	1.207E-03	6.035E-04	3.000E+01	5.325E-03
2.662E-03	3.500E+01	5.928E-02	2.964E-02	4.000E+01	1.624E-01	8.120E-02	4.500E+01
3.179E-01	1.590E-01	5.000E+01	5.110E-01	2.555E-01	5.500E+01	5.440E-01	2.720E-01
6.000E+01	7.000E-01	3.500E-01	6.500E+01	8.398E-01	4.199E-01	7.000E+01	9.600E-01
4.800E-01	7.500E+01	1.145E+00	5.725E-01	8.000E+01	1.327E+00	6.635E-01	8.500E+01
1.592E+00	7.960E-01	9.000E+01	1.779E+00	8.895E-01	9.500E+01	2.089E+00	1.044E+00
1.000E+02	2.322E+00	1.161E+00	1.100E+02	3.118E+00	1.559E+00	1.200E+02	3.815E+00
1.907E+00	1.300E+02	4.495E+00	2.248E+00	1.400E+02	5.073E+00	2.537E+00	1.500E+02
5.428E+00	2.714E+00	1.600E+02	6.454E+00	3.227E+00	1.700E+02	6.969E+00	3.485E+00
1.800E+02	8.169E+00	4.085E+00	1.900E+02	8.621E+00	4.311E+00	2.000E+02	9.896E+00
4.948E+00							
0	1	10	20	32			n+Ne20
1.885E+01	0.000E+00	0.000E+00	1.900E+01	8.989E-07	4.494E-07	2.000E+01	9.110E-05
4.555E-05	2.200E+01	1.409E-03	7.045E-04	2.400E+01	1.149E-02	5.745E-03	2.600E+01
6.024E-02	3.012E-02	2.800E+01	1.693E-01	8.465E-02	3.000E+01	3.154E-01	1.577E-01
3.500E+01	6.314E-01	3.157E-01	4.000E+01	1.023E+00	5.115E-01	4.500E+01	1.532E+00
7.660E-01	5.000E+01	1.619E+00	8.095E-01	5.500E+01	2.040E+00	1.020E+00	6.000E+01
2.429E+00	1.214E+00	6.500E+01	2.969E+00	1.484E+00	7.000E+01	3.452E+00	1.726E+00
7.500E+01	4.441E+00	2.220E+00	8.000E+01	4.884E+00	2.442E+00	8.500E+01	6.025E+00
3.013E+00	9.000E+01	6.317E+00	3.159E+00	9.500E+01	6.794E+00	3.397E+00	1.000E+02
7.298E+00	3.649E+00	1.100E+02	7.618E+00	3.809E+00	1.200E+02	7.753E+00	3.877E+00
1.300E+02	7.983E+00	3.991E+00	1.400E+02	8.228E+00	4.114E+00	1.500E+02	8.793E+00
4.396E+00	1.600E+02	8.775E+00	4.388E+00	1.700E+02	9.374E+00	4.687E+00	1.800E+02
9.597E+00	4.798E+00	1.900E+02	1.023E+01	5.115E+00	2.000E+02	1.073E+01	5.365E+00
0	1	10	21	28			n+Ne21
2.442E+01	0.000E+00	0.000E+00	2.600E+01	6.970E-04	3.485E-04	2.800E+01	3.878E-03
1.939E-03	3.000E+01	1.607E-02	8.035E-03	3.500E+01	1.562E-01	7.810E-02	4.000E+01
3.799E-01	1.900E-01	4.500E+01	5.007E-01	2.504E-01	5.000E+01	7.127E-01	3.564E-01
5.500E+01	9.319E-01	4.659E-01	6.000E+01	1.167E+00	5.835E-01	6.500E+01	1.276E+00
6.380E-01	7.000E+01	1.543E+00	7.715E-01	7.500E+01	1.812E+00	9.060E-01	8.000E+01

2.122E+00	1.061E+00	8.500E+01	2.610E+00	1.305E+00	9.000E+01	3.258E+00	1.629E+00
9.500E+01	3.572E+00	1.786E+00	1.000E+02	3.918E+00	1.959E+00	1.100E+02	4.425E+00
2.212E+00	1.200E+02	4.782E+00	2.391E+00	1.300E+02	5.144E+00	2.572E+00	1.400E+02
5.365E+00	2.683E+00	1.500E+02	5.815E+00	2.908E+00	1.600E+02	6.126E+00	3.063E+00
1.700E+02	6.964E+00	3.482E+00	1.800E+02	7.244E+00	3.622E+00	1.900E+02	7.974E+00
3.987E+00	2.000E+02	8.410E+00	4.205E+00				
0	1	10	22	25			n+Ne22
3.077E+01	0.000E+00	0.000E+00	3.500E+01	3.571E-04	1.786E-04	4.000E+01	1.198E-02
5.990E-03	4.500E+01	4.549E-02	2.275E-02	5.000E+01	9.692E-02	4.846E-02	5.500E+01
1.896E-01	9.480E-02	6.000E+01	3.035E-01	1.517E-01	6.500E+01	4.298E-01	2.149E-01
7.000E+01	5.500E-01	2.750E-01	7.500E+01	6.937E-01	3.468E-01	8.000E+01	8.631E-01
4.315E-01	8.500E+01	1.091E+00	5.455E-01	9.000E+01	1.247E+00	6.235E-01	9.500E+01
1.493E+00	7.465E-01	1.000E+02	1.662E+00	8.310E-01	1.100E+02	1.924E+00	9.620E-01
1.200E+02	2.424E+00	1.212E+00	1.300E+02	2.719E+00	1.359E+00	1.400E+02	2.927E+00
1.464E+00	1.500E+02	3.128E+00	1.564E+00	1.600E+02	3.480E+00	1.740E+00	1.700E+02
4.137E+00	2.068E+00	1.800E+02	4.269E+00	2.135E+00	1.900E+02	5.096E+00	2.548E+00
2.000E+02	5.236E+00	2.618E+00					
0	1	11	23	27			n+Na23
2.629E+01	0.000E+00	0.000E+00	2.800E+01	2.797E-04	1.399E-04	3.000E+01	1.990E-03
9.950E-04	3.500E+01	2.785E-02	1.392E-02	4.000E+01	8.816E-02	4.408E-02	4.500E+01
1.520E-01	7.600E-02	5.000E+01	3.183E-01	1.592E-01	5.500E+01	5.484E-01	2.742E-01
6.000E+01	7.775E-01	3.887E-01	6.500E+01	9.397E-01	4.698E-01	7.000E+01	1.163E+00
5.815E-01	7.500E+01	1.528E+00	7.640E-01	8.000E+01	1.738E+00	8.690E-01	8.500E+01
2.216E+00	1.108E+00	9.000E+01	2.466E+00	1.233E+00	9.500E+01	2.611E+00	1.306E+00
1.000E+02	2.840E+00	1.420E+00	1.100E+02	3.152E+00	1.576E+00	1.200E+02	3.424E+00
1.712E+00	1.300E+02	3.649E+00	1.825E+00	1.400E+02	4.057E+00	2.029E+00	1.500E+02
4.673E+00	2.337E+00	1.600E+02	4.952E+00	2.476E+00	1.700E+02	5.427E+00	2.713E+00
1.800E+02	6.150E+00	3.075E+00	1.900E+02	6.342E+00	3.171E+00	2.000E+02	7.216E+00
3.608E+00							
0	1	12	24	30			n+Mg24
2.173E+01	0.000E+00	0.000E+00	2.200E+01	1.610E-08	8.050E-09	2.400E+01	9.999E-06
5.000E-06	2.600E+01	2.317E-04	1.158E-04	2.800E+01	2.012E-03	1.006E-03	3.000E+01
1.066E-02	5.330E-03	3.500E+01	7.833E-02	3.916E-02	4.000E+01	1.347E-01	6.735E-02
4.500E+01	2.608E-01	1.304E-01	5.000E+01	4.482E-01	2.241E-01	5.500E+01	6.733E-01
3.367E-01	6.000E+01	8.416E-01	4.208E-01	6.500E+01	1.126E+00	5.630E-01	7.000E+01
1.400E+00	7.000E-01	7.500E+01	1.759E+00	8.795E-01	8.000E+01	2.259E+00	1.129E+00
8.500E+01	2.612E+00	1.306E+00	9.000E+01	3.083E+00	1.542E+00	9.500E+01	3.266E+00
1.633E+00	1.000E+02	3.608E+00	1.804E+00	1.100E+02	4.084E+00	2.042E+00	1.200E+02
4.428E+00	2.214E+00	1.300E+02	4.913E+00	2.457E+00	1.400E+02	5.282E+00	2.641E+00
1.500E+02	5.872E+00	2.936E+00	1.600E+02	6.241E+00	3.120E+00	1.700E+02	6.740E+00
3.370E+00	1.800E+02	7.431E+00	3.716E+00	1.900E+02	7.750E+00	3.875E+00	2.000E+02
8.570E+00	4.285E+00						
0	1	12	25	28			n+Mg25
2.520E+01	0.000E+00	0.000E+00	2.600E+01	1.241E-05	5.465E-06	2.800E+01	1.958E-04
8.032E-05	3.000E+01	1.542E-03	5.805E-04	3.500E+01	2.097E-02	1.048E-02	4.000E+01
6.109E-02	3.054E-02	4.500E+01	1.066E-01	5.330E-02	5.000E+01	1.621E-01	8.105E-02
5.500E+01	1.987E-01	9.935E-02	6.000E+01	2.795E-01	1.398E-01	6.500E+01	3.632E-01
1.816E-01	7.000E+01	5.132E-01	2.566E-01	7.500E+01	5.886E-01	2.943E-01	8.000E+01
7.598E-01	3.799E-01	8.500E+01	9.524E-01	4.762E-01	9.000E+01	1.138E+00	5.690E-01
9.500E+01	1.357E+00	6.785E-01	1.000E+02	1.534E+00	7.670E-01	1.100E+02	1.879E+00
9.395E-01	1.200E+02	2.168E+00	1.084E+00	1.300E+02	2.426E+00	1.213E+00	1.400E+02
2.793E+00	1.397E+00	1.500E+02	3.083E+00	1.529E+00	1.600E+02	3.494E+00	1.724E+00
1.700E+02	3.852E+00	1.872E+00	1.800E+02	4.280E+00	2.048E+00	1.900E+02	4.692E+00
2.225E+00	2.000E+02	5.360E+00	2.418E+00				
0	1	12	26	26			n+Mg26
2.879E+01	0.000E+00	0.000E+00	3.000E+01	2.831E-08	1.252E-08	3.500E+01	5.667E-04
2.543E-04	4.000E+01	8.564E-03	4.168E-03	4.500E+01	2.135E-02	1.068E-02	5.000E+01
3.965E-02	1.982E-02	5.500E+01	5.648E-02	2.824E-02	6.000E+01	8.350E-02	4.175E-02
6.500E+01	1.173E-01	5.865E-02	7.000E+01	1.645E-01	8.225E-02	7.500E+01	2.020E-01
1.010E-01	8.000E+01	2.730E-01	1.331E-01	8.500E+01	3.741E-01	1.757E-01	9.000E+01
4.378E-01	2.026E-01	9.500E+01	5.423E-01	2.412E-01	1.000E+02	6.311E-01	2.730E-01
1.100E+02	8.021E-01	3.293E-01	1.200E+02	9.405E-01	3.723E-01	1.300E+02	1.108E+00
4.184E-01	1.400E+02	1.295E+00	4.793E-01	1.500E+02	1.461E+00	5.223E-01	1.600E+02
1.727E+00	6.255E-01	1.700E+02	1.998E+00	7.176E-01	1.800E+02	2.216E+00	7.834E-01
1.900E+02	2.579E+00	8.979E-01	2.000E+02	2.828E+00	9.693E-01		
0	1	13	27	28			n+Al27

2.578E+01	0.000E+00	0.000E+00	2.600E+01	1.638E-06	8.190E-07	2.800E+01	4.631E-05
2.316E-05	3.000E+01	4.583E-04	2.292E-04	3.500E+01	9.476E-03	4.738E-03	4.000E+01
2.879E-02	1.439E-02	4.500E+01	5.005E-02	2.502E-02	5.000E+01	8.326E-02	4.163E-02
5.500E+01	1.099E-01	5.446E-02	6.000E+01	1.570E-01	7.848E-02	6.500E+01	2.121E-01
1.058E-01	7.000E+01	2.551E-01	1.248E-01	7.500E+01	3.492E-01	1.696E-01	8.000E+01
4.229E-01	2.033E-01	8.500E+01	5.556E-01	2.621E-01	9.000E+01	6.734E-01	3.129E-01
9.500E+01	7.522E-01	3.451E-01	1.000E+02	8.676E-01	3.916E-01	1.100E+02	9.861E-01
4.353E-01	1.200E+02	1.142E+00	4.943E-01	1.300E+02	1.298E+00	5.550E-01	1.400E+02
1.420E+00	6.011E-01	1.500E+02	1.590E+00	6.698E-01	1.600E+02	1.799E+00	7.514E-01
1.700E+02	2.087E+00	8.604E-01	1.800E+02	2.316E+00	9.491E-01	1.900E+02	2.575E+00
1.048E+00	2.000E+02	2.824E+00	1.142E+00				
0	1	14	28	29			n+Si28
2.201E+01	0.000E+00	0.000E+00	2.400E+01	5.598E-08	2.799E-08	2.600E+01	1.130E-05
5.650E-06	2.800E+01	1.683E-04	8.415E-05	3.000E+01	1.557E-03	7.785E-04	3.500E+01
1.967E-02	9.835E-03	4.000E+01	4.968E-02	2.484E-02	4.500E+01	8.473E-02	4.236E-02
5.000E+01	1.113E-01	5.565E-02	5.500E+01	1.605E-01	8.025E-02	6.000E+01	2.233E-01
1.116E-01	6.500E+01	2.836E-01	1.418E-01	7.000E+01	3.297E-01	1.648E-01	7.500E+01
4.157E-01	2.079E-01	8.000E+01	4.976E-01	2.488E-01	8.500E+01	6.359E-01	3.180E-01
9.000E+01	7.984E-01	3.992E-01	9.500E+01	8.774E-01	4.387E-01	1.000E+02	9.946E-01
4.973E-01	1.100E+02	1.148E+00	5.740E-01	1.200E+02	1.341E+00	6.705E-01	1.300E+02
1.483E+00	7.415E-01	1.400E+02	1.625E+00	8.125E-01	1.500E+02	1.853E+00	9.265E-01
1.600E+02	2.059E+00	1.030E+00	1.700E+02	2.326E+00	1.163E+00	1.800E+02	2.620E+00
1.310E+00	1.900E+02	2.827E+00	1.413E+00	2.000E+02	3.109E+00	1.554E+00	
0	1	14	29	28			n+Si29
2.529E+01	0.000E+00	0.000E+00	2.600E+01	6.429E-07	3.215E-07	2.800E+01	2.197E-05
1.099E-05	3.000E+01	2.334E-04	1.116E-04	3.500E+01	6.030E-03	3.015E-03	4.000E+01
2.188E-02	1.094E-02	4.500E+01	3.468E-02	1.734E-02	5.000E+01	5.280E-02	2.640E-02
5.500E+01	7.558E-02	3.779E-02	6.000E+01	9.881E-02	4.940E-02	6.500E+01	1.202E-01
6.010E-02	7.000E+01	1.475E-01	7.375E-02	7.500E+01	1.854E-01	9.270E-02	8.000E+01
2.404E-01	1.202E-01	8.500E+01	3.048E-01	1.524E-01	9.000E+01	3.769E-01	1.885E-01
9.500E+01	4.527E-01	2.263E-01	1.000E+02	5.001E-01	2.500E-01	1.100E+02	6.418E-01
3.209E-01	1.200E+02	7.435E-01	3.718E-01	1.300E+02	8.497E-01	4.249E-01	1.400E+02
1.004E+00	5.020E-01	1.500E+02	1.145E+00	5.725E-01	1.600E+02	1.317E+00	6.585E-01
1.700E+02	1.505E+00	7.525E-01	1.800E+02	1.715E+00	8.575E-01	1.900E+02	1.894E+00
9.470E-01	2.000E+02	2.103E+00	1.052E+00				
0	1	14	30	27			n+Si30
2.706E+01	0.000E+00	0.000E+00	2.800E+01	3.274E-09	1.577E-09	3.000E+01	4.326E-07
2.141E-07	3.500E+01	7.065E-04	3.424E-04	4.000E+01	7.418E-03	3.709E-03	4.500E+01
1.662E-02	8.310E-03	5.000E+01	2.400E-02	1.200E-02	5.500E+01	3.549E-02	1.775E-02
6.000E+01	4.837E-02	2.419E-02	6.500E+01	5.887E-02	2.943E-02	7.000E+01	7.332E-02
3.666E-02	7.500E+01	9.692E-02	4.846E-02	8.000E+01	1.336E-01	6.680E-02	8.500E+01
1.712E-01	8.560E-02	9.000E+01	2.092E-01	1.046E-01	9.500E+01	2.511E-01	1.255E-01
1.000E+02	2.819E-01	1.409E-01	1.100E+02	3.601E-01	1.800E-01	1.200E+02	4.167E-01
2.084E-01	1.300E+02	4.979E-01	2.490E-01	1.400E+02	5.844E-01	2.922E-01	1.500E+02
6.483E-01	3.241E-01	1.600E+02	7.843E-01	3.921E-01	1.700E+02	9.381E-01	4.691E-01
1.800E+02	1.032E+00	5.160E-01	1.900E+02	1.197E+00	5.985E-01	2.000E+02	1.375E+00
6.875E-01							
0	1	15	31	29			n+P31
2.352E+01	0.000E+00	0.000E+00	2.400E+01	2.765E-08	1.382E-08	2.600E+01	8.510E-06
4.255E-06	2.800E+01	1.357E-04	6.785E-05	3.000E+01	1.012E-03	5.060E-04	3.500E+01
1.077E-02	5.385E-03	4.000E+01	2.607E-02	1.303E-02	4.500E+01	3.763E-02	1.881E-02
5.000E+01	5.551E-02	2.775E-02	5.500E+01	7.939E-02	3.970E-02	6.000E+01	9.699E-02
4.850E-02	6.500E+01	1.236E-01	6.180E-02	7.000E+01	1.548E-01	7.740E-02	7.500E+01
1.969E-01	9.845E-02	8.000E+01	2.507E-01	1.253E-01	8.500E+01	3.081E-01	1.540E-01
9.000E+01	3.650E-01	1.825E-01	9.500E+01	4.037E-01	2.019E-01	1.000E+02	4.490E-01
2.245E-01	1.100E+02	5.245E-01	2.622E-01	1.200E+02	5.971E-01	2.985E-01	1.300E+02
6.532E-01	3.266E-01	1.400E+02	7.136E-01	3.568E-01	1.500E+02	7.866E-01	3.933E-01
1.600E+02	9.214E-01	4.607E-01	1.700E+02	1.063E+00	5.315E-01	1.800E+02	1.163E+00
5.815E-01	1.900E+02	1.316E+00	6.580E-01	2.000E+02	1.479E+00	7.395E-01	
0	1	16	32	32			n+S32
1.805E+01	0.000E+00	0.000E+00	1.900E+01	2.797E-09	9.488E-10	2.000E+01	1.513E-08
5.193E-09	2.200E+01	9.346E-07	3.336E-07	2.400E+01	4.431E-05	1.635E-05	2.600E+01
5.228E-04	1.929E-04	2.800E+01	2.971E-03	1.045E-03	3.000E+01	9.034E-03	3.152E-03
3.500E+01	3.469E-02	1.355E-02	4.000E+01	6.409E-02	2.511E-02	4.500E+01	7.986E-02
2.889E-02	5.000E+01	1.048E-01	3.796E-02	5.500E+01	1.343E-01	4.960E-02	6.000E+01
1.459E-01	5.306E-02	6.500E+01	1.743E-01	6.459E-02	7.000E+01	2.202E-01	8.335E-02

7.500E+01	2.702E-01	1.039E-01	8.000E+01	3.486E-01	1.354E-01	8.500E+01	4.335E-01
1.701E-01	9.000E+01	5.179E-01	2.041E-01	9.500E+01	5.570E-01	2.197E-01	1.000E+02
6.329E-01	2.495E-01	1.100E+02	7.102E-01	2.801E-01	1.200E+02	8.133E-01	3.208E-01
1.300E+02	8.660E-01	3.421E-01	1.400E+02	9.576E-01	3.784E-01	1.500E+02	1.041E+00
4.123E-01	1.600E+02	1.195E+00	4.715E-01	1.700E+02	1.380E+00	5.417E-01	1.800E+02
1.520E+00	5.941E-01	1.900E+02	1.631E+00	6.357E-01	2.000E+02	1.820E+00	7.057E-01
0	1	16	33	30			n+S33
2.030E+01	0.000E+00	0.000E+00	2.200E+01	3.950E-07	1.786E-07	2.400E+01	1.890E-05
8.798E-06	2.600E+01	2.117E-04	9.047E-05	2.800E+01	1.520E-03	5.887E-04	3.000E+01
4.771E-03	1.631E-03	3.500E+01	2.265E-02	8.423E-03	4.000E+01	4.117E-02	1.512E-02
4.500E+01	6.214E-02	2.243E-02	5.000E+01	8.112E-02	2.882E-02	5.500E+01	8.930E-02
3.080E-02	6.000E+01	1.070E-01	3.701E-02	6.500E+01	1.243E-01	4.328E-02	7.000E+01
1.370E-01	4.770E-02	7.500E+01	1.771E-01	6.245E-02	8.000E+01	2.123E-01	7.527E-02
8.500E+01	2.667E-01	9.482E-02	9.000E+01	3.207E-01	1.140E-01	9.500E+01	3.587E-01
1.269E-01	1.000E+02	3.974E-01	1.403E-01	1.100E+02	4.747E-01	1.662E-01	1.200E+02
5.465E-01	1.898E-01	1.300E+02	5.858E-01	2.028E-01	1.400E+02	6.597E-01	2.281E-01
1.500E+02	7.377E-01	2.543E-01	1.600E+02	8.434E-01	2.899E-01	1.700E+02	9.376E-01
3.214E-01	1.800E+02	1.066E+00	3.630E-01	1.900E+02	1.202E+00	4.071E-01	2.000E+02
1.315E+00	4.434E-01						
0	1	16	34	29			n+S34
2.328E+01	0.000E+00	0.000E+00	2.400E+01	6.617E-10	2.837E-10	2.600E+01	1.397E-08
5.901E-09	2.800E+01	3.345E-06	1.650E-06	3.000E+01	6.560E-05	3.261E-05	3.500E+01
4.168E-03	1.842E-03	4.000E+01	1.271E-02	5.244E-03	4.500E+01	2.257E-02	8.785E-03
5.000E+01	3.449E-02	1.267E-02	5.500E+01	4.540E-02	1.616E-02	6.000E+01	5.967E-02
2.069E-02	6.500E+01	7.798E-02	2.663E-02	7.000E+01	9.534E-02	3.241E-02	7.500E+01
1.332E-01	4.533E-02	8.000E+01	1.600E-01	5.456E-02	8.500E+01	1.943E-01	6.648E-02
9.000E+01	2.375E-01	8.141E-02	9.500E+01	2.720E-01	9.306E-02	1.000E+02	2.869E-01
9.800E-02	1.100E+02	3.507E-01	1.190E-01	1.200E+02	3.817E-01	1.290E-01	1.300E+02
4.354E-01	1.463E-01	1.400E+02	4.666E-01	1.567E-01	1.500E+02	5.394E-01	1.813E-01
1.600E+02	5.941E-01	1.993E-01	1.700E+02	6.798E-01	2.270E-01	1.800E+02	7.961E-01
2.639E-01	1.900E+02	8.858E-01	2.926E-01	2.000E+02	9.493E-01	3.129E-01	
0	1	16	36	25			n+S36
3.028E+01	0.000E+00	0.000E+00	3.500E+01	1.714E-06	8.570E-07	4.000E+01	8.147E-04
4.074E-04	4.500E+01	4.252E-03	2.126E-03	5.000E+01	7.480E-03	3.740E-03	5.500E+01
1.070E-02	5.350E-03	6.000E+01	1.495E-02	7.475E-03	6.500E+01	2.076E-02	9.305E-03
7.000E+01	2.787E-02	1.147E-02	7.500E+01	3.872E-02	1.490E-02	8.000E+01	5.240E-02
1.955E-02	8.500E+01	6.378E-02	2.347E-02	9.000E+01	8.033E-02	2.933E-02	9.500E+01
9.800E-02	3.549E-02	1.000E+02	1.133E-01	4.059E-02	1.100E+02	1.378E-01	4.888E-02
1.200E+02	1.736E-01	6.053E-02	1.300E+02	1.954E-01	6.769E-02	1.400E+02	2.223E-01
7.619E-02	1.500E+02	2.531E-01	8.649E-02	1.600E+02	3.100E-01	1.046E-01	1.700E+02
3.474E-01	1.165E-01	1.800E+02	3.895E-01	1.300E-01	1.900E+02	4.618E-01	1.523E-01
2.000E+02	5.251E-01	1.717E-01					
0	1	17	35	31			n+C135
1.903E+01	0.000E+00	0.000E+00	2.000E+01	1.797E-08	8.985E-09	2.200E+01	3.515E-06
1.757E-06	2.400E+01	5.865E-05	2.933E-05	2.600E+01	6.668E-04	3.334E-04	2.800E+01
3.439E-03	1.720E-03	3.000E+01	8.461E-03	4.230E-03	3.500E+01	2.857E-02	1.346E-02
4.000E+01	4.695E-02	2.114E-02	4.500E+01	7.095E-02	2.974E-02	5.000E+01	9.900E-02
3.933E-02	5.500E+01	1.188E-01	4.585E-02	6.000E+01	1.476E-01	5.551E-02	6.500E+01
1.813E-01	6.676E-02	7.000E+01	2.202E-01	7.958E-02	7.500E+01	2.825E-01	1.009E-01
8.000E+01	3.449E-01	1.223E-01	8.500E+01	4.048E-01	1.427E-01	9.000E+01	4.784E-01
1.674E-01	9.500E+01	5.334E-01	1.862E-01	1.000E+02	5.637E-01	1.961E-01	1.100E+02
6.486E-01	2.240E-01	1.200E+02	6.922E-01	2.385E-01	1.300E+02	7.506E-01	2.577E-01
1.400E+02	7.905E-01	2.715E-01	1.500E+02	8.477E-01	2.922E-01	1.600E+02	9.672E-01
3.321E-01	1.700E+02	1.055E+00	3.623E-01	1.800E+02	1.167E+00	3.990E-01	1.900E+02
1.290E+00	4.397E-01	2.000E+02	1.398E+00	4.746E-01			
0	1	17	37	28			n+C137
2.518E+01	0.000E+00	0.000E+00	2.600E+01	5.952E-09	2.976E-09	2.800E+01	1.416E-06
7.080E-07	3.000E+01	2.677E-05	1.338E-05	3.500E+01	2.886E-03	1.310E-03	4.000E+01
8.798E-03	3.768E-03	4.500E+01	1.481E-02	6.104E-03	5.000E+01	2.235E-02	8.453E-03
5.500E+01	2.989E-02	1.074E-02	6.000E+01	4.093E-02	1.389E-02	6.500E+01	5.385E-02
1.782E-02	7.000E+01	7.384E-02	2.419E-02	7.500E+01	9.599E-02	3.158E-02	8.000E+01
1.264E-01	4.178E-02	8.500E+01	1.597E-01	5.282E-02	9.000E+01	1.880E-01	6.212E-02
9.500E+01	2.122E-01	6.999E-02	1.000E+02	2.415E-01	7.922E-02	1.100E+02	2.884E-01
9.356E-02	1.200E+02	3.358E-01	1.079E-01	1.300E+02	3.668E-01	1.170E-01	1.400E+02
4.143E-01	1.313E-01	1.500E+02	4.546E-01	1.440E-01	1.600E+02	5.316E-01	1.676E-01
1.700E+02	5.983E-01	1.877E-01	1.800E+02	6.659E-01	2.081E-01	1.900E+02	7.386E-01

1.200E+02	7.662E-01	2.224E-01	1.300E+02	8.477E-01	2.437E-01	1.400E+02	9.337E-01
2.670E-01	1.500E+02	9.824E-01	2.814E-01	1.600E+02	1.112E+00	3.171E-01	1.700E+02
1.264E+00	3.577E-01	1.800E+02	1.406E+00	3.956E-01	1.900E+02	1.515E+00	4.249E-01
2.000E+02	1.644E+00	4.603E-01					
0	1	19	41	32			n+K41
1.885E+01	0.000E+00	0.000E+00	1.900E+01	1.466E-09	6.884E-10	2.000E+01	6.403E-09
2.888E-09	2.200E+01	1.559E-07	7.218E-08	2.400E+01	2.144E-05	1.070E-05	2.600E+01
3.123E-04	1.547E-04	2.800E+01	2.588E-03	1.209E-03	3.000E+01	8.179E-03	3.638E-03
3.500E+01	2.704E-02	1.132E-02	4.000E+01	4.797E-02	1.911E-02	4.500E+01	6.717E-02
2.585E-02	5.000E+01	8.947E-02	3.202E-02	5.500E+01	1.138E-01	3.783E-02	6.000E+01
1.318E-01	4.225E-02	6.500E+01	1.568E-01	4.736E-02	7.000E+01	1.908E-01	5.414E-02
7.500E+01	2.323E-01	6.273E-02	8.000E+01	2.807E-01	7.346E-02	8.500E+01	3.428E-01
8.778E-02	9.000E+01	4.056E-01	1.025E-01	9.500E+01	4.315E-01	1.085E-01	1.000E+02
4.699E-01	1.178E-01	1.100E+02	5.554E-01	1.377E-01	1.200E+02	6.070E-01	1.498E-01
1.300E+02	6.771E-01	1.660E-01	1.400E+02	7.142E-01	1.750E-01	1.500E+02	7.698E-01
1.892E-01	1.600E+02	8.692E-01	2.135E-01	1.700E+02	9.996E-01	2.443E-01	1.800E+02
1.114E+00	2.716E-01	1.900E+02	1.198E+00	2.922E-01	2.000E+02	1.292E+00	3.152E-01
0	1	20	40	38			n+Ca40
1.293E+01	0.000E+00	0.000E+00	1.300E+01	0.000E+00	0.000E+00	1.400E+01	9.184E-10
2.503E-10	1.500E+01	3.782E-09	1.023E-09	1.600E+01	1.344E-08	3.650E-09	1.700E+01
4.268E-08	1.184E-08	1.800E+01	1.236E-07	3.555E-08	1.900E+01	1.559E-06	5.529E-07
2.000E+01	1.426E-05	5.268E-06	2.200E+01	1.927E-04	7.296E-05	2.400E+01	1.685E-03
6.471E-04	2.600E+01	7.295E-03	2.627E-03	2.800E+01	1.753E-02	5.876E-03	3.000E+01
3.016E-02	9.834E-03	3.500E+01	6.631E-02	2.057E-02	4.000E+01	1.058E-01	3.135E-02
4.500E+01	1.316E-01	3.792E-02	5.000E+01	1.705E-01	4.823E-02	5.500E+01	2.137E-01
5.978E-02	6.000E+01	2.392E-01	6.625E-02	6.500E+01	2.907E-01	8.034E-02	7.000E+01
3.699E-01	1.023E-01	7.500E+01	4.587E-01	1.267E-01	8.000E+01	5.690E-01	1.572E-01
8.500E+01	7.063E-01	1.949E-01	9.000E+01	8.400E-01	2.307E-01	9.500E+01	9.142E-01
2.499E-01	1.000E+02	9.941E-01	2.711E-01	1.100E+02	1.143E+00	3.099E-01	1.200E+02
1.240E+00	3.346E-01	1.300E+02	1.342E+00	3.613E-01	1.400E+02	1.410E+00	3.793E-01
1.500E+02	1.508E+00	4.064E-01	1.600E+02	1.732E+00	4.640E-01	1.700E+02	1.936E+00
5.163E-01	1.800E+02	2.166E+00	5.745E-01	1.900E+02	2.323E+00	6.136E-01	2.000E+02
2.564E+00	6.730E-01						
0	1	20	42	35			n+Ca42
1.596E+01	0.000E+00	0.000E+00	1.600E+01	0.000E+00	0.000E+00	1.700E+01	3.197E-10
9.373E-11	1.800E+01	1.609E-09	4.809E-10	1.900E+01	6.081E-09	1.892E-09	2.000E+01
2.157E-08	7.040E-09	2.200E+01	1.582E-06	6.315E-07	2.400E+01	5.127E-05	2.142E-05
2.600E+01	6.123E-04	2.620E-04	2.800E+01	4.071E-03	1.697E-03	3.000E+01	1.131E-02
4.613E-03	3.500E+01	3.595E-02	1.388E-02	4.000E+01	6.302E-02	2.332E-02	4.500E+01
8.860E-02	3.165E-02	5.000E+01	1.165E-01	3.935E-02	5.500E+01	1.460E-01	4.678E-02
6.000E+01	1.663E-01	5.196E-02	6.500E+01	1.982E-01	5.868E-02	7.000E+01	2.343E-01
6.616E-02	7.500E+01	2.836E-01	7.661E-02	8.000E+01	3.353E-01	8.815E-02	8.500E+01
4.008E-01	1.032E-01	9.000E+01	4.892E-01	1.238E-01	9.500E+01	5.443E-01	1.368E-01
1.000E+02	5.824E-01	1.458E-01	1.100E+02	6.803E-01	1.687E-01	1.200E+02	7.507E-01
1.851E-01	1.300E+02	8.354E-01	2.049E-01	1.400E+02	8.827E-01	2.162E-01	1.500E+02
9.857E-01	2.422E-01	1.600E+02	1.098E+00	2.695E-01	1.700E+02	1.247E+00	3.050E-01
1.800E+02	1.394E+00	3.396E-01	1.900E+02	1.531E+00	3.722E-01	2.000E+02	1.653E+00
4.007E-01							
0	1	20	43	31			n+Ca43
1.966E+01	0.000E+00	0.000E+00	2.000E+01	4.580E-10	2.290E-10	2.200E+01	6.077E-09
3.038E-09	2.400E+01	8.182E-07	4.091E-07	2.600E+01	2.625E-05	1.313E-05	2.800E+01
3.250E-04	1.625E-04	3.000E+01	2.008E-03	1.004E-03	3.500E+01	1.087E-02	5.435E-03
4.000E+01	2.195E-02	1.098E-02	4.500E+01	3.607E-02	1.645E-02	5.000E+01	5.318E-02
2.182E-02	5.500E+01	7.128E-02	2.675E-02	6.000E+01	9.510E-02	3.238E-02	6.500E+01
1.159E-01	3.705E-02	7.000E+01	1.456E-01	4.363E-02	7.500E+01	1.762E-01	5.051E-02
8.000E+01	2.035E-01	5.678E-02	8.500E+01	2.582E-01	6.938E-02	9.000E+01	3.146E-01
8.263E-02	9.500E+01	3.607E-01	9.314E-02	1.000E+02	3.969E-01	1.013E-01	1.100E+02
4.824E-01	1.207E-01	1.200E+02	5.681E-01	1.395E-01	1.300E+02	6.206E-01	1.509E-01
1.400E+02	7.111E-01	1.708E-01	1.500E+02	7.700E-01	1.840E-01	1.600E+02	8.649E-01
2.057E-01	1.700E+02	9.766E-01	2.308E-01	1.800E+02	1.114E+00	2.611E-01	1.900E+02
1.224E+00	2.855E-01	2.000E+02	1.334E+00	3.098E-01			
0	1	20	44	29			n+Ca44
2.282E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	1.693E-09
8.465E-10	2.800E+01	2.074E-08	1.037E-08	3.000E+01	5.931E-06	2.965E-06	3.500E+01
1.964E-03	9.820E-04	4.000E+01	9.375E-03	4.687E-03	4.500E+01	1.721E-02	8.605E-03
5.000E+01	2.539E-02	1.269E-02	5.500E+01	3.366E-02	1.683E-02	6.000E+01	4.358E-02

2.179E-02	6.500E+01	5.453E-02	2.727E-02	7.000E+01	6.873E-02	3.436E-02	7.500E+01
8.498E-02	4.249E-02	8.000E+01	1.048E-01	5.186E-02	8.500E+01	1.330E-01	5.720E-02
9.000E+01	1.667E-01	6.365E-02	9.500E+01	1.973E-01	6.925E-02	1.000E+02	2.195E-01
7.326E-02	1.100E+02	2.760E-01	8.386E-02	1.200E+02	3.330E-01	9.494E-02	1.300E+02
3.821E-01	1.047E-01	1.400E+02	4.374E-01	1.159E-01	1.500E+02	5.024E-01	1.299E-01
1.600E+02	5.577E-01	1.424E-01	1.700E+02	6.355E-01	1.597E-01	1.800E+02	7.468E-01
1.846E-01	1.900E+02	8.544E-01	2.087E-01	2.000E+02	9.397E-01	2.285E-01	
0	1	20	46	26			n+Ca46
2.858E+01	0.000E+00	0.000E+00	3.000E+01	0.000E+00	0.000E+00	3.500E+01	7.487E-07
3.744E-07	4.000E+01	6.123E-04	3.061E-04	4.500E+01	4.129E-03	2.064E-03	5.000E+01
7.965E-03	3.982E-03	5.500E+01	1.138E-02	5.690E-03	6.000E+01	1.469E-02	7.345E-03
6.500E+01	1.783E-02	8.915E-03	7.000E+01	2.106E-02	1.053E-02	7.500E+01	2.478E-02
1.239E-02	8.000E+01	2.918E-02	1.459E-02	8.500E+01	3.435E-02	1.717E-02	9.000E+01
4.075E-02	2.038E-02	9.500E+01	4.833E-02	2.416E-02	1.000E+02	5.721E-02	2.860E-02
1.100E+02	7.370E-02	3.685E-02	1.200E+02	9.497E-02	4.748E-02	1.300E+02	1.182E-01
5.058E-02	1.400E+02	1.380E-01	5.174E-02	1.500E+02	1.725E-01	5.541E-02	1.600E+02
2.115E-01	6.117E-02	1.700E+02	2.487E-01	6.725E-02	1.800E+02	2.864E-01	7.394E-02
1.900E+02	3.423E-01	8.430E-02	2.000E+02	3.980E-01	9.503E-02		
0	1	20	48	25			n+Ca48
3.496E+01	0.000E+00	0.000E+00	3.500E+01	0.000E+00	0.000E+00	4.000E+01	5.211E-09
2.606E-09	4.500E+01	9.971E-05	4.986E-05	5.000E+01	1.994E-03	9.970E-04	5.500E+01
4.304E-03	2.152E-03	6.000E+01	6.382E-03	3.191E-03	6.500E+01	8.238E-03	4.119E-03
7.000E+01	9.844E-03	4.922E-03	7.500E+01	1.133E-02	5.665E-03	8.000E+01	1.280E-02
6.400E-03	8.500E+01	1.434E-02	7.170E-03	9.000E+01	1.582E-02	7.910E-03	9.500E+01
1.734E-02	8.670E-03	1.000E+02	1.929E-02	9.645E-03	1.100E+02	2.384E-02	1.192E-02
1.200E+02	2.887E-02	1.443E-02	1.300E+02	3.642E-02	1.821E-02	1.400E+02	4.336E-02
2.168E-02	1.500E+02	5.616E-02	2.808E-02	1.600E+02	7.181E-02	3.590E-02	1.700E+02
8.695E-02	3.837E-02	1.800E+02	9.923E-02	3.866E-02	1.900E+02	1.228E-01	4.063E-02
2.000E+02	1.537E-01	4.424E-02					
0	1	21	45	31			n+Sc45
1.939E+01	0.000E+00	0.000E+00	2.000E+01	4.567E-10	2.283E-10	2.200E+01	6.791E-09
3.396E-09	2.400E+01	4.470E-07	2.235E-07	2.600E+01	2.184E-05	1.092E-05	2.800E+01
2.772E-04	1.386E-04	3.000E+01	1.971E-03	9.855E-04	3.500E+01	1.185E-02	5.925E-03
4.000E+01	2.347E-02	1.174E-02	4.500E+01	3.575E-02	1.787E-02	5.000E+01	5.002E-02
2.501E-02	5.500E+01	6.422E-02	3.211E-02	6.000E+01	8.257E-02	4.129E-02	6.500E+01
1.008E-01	5.040E-02	7.000E+01	1.239E-01	6.195E-02	7.500E+01	1.529E-01	7.645E-02
8.000E+01	1.931E-01	8.981E-02	8.500E+01	2.340E-01	9.676E-02	9.000E+01	2.803E-01
1.046E-01	9.500E+01	3.276E-01	1.118E-01	1.000E+02	3.708E-01	1.186E-01	1.100E+02
4.355E-01	1.284E-01	1.200E+02	5.181E-01	1.425E-01	1.300E+02	5.747E-01	1.519E-01
1.400E+02	6.416E-01	1.641E-01	1.500E+02	7.300E-01	1.816E-01	1.600E+02	8.258E-01
2.018E-01	1.700E+02	9.176E-01	2.212E-01	1.800E+02	1.034E+00	2.460E-01	1.900E+02
1.194E+00	2.806E-01	2.000E+02	1.308E+00	3.051E-01			
0	1	22	46	33			n+Ti46
1.706E+01	0.000E+00	0.000E+00	1.800E+01	0.000E+00	0.000E+00	1.900E+01	1.963E-10
9.815E-11	2.000E+01	7.640E-10	3.820E-10	2.200E+01	8.447E-09	4.223E-09	2.400E+01
6.484E-07	3.242E-07	2.600E+01	2.619E-05	1.310E-05	2.800E+01	3.118E-04	1.559E-04
3.000E+01	1.903E-03	9.515E-04	3.500E+01	1.326E-02	6.630E-03	4.000E+01	2.680E-02
1.340E-02	4.500E+01	4.130E-02	2.065E-02	5.000E+01	5.613E-02	2.806E-02	5.500E+01
7.259E-02	3.630E-02	6.000E+01	9.185E-02	4.593E-02	6.500E+01	1.099E-01	5.495E-02
7.000E+01	1.312E-01	6.560E-02	7.500E+01	1.614E-01	8.070E-02	8.000E+01	1.972E-01
9.860E-02	8.500E+01	2.403E-01	1.147E-01	9.000E+01	2.947E-01	1.215E-01	9.500E+01
3.482E-01	1.269E-01	1.000E+02	3.915E-01	1.314E-01	1.100E+02	4.737E-01	1.404E-01
1.200E+02	5.679E-01	1.528E-01	1.300E+02	6.264E-01	1.603E-01	1.400E+02	7.020E-01
1.718E-01	1.500E+02	7.958E-01	1.876E-01	1.600E+02	9.300E-01	2.135E-01	1.700E+02
1.028E+00	2.327E-01	1.800E+02	1.182E+00	2.632E-01	1.900E+02	1.339E+00	2.946E-01
2.000E+02	1.471E+00	3.208E-01					
0	1	22	47	31			n+Ti47
1.998E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	7.180E-10
3.590E-10	2.400E+01	9.793E-09	4.897E-09	2.600E+01	2.161E-06	1.081E-06	2.800E+01
3.917E-05	1.958E-05	3.000E+01	4.125E-04	2.062E-04	3.500E+01	5.376E-03	2.688E-03
4.000E+01	1.233E-02	6.165E-03	4.500E+01	1.975E-02	9.875E-03	5.000E+01	2.723E-02
1.362E-02	5.500E+01	3.547E-02	1.774E-02	6.000E+01	4.397E-02	2.199E-02	6.500E+01
5.438E-02	2.719E-02	7.000E+01	6.561E-02	3.281E-02	7.500E+01	8.140E-02	4.070E-02
8.000E+01	9.751E-02	4.875E-02	8.500E+01	1.181E-01	5.905E-02	9.000E+01	1.458E-01
7.290E-02	9.500E+01	1.733E-01	8.083E-02	1.000E+02	2.039E-01	8.308E-02	1.100E+02
2.586E-01	8.748E-02	1.200E+02	3.206E-01	9.383E-02	1.300E+02	3.825E-01	1.014E-01

1.400E+02	4.291E-01	1.074E-01	1.500E+02	5.125E-01	1.207E-01	1.600E+02	5.998E-01
1.364E-01	1.700E+02	6.773E-01	1.507E-01	1.800E+02	7.671E-01	1.678E-01	1.900E+02
8.808E-01	1.895E-01	2.000E+02	1.018E+00	2.159E-01			
0	1	22	48	29			n+Ti48
2.222E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	8.805E-10
4.403E-10	2.800E+01	9.971E-09	4.986E-09	3.000E+01	2.429E-06	1.214E-06	3.500E+01
1.117E-03	5.585E-04	4.000E+01	6.861E-03	3.430E-03	4.500E+01	1.332E-02	6.660E-03
5.000E+01	1.935E-02	9.675E-03	5.500E+01	2.508E-02	1.254E-02	6.000E+01	3.062E-02
1.531E-02	6.500E+01	3.607E-02	1.803E-02	7.000E+01	4.154E-02	2.077E-02	7.500E+01
4.888E-02	2.444E-02	8.000E+01	5.723E-02	2.862E-02	8.500E+01	6.918E-02	3.459E-02
9.000E+01	8.103E-02	4.052E-02	9.500E+01	9.518E-02	4.759E-02	1.000E+02	1.123E-01
5.615E-02	1.100E+02	1.424E-01	7.120E-02	1.200E+02	1.755E-01	8.775E-02	1.300E+02
2.156E-01	1.053E-01	1.400E+02	2.426E-01	1.045E-01	1.500E+02	2.809E-01	1.060E-01
1.600E+02	3.414E-01	1.127E-01	1.700E+02	4.133E-01	1.225E-01	1.800E+02	4.709E-01
1.309E-01	1.900E+02	5.385E-01	1.421E-01	2.000E+02	6.185E-01	1.562E-01	
0	1	22	49	28			n+Ti49
2.475E+01	0.000E+00	0.000E+00	2.600E+01	1.463E-10	7.315E-11	2.800E+01	1.776E-09
8.880E-10	3.000E+01	2.516E-07	1.258E-07	3.500E+01	3.430E-04	1.715E-04	4.000E+01
3.433E-03	1.716E-03	4.500E+01	7.178E-03	3.589E-03	5.000E+01	1.072E-02	5.360E-03
5.500E+01	1.413E-02	7.065E-03	6.000E+01	1.733E-02	8.665E-03	6.500E+01	2.073E-02
1.036E-02	7.000E+01	2.412E-02	1.206E-02	7.500E+01	2.753E-02	1.376E-02	8.000E+01
3.211E-02	1.605E-02	8.500E+01	3.739E-02	1.869E-02	9.000E+01	4.409E-02	2.204E-02
9.500E+01	5.149E-02	2.575E-02	1.000E+02	5.910E-02	2.955E-02	1.100E+02	7.769E-02
3.884E-02	1.200E+02	9.859E-02	4.058E-02	1.300E+02	1.229E-01	4.276E-02	1.400E+02
1.403E-01	4.429E-02	1.500E+02	1.675E-01	4.772E-02	1.600E+02	2.110E-01	5.477E-02
1.700E+02	2.552E-01	6.234E-02	1.800E+02	2.952E-01	6.954E-02	1.900E+02	3.430E-01
7.847E-02	2.000E+02	3.992E-01	8.897E-02				
0	1	22	50	27			n+Ti50
2.699E+01	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	1.750E-10
8.750E-11	3.500E+01	2.558E-06	1.279E-06	4.000E+01	9.832E-04	4.916E-04	4.500E+01
5.053E-03	2.527E-03	5.000E+01	9.329E-03	4.665E-03	5.500E+01	1.319E-02	6.595E-03
6.000E+01	1.653E-02	8.265E-03	6.500E+01	1.946E-02	9.730E-03	7.000E+02	2.160E-02
1.080E-02	7.500E+01	2.430E-02	1.215E-02	8.000E+01	2.759E-02	1.379E-02	8.500E+01
3.106E-02	1.553E-02	9.000E+01	3.452E-02	1.726E-02	9.500E+01	3.774E-02	1.887E-02
1.000E+02	4.164E-02	2.082E-02	1.100E+02	5.193E-02	2.466E-02	1.200E+02	6.078E-02
2.508E-02	1.300E+02	7.429E-02	2.622E-02	1.400E+02	8.855E-02	2.771E-02	1.500E+02
1.012E-01	2.914E-02	1.600E+02	1.295E-01	3.383E-02	1.700E+02	1.574E-01	3.875E-02
1.800E+02	1.804E-01	4.290E-02	1.900E+02	2.119E-01	4.895E-02	2.000E+02	2.496E-01
5.625E-02							
0	1	23	50	30			n+V50
2.154E+01	0.000E+00	0.000E+00	2.200E+01	3.975E-10	1.988E-10	2.400E+01	5.575E-09
2.788E-09	2.600E+01	7.645E-07	3.823E-07	2.800E+01	1.875E-05	9.375E-06	3.000E+01
2.184E-04	1.092E-04	3.500E+01	4.237E-03	2.119E-03	4.000E+01	9.669E-03	4.835E-03
4.500E+01	1.508E-02	7.540E-03	5.000E+01	2.011E-02	1.005E-02	5.500E+01	2.495E-02
1.247E-02	6.000E+01	2.909E-02	1.455E-02	6.500E+01	3.377E-02	1.689E-02	7.000E+01
3.814E-02	1.907E-02	7.500E+01	4.216E-02	2.108E-02	8.000E+01	4.897E-02	2.448E-02
8.500E+01	5.815E-02	2.908E-02	9.000E+01	6.784E-02	3.123E-02	9.500E+01	7.695E-02
3.210E-02	1.000E+02	8.622E-02	3.302E-02	1.100E+02	1.117E-01	3.614E-02	1.200E+02
1.354E-01	3.942E-02	1.300E+02	1.632E-01	4.388E-02	1.400E+02	1.918E-01	4.872E-02
1.500E+02	2.198E-01	5.371E-02	1.600E+02	2.756E-01	6.485E-02	1.700E+02	3.239E-01
7.461E-02	1.800E+02	3.720E-01	8.422E-02	1.900E+02	4.322E-01	9.635E-02	2.000E+02
4.924E-01	1.086E-01						
0	1	23	51	29			n+V51
2.375E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	4.363E-10
2.181E-10	2.800E+01	6.208E-09	3.104E-09	3.000E+01	1.383E-06	6.915E-07	3.500E+01
7.064E-04	3.532E-04	4.000E+01	5.910E-03	2.955E-03	4.500E+01	1.160E-02	5.800E-03
5.000E+01	1.689E-02	8.445E-03	5.500E+01	2.180E-02	1.090E-02	6.000E+01	2.595E-02
1.298E-02	6.500E+01	2.978E-02	1.489E-02	7.000E+01	3.327E-02	1.664E-02	7.500E+01
3.750E-02	1.875E-02	8.000E+01	4.301E-02	2.040E-02	8.500E+01	4.886E-02	2.144E-02
9.000E+01	5.554E-02	2.250E-02	9.500E+01	6.020E-02	2.304E-02	1.000E+02	6.601E-02
2.374E-02	1.100E+02	8.191E-02	2.608E-02	1.200E+02	9.507E-02	2.827E-02	1.300E+02
1.137E-01	3.193E-02	1.400E+02	1.314E-01	3.553E-02	1.500E+02	1.437E-01	3.809E-02
1.600E+02	1.835E-01	4.753E-02	1.700E+02	2.150E-01	5.506E-02	1.800E+02	2.491E-01
6.314E-02	1.900E+02	2.822E-01	7.093E-02	2.000E+02	3.247E-01	8.108E-02	
0	1	24	50	32			n+Cr50
1.682E+01	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	2.371E-10

1.185E-10	2.200E+01	2.505E-09	1.252E-09	2.400E+01	2.905E-08	1.452E-08	2.600E+01
6.633E-06	3.316E-06	2.800E+01	9.135E-05	4.567E-05	3.000E+01	8.209E-04	4.104E-04
3.500E+01	8.558E-03	4.279E-03	4.000E+01	1.871E-02	9.355E-03	4.500E+01	2.867E-02
1.434E-02	5.000E+01	3.834E-02	1.917E-02	5.500E+01	4.789E-02	2.395E-02	6.000E+01
5.595E-02	2.797E-02	6.500E+01	6.506E-02	3.253E-02	7.000E+01	7.216E-02	3.608E-02
7.500E+01	8.118E-02	4.059E-02	8.000E+01	9.609E-02	4.589E-02	8.500E+01	1.148E-01
4.827E-02	9.000E+01	1.342E-01	5.069E-02	9.500E+01	1.534E-01	5.250E-02	1.000E+02
1.746E-01	5.469E-02	1.100E+02	2.222E-01	6.061E-02	1.200E+02	2.597E-01	6.554E-02
1.300E+02	3.138E-01	7.404E-02	1.400E+02	3.543E-01	8.054E-02	1.500E+02	3.880E-01
8.614E-02	1.600E+02	4.771E-01	1.029E-01	1.700E+02	5.642E-01	1.195E-01	1.800E+02
6.306E-01	1.324E-01	1.900E+02	7.201E-01	1.497E-01	2.000E+02	8.102E-01	1.672E-01
0	1	24	52	30			n+Cr52
2.037E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	2.472E-10
1.204E-10	2.600E+01	3.210E-09	1.605E-09	2.800E+01	1.248E-07	6.240E-08	3.000E+01
9.530E-06	4.765E-06	3.500E+01	1.945E-03	9.561E-04	4.000E+01	8.526E-03	4.263E-03
4.500E+01	1.556E-02	7.780E-03	5.000E+01	2.206E-02	1.103E-02	5.500E+01	2.811E-02
1.405E-02	6.000E+01	3.327E-02	1.664E-02	6.500E+01	3.812E-02	1.906E-02	7.000E+01
4.237E-02	2.083E-02	7.500E+01	4.682E-02	2.221E-02	8.000E+01	5.394E-02	2.356E-02
8.500E+01	6.170E-02	2.489E-02	9.000E+01	7.101E-02	2.644E-02	9.500E+01	7.678E-02
2.724E-02	1.000E+02	8.453E-02	2.843E-02	1.100E+02	1.042E-01	3.205E-02	1.200E+02
1.207E-01	3.545E-02	1.300E+02	1.390E-01	3.964E-02	1.400E+02	1.631E-01	4.545E-02
1.500E+02	1.801E-01	4.973E-02	1.600E+02	2.219E-01	6.058E-02	1.700E+02	2.614E-01
7.102E-02	1.800E+02	3.043E-01	8.227E-02	1.900E+02	3.398E-01	9.164E-02	2.000E+02
3.920E-01	1.051E-01						
0	1	24	53	30			n+Cr53
2.104E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	6.730E-10
3.365E-10	2.600E+01	7.270E-09	3.635E-09	2.800E+01	1.607E-06	8.035E-07	3.000E+01
3.023E-05	1.512E-05	3.500E+01	2.622E-03	1.311E-03	4.000E+01	8.183E-03	4.091E-03
4.500E+01	1.389E-02	6.945E-03	5.000E+01	1.915E-02	9.575E-03	5.500E+01	2.406E-02
1.203E-02	6.000E+01	2.827E-02	1.413E-02	6.500E+01	3.204E-02	1.602E-02	7.000E+01
3.449E-02	1.724E-02	7.500E+01	3.760E-02	1.880E-02	8.000E+01	4.228E-02	2.114E-02
8.500E+01	4.898E-02	2.299E-02	9.000E+01	5.557E-02	2.396E-02	9.500E+01	6.022E-02
2.442E-02	1.000E+02	6.582E-02	2.505E-02	1.100E+02	8.058E-02	2.725E-02	1.200E+02
9.701E-02	3.039E-02	1.300E+02	1.091E-01	3.293E-02	1.400E+02	1.279E-01	3.741E-02
1.500E+02	1.405E-01	4.054E-02	1.600E+02	1.680E-01	4.789E-02	1.700E+02	2.060E-01
5.806E-02	1.800E+02	2.384E-01	6.688E-02	1.900E+02	2.674E-01	7.464E-02	2.000E+02
3.015E-01	8.402E-02						
0	1	24	54	30			n+Cr54
2.080E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.695E-10
8.279E-11	2.600E+01	2.315E-09	1.157E-09	2.800E+01	2.531E-08	1.265E-08	3.000E+01
7.103E-06	3.551E-06	3.500E+01	1.990E-03	9.950E-04	4.000E+01	9.832E-03	4.916E-03
4.500E+01	1.822E-02	9.110E-03	5.000E+01	2.572E-02	1.286E-02	5.500E+01	3.181E-02
1.590E-02	6.000E+01	3.709E-02	1.854E-02	6.500E+01	4.154E-02	2.077E-02	7.000E+01
4.665E-02	2.332E-02	7.500E+01	5.128E-02	2.564E-02	8.000E+01	5.617E-02	2.808E-02
8.500E+01	6.180E-02	3.020E-02	9.000E+01	6.795E-02	3.105E-02	9.500E+01	7.247E-02
3.123E-02	1.000E+02	7.641E-02	3.129E-02	1.100E+02	8.720E-02	3.177E-02	1.200E+02
9.975E-02	3.289E-02	1.300E+02	1.105E-01	3.405E-02	1.400E+02	1.224E-01	3.578E-02
1.500E+02	1.315E-01	3.697E-02	1.600E+02	1.497E-01	4.111E-02	1.700E+02	1.759E-01
4.736E-02	1.800E+02	2.027E-01	5.397E-02	1.900E+02	2.389E-01	6.288E-02	2.000E+02
2.613E-01	6.852E-02						
0	1	25	55	31			n+Mn55
1.920E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	4.891E-10
2.445E-10	2.400E+01	5.423E-09	2.711E-09	2.600E+01	5.992E-07	2.996E-07	2.800E+01
1.990E-05	9.950E-06	3.000E+01	2.348E-04	1.174E-04	3.500E+01	6.090E-03	3.045E-03
4.000E+01	1.528E-02	7.640E-03	4.500E+01	2.401E-02	1.201E-02	5.000E+01	3.181E-02
1.590E-02	5.500E+01	3.827E-02	1.913E-02	6.000E+01	4.406E-02	2.203E-02	6.500E+01
4.889E-02	2.445E-02	7.000E+01	5.401E-02	2.701E-02	7.500E+01	5.958E-02	2.979E-02
8.000E+01	6.578E-02	3.289E-02	8.500E+01	7.350E-02	3.519E-02	9.000E+01	8.119E-02
3.627E-02	9.500E+01	8.705E-02	3.660E-02	1.000E+02	9.224E-02	3.683E-02	1.100E+02
1.052E-01	3.784E-02	1.200E+02	1.207E-01	3.976E-02	1.300E+02	1.331E-01	4.147E-02
1.400E+02	1.463E-01	4.375E-02	1.500E+02	1.571E-01	4.577E-02	1.600E+02	1.836E-01
5.212E-02	1.700E+02	2.156E-01	6.025E-02	1.800E+02	2.477E-01	6.858E-02	1.900E+02
2.804E-01	7.719E-02	2.000E+02	3.074E-01	8.432E-02			
0	1	26	54	32			n+Fe54
1.575E+01	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	3.097E-10
1.360E-10	2.200E+01	3.256E-09	1.575E-09	2.400E+01	5.383E-08	2.691E-08	2.600E+01

6.572E-06	3.286E-06	2.800E+01	8.656E-05	4.328E-05	3.000E+01	7.537E-04	3.769E-04
3.500E+01	8.290E-03	4.145E-03	4.000E+01	1.776E-02	8.880E-03	4.500E+01	2.725E-02
1.362E-02	5.000E+01	3.616E-02	1.808E-02	5.500E+01	4.412E-02	2.206E-02	6.000E+01
5.168E-02	2.575E-02	6.500E+01	5.837E-02	2.827E-02	7.000E+01	6.277E-02	2.965E-02
7.500E+01	6.960E-02	3.132E-02	8.000E+01	7.674E-02	3.274E-02	8.500E+01	9.040E-02
3.471E-02	9.000E+01	1.047E-01	3.690E-02	9.500E+01	1.163E-01	3.854E-02	1.000E+02
1.262E-01	3.997E-02	1.100E+02	1.485E-01	4.382E-02	1.200E+02	1.773E-01	4.984E-02
1.300E+02	1.993E-01	5.460E-02	1.400E+02	2.246E-01	6.057E-02	1.500E+02	2.440E-01
6.540E-02	1.600E+02	2.883E-01	7.673E-02	1.700E+02	3.408E-01	9.049E-02	1.800E+02
3.952E-01	1.048E-01	1.900E+02	4.472E-01	1.185E-01	2.000E+02	4.963E-01	1.313E-01
0	1	26	56	31			n+Fe56
1.718E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	5.327E-10
2.664E-10	2.400E+01	6.698E-09	3.349E-09	2.600E+01	4.215E-07	2.108E-07	2.800E+01
1.741E-05	8.705E-06	3.000E+01	2.021E-04	1.011E-04	3.500E+01	6.193E-03	3.096E-03
4.000E+01	1.568E-02	7.840E-03	4.500E+01	2.511E-02	1.256E-02	5.000E+01	3.366E-02
1.683E-02	5.500E+01	4.131E-02	2.065E-02	6.000E+01	4.781E-02	2.390E-02	6.500E+01
5.339E-02	2.669E-02	7.000E+01	5.810E-02	2.905E-02	7.500E+01	6.291E-02	3.145E-02
8.000E+01	7.039E-02	3.519E-02	8.500E+01	7.898E-02	3.949E-02	9.000E+01	8.929E-02
4.136E-02	9.500E+01	9.693E-02	4.225E-02	1.000E+02	1.030E-01	4.285E-02	1.100E+02
1.186E-01	4.495E-02	1.200E+02	1.382E-01	4.830E-02	1.300E+02	1.524E-01	5.078E-02
1.400E+02	1.697E-01	5.447E-02	1.500E+02	1.807E-01	5.662E-02	1.600E+02	2.136E-01
6.543E-02	1.700E+02	2.439E-01	7.387E-02	1.800E+02	2.837E-01	8.505E-02	1.900E+02
3.207E-01	9.551E-02	2.000E+02	3.561E-01	1.055E-01			
0	1	26	57	31			n+Fe57
1.847E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	4.513E-10
2.256E-10	2.400E+01	5.513E-09	2.757E-09	2.600E+01	8.955E-07	4.478E-07	2.800E+01
2.018E-05	1.009E-05	3.000E+01	1.841E-04	9.205E-05	3.500E+01	4.613E-03	2.306E-03
4.000E+01	1.117E-02	5.585E-03	4.500E+01	1.781E-02	8.905E-03	5.000E+01	2.387E-02
1.193E-02	5.500E+01	2.963E-02	1.482E-02	6.000E+01	3.505E-02	1.752E-02	6.500E+01
4.074E-02	2.037E-02	7.000E+01	4.546E-02	2.273E-02	7.500E+01	4.979E-02	2.490E-02
8.000E+01	5.559E-02	2.648E-02	8.500E+01	6.368E-02	2.775E-02	9.000E+01	7.435E-02
2.925E-02	9.500E+01	8.231E-02	3.009E-02	1.000E+02	9.162E-02	3.114E-02	1.100E+02
1.075E-01	3.308E-02	1.200E+02	1.272E-01	3.606E-02	1.300E+02	1.454E-01	3.908E-02
1.400E+02	1.642E-01	4.248E-02	1.500E+02	1.764E-01	4.467E-02	1.600E+02	2.045E-01
5.075E-02	1.700E+02	2.319E-01	5.685E-02	1.800E+02	2.711E-01	6.564E-02	1.900E+02
3.109E-01	7.461E-02	2.000E+02	3.535E-01	8.436E-02			
0	1	26	58	29			n+Fe58
2.074E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	5.875E-10
2.937E-10	2.800E+01	7.467E-09	3.733E-09	3.000E+01	1.544E-06	7.720E-07	3.500E+01
7.067E-04	3.533E-04	4.000E+01	6.582E-03	3.291E-03	4.500E+01	1.337E-02	6.685E-03
5.000E+01	1.981E-02	9.905E-03	5.500E+01	2.554E-02	1.277E-02	6.000E+01	3.074E-02
1.537E-02	6.500E+01	3.548E-02	1.774E-02	7.000E+01	4.033E-02	2.016E-02	7.500E+01
4.521E-02	2.261E-02	8.000E+01	5.105E-02	2.552E-02	8.500E+01	5.789E-02	2.831E-02
9.000E+01	6.713E-02	2.938E-02	9.500E+01	7.426E-02	2.983E-02	1.000E+02	8.241E-02
3.029E-02	1.100E+02	9.577E-02	3.095E-02	1.200E+02	1.143E-01	3.247E-02	1.300E+02
1.313E-01	3.418E-02	1.400E+02	1.466E-01	3.590E-02	1.500E+02	1.612E-01	3.782E-02
1.600E+02	1.878E-01	4.244E-02	1.700E+02	2.148E-01	4.740E-02	1.800E+02	2.545E-01
5.495E-02	1.900E+02	2.929E-01	6.241E-02	2.000E+02	3.284E-01	6.950E-02	
0	1	27	59	31			n+Co59
1.839E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	4.099E-10
2.050E-10	2.400E+01	4.250E-09	2.125E-09	2.600E+01	3.339E-07	1.669E-07	2.800E+01
1.395E-05	6.975E-06	3.000E+01	1.629E-04	8.145E-05	3.500E+01	5.065E-03	2.533E-03
4.000E+01	1.343E-02	6.715E-03	4.500E+01	2.145E-02	1.073E-02	5.000E+01	2.881E-02
1.440E-02	5.500E+01	3.564E-02	1.782E-02	6.000E+01	4.162E-02	2.081E-02	6.500E+01
4.713E-02	2.356E-02	7.000E+01	5.241E-02	2.620E-02	7.500E+01	5.918E-02	2.959E-02
8.000E+01	6.666E-02	3.333E-02	8.500E+01	7.557E-02	3.465E-02	9.000E+01	8.558E-02
3.533E-02	9.500E+01	9.479E-02	3.527E-02	1.000E+02	1.035E-01	3.511E-02	1.100E+02
1.207E-01	3.482E-02	1.200E+02	1.399E-01	3.493E-02	1.300E+02	1.598E-01	3.561E-02
1.400E+02	1.755E-01	3.627E-02	1.500E+02	1.934E-01	3.720E-02	1.600E+02	2.247E-01
4.103E-02	1.700E+02	2.544E-01	4.509E-02	1.800E+02	2.929E-01	5.071E-02	1.900E+02
3.378E-01	5.759E-02	2.000E+02	3.743E-01	6.338E-02			
0	1	28	58	35			n+Ni58
1.273E+01	0.000E+00	0.000E+00	1.600E+01	0.000E+00	0.000E+00	1.700E+01	2.087E-10
6.915E-11	1.800E+01	6.213E-10	2.239E-10	1.900E+01	1.861E-09	7.248E-10	2.000E+01
5.702E-09	2.358E-09	2.200E+01	1.175E-07	5.165E-08	2.400E+01	9.435E-06	4.492E-06
2.600E+01	1.179E-04	5.775E-05	2.800E+01	9.824E-04	4.759E-04	3.000E+01	4.019E-03

1.914E-03	3.500E+01	1.596E-02	7.980E-03	4.000E+01	2.914E-02	1.457E-02	4.500E+01
4.178E-02	2.089E-02	5.000E+01	5.292E-02	2.631E-02	5.500E+01	6.316E-02	3.099E-02
6.000E+01	7.185E-02	3.459E-02	6.500E+01	7.837E-02	3.741E-02	7.000E+01	8.445E-02
3.954E-02	7.500E+01	8.983E-02	4.116E-02	8.000E+01	1.015E-01	4.266E-02	8.500E+01
1.156E-01	4.403E-02	9.000E+01	1.315E-01	4.543E-02	9.500E+01	1.430E-01	4.576E-02
1.000E+02	1.538E-01	4.605E-02	1.100E+02	1.758E-01	4.691E-02	1.200E+02	2.026E-01
4.891E-02	1.300E+02	2.237E-01	5.072E-02	1.400E+02	2.415E-01	5.246E-02	1.500E+02
2.526E-01	5.311E-02	1.600E+02	2.900E-01	5.920E-02	1.700E+02	3.372E-01	6.746E-02
1.800E+02	3.899E-01	7.691E-02	1.900E+02	4.379E-01	8.569E-02	2.000E+02	4.893E-01
9.513E-02							
0	1	28	60	32			n+Ni60
1.549E+01	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	1.478E-10
6.968E-11	2.200E+01	1.545E-09	7.725E-10	2.400E+01	1.676E-08	8.380E-09	2.600E+01
3.215E-06	1.608E-06	2.800E+01	5.035E-05	2.517E-05	3.000E+01	4.073E-04	2.036E-04
3.500E+01	7.622E-03	3.811E-03	4.000E+01	1.793E-02	8.965E-03	4.500E+01	2.785E-02
1.392E-02	5.000E+01	3.699E-02	1.850E-02	5.500E+01	4.511E-02	2.255E-02	6.000E+01
5.263E-02	2.632E-02	6.500E+01	5.942E-02	2.971E-02	7.000E+01	6.594E-02	3.297E-02
7.500E+01	7.355E-02	3.661E-02	8.000E+01	8.224E-02	3.801E-02	8.500E+01	9.353E-02
3.919E-02	9.000E+01	1.066E-01	4.021E-02	9.500E+01	1.187E-01	4.041E-02	1.000E+02
1.294E-01	4.046E-02	1.100E+02	1.508E-01	4.060E-02	1.200E+02	1.715E-01	4.090E-02
1.300E+02	1.969E-01	4.208E-02	1.400E+02	2.149E-01	4.286E-02	1.500E+02	2.402E-01
4.493E-02	1.600E+02	2.723E-01	4.852E-02	1.700E+02	3.096E-01	5.319E-02	1.800E+02
3.535E-01	5.904E-02	1.900E+02	3.986E-01	6.534E-02	2.000E+02	4.432E-01	7.167E-02
0	1	28	61	31			n+Ni61
1.709E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	8.108E-10
4.036E-10	2.400E+01	7.621E-09	3.810E-09	2.600E+01	1.434E-06	7.170E-07	2.800E+01
2.536E-05	1.268E-05	3.000E+01	2.580E-04	1.290E-04	3.500E+01	4.718E-03	2.359E-03
4.000E+01	1.096E-02	5.480E-03	4.500E+01	1.726E-02	8.630E-03	5.000E+01	2.301E-02
1.150E-02	5.500E+01	2.859E-02	1.430E-02	6.000E+01	3.376E-02	1.688E-02	6.500E+01
3.895E-02	1.947E-02	7.000E+01	4.386E-02	2.157E-02	7.500E+01	4.896E-02	2.283E-02
8.000E+01	5.419E-02	2.382E-02	8.500E+01	6.270E-02	2.472E-02	9.000E+01	7.221E-02
2.551E-02	9.500E+01	8.145E-02	2.584E-02	1.000E+02	9.081E-02	2.615E-02	1.100E+02
1.119E-01	2.708E-02	1.200E+02	1.322E-01	2.820E-02	1.300E+02	1.553E-01	3.002E-02
1.400E+02	1.832E-01	3.308E-02	1.500E+02	2.063E-01	3.550E-02	1.600E+02	2.305E-01
3.847E-02	1.700E+02	2.661E-01	4.324E-02	1.800E+02	3.093E-01	4.922E-02	1.900E+02
3.523E-01	5.528E-02	2.000E+02	4.044E-01	6.274E-02			
0	1	28	62	29			n+Ni62
1.948E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	8.910E-10
4.455E-10	2.800E+01	1.055E-08	5.275E-09	3.000E+01	2.344E-06	1.172E-06	3.500E+01
7.912E-04	3.956E-04	4.000E+01	6.634E-03	3.317E-03	4.500E+01	1.344E-02	6.720E-03
5.000E+01	1.972E-02	9.860E-03	5.500E+01	2.538E-02	1.269E-02	6.000E+01	3.035E-02
1.517E-02	6.500E+01	3.487E-02	1.743E-02	7.000E+01	3.915E-02	1.957E-02	7.500E+01
4.378E-02	2.189E-02	8.000E+01	4.854E-02	2.427E-02	8.500E+01	5.414E-02	2.535E-02
9.000E+01	6.162E-02	2.601E-02	9.500E+01	6.852E-02	2.611E-02	1.000E+02	7.569E-02
2.611E-02	1.100E+02	8.938E-02	2.601E-02	1.200E+02	1.042E-01	2.603E-02	1.300E+02
1.238E-01	2.674E-02	1.400E+02	1.407E-01	2.760E-02	1.500E+02	1.564E-01	2.859E-02
1.600E+02	1.821E-01	3.125E-02	1.700E+02	2.131E-01	3.499E-02	1.800E+02	2.448E-01
3.911E-02	1.900E+02	2.869E-01	4.492E-02	2.000E+02	3.196E-01	4.954E-02	
0	1	28	64	27			n+Ni64
2.333E+01	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	7.004E-10
3.502E-10	3.500E+01	7.730E-06	3.865E-06	4.000E+01	1.331E-03	6.655E-04	4.500E+01
5.761E-03	2.880E-03	5.000E+01	1.032E-02	5.160E-03	5.500E+01	1.455E-02	7.275E-03
6.000E+01	1.818E-02	9.090E-03	6.500E+01	2.134E-02	1.067E-02	7.000E+01	2.412E-02
1.206E-02	7.500E+01	2.672E-02	1.336E-02	8.000E+01	2.925E-02	1.463E-02	8.500E+01
3.165E-02	1.582E-02	9.000E+01	3.463E-02	1.732E-02	9.500E+01	3.709E-02	1.854E-02
1.000E+02	4.023E-02	2.012E-02	1.100E+02	4.664E-02	2.332E-02	1.200E+02	5.371E-02
2.686E-02	1.300E+02	6.329E-02	2.919E-02	1.400E+02	7.476E-02	2.877E-02	1.500E+02
8.516E-02	2.837E-02	1.600E+02	1.035E-01	2.923E-02	1.700E+02	1.207E-01	3.020E-02
1.800E+02	1.414E-01	3.193E-02	1.900E+02	1.650E-01	3.426E-02	2.000E+02	1.920E-01
3.745E-02							
0	1	29	63	32			n+Cu63
1.604E+01	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	2.474E-10
1.237E-10	2.200E+01	2.485E-09	1.243E-09	2.400E+01	2.363E-08	1.182E-08	2.600E+01
5.381E-06	2.690E-06	2.800E+01	7.167E-05	3.583E-05	3.000E+01	6.364E-04	3.182E-04
3.500E+01	7.863E-03	3.932E-03	4.000E+01	1.709E-02	8.545E-03	4.500E+01	2.604E-02
1.302E-02	5.000E+01	3.407E-02	1.704E-02	5.500E+01	4.160E-02	2.080E-02	6.000E+01

4.806E-02	2.403E-02	6.500E+01	5.441E-02	2.721E-02	7.000E+01	6.131E-02	3.066E-02
7.500E+01	6.923E-02	3.461E-02	8.000E+01	7.906E-02	3.746E-02	8.500E+01	8.827E-02
3.845E-02	9.000E+01	9.976E-02	3.924E-02	9.500E+01	1.086E-01	3.912E-02	1.000E+02
1.206E-01	3.908E-02	1.100E+02	1.445E-01	3.903E-02	1.200E+02	1.648E-01	3.902E-02
1.300E+02	1.893E-01	3.980E-02	1.400E+02	2.123E-01	4.089E-02	1.500E+02	2.374E-01
4.216E-02	1.600E+02	2.781E-01	4.661E-02	1.700E+02	3.048E-01	4.970E-02	1.800E+02
3.460E-01	5.487E-02	1.900E+02	3.942E-01	6.128E-02	2.000E+02	4.487E-01	6.864E-02
0	1	29	65	30			n+Cu65
1.979E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.801E-10
9.005E-11	2.600E+01	2.096E-09	1.048E-09	2.800E+01	1.040E-07	5.200E-08	3.000E+01
5.363E-06	2.682E-06	3.500E+01	1.282E-03	6.410E-04	4.000E+01	7.115E-03	3.557E-03
4.500E+01	1.339E-02	6.695E-03	5.000E+01	1.928E-02	9.640E-03	5.500E+01	2.465E-02
1.232E-02	6.000E+01	2.919E-02	1.460E-02	6.500E+01	3.321E-02	1.661E-02	7.000E+01
3.688E-02	1.844E-02	7.500E+01	4.081E-02	2.040E-02	8.000E+01	4.521E-02	2.261E-02
8.500E+01	4.938E-02	2.469E-02	9.000E+01	5.436E-02	2.718E-02	9.500E+01	5.850E-02
2.725E-02	1.000E+02	6.465E-02	2.713E-02	1.100E+02	7.559E-02	2.665E-02	1.200E+02
8.708E-02	2.617E-02	1.300E+02	1.002E-01	2.596E-02	1.400E+02	1.172E-01	2.639E-02
1.500E+02	1.340E-01	2.668E-02	1.600E+02	1.585E-01	2.896E-02	1.700E+02	1.800E-01
3.117E-02	1.800E+02	2.046E-01	3.411E-02	1.900E+02	2.346E-01	3.797E-02	2.000E+02
2.747E-01	4.340E-02						
0	1	30	64	35			n+Zn64
1.173E+01	0.000E+00	0.000E+00	1.600E+01	0.000E+00	0.000E+00	1.700E+01	2.818E-10
1.312E-10	1.800E+01	8.246E-10	4.123E-10	1.900E+01	2.458E-09	1.229E-09	2.000E+01
6.834E-09	3.417E-09	2.200E+01	1.800E-07	9.000E-08	2.400E+01	1.318E-05	6.590E-06
2.600E+01	1.544E-04	7.720E-05	2.800E+01	1.236E-03	6.180E-04	3.000E+01	4.819E-03
2.410E-03	3.500E+01	1.879E-02	9.395E-03	4.000E+01	3.347E-02	1.673E-02	4.500E+01
4.714E-02	2.357E-02	5.000E+01	5.928E-02	2.964E-02	5.500E+01	7.084E-02	3.542E-02
6.000E+01	8.002E-02	4.001E-02	6.500E+01	8.858E-02	4.429E-02	7.000E+01	9.872E-02
4.936E-02	7.500E+01	1.118E-01	5.590E-02	8.000E+01	1.266E-01	6.330E-02	8.500E+01
1.428E-01	7.140E-02	9.000E+01	1.615E-01	7.888E-02	9.500E+01	1.744E-01	7.779E-02
1.000E+02	1.926E-01	7.666E-02	1.100E+02	2.272E-01	7.433E-02	1.200E+02	2.530E-01
7.183E-02	1.300E+02	2.859E-01	7.037E-02	1.400E+02	3.181E-01	6.960E-02	1.500E+02
3.472E-01	6.775E-02	1.600E+02	4.023E-01	7.156E-02	1.700E+02	4.378E-01	7.393E-02
1.800E+02	4.934E-01	7.911E-02	1.900E+02	5.573E-01	8.564E-02	2.000E+02	6.281E-01
9.358E-02							
0	1	30	66	31			n+Zn66
1.542E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	5.873E-10
2.937E-10	2.400E+01	5.673E-09	2.836E-09	2.600E+01	5.098E-07	2.549E-07	2.800E+01
1.626E-05	8.130E-06	3.000E+01	1.777E-04	8.885E-05	3.500E+01	5.682E-03	2.841E-03
4.000E+01	1.563E-02	7.815E-03	4.500E+01	2.534E-02	1.267E-02	5.000E+01	3.400E-02
1.700E-02	5.500E+01	4.151E-02	2.075E-02	6.000E+01	4.807E-02	2.404E-02	6.500E+01
5.396E-02	2.698E-02	7.000E+01	6.138E-02	3.069E-02	7.500E+01	6.828E-02	3.414E-02
8.000E+01	7.561E-02	3.780E-02	8.500E+01	8.364E-02	4.182E-02	9.000E+01	9.309E-02
4.438E-02	9.500E+01	1.007E-01	4.403E-02	1.000E+02	1.091E-01	4.352E-02	1.100E+02
1.302E-01	4.242E-02	1.200E+02	1.454E-01	4.110E-02	1.300E+02	1.665E-01	4.040E-02
1.400E+02	1.901E-01	4.033E-02	1.500E+02	2.131E-01	4.068E-02	1.600E+02	2.494E-01
4.318E-02	1.700E+02	2.723E-01	4.482E-02	1.800E+02	3.131E-01	4.870E-02	1.900E+02
3.536E-01	5.304E-02	2.000E+02	4.072E-01	5.914E-02			
0	1	30	67	31			n+Zn67
1.691E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	2.669E-10
1.334E-10	2.400E+01	3.002E-09	1.501E-09	2.600E+01	3.044E-07	1.522E-07	2.800E+01
9.603E-06	4.801E-06	3.000E+01	1.082E-04	5.410E-05	3.500E+01	3.415E-03	1.708E-03
4.000E+01	9.324E-03	4.662E-03	4.500E+01	1.514E-02	7.570E-03	5.000E+01	2.067E-02
1.034E-02	5.500E+01	2.559E-02	1.280E-02	6.000E+01	2.999E-02	1.499E-02	6.500E+01
3.332E-02	1.666E-02	7.000E+01	3.723E-02	1.861E-02	7.500E+01	4.120E-02	2.060E-02
8.000E+01	4.574E-02	2.287E-02	8.500E+01	5.118E-02	2.559E-02	9.000E+01	5.698E-02
2.766E-02	9.500E+01	6.303E-02	2.779E-02	1.000E+02	6.968E-02	2.782E-02	1.100E+02
8.515E-02	2.786E-02	1.200E+02	9.915E-02	2.783E-02	1.300E+02	1.179E-01	2.836E-02
1.400E+02	1.414E-01	2.963E-02	1.500E+02	1.603E-01	3.080E-02	1.600E+02	1.908E-01
3.379E-02	1.700E+02	2.158E-01	3.645E-02	1.800E+02	2.427E-01	3.946E-02	1.900E+02
2.771E-01	4.354E-02	2.000E+02	3.206E-01	4.892E-02			
0	1	30	68	29			n+Zn68
1.908E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	4.892E-10
2.446E-10	2.800E+01	5.602E-09	2.801E-09	3.000E+01	9.378E-07	4.689E-07	3.500E+01
4.750E-04	2.375E-04	4.000E+01	5.718E-03	2.859E-03	4.500E+01	1.243E-02	6.215E-03
5.000E+01	1.869E-02	9.345E-03	5.500E+01	2.415E-02	1.208E-02	6.000E+01	2.889E-02

1.444E-02	6.500E+01	3.295E-02	1.648E-02	7.000E+01	3.591E-02	1.795E-02	7.500E+01
3.946E-02	1.973E-02	8.000E+01	4.311E-02	2.156E-02	8.500E+01	4.698E-02	2.349E-02
9.000E+01	5.127E-02	2.564E-02	9.500E+01	5.461E-02	2.730E-02	1.000E+02	5.827E-02
2.914E-02	1.100E+02	6.750E-02	2.860E-02	1.200E+02	7.750E-02	2.775E-02	1.300E+02
8.880E-02	2.695E-02	1.400E+02	1.018E-01	2.635E-02	1.500E+02	1.187E-01	2.690E-02
1.600E+02	1.362E-01	2.724E-02	1.700E+02	1.585E-01	2.817E-02	1.800E+02	1.772E-01
2.909E-02	1.900E+02	2.083E-01	3.136E-02	2.000E+02	2.422E-01	3.427E-02	
0	1	30	70	27			n+Zn70
2.282E+01	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	3.865E-10
1.933E-10	3.500E+01	4.856E-06	2.428E-06	4.000E+01	1.025E-03	5.125E-04	4.500E+01
5.086E-03	2.543E-03	5.000E+01	9.633E-03	4.816E-03	5.500E+01	1.396E-02	6.980E-03
6.000E+01	1.764E-02	8.820E-03	6.500E+01	2.075E-02	1.038E-02	7.000E+01	2.294E-02
1.147E-02	7.500E+01	2.522E-02	1.261E-02	8.000E+01	2.730E-02	1.365E-02	8.500E+01
2.926E-02	1.463E-02	9.000E+01	3.106E-02	1.553E-02	9.500E+01	3.261E-02	1.631E-02
1.000E+02	3.409E-02	1.705E-02	1.100E+02	3.780E-02	1.890E-02	1.200E+02	4.212E-02
2.106E-02	1.300E+02	4.729E-02	2.169E-02	1.400E+02	5.339E-02	2.088E-02	1.500E+02
6.263E-02	2.081E-02	1.600E+02	7.434E-02	2.058E-02	1.700E+02	8.683E-02	2.054E-02
1.800E+02	9.794E-02	2.059E-02	1.900E+02	1.128E-01	2.113E-02	2.000E+02	1.309E-01
2.213E-02							
0	1	31	69	32			n+Ga69
1.541E+01	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	1.639E-10
8.195E-11	2.200E+01	1.734E-09	8.670E-10	2.400E+01	1.658E-08	8.290E-09	2.600E+01
3.484E-06	1.742E-06	2.800E+01	4.972E-05	2.486E-05	3.000E+01	4.596E-04	2.298E-04
3.500E+01	6.993E-03	3.497E-03	4.000E+01	1.642E-02	8.210E-03	4.500E+01	2.545E-02
1.273E-02	5.000E+01	3.352E-02	1.676E-02	5.500E+01	4.083E-02	2.041E-02	6.000E+01
4.715E-02	2.357E-02	6.500E+01	5.255E-02	2.627E-02	7.000E+01	5.626E-02	2.813E-02
7.500E+01	6.291E-02	3.145E-02	8.000E+01	6.975E-02	3.488E-02	8.500E+01	7.761E-02
3.800E-02	9.000E+01	8.509E-02	3.868E-02	9.500E+01	9.297E-02	3.847E-02	1.000E+02
1.004E-01	3.808E-02	1.100E+02	1.192E-01	3.729E-02	1.200E+02	1.380E-01	3.661E-02
1.300E+02	1.565E-01	3.616E-02	1.400E+02	1.744E-01	3.600E-02	1.500E+02	2.011E-01
3.696E-02	1.600E+02	2.341E-01	3.933E-02	1.700E+02	2.749E-01	4.288E-02	1.800E+02
3.041E-01	4.555E-02	1.900E+02	3.528E-01	5.064E-02	2.000E+02	3.953E-01	5.526E-02
0	1	31	71	30			n+Ga71
1.893E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.840E-10
9.200E-11	2.600E+01	2.057E-09	1.028E-09	2.800E+01	8.213E-08	4.106E-08	3.000E+01
5.012E-06	2.506E-06	3.500E+01	1.226E-03	6.130E-04	4.000E+01	7.287E-03	3.644E-03
4.500E+01	1.401E-02	7.005E-03	5.000E+01	2.031E-02	1.016E-02	5.500E+01	2.571E-02
1.286E-02	6.000E+01	3.037E-02	1.519E-02	6.500E+01	3.434E-02	1.717E-02	7.000E+01
3.860E-02	1.930E-02	7.500E+01	4.214E-02	2.107E-02	8.000E+01	4.557E-02	2.278E-02
8.500E+01	4.929E-02	2.465E-02	9.000E+01	5.349E-02	2.675E-02	9.500E+01	5.587E-02
2.794E-02	1.000E+02	5.912E-02	2.956E-02	1.100E+02	6.705E-02	3.125E-02	1.200E+02
7.674E-02	3.009E-02	1.300E+02	8.613E-02	2.893E-02	1.400E+02	9.743E-02	2.795E-02
1.500E+02	1.143E-01	2.735E-02	1.600E+02	1.324E-01	2.758E-02	1.700E+02	1.535E-01
2.824E-02	1.800E+02	1.780E-01	2.950E-02	1.900E+02	1.973E-01	3.060E-02	2.000E+02
2.307E-01	3.330E-02						
0	1	32	70	35			n+Ge70
1.132E+01	0.000E+00	0.000E+00	1.600E+01	0.000E+00	0.000E+00	1.700E+01	1.682E-10
6.568E-11	1.800E+01	4.846E-10	2.078E-10	1.900E+01	1.436E-09	6.575E-10	2.000E+01
4.319E-09	2.086E-09	2.200E+01	3.789E-08	1.894E-08	2.400E+01	6.714E-06	3.357E-06
2.600E+01	8.888E-05	4.444E-05	2.800E+01	7.723E-04	3.861E-04	3.000E+01	3.677E-03
1.839E-03	3.500E+01	1.735E-02	8.675E-03	4.000E+01	3.218E-02	1.609E-02	4.500E+01
4.619E-02	2.310E-02	5.000E+01	5.859E-02	2.930E-02	5.500E+01	6.999E-02	3.499E-02
6.000E+01	7.995E-02	3.997E-02	6.500E+01	8.829E-02	4.414E-02	7.000E+01	9.695E-02
4.847E-02	7.500E+01	1.097E-01	5.485E-02	8.000E+01	1.227E-01	5.986E-02	8.500E+01
1.396E-01	6.107E-02	9.000E+01	1.544E-01	6.182E-02	9.500E+01	1.664E-01	6.106E-02
1.000E+02	1.826E-01	6.028E-02	1.100E+02	2.167E-01	5.873E-02	1.200E+02	2.525E-01
5.759E-02	1.300E+02	2.743E-01	5.613E-02	1.400E+02	3.124E-01	5.636E-02	1.500E+02
3.401E-01	5.525E-02	1.600E+02	3.937E-01	5.875E-02	1.700E+02	4.483E-01	6.295E-02
1.800E+02	5.037E-01	6.753E-02	1.900E+02	5.614E-01	7.284E-02	2.000E+02	6.321E-01
7.972E-02							
0	1	32	72	31			n+Ge72
1.448E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	6.617E-10
3.309E-10	2.400E+01	6.868E-09	3.434E-09	2.600E+01	7.957E-07	3.978E-07	2.800E+01
1.934E-05	9.670E-06	3.000E+01	2.032E-04	1.016E-04	3.500E+01	5.978E-03	2.989E-03
4.000E+01	1.639E-02	8.195E-03	4.500E+01	2.667E-02	1.333E-02	5.000E+01	3.583E-02
1.792E-02	5.500E+01	4.389E-02	2.194E-02	6.000E+01	5.086E-02	2.543E-02	6.500E+01

5.682E-02	2.841E-02	7.000E+01	6.214E-02	3.107E-02	7.500E+01	6.868E-02	3.434E-02
8.000E+01	7.530E-02	3.765E-02	8.500E+01	8.338E-02	4.169E-02	9.000E+01	9.213E-02
4.454E-02	9.500E+01	9.790E-02	4.409E-02	1.000E+02	1.061E-01	4.343E-02	1.100E+02
1.236E-01	4.183E-02	1.200E+02	1.422E-01	4.023E-02	1.300E+02	1.611E-01	3.885E-02
1.400E+02	1.829E-01	3.801E-02	1.500E+02	2.043E-01	3.747E-02	1.600E+02	2.380E-01
3.874E-02	1.700E+02	2.813E-01	4.128E-02	1.800E+02	3.195E-01	4.389E-02	1.900E+02
3.511E-01	4.627E-02	2.000E+02	3.951E-01	5.013E-02			
0	1	32	73	31			n+Ge73
1.546E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	5.608E-10
2.804E-10	2.400E+01	6.118E-09	3.059E-09	2.600E+01	1.090E-06	5.450E-07	2.800E+01
1.950E-05	9.750E-06	3.000E+01	1.650E-04	8.250E-05	3.500E+01	4.153E-03	2.076E-03
4.000E+01	1.053E-02	5.265E-03	4.500E+01	1.682E-02	8.410E-03	5.000E+01	2.254E-02
1.127E-02	5.500E+01	2.779E-02	1.389E-02	6.000E+01	3.259E-02	1.630E-02	6.500E+01
3.687E-02	1.843E-02	7.000E+01	4.075E-02	2.038E-02	7.500E+01	4.481E-02	2.241E-02
8.000E+01	4.906E-02	2.453E-02	8.500E+01	5.370E-02	2.685E-02	9.000E+01	5.987E-02
2.947E-02	9.500E+01	6.528E-02	2.941E-02	1.000E+02	7.059E-02	2.916E-02	1.100E+02
8.431E-02	2.850E-02	1.200E+02	1.005E-01	2.786E-02	1.300E+02	1.172E-01	2.740E-02
1.400E+02	1.348E-01	2.796E-02	1.500E+02	1.581E-01	2.846E-02	1.600E+02	1.852E-01
2.988E-02	1.700E+02	2.211E-01	3.239E-02	1.800E+02	2.567E-01	3.521E-02	1.900E+02
2.852E-01	3.756E-02	2.000E+02	3.252E-01	4.124E-02			
0	1	32	74	29			n+Ge74
1.790E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	7.700E-10
3.850E-10	2.800E+01	8.547E-09	4.274E-09	3.000E+01	1.799E-06	8.995E-07	3.500E+01
6.247E-04	3.123E-04	4.000E+01	6.159E-03	3.080E-03	4.500E+01	1.310E-02	6.550E-03
5.000E+01	1.960E-02	9.800E-03	5.500E+01	2.530E-02	1.265E-02	6.000E+01	3.034E-02
1.517E-02	6.500E+01	3.469E-02	1.734E-02	7.000E+01	3.921E-02	1.961E-02	7.500E+01
4.281E-02	2.141E-02	8.000E+01	4.672E-02	2.336E-02	8.500E+01	5.082E-02	2.541E-02
9.000E+01	5.530E-02	2.765E-02	9.500E+01	5.810E-02	2.905E-02	1.000E+02	6.216E-02
3.108E-02	1.100E+02	7.072E-02	3.147E-02	1.200E+02	8.189E-02	3.029E-02	1.300E+02
9.412E-02	2.911E-02	1.400E+02	1.055E-01	2.803E-02	1.500E+02	1.187E-01	2.711E-02
1.600E+02	1.459E-01	2.760E-02	1.700E+02	1.685E-01	2.812E-02	1.800E+02	1.927E-01
2.908E-02	1.900E+02	2.128E-01	3.001E-02	2.000E+02	2.409E-01	3.183E-02	
0	1	32	76	27			n+Ge76
2.205E+01	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	3.481E-10
1.741E-10	3.500E+01	4.102E-06	2.051E-06	4.000E+01	8.889E-04	4.444E-04	4.500E+01
4.719E-03	2.360E-03	5.000E+01	9.145E-03	4.573E-03	5.500E+01	1.331E-02	6.655E-03
6.000E+01	1.695E-02	8.475E-03	6.500E+01	2.007E-02	1.004E-02	7.000E+01	2.226E-02
1.113E-02	7.500E+01	2.448E-02	1.224E-02	8.000E+01	2.649E-02	1.324E-02	8.500E+01
2.841E-02	1.421E-02	9.000E+01	3.031E-02	1.516E-02	9.500E+01	3.172E-02	1.586E-02
1.000E+02	3.287E-02	1.644E-02	1.100E+02	3.595E-02	1.798E-02	1.200E+02	4.071E-02
2.036E-02	1.300E+02	4.640E-02	2.127E-02	1.400E+02	5.194E-02	2.044E-02	1.500E+02
5.958E-02	1.967E-02	1.600E+02	7.262E-02	1.944E-02	1.700E+02	8.691E-02	1.940E-02
1.800E+02	1.011E-01	1.951E-02	1.900E+02	1.180E-01	2.000E-02	2.000E+02	1.330E-01
2.057E-02							
0	1	33	75	31			n+As75
1.520E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	6.712E-10
3.356E-10	2.400E+01	6.842E-09	3.421E-09	2.600E+01	9.741E-07	4.870E-07	2.800E+01
1.980E-05	9.900E-06	3.000E+01	2.015E-04	1.007E-04	3.500E+01	5.236E-03	2.618E-03
4.000E+01	1.397E-02	6.985E-03	4.500E+01	2.259E-02	1.129E-02	5.000E+01	3.027E-02
1.513E-02	5.500E+01	3.752E-02	1.876E-02	6.000E+01	4.348E-02	2.174E-02	6.500E+01
4.873E-02	2.437E-02	7.000E+01	5.206E-02	2.603E-02	7.500E+01	5.689E-02	2.845E-02
8.000E+01	6.230E-02	3.115E-02	8.500E+01	6.833E-02	3.417E-02	9.000E+01	7.571E-02
3.785E-02	9.500E+01	8.085E-02	3.858E-02	1.000E+02	8.628E-02	3.813E-02	1.100E+02
1.003E-01	3.697E-02	1.200E+02	1.179E-01	3.578E-02	1.300E+02	1.350E-01	3.475E-02
1.400E+02	1.540E-01	3.407E-02	1.500E+02	1.737E-01	3.466E-02	1.600E+02	2.110E-01
3.616E-02	1.700E+02	2.468E-01	3.802E-02	1.800E+02	2.769E-01	3.978E-02	1.900E+02
3.178E-01	4.276E-02	2.000E+02	3.524E-01	4.544E-02			
0	1	34	74	36			n+Se74
1.004E+01	0.000E+00	0.000E+00	1.500E+01	0.000E+00	0.000E+00	1.600E+01	1.053E-10
3.952E-11	1.700E+01	2.829E-10	1.206E-10	1.800E+01	7.844E-10	3.690E-10	1.900E+01
2.068E-09	1.034E-09	2.000E+01	6.105E-09	3.052E-09	2.200E+01	1.532E-07	7.660E-08
2.400E+01	1.189E-05	5.945E-06	2.600E+01	1.318E-04	6.590E-05	2.800E+01	1.023E-03
5.115E-04	3.000E+01	3.854E-03	1.927E-03	3.500E+01	1.695E-02	8.475E-03	4.000E+01
3.124E-02	1.562E-02	4.500E+01	4.468E-02	2.234E-02	5.000E+01	5.680E-02	2.840E-02
5.500E+01	6.760E-02	3.380E-02	6.000E+01	7.738E-02	3.869E-02	6.500E+01	8.652E-02
4.326E-02	7.000E+01	9.446E-02	4.723E-02	7.500E+01	1.033E-01	5.165E-02	8.000E+01

1.178E-01	5.803E-02	8.500E+01	1.338E-01	5.935E-02	9.000E+01	1.518E-01	6.032E-02
9.500E+01	1.636E-01	5.967E-02	1.000E+02	1.793E-01	5.899E-02	1.100E+02	2.168E-01
5.777E-02	1.200E+02	2.607E-01	5.725E-02	1.300E+02	2.978E-01	5.694E-02	1.400E+02
3.313E-01	5.697E-02	1.500E+02	3.721E-01	5.822E-02	1.600E+02	4.464E-01	6.355E-02
1.700E+02	5.135E-01	6.877E-02	1.800E+02	5.858E-01	7.493E-02	1.900E+02	6.488E-01
8.062E-02	2.000E+02	7.414E-01	8.939E-02				
0	1	34	76	31			n+Se76
1.356E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	6.323E-10
3.161E-10	2.400E+01	6.744E-09	3.372E-09	2.600E+01	4.978E-07	2.489E-07	2.800E+01
1.459E-05	7.295E-06	3.000E+01	1.511E-04	7.555E-05	3.500E+01	5.175E-03	2.587E-03
4.000E+01	1.432E-02	7.160E-03	4.500E+01	2.366E-02	1.183E-02	5.000E+01	3.211E-02
1.605E-02	5.500E+01	3.968E-02	1.984E-02	6.000E+01	4.615E-02	2.307E-02	6.500E+01
5.188E-02	2.594E-02	7.000E+01	5.555E-02	2.778E-02	7.500E+01	6.059E-02	3.029E-02
8.000E+01	6.692E-02	3.346E-02	8.500E+01	7.352E-02	3.676E-02	9.000E+01	8.167E-02
4.084E-02	9.500E+01	8.843E-02	4.363E-02	1.000E+02	9.406E-02	4.313E-02	1.100E+02
1.126E-01	4.192E-02	1.200E+02	1.350E-01	4.073E-02	1.300E+02	1.552E-01	3.962E-02
1.400E+02	1.779E-01	3.887E-02	1.500E+02	2.038E-01	3.876E-02	1.600E+02	2.490E-01
4.086E-02	1.700E+02	2.928E-01	4.338E-02	1.800E+02	3.369E-01	4.638E-02	1.900E+02
3.862E-01	5.011E-02	2.000E+02	4.312E-01	5.379E-02			
0	1	34	77	31			n+Se77
1.517E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	2.267E-10
1.134E-10	2.400E+01	2.337E-09	1.169E-09	2.600E+01	1.924E-07	9.620E-08	2.800E+01
6.579E-06	3.290E-06	3.000E+01	7.220E-05	3.610E-05	3.500E+01	2.757E-03	1.378E-03
4.000E+01	8.205E-03	4.103E-03	4.500E+01	1.378E-02	6.890E-03	5.000E+01	1.879E-02
9.395E-03	5.500E+01	2.342E-02	1.171E-02	6.000E+01	2.759E-02	1.379E-02	6.500E+01
3.128E-02	1.564E-02	7.000E+01	3.466E-02	1.733E-02	7.500E+01	3.797E-02	1.898E-02
8.000E+01	4.166E-02	2.083E-02	8.500E+01	4.566E-02	2.283E-02	9.000E+01	5.099E-02
2.550E-02	9.500E+01	5.569E-02	2.744E-02	1.000E+02	5.990E-02	2.728E-02	1.100E+02
7.191E-02	2.675E-02	1.200E+02	8.947E-02	2.629E-02	1.300E+02	1.071E-01	2.595E-02
1.400E+02	1.288E-01	2.677E-02	1.500E+02	1.475E-01	2.693E-02	1.600E+02	1.821E-01
2.890E-02	1.700E+02	2.152E-01	3.111E-02	1.800E+02	2.515E-01	3.388E-02	1.900E+02
2.986E-01	3.781E-02	2.000E+02	3.388E-01	4.140E-02			
0	1	34	78	30			n+Se78
1.681E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.027E-10
5.135E-11	2.600E+01	8.873E-10	4.437E-10	2.800E+01	9.333E-09	4.666E-09	3.000E+01
1.980E-06	9.900E-07	3.500E+01	6.748E-04	3.374E-04	4.000E+01	5.917E-03	2.959E-03
4.500E+01	1.241E-02	6.205E-03	5.000E+01	1.868E-02	9.340E-03	5.500E+01	2.444E-02
1.222E-02	6.000E+01	2.926E-02	1.463E-02	6.500E+01	3.334E-02	1.667E-02	7.000E+01
3.671E-02	1.835E-02	7.500E+01	3.971E-02	1.986E-02	8.000E+01	4.280E-02	2.140E-02
8.500E+01	4.586E-02	2.293E-02	9.000E+01	4.922E-02	2.461E-02	9.500E+01	5.143E-02
2.571E-02	1.000E+02	5.353E-02	2.677E-02	1.100E+02	5.932E-02	2.966E-02	1.200E+02
6.940E-02	3.036E-02	1.300E+02	8.075E-02	2.913E-02	1.400E+02	8.960E-02	2.790E-02
1.500E+02	1.032E-01	2.600E-02	1.600E+02	1.255E-01	2.607E-02	1.700E+02	1.504E-01
2.654E-02	1.800E+02	1.799E-01	2.760E-02	1.900E+02	2.099E-01	2.905E-02	2.000E+02
2.367E-01	3.050E-02						
0	1	34	80	28			n+Se80
2.000E+01	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	1.668E-10
8.340E-11	3.000E+01	1.517E-09	7.585E-10	3.500E+01	1.690E-05	8.450E-06	4.000E+01
1.581E-03	7.905E-04	4.500E+01	5.856E-03	2.928E-03	5.000E+01	1.051E-02	5.255E-03
5.500E+01	1.468E-02	7.340E-03	6.000E+01	1.841E-02	9.205E-03	6.500E+01	2.161E-02
1.081E-02	7.000E+01	2.429E-02	1.214E-02	7.500E+01	2.653E-02	1.327E-02	8.000E+01
2.849E-02	1.425E-02	8.500E+01	3.025E-02	1.512E-02	9.000E+01	3.198E-02	1.599E-02
9.500E+01	3.299E-02	1.649E-02	1.000E+02	3.398E-02	1.699E-02	1.100E+02	3.587E-02
1.793E-02	1.200E+02	3.885E-02	1.943E-02	1.300E+02	4.349E-02	2.175E-02	1.400E+02
4.883E-02	2.266E-02	1.500E+02	5.411E-02	2.240E-02	1.600E+02	6.330E-02	2.180E-02
1.700E+02	7.903E-02	2.148E-02	1.800E+02	9.487E-02	2.129E-02	1.900E+02	1.116E-01
2.135E-02	2.000E+02	1.303E-01	2.171E-02				
0	1	34	82	26			n+Se82
2.344E+01	0.000E+00	0.000E+00	3.000E+01	0.000E+00	0.000E+00	3.500E+01	1.726E-08
8.630E-09	4.000E+01	8.584E-05	4.292E-05	4.500E+01	2.154E-03	1.077E-03	5.000E+01
5.485E-03	2.743E-03	5.500E+01	8.887E-03	4.444E-03	6.000E+01	1.193E-02	5.965E-03
6.500E+01	1.461E-02	7.305E-03	7.000E+01	1.686E-02	8.430E-03	7.500E+01	1.875E-02
9.375E-03	8.000E+01	2.032E-02	1.016E-02	8.500E+01	2.165E-02	1.082E-02	9.000E+01
2.275E-02	1.137E-02	9.500E+01	2.335E-02	1.167E-02	1.000E+02	2.385E-02	1.192E-02
1.100E+02	2.461E-02	1.230E-02	1.200E+02	2.542E-02	1.271E-02	1.300E+02	2.681E-02
1.341E-02	1.400E+02	2.883E-02	1.442E-02	1.500E+02	3.076E-02	1.538E-02	1.600E+02

3.517E-02	1.532E-02	1.700E+02	4.234E-02	1.490E-02	1.800E+02	5.050E-02	1.456E-02
1.900E+02	5.797E-02	1.428E-02	2.000E+02	6.812E-02	1.419E-02		
0	1	35	79	31			n+Br79
1.425E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	6.617E-10
3.309E-10	2.400E+01	6.906E-09	3.453E-09	2.600E+01	6.745E-07	3.372E-07	2.800E+01
1.541E-05	7.705E-06	3.000E+01	1.543E-04	7.715E-05	3.500E+01	4.651E-03	2.325E-03
4.000E+01	1.261E-02	6.305E-03	4.500E+01	2.051E-02	1.026E-02	5.000E+01	2.772E-02
1.386E-02	5.500E+01	3.401E-02	1.700E-02	6.000E+01	3.941E-02	1.971E-02	6.500E+01
4.408E-02	2.204E-02	7.000E+01	4.789E-02	2.395E-02	7.500E+01	5.135E-02	2.567E-02
8.000E+01	5.504E-02	2.752E-02	8.500E+01	5.966E-02	2.983E-02	9.000E+01	6.418E-02
3.209E-02	9.500E+01	6.825E-02	3.413E-02	1.000E+02	7.194E-02	3.597E-02	1.100E+02
8.137E-02	3.618E-02	1.200E+02	9.233E-02	3.454E-02	1.300E+02	1.078E-01	3.307E-02
1.400E+02	1.245E-01	3.182E-02	1.500E+02	1.369E-01	3.067E-02	1.600E+02	1.633E-01
3.089E-02	1.700E+02	1.997E-01	3.205E-02	1.800E+02	2.317E-01	3.343E-02	1.900E+02
2.738E-01	3.590E-02	2.000E+02	3.157E-01	3.878E-02			
0	1	35	81	30			n+Br81
1.742E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.089E-10
5.445E-11	2.600E+01	1.123E-09	5.615E-10	2.800E+01	1.183E-08	5.915E-09	3.000E+01
2.291E-06	1.146E-06	3.500E+01	6.636E-04	3.318E-04	4.000E+01	5.282E-03	2.641E-03
4.500E+01	1.096E-02	5.480E-03	5.000E+01	1.632E-02	8.160E-03	5.500E+01	2.126E-02
1.063E-02	6.000E+01	2.542E-02	1.271E-02	6.500E+01	2.898E-02	1.449E-02	7.000E+01
3.133E-02	1.566E-02	7.500E+01	3.387E-02	1.693E-02	8.000E+01	3.610E-02	1.805E-02
8.500E+01	3.836E-02	1.918E-02	9.000E+01	4.066E-02	2.033E-02	9.500E+01	4.210E-02
2.105E-02	1.000E+02	4.348E-02	2.174E-02	1.100E+02	4.658E-02	2.329E-02	1.200E+02
5.189E-02	2.594E-02	1.300E+02	5.898E-02	2.615E-02	1.400E+02	6.611E-02	2.488E-02
1.500E+02	7.291E-02	2.364E-02	1.600E+02	8.888E-02	2.315E-02	1.700E+02	1.069E-01
2.287E-02	1.800E+02	1.254E-01	2.282E-02	1.900E+02	1.483E-01	2.322E-02	2.000E+02
1.702E-01	2.384E-02						
0	1	36	78	35			n+Kr78
9.413E+00	0.000E+00	0.000E+00	1.600E+01	0.000E+00	0.000E+00	1.700E+01	1.975E-10
8.982E-11	1.800E+01	5.363E-10	2.681E-10	1.900E+01	1.506E-09	7.530E-10	2.000E+01
4.345E-09	2.173E-09	2.200E+01	3.531E-08	1.766E-08	2.400E+01	6.900E-06	3.450E-06
2.600E+01	8.003E-05	4.002E-05	2.800E+01	6.447E-04	3.224E-04	3.000E+01	2.981E-03
1.491E-03	3.500E+01	1.424E-02	7.120E-03	4.000E+01	2.725E-02	1.362E-02	4.500E+01
3.950E-02	1.975E-02	5.000E+01	5.046E-02	2.523E-02	5.500E+01	5.935E-02	2.967E-02
6.000E+01	6.781E-02	3.390E-02	6.500E+01	7.529E-02	3.764E-02	7.000E+01	8.300E-02
4.150E-02	7.500E+01	8.944E-02	4.472E-02	8.000E+01	9.856E-02	4.928E-02	8.500E+01
1.095E-01	5.475E-02	9.000E+01	1.215E-01	6.075E-02	9.500E+01	1.321E-01	6.019E-02
1.000E+02	1.412E-01	5.915E-02	1.100E+02	1.674E-01	5.692E-02	1.200E+02	1.969E-01
5.480E-02	1.300E+02	2.318E-01	5.326E-02	1.400E+02	2.625E-01	5.205E-02	1.500E+02
2.929E-01	5.001E-02	1.600E+02	3.629E-01	5.333E-02	1.700E+02	4.178E-01	5.629E-02
1.800E+02	4.772E-01	6.002E-02	1.900E+02	5.495E-01	6.522E-02	2.000E+02	6.064E-01
6.943E-02							
0	1	36	80	32			n+Kr80
1.232E+01	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	1.127E-10
5.635E-11	2.200E+01	1.017E-09	5.085E-10	2.400E+01	9.505E-09	4.752E-09	2.600E+01
1.410E-06	7.050E-07	2.800E+01	1.976E-05	9.880E-06	3.000E+01	1.884E-04	9.420E-05
3.500E+01	5.313E-03	2.657E-03	4.000E+01	1.436E-02	7.180E-03	4.500E+01	2.338E-02
1.169E-02	5.000E+01	3.166E-02	1.583E-02	5.500E+01	3.886E-02	1.943E-02	6.000E+01
4.506E-02	2.253E-02	6.500E+01	5.040E-02	2.520E-02	7.000E+01	5.480E-02	2.740E-02
7.500E+01	5.881E-02	2.941E-02	8.000E+01	6.293E-02	3.146E-02	8.500E+01	6.833E-02
3.417E-02	9.000E+01	7.387E-02	3.694E-02	9.500E+01	7.856E-02	3.928E-02	1.000E+02
8.274E-02	4.137E-02	1.100E+02	9.314E-02	4.412E-02	1.200E+02	1.073E-01	4.227E-02
1.300E+02	1.257E-01	4.058E-02	1.400E+02	1.440E-01	3.909E-02	1.500E+02	1.595E-01
3.770E-02	1.600E+02	1.905E-01	3.802E-02	1.700E+02	2.286E-01	3.911E-02	1.800E+02
2.710E-01	4.095E-02	1.900E+02	3.131E-01	4.319E-02	2.000E+02	3.582E-01	4.602E-02
0	1	36	82	30			n+Kr82
1.526E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	2.139E-10
1.070E-10	2.600E+01	2.099E-09	1.049E-09	2.800E+01	8.271E-08	4.136E-08	3.000E+01
5.270E-06	2.635E-06	3.500E+01	1.045E-03	5.225E-04	4.000E+01	6.491E-03	3.246E-03
4.500E+01	1.314E-02	6.570E-03	5.000E+01	1.943E-02	9.715E-03	5.500E+01	2.519E-02
1.260E-02	6.000E+01	3.005E-02	1.503E-02	6.500E+01	3.418E-02	1.709E-02	7.000E+01
3.756E-02	1.878E-02	7.500E+01	4.051E-02	2.025E-02	8.000E+01	4.314E-02	2.157E-02
8.500E+01	4.599E-02	2.300E-02	9.000E+01	4.890E-02	2.445E-02	9.500E+01	5.082E-02
2.541E-02	1.000E+02	5.297E-02	2.649E-02	1.100E+02	5.694E-02	2.847E-02	1.200E+02
6.282E-02	3.055E-02	1.300E+02	7.166E-02	2.924E-02	1.400E+02	8.169E-02	2.799E-02

1.500E+02	8.641E-02	2.572E-02	1.600E+02	1.027E-01	2.538E-02	1.700E+02	1.276E-01
2.556E-02	1.800E+02	1.522E-01	2.605E-02	1.900E+02	1.775E-01	2.683E-02	2.000E+02
2.077E-01	2.819E-02						
0	1	36	83	30			n+Kr83
1.667E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.118E-10
5.590E-11	2.600E+01	9.579E-10	4.789E-10	2.800E+01	2.217E-08	1.108E-08	3.000E+01
2.555E-06	1.278E-06	3.500E+01	5.895E-04	2.947E-04	4.000E+01	3.996E-03	1.998E-03
4.500E+01	8.063E-03	4.032E-03	5.000E+01	1.205E-02	6.025E-03	5.500E+01	1.565E-02
7.825E-03	6.000E+01	1.882E-02	9.410E-03	6.500E+01	2.161E-02	1.081E-02	7.000E+01
2.404E-02	1.202E-02	7.500E+01	2.618E-02	1.309E-02	8.000E+01	2.805E-02	1.402E-02
8.500E+01	2.996E-02	1.498E-02	9.000E+01	3.170E-02	1.585E-02	9.500E+01	3.314E-02
1.657E-02	1.000E+02	3.467E-02	1.733E-02	1.100E+02	3.800E-02	1.900E-02	1.200E+02
4.241E-02	1.944E-02	1.300E+02	4.943E-02	1.872E-02	1.400E+02	5.647E-02	1.798E-02
1.500E+02	6.531E-02	1.740E-02	1.600E+02	7.915E-02	1.741E-02	1.700E+02	9.653E-02
1.777E-02	1.800E+02	1.112E-01	1.816E-02	1.900E+02	1.318E-01	1.914E-02	2.000E+02
1.535E-01	2.037E-02						
0	1	36	84	28			n+Kr84
1.849E+01	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	3.422E-10
1.711E-10	3.000E+01	3.569E-09	1.784E-09	3.500E+01	3.555E-05	1.777E-05	4.000E+01
1.888E-03	9.440E-04	4.500E+01	6.339E-03	3.170E-03	5.000E+01	1.101E-02	5.505E-03
5.500E+01	1.518E-02	7.590E-03	6.000E+01	1.894E-02	9.470E-03	6.500E+01	2.217E-02
1.108E-02	7.000E+01	2.488E-02	1.244E-02	7.500E+01	2.717E-02	1.358E-02	8.000E+01
2.908E-02	1.454E-02	8.500E+01	3.082E-02	1.541E-02	9.000E+01	3.251E-02	1.625E-02
9.500E+01	3.348E-02	1.674E-02	1.000E+02	3.440E-02	1.720E-02	1.100E+02	3.601E-02
1.801E-02	1.200E+02	3.833E-02	1.917E-02	1.300E+02	4.211E-02	2.106E-02	1.400E+02
4.663E-02	2.265E-02	1.500E+02	5.143E-02	2.241E-02	1.600E+02	5.931E-02	2.176E-02
1.700E+02	6.850E-02	2.116E-02	1.800E+02	8.355E-02	2.083E-02	1.900E+02	9.803E-02
2.061E-02	2.000E+02	1.147E-01	2.061E-02				
0	1	36	86	26			n+Kr86
2.170E+01	0.000E+00	0.000E+00	3.000E+01	0.000E+00	0.000E+00	3.500E+01	3.718E-07
1.859E-07	4.000E+01	1.892E-04	9.460E-05	4.500E+01	2.867E-03	1.434E-03	5.000E+01
6.730E-03	3.365E-03	5.500E+01	1.052E-02	5.260E-03	6.000E+01	1.391E-02	6.955E-03
6.500E+01	1.687E-02	8.435E-03	7.000E+01	1.935E-02	9.675E-03	7.500E+01	2.142E-02
1.071E-02	8.000E+01	2.314E-02	1.157E-02	8.500E+01	2.454E-02	1.227E-02	9.000E+01
2.576E-02	1.288E-02	9.500E+01	2.635E-02	1.317E-02	1.000E+02	2.677E-02	1.338E-02
1.100E+02	2.734E-02	1.367E-02	1.200E+02	2.802E-02	1.401E-02	1.300E+02	2.901E-02
1.451E-02	1.400E+02	3.095E-02	1.547E-02	1.500E+02	3.208E-02	1.604E-02	1.600E+02
3.601E-02	1.630E-02	1.700E+02	4.119E-02	1.578E-02	1.800E+02	4.866E-02	1.533E-02
1.900E+02	5.757E-02	1.500E-02	2.000E+02	6.620E-02	1.475E-02		
0	1	37	85	30			n+Rb85
1.642E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.142E-10
5.710E-11	2.600E+01	1.132E-09	5.660E-10	2.800E+01	9.535E-09	4.768E-09	3.000E+01
2.196E-06	1.098E-06	3.500E+01	5.745E-04	2.873E-04	4.000E+01	4.571E-03	2.286E-03
4.500E+01	9.523E-03	4.762E-03	5.000E+01	1.438E-02	7.190E-03	5.500E+01	1.843E-02
9.215E-03	6.000E+01	2.220E-02	1.110E-02	6.500E+01	2.545E-02	1.273E-02	7.000E+01
2.822E-02	1.411E-02	7.500E+01	3.058E-02	1.529E-02	8.000E+01	3.260E-02	1.630E-02
8.500E+01	3.443E-02	1.722E-02	9.000E+01	3.637E-02	1.818E-02	9.500E+01	3.764E-02
1.882E-02	1.000E+02	3.878E-02	1.939E-02	1.100E+02	4.125E-02	2.063E-02	1.200E+02
4.484E-02	2.242E-02	1.300E+02	5.045E-02	2.270E-02	1.400E+02	5.590E-02	2.170E-02
1.500E+02	6.222E-02	2.074E-02	1.600E+02	7.397E-02	2.040E-02	1.700E+02	8.619E-02
2.019E-02	1.800E+02	1.034E-01	2.039E-02	1.900E+02	1.210E-01	2.076E-02	2.000E+02
1.397E-01	2.141E-02						
0	1	37	87	28			n+Rb87
1.999E+01	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	1.563E-10
7.815E-11	3.000E+01	1.603E-09	8.015E-10	3.500E+01	1.306E-05	6.530E-06	4.000E+01
1.314E-03	6.570E-04	4.500E+01	5.359E-03	2.680E-03	5.000E+01	9.743E-03	4.871E-03
5.500E+01	1.393E-02	6.965E-03	6.000E+01	1.757E-02	8.785E-03	6.500E+01	2.067E-02
1.034E-02	7.000E+01	2.280E-02	1.140E-02	7.500E+01	2.490E-02	1.245E-02	8.000E+01
2.662E-02	1.331E-02	8.500E+01	2.805E-02	1.402E-02	9.000E+01	2.928E-02	1.464E-02
9.500E+01	2.986E-02	1.493E-02	1.000E+02	3.025E-02	1.512E-02	1.100E+02	3.095E-02
1.547E-02	1.200E+02	3.159E-02	1.580E-02	1.300E+02	3.310E-02	1.655E-02	1.400E+02
3.557E-02	1.778E-02	1.500E+02	3.730E-02	1.865E-02	1.600E+02	4.222E-02	2.014E-02
1.700E+02	4.803E-02	1.951E-02	1.800E+02	5.681E-02	1.897E-02	1.900E+02	6.680E-02
1.853E-02	2.000E+02	7.782E-02	1.824E-02				
0	1	38	84	32			n+Sr84
1.145E+01	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	1.016E-10

5.080E-11	2.200E+01	8.725E-10	4.363E-10	2.400E+01	7.821E-09	3.910E-09	2.600E+01
1.092E-06	5.460E-07	2.800E+01	1.837E-05	9.185E-06	3.000E+01	1.686E-04	8.430E-05
3.500E+01	4.471E-03	2.236E-03	4.000E+01	1.258E-02	6.290E-03	4.500E+01	2.083E-02
1.042E-02	5.000E+01	2.834E-02	1.417E-02	5.500E+01	3.517E-02	1.758E-02	6.000E+01
4.098E-02	2.049E-02	6.500E+01	4.597E-02	2.298E-02	7.000E+01	4.921E-02	2.460E-02
7.500E+01	5.292E-02	2.646E-02	8.000E+01	5.616E-02	2.808E-02	8.500E+01	5.952E-02
2.976E-02	9.000E+01	6.433E-02	3.216E-02	9.500E+01	6.756E-02	3.378E-02	1.000E+02
7.122E-02	3.561E-02	1.100E+02	7.896E-02	3.681E-02	1.200E+02	8.847E-02	3.509E-02
1.300E+02	1.010E-01	3.336E-02	1.400E+02	1.154E-01	3.180E-02	1.500E+02	1.263E-01
3.027E-02	1.600E+02	1.487E-01	2.990E-02	1.700E+02	1.754E-01	2.996E-02	1.800E+02
2.118E-01	3.082E-02	1.900E+02	2.487E-01	3.213E-02	2.000E+02	2.847E-01	3.378E-02
0	1	38	86	30			n+Sr86
1.463E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.382E-10
6.910E-11	2.600E+01	1.304E-09	6.520E-10	2.800E+01	1.833E-08	9.165E-09	3.000E+01
2.893E-06	1.447E-06	3.500E+01	6.640E-04	3.320E-04	4.000E+01	5.054E-03	2.527E-03
4.500E+01	1.074E-02	5.370E-03	5.000E+01	1.622E-02	8.110E-03	5.500E+01	2.081E-02
1.040E-02	6.000E+01	2.502E-02	1.251E-02	6.500E+01	2.867E-02	1.434E-02	7.000E+01
3.172E-02	1.586E-02	7.500E+01	3.435E-02	1.717E-02	8.000E+01	3.658E-02	1.829E-02
8.500E+01	3.863E-02	1.931E-02	9.000E+01	4.089E-02	2.045E-02	9.500E+01	4.238E-02
2.119E-02	1.000E+02	4.374E-02	2.187E-02	1.100E+02	4.667E-02	2.334E-02	1.200E+02
5.090E-02	2.545E-02	1.300E+02	5.651E-02	2.790E-02	1.400E+02	6.480E-02	2.667E-02
1.500E+02	7.114E-02	2.545E-02	1.600E+02	8.405E-02	2.488E-02	1.700E+02	9.941E-02
2.448E-02	1.800E+02	1.178E-01	2.433E-02	1.900E+02	1.384E-01	2.445E-02	2.000E+02
1.616E-01	2.489E-02						
0	1	38	87	29			n+Sr87
1.638E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	4.506E-10
2.253E-10	2.800E+01	4.522E-09	2.261E-09	3.000E+01	7.358E-07	3.679E-07	3.500E+01
2.630E-04	1.315E-04	4.000E+01	2.832E-03	1.416E-03	4.500E+01	6.302E-03	3.151E-03
5.000E+01	9.828E-03	4.914E-03	5.500E+01	1.301E-02	6.505E-03	6.000E+01	1.583E-02
7.915E-03	6.500E+01	1.801E-02	9.005E-03	7.000E+01	2.011E-02	1.005E-02	7.500E+01
2.200E-02	1.100E-02	8.000E+01	2.362E-02	1.181E-02	8.500E+01	2.509E-02	1.255E-02
9.000E+01	2.657E-02	1.328E-02	9.500E+01	2.739E-02	1.370E-02	1.000E+02	2.850E-02
1.425E-02	1.100E+02	3.099E-02	1.550E-02	1.200E+02	3.365E-02	1.682E-02	1.300E+02
3.753E-02	1.877E-02	1.400E+02	4.401E-02	1.932E-02	1.500E+02	5.033E-02	1.844E-02
1.600E+02	5.975E-02	1.797E-02	1.700E+02	7.185E-02	1.764E-02	1.800E+02	8.675E-02
1.754E-02	1.900E+02	1.013E-01	1.759E-02	2.000E+02	1.189E-01	1.793E-02	
0	1	38	88	28			n+Sr88
1.823E+01	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	1.695E-10
8.475E-11	3.000E+01	1.668E-09	8.340E-10	3.500E+01	1.505E-05	7.525E-06	4.000E+01
1.386E-03	6.930E-04	4.500E+01	5.545E-03	2.772E-03	5.000E+01	1.024E-02	5.120E-03
5.500E+01	1.448E-02	7.240E-03	6.000E+01	1.831E-02	9.155E-03	6.500E+01	2.159E-02
1.080E-02	7.000E+01	2.430E-02	1.215E-02	7.500E+01	2.657E-02	1.328E-02	8.000E+01
2.846E-02	1.423E-02	8.500E+01	3.005E-02	1.503E-02	9.000E+01	3.147E-02	1.573E-02
9.500E+01	3.218E-02	1.609E-02	1.000E+02	3.275E-02	1.638E-02	1.100E+02	3.374E-02
1.687E-02	1.200E+02	3.483E-02	1.741E-02	1.300E+02	3.681E-02	1.841E-02	1.400E+02
3.992E-02	1.996E-02	1.500E+02	4.331E-02	2.166E-02	1.600E+02	4.917E-02	2.239E-02
1.700E+02	5.704E-02	2.167E-02	1.800E+02	6.691E-02	2.105E-02	1.900E+02	7.687E-02
2.049E-02	2.000E+02	8.963E-02	2.015E-02				
0	1	39	89	29			n+Y89
1.658E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	3.814E-10
1.907E-10	2.800E+01	3.622E-09	1.811E-09	3.000E+01	3.318E-07	1.659E-07	3.500E+01
2.134E-04	1.067E-04	4.000E+01	3.639E-03	1.819E-03	4.500E+01	8.902E-03	4.451E-03
5.000E+01	1.409E-02	7.045E-03	5.500E+01	1.875E-02	9.375E-03	6.000E+01	2.283E-02
1.141E-02	6.500E+01	2.626E-02	1.313E-02	7.000E+01	2.967E-02	1.483E-02	7.500E+01
3.206E-02	1.603E-02	8.000E+01	3.405E-02	1.702E-02	8.500E+01	3.572E-02	1.786E-02
9.000E+01	3.720E-02	1.860E-02	9.500E+01	3.791E-02	1.895E-02	1.000E+02	3.837E-02
1.919E-02	1.100E+02	3.941E-02	1.971E-02	1.200E+02	4.057E-02	2.029E-02	1.300E+02
4.260E-02	2.130E-02	1.400E+02	4.619E-02	2.310E-02	1.500E+02	4.920E-02	2.327E-02
1.600E+02	5.586E-02	2.238E-02	1.700E+02	6.413E-02	2.154E-02	1.800E+02	7.419E-02
2.078E-02	1.900E+02	8.698E-02	2.015E-02	2.000E+02	1.012E-01	1.969E-02	
0	1	40	90	30			n+Zr90
1.419E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.166E-10
5.830E-11	2.600E+01	8.924E-10	4.462E-10	2.800E+01	8.145E-09	4.072E-09	3.000E+01
1.519E-06	7.595E-07	3.500E+01	4.471E-04	2.236E-04	4.000E+01	4.847E-03	2.423E-03
4.500E+01	1.084E-02	5.420E-03	5.000E+01	1.680E-02	8.400E-03	5.500E+01	2.202E-02
1.101E-02	6.000E+01	2.662E-02	1.331E-02	6.500E+01	3.050E-02	1.525E-02	7.000E+01

3.440E-02	1.720E-02	7.500E+01	3.707E-02	1.853E-02	8.000E+01	3.931E-02	1.965E-02
8.500E+01	4.120E-02	2.060E-02	9.000E+01	4.293E-02	2.147E-02	9.500E+01	4.371E-02
2.185E-01	1.000E+02	4.442E-02	2.221E-02	1.100E+02	4.561E-02	2.280E-02	1.200E+02
4.694E-02	2.347E-02	1.300E+02	4.939E-02	2.470E-02	1.400E+02	5.323E-02	2.661E-02
1.500E+02	5.667E-02	2.792E-02	1.600E+02	6.423E-02	2.686E-02	1.700E+02	7.359E-02
2.583E-02	1.800E+02	8.461E-02	2.487E-02	1.900E+02	1.002E-01	2.411E-02	2.000E+02
1.156E-01	2.350E-02						
0	1	40	91	30			n+Zr91
1.427E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	3.131E-10
1.565E-10	2.600E+01	2.891E-09	1.446E-09	2.800E+01	2.983E-07	1.492E-07	3.000E+01
7.044E-06	3.522E-06	3.500E+01	9.951E-04	4.976E-04	4.000E+01	5.450E-03	2.725E-03
4.500E+01	1.085E-02	5.425E-03	5.000E+01	1.600E-02	8.000E-03	5.500E+01	2.065E-02
1.033E-02	6.000E+01	2.462E-02	1.231E-02	6.500E+01	2.796E-02	1.398E-02	7.000E+01
3.133E-02	1.566E-02	7.500E+01	3.363E-02	1.682E-02	8.000E+01	3.556E-02	1.778E-02
8.500E+01	3.720E-02	1.860E-02	9.000E+01	3.863E-02	1.931E-02	9.500E+01	3.920E-02
1.960E-02	1.000E+02	3.965E-02	1.982E-02	1.100E+02	4.052E-02	2.026E-02	1.200E+02
4.157E-02	2.079E-02	1.300E+02	4.361E-02	2.181E-02	1.400E+02	4.684E-02	2.342E-02
1.500E+02	4.829E-02	2.224E-02	1.600E+02	5.489E-02	2.146E-02	1.700E+02	6.407E-02
2.074E-02	1.800E+02	7.371E-02	2.011E-02	1.900E+02	8.623E-02	1.966E-02	2.000E+02
9.934E-02	1.937E-02						
0	1	40	92	30			n+Zr92
1.303E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	5.092E-10
2.546E-10	2.600E+01	4.617E-09	2.309E-09	2.800E+01	4.683E-07	2.341E-07	3.000E+01
1.093E-05	5.465E-06	3.500E+01	1.486E-03	7.430E-04	4.000E+01	7.986E-03	3.993E-03
4.500E+01	1.581E-02	7.905E-03	5.000E+01	2.319E-02	1.159E-02	5.500E+01	2.992E-02
1.496E-02	6.000E+01	3.549E-02	1.775E-02	6.500E+01	4.011E-02	2.005E-02	7.000E+01
4.384E-02	2.192E-02	7.500E+01	4.684E-02	2.342E-02	8.000E+01	4.929E-02	2.465E-02
8.500E+01	5.125E-02	2.562E-02	9.000E+01	5.287E-02	2.644E-02	9.500E+01	5.322E-02
2.661E-02	1.000E+02	5.338E-02	2.669E-02	1.100E+02	5.334E-02	2.667E-02	1.200E+02
5.328E-02	2.664E-02	1.300E+02	5.400E-02	2.700E-02	1.400E+02	5.548E-02	2.774E-02
1.500E+02	5.567E-02	2.783E-02	1.600E+02	6.044E-02	3.022E-02	1.700E+02	6.694E-02
3.129E-02	1.800E+02	7.386E-02	3.005E-02	1.900E+02	8.394E-02	2.892E-02	2.000E+02
9.474E-02	2.789E-02						
0	1	40	94	29			n+Zr94
1.544E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	2.313E-10
1.156E-10	2.800E+01	2.174E-09	1.087E-09	3.000E+01	1.561E-07	7.805E-08	3.500E+01
1.627E-04	8.135E-05	4.000E+01	3.573E-03	1.786E-03	4.500E+01	9.289E-03	4.645E-03
5.000E+01	1.518E-02	7.590E-03	5.500E+01	2.062E-02	1.031E-02	6.000E+01	2.527E-02
1.264E-02	6.500E+01	2.922E-02	1.461E-02	7.000E+01	3.316E-02	1.658E-02	7.500E+01
3.594E-02	1.797E-02	8.000E+01	3.826E-02	1.913E-02	8.500E+01	4.027E-02	2.014E-02
9.000E+01	4.198E-02	2.099E-02	9.500E+01	4.284E-02	2.142E-02	1.000E+02	4.348E-02
2.174E-02	1.100E+02	4.466E-02	2.233E-02	1.200E+02	4.579E-02	2.289E-02	1.300E+02
4.781E-02	2.390E-02	1.400E+02	5.036E-02	2.518E-02	1.500E+02	5.139E-02	2.569E-02
1.600E+02	5.716E-02	2.544E-02	1.700E+02	6.460E-02	2.444E-02	1.800E+02	7.269E-02
2.350E-02	1.900E+02	8.150E-02	2.261E-02	2.000E+02	9.452E-02	2.188E-02	
0	1	40	96	27			n+Zr96
1.836E+01	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	6.426E-10
3.213E-10	3.500E+01	4.584E-06	2.292E-06	4.000E+01	7.811E-04	3.905E-04	4.500E+01
4.663E-03	2.331E-03	5.000E+01	9.344E-03	4.672E-03	5.500E+01	1.386E-02	6.930E-03
6.000E+01	1.788E-02	8.940E-03	6.500E+01	2.133E-02	1.066E-02	7.000E+01	2.471E-02
1.235E-02	7.500E+01	2.716E-02	1.358E-02	8.000E+01	2.918E-02	1.459E-02	8.500E+01
3.085E-02	1.542E-02	9.000E+01	3.223E-02	1.612E-02	9.500E+01	3.285E-02	1.642E-02
1.000E+02	3.338E-02	1.669E-02	1.100E+02	3.404E-02	1.702E-02	1.200E+02	3.485E-02
1.742E-02	1.300E+02	3.574E-02	1.787E-02	1.400E+02	3.710E-02	1.855E-02	1.500E+02
3.821E-02	1.911E-02	1.600E+02	4.186E-02	2.087E-02	1.700E+02	4.741E-02	2.013E-02
1.800E+02	5.352E-02	1.939E-02	1.900E+02	6.085E-02	1.870E-02	2.000E+02	7.019E-02
1.815E-02							
0	1	41	93	33			n+Nb93
1.042E+01	0.000E+00	0.000E+00	1.800E+01	0.000E+00	0.000E+00	1.900E+01	1.493E-10
7.465E-11	2.000E+01	4.267E-10	2.133E-10	2.200E+01	3.335E-09	1.668E-09	2.400E+01
7.841E-08	3.920E-08	2.600E+01	6.200E-06	3.100E-06	2.800E+01	6.621E-05	3.311E-05
3.000E+01	5.101E-04	2.550E-04	3.500E+01	7.068E-03	3.534E-03	4.000E+01	1.719E-02
8.595E-03	4.500E+01	2.712E-02	1.356E-02	5.000E+01	3.600E-02	1.800E-02	5.500E+01
4.394E-02	2.197E-02	6.000E+01	5.031E-02	2.516E-02	6.500E+01	5.546E-02	2.773E-02
7.000E+01	5.952E-02	2.976E-02	7.500E+01	6.282E-02	3.141E-02	8.000E+01	6.555E-02
3.277E-02	8.500E+01	6.771E-02	3.386E-02	9.000E+01	6.964E-02	3.482E-02	9.500E+01

6.977E-02	3.488E-02	1.000E+02	6.983E-02	3.492E-02	1.100E+02	6.979E-02	3.490E-02
1.200E+02	6.988E-02	3.494E-02	1.300E+02	7.114E-02	3.557E-02	1.400E+02	7.293E-02
3.646E-02	1.500E+02	7.371E-02	3.559E-02	1.600E+02	7.996E-02	3.401E-02	1.700E+02
8.750E-02	3.246E-02	1.800E+02	9.670E-02	3.102E-02	1.900E+02	1.093E-01	2.977E-02
2.000E+02	1.222E-01	2.864E-02					
0	1	42	92	31			n+Mo92
1.009E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	6.380E-10
3.190E-10	2.400E+01	5.264E-09	2.632E-09	2.600E+01	4.728E-07	2.364E-07	2.800E+01
1.057E-05	5.285E-06	3.000E+01	8.255E-05	4.128E-05	3.500E+01	3.479E-03	1.739E-03
4.000E+01	1.119E-02	5.595E-03	4.500E+01	1.930E-02	9.650E-03	5.000E+01	2.675E-02
1.337E-02	5.500E+01	3.334E-02	1.667E-02	6.000E+01	3.894E-02	1.947E-02	6.500E+01
4.364E-02	2.182E-02	7.000E+01	4.752E-02	2.376E-02	7.500E+01	5.064E-02	2.532E-02
8.000E+01	5.325E-02	2.662E-02	8.500E+01	5.562E-02	2.781E-02	9.000E+01	5.802E-02
2.901E-02	9.500E+01	5.911E-02	2.956E-02	1.000E+02	6.026E-02	3.013E-02	1.100E+02
6.220E-02	3.110E-02	1.200E+02	6.473E-02	3.236E-02	1.300E+02	6.909E-02	3.454E-02
1.400E+02	7.510E-02	3.755E-02	1.500E+02	8.049E-02	3.648E-02	1.600E+02	9.196E-02
3.512E-02	1.700E+02	1.037E-01	3.384E-02	1.800E+02	1.181E-01	3.272E-02	1.900E+02
1.370E-01	3.181E-02	2.000E+02	1.564E-01	3.117E-02			
0	1	42	94	34			n+Mo94
8.275E+00	0.000E+00	0.000E+00	1.700E+01	0.000E+00	0.000E+00	1.800E+01	1.180E-10
5.900E-11	1.900E+01	3.215E-10	1.607E-10	2.000E+01	8.916E-10	4.458E-10	2.200E+01
7.145E-09	3.572E-09	2.400E+01	5.425E-07	2.712E-07	2.600E+01	1.368E-05	6.840E-06
2.800E+01	1.281E-04	6.405E-05	3.000E+01	7.818E-04	3.909E-04	3.500E+01	9.104E-03
4.552E-03	4.000E+01	2.091E-02	1.046E-02	4.500E+01	3.239E-02	1.620E-02	5.000E+01
4.261E-02	2.131E-02	5.500E+01	5.190E-02	2.595E-02	6.000E+01	5.931E-02	2.966E-02
6.500E+01	6.528E-02	3.264E-02	7.000E+01	6.984E-02	3.492E-02	7.500E+01	7.344E-02
3.672E-02	8.000E+01	7.665E-02	3.832E-02	8.500E+01	7.938E-02	3.969E-02	9.000E+01
8.174E-02	4.087E-02	9.500E+01	8.209E-02	4.104E-02	1.000E+02	8.247E-02	4.124E-02
1.100E+02	8.297E-02	4.149E-02	1.200E+02	8.373E-02	4.186E-02	1.300E+02	8.610E-02
4.305E-02	1.400E+02	8.931E-02	4.466E-02	1.500E+02	9.079E-02	4.235E-02	1.600E+02
1.000E-01	4.047E-02	1.700E+02	1.095E-01	3.864E-02	1.800E+02	1.207E-01	3.694E-02
1.900E+02	1.348E-01	3.542E-02	2.000E+02	1.523E-01	3.417E-02		
0	1	42	95	33			n+Mo95
9.295E+00	0.000E+00	0.000E+00	1.800E+01	0.000E+00	0.000E+00	1.900E+01	2.495E-10
1.248E-10	2.000E+01	7.123E-10	3.562E-10	2.200E+01	5.966E-09	2.983E-09	2.400E+01
6.452E-07	3.226E-07	2.600E+01	1.072E-05	5.360E-06	2.800E+01	1.006E-04	5.030E-05
3.000E+01	6.941E-04	3.471E-04	3.500E+01	6.993E-03	3.497E-03	4.000E+01	1.560E-02
7.800E-03	4.500E+01	2.401E-02	1.201E-02	5.000E+01	3.158E-02	1.579E-02	5.500E+01
3.872E-02	1.936E-02	6.000E+01	4.447E-02	2.224E-02	6.500E+01	4.933E-02	2.466E-02
7.000E+01	5.236E-02	2.618E-02	7.500E+01	5.572E-02	2.786E-02	8.000E+01	5.869E-02
2.934E-02	8.500E+01	6.192E-02	3.096E-02	9.000E+01	6.512E-02	3.256E-02	9.500E+01
6.712E-02	3.356E-02	1.000E+02	6.905E-02	3.453E-02	1.100E+02	7.320E-02	3.660E-02
1.200E+02	7.823E-02	3.911E-02	1.300E+02	8.328E-02	4.164E-02	1.400E+02	8.996E-02
4.212E-02	1.500E+02	9.756E-02	4.121E-02	1.600E+02	1.106E-01	3.952E-02	1.700E+02
1.247E-01	3.794E-02	1.800E+02	1.398E-01	3.651E-02	1.900E+02	1.574E-01	3.520E-02
2.000E+02	1.789E-01	3.423E-02					
0	1	42	96	31			n+Mo96
1.066E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	4.165E-10
2.083E-10	2.400E+01	3.525E-09	1.763E-09	2.600E+01	1.522E-07	7.610E-08	2.800E+01
6.995E-06	3.497E-06	3.000E+01	7.095E-05	3.548E-05	3.500E+01	3.412E-03	1.706E-03
4.000E+01	1.210E-02	6.050E-03	4.500E+01	2.142E-02	1.071E-02	5.000E+01	3.000E-02
1.500E-02	5.500E+01	3.799E-02	1.900E-02	6.000E+01	4.443E-02	2.221E-02	6.500E+01
4.983E-02	2.491E-02	7.000E+01	5.311E-02	2.655E-02	7.500E+01	5.679E-02	2.840E-02
8.000E+01	6.024E-02	3.012E-02	8.500E+01	6.349E-02	3.175E-02	9.000E+01	6.676E-02
3.338E-02	9.500E+01	6.844E-02	3.422E-02	1.000E+02	7.098E-02	3.549E-02	1.100E+02
7.520E-02	3.760E-02	1.200E+02	8.043E-02	4.022E-02	1.300E+02	8.579E-02	4.290E-02
1.400E+02	9.338E-02	4.219E-02	1.500E+02	1.007E-01	4.138E-02	1.600E+02	1.138E-01
3.977E-02	1.700E+02	1.283E-01	3.824E-02	1.800E+02	1.463E-01	3.691E-02	1.900E+02
1.641E-01	3.575E-02	2.000E+02	1.863E-01	3.481E-02			
0	1	42	97	31			n+Mo97
1.171E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	3.339E-10
1.670E-10	2.400E+01	2.947E-09	1.473E-09	2.600E+01	1.241E-07	6.205E-08	2.800E+01
5.410E-06	2.705E-06	3.000E+01	5.521E-05	2.761E-05	3.500E+01	2.726E-03	1.363E-03
4.000E+01	9.120E-03	4.560E-03	4.500E+01	1.597E-02	7.985E-03	5.000E+01	2.229E-02
1.115E-02	5.500E+01	2.777E-02	1.388E-02	6.000E+01	3.256E-02	1.628E-02	6.500E+01
3.661E-02	1.830E-02	7.000E+01	4.085E-02	2.042E-02	7.500E+01	4.375E-02	2.187E-02

8.000E+01	4.628E-02	2.314E-02	8.500E+01	4.877E-02	2.439E-02	9.000E+01	5.115E-02
2.558E-02	9.500E+01	5.244E-02	2.622E-02	1.000E+02	5.406E-02	2.703E-02	1.100E+02
5.748E-02	2.874E-02	1.200E+02	6.213E-02	3.106E-02	1.300E+02	6.692E-02	3.346E-02
1.400E+02	7.365E-02	3.317E-02	1.500E+02	8.109E-02	3.129E-02	1.600E+02	9.340E-02
3.018E-02	1.700E+02	1.059E-01	2.916E-02	1.800E+02	1.207E-01	2.821E-02	1.900E+02
1.375E-01	2.749E-02	2.000E+02	1.601E-01	2.710E-02			
0	1	42	98	30			n+Mo98
1.308E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	2.090E-10
1.045E-10	2.600E+01	1.849E-09	9.245E-10	2.800E+01	3.368E-08	1.684E-08	3.000E+01
3.588E-06	1.794E-06	3.500E+01	7.841E-04	3.921E-04	4.000E+01	6.502E-03	3.251E-03
4.500E+01	1.425E-02	7.125E-03	5.000E+01	2.176E-02	1.088E-02	5.500E+01	2.852E-02
1.426E-02	6.000E+01	3.425E-02	1.713E-02	6.500E+01	3.902E-02	1.951E-02	7.000E+01
4.199E-02	2.099E-02	7.500E+01	4.517E-02	2.259E-02	8.000E+01	4.781E-02	2.390E-02
8.500E+01	5.017E-02	2.508E-02	9.000E+01	5.224E-02	2.612E-02	9.500E+01	5.327E-02
2.663E-02	1.000E+02	5.433E-02	2.717E-02	1.100E+02	5.636E-02	2.818E-02	1.200E+02
5.925E-02	2.962E-02	1.300E+02	6.240E-02	3.120E-02	1.400E+02	6.776E-02	3.388E-02
1.500E+02	7.311E-02	3.655E-02	1.600E+02	8.394E-02	3.523E-02	1.700E+02	9.554E-02
3.388E-02	1.800E+02	1.093E-01	3.261E-02	1.900E+02	1.222E-01	3.143E-02	2.000E+02
1.416E-01	3.052E-02						
0	1	42	100	29			n+Mo100
1.519E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	1.351E-10
6.755E-11	2.800E+01	1.217E-09	6.085E-10	3.000E+01	1.121E-08	5.605E-09	3.500E+01
8.807E-05	4.404E-05	4.000E+01	3.062E-03	1.531E-03	4.500E+01	9.138E-03	4.569E-03
5.000E+01	1.544E-02	7.720E-03	5.500E+01	2.111E-02	1.056E-02	6.000E+01	2.611E-02
1.306E-02	6.500E+01	3.034E-02	1.517E-02	7.000E+01	3.382E-02	1.691E-02	7.500E+01
3.667E-02	1.834E-02	8.000E+01	3.901E-02	1.951E-02	8.500E+01	4.092E-02	2.046E-02
9.000E+01	4.255E-02	2.127E-02	9.500E+01	4.316E-02	2.158E-02	1.000E+02	4.360E-02
2.180E-02	1.100E+02	4.446E-02	2.223E-02	1.200E+02	4.550E-02	2.275E-02	1.300E+02
4.712E-02	2.356E-02	1.400E+02	4.975E-02	2.488E-02	1.500E+02	5.439E-02	2.720E-02
1.600E+02	5.921E-02	2.960E-02	1.700E+02	6.619E-02	3.163E-02	1.800E+02	7.612E-02
3.038E-02	1.900E+02	8.742E-02	2.922E-02	2.000E+02	9.953E-02	2.817E-02	
0	1	44	96	37			n+Ru96
5.056E+00	0.000E+00	0.000E+00	1.400E+01	0.000E+00	0.000E+00	1.500E+01	1.282E-10
4.792E-11	1.600E+01	3.028E-10	1.347E-10	1.700E+01	7.429E-10	3.714E-10	1.800E+01
1.903E-09	9.515E-10	1.900E+01	5.026E-09	2.513E-09	2.000E+01	1.356E-08	6.780E-09
2.200E+01	1.218E-06	6.090E-07	2.400E+01	2.246E-05	1.123E-05	2.600E+01	1.919E-04
9.595E-05	2.800E+01	1.221E-03	6.105E-04	3.000E+01	4.087E-03	2.044E-03	3.500E+01
1.715E-02	8.575E-03	4.000E+01	3.173E-02	1.587E-02	4.500E+01	4.534E-02	2.267E-02
5.000E+01	5.733E-02	2.866E-02	5.500E+01	6.890E-02	3.445E-02	6.000E+01	7.760E-02
3.880E-02	6.500E+01	8.454E-02	4.227E-02	7.000E+01	9.005E-02	4.503E-02	7.500E+01
9.406E-02	4.703E-02	8.000E+01	9.770E-02	4.885E-02	8.500E+01	1.014E-01	5.070E-02
9.000E+01	1.051E-01	5.255E-02	9.500E+01	1.059E-01	5.295E-02	1.000E+02	1.077E-01
5.385E-02	1.100E+02	1.101E-01	5.505E-02	1.200E+02	1.138E-01	5.690E-02	1.300E+02
1.178E-01	5.890E-02	1.400E+02	1.234E-01	5.578E-02	1.500E+02	1.276E-01	5.215E-02
1.600E+02	1.407E-01	4.993E-02	1.700E+02	1.564E-01	4.794E-02	1.800E+02	1.714E-01
4.612E-02	1.900E+02	1.901E-01	4.449E-02	2.000E+02	2.137E-01	4.327E-02	
0	1	44	98	34			n+Ru98
7.546E+00	0.000E+00	0.000E+00	1.700E+01	0.000E+00	0.000E+00	1.800E+01	1.066E-10
5.330E-11	1.900E+01	2.818E-10	1.409E-10	2.000E+01	7.656E-10	3.828E-10	2.200E+01
5.904E-09	2.952E-09	2.400E+01	2.226E-07	1.113E-07	2.600E+01	9.305E-06	4.652E-06
2.800E+01	8.933E-05	4.467E-05	3.000E+01	6.347E-04	3.173E-04	3.500E+01	8.147E-03
4.073E-03	4.000E+01	1.931E-02	9.655E-03	4.500E+01	3.029E-02	1.515E-02	5.000E+01
4.026E-02	2.013E-02	5.500E+01	4.888E-02	2.444E-02	6.000E+01	5.626E-02	2.813E-02
6.500E+01	6.248E-02	3.124E-02	7.000E+01	6.773E-02	3.386E-02	7.500E+01	7.220E-02
3.610E-02	8.000E+01	7.670E-02	3.835E-02	8.500E+01	8.148E-02	4.074E-02	9.000E+01
8.649E-02	4.324E-02	9.500E+01	8.964E-02	4.482E-02	1.000E+02	9.387E-02	4.693E-02
1.100E+02	1.016E-01	5.080E-02	1.200E+02	1.115E-01	5.575E-02	1.300E+02	1.210E-01
5.311E-02	1.400E+02	1.337E-01	5.011E-02	1.500E+02	1.441E-01	4.729E-02	1.600E+02
1.649E-01	4.570E-02	1.700E+02	1.889E-01	4.434E-02	1.800E+02	2.159E-01	4.323E-02
1.900E+02	2.432E-01	4.236E-02	2.000E+02	2.775E-01	4.200E-02		
0	1	44	99	34			n+Ru99
8.282E+00	0.000E+00	0.000E+00	1.700E+01	0.000E+00	0.000E+00	1.800E+01	1.032E-10
5.160E-11	1.900E+01	2.841E-10	1.420E-10	2.000E+01	7.491E-10	3.746E-10	2.200E+01
6.520E-09	3.260E-09	2.400E+01	7.919E-07	3.959E-07	2.600E+01	1.130E-05	5.650E-06
2.800E+01	1.014E-04	5.070E-05	3.000E+01	6.743E-04	3.371E-04	3.500E+01	6.608E-03
3.304E-03	4.000E+01	1.478E-02	7.390E-03	4.500E+01	2.278E-02	1.139E-02	5.000E+01

3.011E-02	1.506E-02	5.500E+01	3.670E-02	1.835E-02	6.000E+01	4.226E-02	2.113E-02
6.500E+01	4.703E-02	2.352E-02	7.000E+01	5.015E-02	2.508E-02	7.500E+01	5.367E-02
2.684E-02	8.000E+01	5.672E-02	2.836E-02	8.500E+01	5.965E-02	2.983E-02	9.000E+01
6.348E-02	3.174E-02	9.500E+01	6.573E-02	3.286E-02	1.000E+02	6.870E-02	3.435E-02
1.100E+02	7.653E-02	3.827E-02	1.200E+02	8.527E-02	4.263E-02	1.300E+02	9.402E-02
4.166E-02	1.400E+02	1.064E-01	3.935E-02	1.500E+02	1.212E-01	3.720E-02	1.600E+02
1.405E-01	3.611E-02	1.700E+02	1.638E-01	3.526E-02	1.800E+02	1.884E-01	3.468E-02
1.900E+02	2.146E-01	3.436E-02	2.000E+02	2.433E-01	3.440E-02		
0	1	44	100	31			n+Ru100
9.748E+00	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	4.634E-10
2.317E-10	2.400E+01	4.087E-09	2.043E-09	2.600E+01	1.266E-07	6.330E-08	2.800E+01
6.454E-06	3.227E-06	3.000E+01	6.424E-05	3.212E-05	3.500E+01	3.376E-03	1.688E-03
4.000E+01	1.200E-02	6.000E-03	4.500E+01	2.137E-02	1.069E-02	5.000E+01	3.000E-02
1.500E-02	5.500E+01	3.725E-02	1.862E-02	6.000E+01	4.367E-02	2.184E-02	6.500E+01
4.903E-02	2.451E-02	7.000E+01	5.345E-02	2.672E-02	7.500E+01	5.717E-02	2.858E-02
8.000E+01	6.046E-02	3.023E-02	8.500E+01	6.353E-02	3.177E-02	9.000E+01	6.669E-02
3.334E-02	9.500E+01	6.827E-02	3.413E-02	1.000E+02	7.014E-02	3.507E-02	1.100E+02
7.482E-02	3.741E-02	1.200E+02	8.066E-02	4.033E-02	1.300E+02	8.678E-02	4.339E-02
1.400E+02	9.673E-02	4.767E-02	1.500E+02	1.107E-01	4.678E-02	1.600E+02	1.241E-01
4.493E-02	1.700E+02	1.432E-01	4.321E-02	1.800E+02	1.646E-01	4.165E-02	1.900E+02
1.882E-01	4.039E-02	2.000E+02	2.146E-01	3.942E-02			
0	1	44	101	31			n+Ru101
1.009E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	7.931E-10
3.965E-10	2.400E+01	6.765E-09	3.382E-09	2.600E+01	7.857E-07	3.928E-07	2.800E+01
1.287E-05	6.435E-06	3.000E+01	1.129E-04	5.645E-05	3.500E+01	3.438E-03	1.719E-03
4.000E+01	1.005E-02	5.025E-03	4.500E+01	1.695E-02	8.475E-03	5.000E+01	2.338E-02
1.169E-02	5.500E+01	2.892E-02	1.446E-02	6.000E+01	3.380E-02	1.690E-02	6.500E+01
3.793E-02	1.896E-02	7.000E+01	4.230E-02	2.115E-02	7.500E+01	4.526E-02	2.263E-02
8.000E+01	4.776E-02	2.388E-02	8.500E+01	4.993E-02	2.497E-02	9.000E+01	5.228E-02
2.614E-02	9.500E+01	5.333E-02	2.667E-02	1.000E+02	5.450E-02	2.725E-02	1.100E+02
5.788E-02	2.894E-02	1.200E+02	6.227E-02	3.113E-02	1.300E+02	6.792E-02	3.396E-02
1.400E+02	7.516E-02	3.758E-02	1.500E+02	8.629E-02	3.753E-02	1.600E+02	9.864E-02
3.606E-02	1.700E+02	1.156E-01	3.470E-02	1.800E+02	1.321E-01	3.346E-02	1.900E+02
1.537E-01	3.241E-02	2.000E+02	1.774E-01	3.158E-02			
0	1	44	102	30			n+Ru102
1.147E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	5.322E-10
2.661E-10	2.600E+01	4.481E-09	2.240E-09	2.800E+01	4.012E-07	2.006E-07	3.000E+01
9.484E-06	4.742E-06	3.500E+01	1.285E-03	6.425E-04	4.000E+01	7.723E-03	3.861E-03
4.500E+01	1.586E-02	7.930E-03	5.000E+01	2.365E-02	1.183E-02	5.500E+01	3.079E-02
1.540E-02	6.000E+01	3.674E-02	1.837E-02	6.500E+01	4.172E-02	2.086E-02	7.000E+01
4.583E-02	2.292E-02	7.500E+01	4.922E-02	2.461E-02	8.000E+01	5.199E-02	2.600E-02
8.500E+01	5.441E-02	2.721E-02	9.000E+01	5.656E-02	2.828E-02	9.500E+01	5.741E-02
2.871E-02	1.000E+02	5.830E-02	2.915E-02	1.100E+02	6.028E-02	3.014E-02	1.200E+02
6.287E-02	3.143E-02	1.300E+02	6.591E-02	3.295E-02	1.400E+02	7.140E-02	3.570E-02
1.500E+02	7.635E-02	3.665E-02	1.600E+02	8.449E-02	3.524E-02	1.700E+02	9.779E-02
3.391E-02	1.800E+02	1.130E-01	3.271E-02	1.900E+02	1.321E-01	3.174E-02	2.000E+02
1.520E-01	3.089E-02						
0	1	44	104	28			n+Ru104
1.464E+01	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	8.084E-10
4.042E-10	3.000E+01	7.180E-09	3.590E-09	3.500E+01	5.375E-05	2.687E-05	4.000E+01
2.325E-03	1.162E-03	4.500E+01	7.523E-03	3.762E-03	5.000E+01	1.323E-02	6.615E-03
5.500E+01	1.837E-02	9.185E-03	6.000E+01	2.299E-02	1.150E-02	6.500E+01	2.694E-02
1.347E-02	7.000E+01	3.021E-02	1.511E-02	7.500E+01	3.296E-02	1.648E-02	8.000E+01
3.521E-02	1.760E-02	8.500E+01	3.711E-02	1.855E-02	9.000E+01	3.876E-02	1.938E-02
9.500E+01	3.949E-02	1.974E-02	1.000E+02	4.013E-02	2.006E-02	1.100E+02	4.136E-02
2.068E-02	1.200E+02	4.286E-02	2.143E-02	1.300E+02	4.513E-02	2.257E-02	1.400E+02
4.758E-02	2.379E-02	1.500E+02	5.324E-02	2.662E-02	1.600E+02	5.874E-02	2.937E-02
1.700E+02	6.611E-02	3.115E-02	1.800E+02	7.705E-02	3.004E-02	1.900E+02	8.954E-02
2.898E-02	2.000E+02	1.053E-01	2.805E-02				
0	1	45	103	31			n+Rh103
1.021E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	5.669E-10
2.834E-10	2.400E+01	4.575E-09	2.287E-09	2.600E+01	3.926E-07	1.963E-07	2.800E+01
9.080E-06	4.540E-06	3.000E+01	8.345E-05	4.172E-05	3.500E+01	3.303E-03	1.651E-03
4.000E+01	1.118E-02	5.590E-03	4.500E+01	1.965E-02	9.825E-03	5.000E+01	2.746E-02
1.373E-02	5.500E+01	3.489E-02	1.744E-02	6.000E+01	4.080E-02	2.040E-02	6.500E+01
4.572E-02	2.286E-02	7.000E+01	4.969E-02	2.484E-02	7.500E+01	5.300E-02	2.650E-02

8.000E+01	5.577E-02	2.789E-02	8.500E+01	5.818E-02	2.909E-02	9.000E+01	6.042E-02
3.021E-02	9.500E+01	6.114E-02	3.057E-02	1.000E+02	6.193E-02	3.096E-02	1.100E+02
6.407E-02	3.204E-02	1.200E+02	6.699E-02	3.349E-02	1.300E+02	7.188E-02	3.594E-02
1.400E+02	7.705E-02	3.852E-02	1.500E+02	8.515E-02	3.819E-02	1.600E+02	9.527E-02
3.668E-02	1.700E+02	1.100E-01	3.522E-02	1.800E+02	1.291E-01	3.395E-02	1.900E+02
1.480E-01	3.287E-02	2.000E+02	1.697E-01	3.206E-02			
0	1	46	102	33			n+Pd102
6.901E+00	0.000E+00	0.000E+00	1.800E+01	0.000E+00	0.000E+00	1.900E+01	2.297E-10
1.148E-10	2.000E+01	6.138E-10	3.069E-10	2.200E+01	4.589E-09	2.294E-09	2.400E+01
1.676E-07	8.380E-08	2.600E+01	7.472E-06	3.736E-06	2.800E+01	6.130E-05	3.065E-05
3.000E+01	4.442E-04	2.221E-04	3.500E+01	6.997E-03	3.498E-03	4.000E+01	1.751E-02
8.755E-03	4.500E+01	2.807E-02	1.404E-02	5.000E+01	3.759E-02	1.879E-02	5.500E+01
4.552E-02	2.276E-02	6.000E+01	5.253E-02	2.627E-02	6.500E+01	5.844E-02	2.922E-02
7.000E+01	6.346E-02	3.173E-02	7.500E+01	6.766E-02	3.383E-02	8.000E+01	7.122E-02
3.561E-02	8.500E+01	7.492E-02	3.746E-02	9.000E+01	7.888E-02	3.944E-02	9.500E+01
8.094E-02	4.047E-02	1.000E+02	8.362E-02	4.181E-02	1.100E+02	9.038E-02	4.519E-02
1.200E+02	9.865E-02	4.933E-02	1.300E+02	1.072E-01	5.265E-02	1.400E+02	1.194E-01
4.954E-02	1.500E+02	1.377E-01	4.859E-02	1.600E+02	1.548E-01	4.666E-02	1.700E+02
1.790E-01	4.498E-02	1.800E+02	2.053E-01	4.349E-02	1.900E+02	2.353E-01	4.228E-02
2.000E+02	2.652E-01	4.133E-02					
0	1	46	104	31			n+Pd104
9.064E+00	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	3.783E-10
1.891E-10	2.400E+01	3.006E-09	1.503E-09	2.600E+01	1.013E-07	5.065E-08	2.800E+01
5.066E-06	2.533E-06	3.000E+01	5.059E-05	2.530E-05	3.500E+01	2.692E-03	1.346E-03
4.000E+01	1.054E-02	5.270E-03	4.500E+01	1.930E-02	9.650E-03	5.000E+01	2.748E-02
1.374E-02	5.500E+01	3.467E-02	1.733E-02	6.000E+01	4.084E-02	2.042E-02	6.500E+01
4.602E-02	2.301E-02	7.000E+01	5.033E-02	2.516E-02	7.500E+01	5.390E-02	2.695E-02
8.000E+01	5.683E-02	2.841E-02	8.500E+01	5.950E-02	2.975E-02	9.000E+01	6.195E-02
3.097E-02	9.500E+01	6.313E-02	3.157E-02	1.000E+02	6.399E-02	3.200E-02	1.100E+02
6.726E-02	3.363E-02	1.200E+02	7.082E-02	3.541E-02	1.300E+02	7.614E-02	3.807E-02
1.400E+02	8.162E-02	4.081E-02	1.500E+02	9.313E-02	4.409E-02	1.600E+02	1.034E-01
4.231E-02	1.700E+02	1.199E-01	4.060E-02	1.800E+02	1.388E-01	3.902E-02	1.900E+02
1.603E-01	3.762E-02	2.000E+02	1.820E-01	3.641E-02			
0	1	46	105	31			n+Pd105
1.024E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	2.132E-10
1.066E-10	2.400E+01	1.755E-09	8.775E-10	2.600E+01	6.403E-08	3.201E-08	2.800E+01
2.711E-06	1.355E-06	3.000E+01	2.826E-05	1.413E-05	3.500E+01	1.770E-03	8.850E-04
4.000E+01	6.867E-03	3.433E-03	4.500E+01	1.260E-02	6.300E-03	5.000E+01	1.801E-02
9.005E-03	5.500E+01	2.300E-02	1.150E-02	6.000E+01	2.726E-02	1.363E-02	6.500E+01
3.091E-02	1.545E-02	7.000E+01	3.472E-02	1.736E-02	7.500E+01	3.741E-02	1.870E-02
8.000E+01	3.963E-02	1.981E-02	8.500E+01	4.157E-02	2.079E-02	9.000E+01	4.342E-02
2.171E-02	9.500E+01	4.438E-02	2.219E-02	1.000E+02	4.538E-02	2.269E-02	1.100E+02
4.781E-02	2.390E-02	1.200E+02	5.092E-02	2.546E-02	1.300E+02	5.495E-02	2.747E-02
1.400E+02	6.023E-02	3.011E-02	1.500E+02	6.837E-02	2.894E-02	1.600E+02	7.713E-02
2.791E-02	1.700E+02	9.171E-02	2.697E-02	1.800E+02	1.079E-01	2.614E-02	1.900E+02
1.262E-01	2.549E-02	2.000E+02	1.458E-01	2.497E-02			
0	1	46	106	30			n+Pd106
1.153E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.781E-10
8.905E-11	2.600E+01	1.448E-09	7.240E-10	2.800E+01	1.203E-08	6.015E-09	3.000E+01
2.417E-06	1.208E-06	3.500E+01	4.612E-04	2.306E-04	4.000E+01	5.107E-03	2.554E-03
4.500E+01	1.182E-02	5.910E-03	5.000E+01	1.849E-02	9.245E-03	5.500E+01	2.451E-02
1.226E-02	6.000E+01	2.974E-02	1.487E-02	6.500E+01	3.417E-02	1.708E-02	7.000E+01
3.785E-02	1.893E-02	7.500E+01	4.089E-02	2.045E-02	8.000E+01	4.338E-02	2.169E-02
8.500E+01	4.541E-02	2.270E-02	9.000E+01	4.715E-02	2.357E-02	9.500E+01	4.781E-02
2.390E-02	1.000E+02	4.826E-02	2.413E-02	1.100E+02	4.935E-02	2.467E-02	1.200E+02
5.067E-02	2.533E-02	1.300E+02	5.271E-02	2.635E-02	1.400E+02	5.549E-02	2.774E-02
1.500E+02	6.062E-02	3.031E-02	1.600E+02	6.984E-02	3.492E-02	1.700E+02	7.800E-02
3.544E-02	1.800E+02	9.029E-02	3.404E-02	1.900E+02	1.055E-01	3.279E-02	2.000E+02
1.206E-01	3.164E-02						
0	1	46	108	28			n+Pd108
1.379E+01	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	7.652E-10
3.826E-10	3.000E+01	6.543E-09	3.272E-09	3.500E+01	4.560E-05	2.280E-05	4.000E+01
2.089E-03	1.045E-03	4.500E+01	7.087E-03	3.544E-03	5.000E+01	1.251E-02	6.255E-03
5.500E+01	1.772E-02	8.860E-03	6.000E+01	2.228E-02	1.114E-02	6.500E+01	2.618E-02
1.309E-02	7.000E+01	2.884E-02	1.442E-02	7.500E+01	3.149E-02	1.574E-02	8.000E+01
3.365E-02	1.682E-02	8.500E+01	3.539E-02	1.769E-02	9.000E+01	3.682E-02	1.841E-02

9.500E+01	3.733E-02	1.867E-02	1.000E+02	3.762E-02	1.881E-02	1.100E+02	3.784E-02
1.892E-02	1.200E+02	3.789E-02	1.895E-02	1.300E+02	3.835E-02	1.918E-02	1.400E+02
3.930E-02	1.965E-02	1.500E+02	4.142E-02	2.071E-02	1.600E+02	4.550E-02	2.275E-02
1.700E+02	4.959E-02	2.480E-02	1.800E+02	5.622E-02	2.579E-02	1.900E+02	6.394E-02
2.478E-02	2.000E+02	7.463E-02	2.387E-02				
0	1	46	110	27			n+Pd110
1.586E+01	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	6.078E-10
3.039E-10	3.500E+01	4.152E-06	2.076E-06	4.000E+01	6.242E-04	3.121E-04	4.500E+01
4.068E-03	2.034E-03	5.000E+01	8.594E-03	4.297E-03	5.500E+01	1.292E-02	6.460E-03
6.000E+01	1.689E-02	8.445E-03	6.500E+01	2.035E-02	1.018E-02	7.000E+01	2.326E-02
1.163E-02	7.500E+01	2.570E-02	1.285E-02	8.000E+01	2.770E-02	1.385E-02	8.500E+01
2.932E-02	1.466E-02	9.000E+01	3.062E-02	1.531E-02	9.500E+01	3.116E-02	1.558E-02
1.000E+02	3.144E-02	1.572E-02	1.100E+02	3.146E-02	1.573E-02	1.200E+02	3.122E-02
1.561E-02	1.300E+02	3.097E-02	1.549E-02	1.400E+02	3.099E-02	1.550E-02	1.500E+02
3.276E-02	1.638E-02	1.600E+02	3.464E-02	1.732E-02	1.700E+02	3.662E-02	1.831E-02
1.800E+02	3.972E-02	1.986E-02	1.900E+02	4.377E-02	2.189E-02	2.000E+02	4.882E-02
2.366E-02							
0	1	47	107	31			n+Ag107
9.857E+00	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	2.950E-10
1.475E-10	2.400E+01	2.485E-09	1.243E-09	2.600E+01	3.429E-08	1.714E-08	2.800E+01
3.557E-06	1.778E-06	3.000E+01	3.643E-05	1.822E-05	3.500E+01	2.277E-03	1.138E-03
4.000E+01	9.057E-03	4.529E-03	4.500E+01	1.670E-02	8.350E-03	5.000E+01	2.386E-02
1.193E-02	5.500E+03	3.023E-02	1.511E-02	6.000E+01	3.568E-02	1.784E-02	6.500E+01
4.027E-02	2.014E-02	7.000E+01	4.400E-02	2.200E-02	7.500E+01	4.710E-02	2.355E-02
8.000E+01	4.961E-02	2.481E-02	8.500E+01	5.175E-02	2.587E-02	9.000E+01	5.356E-02
2.678E-02	9.500E+01	5.418E-02	2.709E-02	1.000E+02	5.450E-02	2.725E-02	1.100E+02
5.562E-02	2.781E-02	1.200E+02	5.718E-02	2.859E-02	1.300E+02	5.977E-02	2.988E-02
1.400E+02	6.290E-02	3.145E-02	1.500E+02	6.781E-02	3.390E-02	1.600E+02	7.778E-02
3.785E-02	1.700E+02	8.798E-02	3.640E-02	1.800E+02	1.014E-01	3.499E-02	1.900E+02
1.159E-01	3.367E-02	2.000E+02	1.335E-01	3.253E-02			
0	1	47	109	30			n+Ag109
1.193E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	2.075E-10
1.038E-10	2.600E+01	1.679E-09	8.395E-10	2.800E+01	3.764E-08	1.882E-08	3.000E+01
3.008E-06	1.504E-06	3.500E+01	5.622E-04	2.811E-04	4.000E+01	4.954E-03	2.477E-03
4.500E+01	1.118E-02	5.590E-03	5.000E+01	1.734E-02	8.670E-03	5.500E+01	2.261E-02
1.131E-02	6.000E+01	2.737E-02	1.368E-02	6.500E+01	3.141E-02	1.571E-02	7.000E+01
3.545E-02	1.773E-02	7.500E+01	3.824E-02	1.912E-02	8.000E+01	4.050E-02	2.025E-02
8.500E+01	4.233E-02	2.116E-02	9.000E+01	4.382E-02	2.191E-02	9.500E+01	4.424E-02
2.212E-02	1.000E+02	4.440E-02	2.220E-02	1.100E+02	4.448E-02	2.224E-02	1.200E+02
4.471E-02	2.235E-02	1.300E+02	4.537E-02	2.269E-02	1.400E+02	4.637E-02	2.319E-02
1.500E+02	4.752E-02	2.376E-02	1.600E+02	5.283E-02	2.642E-02	1.700E+02	5.813E-02
2.837E-02	1.800E+02	6.558E-02	2.718E-02	1.900E+02	7.483E-02	2.606E-02	2.000E+02
8.730E-02	2.507E-02						
0	1	48	106	34			n+Cd106
5.666E+00	0.000E+00	0.000E+00	1.700E+01	0.000E+00	0.000E+00	1.800E+01	1.393E-10
6.965E-11	1.900E+01	3.584E-10	1.792E-10	2.000E+01	9.428E-10	4.714E-10	2.200E+01
6.839E-09	3.420E-09	2.400E+01	4.960E-07	2.480E-07	2.600E+01	1.106E-05	5.530E-06
2.800E+01	9.572E-05	4.786E-05	3.000E+01	6.322E-04	3.161E-04	3.500E+01	7.400E-03
3.700E-03	4.000E+01	1.787E-02	8.935E-03	4.500E+01	2.836E-02	1.418E-02	5.000E+01
3.784E-02	1.892E-02	5.500E+01	4.649E-02	2.324E-02	6.000E+01	5.358E-02	2.679E-02
6.500E+01	5.955E-02	2.977E-02	7.000E+01	6.440E-02	3.220E-02	7.500E+01	6.853E-02
3.426E-02	8.000E+01	7.201E-02	3.601E-02	8.500E+01	7.523E-02	3.762E-02	9.000E+01
7.859E-02	3.929E-02	9.500E+01	8.010E-02	4.005E-02	1.000E+02	8.169E-02	4.084E-02
1.100E+02	8.619E-02	4.310E-02	1.200E+02	9.179E-02	4.589E-02	1.300E+02	1.000E-01
5.000E-02	1.400E+02	1.084E-01	4.968E-02	1.500E+02	1.199E-01	4.477E-02	1.600E+02
1.389E-01	4.317E-02	1.700E+02	1.568E-01	4.164E-02	1.800E+02	1.805E-01	4.038E-02
1.900E+02	2.081E-01	3.933E-02	2.000E+02	2.376E-01	3.857E-02		
0	1	48	108	31			n+Cd108
7.926E+00	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	5.253E-10
2.627E-10	2.400E+01	4.260E-09	2.130E-09	2.600E+01	2.466E-07	1.233E-07	2.800E+01
6.077E-06	3.038E-06	3.000E+01	5.737E-05	2.869E-05	3.500E+01	2.912E-03	1.456E-03
4.000E+01	1.072E-02	5.360E-03	4.500E+01	1.939E-02	9.695E-03	5.000E+01	2.745E-02
1.372E-02	5.500E+01	3.449E-02	1.724E-02	6.000E+01	4.057E-02	2.029E-02	6.500E+01
4.572E-02	2.286E-02	7.000E+01	5.101E-02	2.550E-02	7.500E+01	5.457E-02	2.729E-02
8.000E+01	5.750E-02	2.875E-02	8.500E+01	5.998E-02	2.999E-02	9.000E+01	6.227E-02
3.113E-02	9.500E+01	6.313E-02	3.157E-02	1.000E+02	6.371E-02	3.186E-02	1.100E+02

6.544E-02	3.272E-02	1.200E+02	6.775E-02	3.388E-02	1.300E+02	7.157E-02	3.578E-02
1.400E+02	7.577E-02	3.789E-02	1.500E+02	8.282E-02	4.141E-02	1.600E+02	9.451E-02
4.175E-02	1.700E+02	1.054E-01	4.022E-02	1.800E+02	1.209E-01	3.886E-02	1.900E+02
1.428E-01	3.772E-02	2.000E+02	1.627E-01	3.673E-02			
0	1	48	110	30			n+Cd110
1.005E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	3.515E-10
1.757E-10	2.600E+01	2.760E-09	1.380E-09	2.800E+01	1.527E-07	7.635E-08	3.000E+01
5.028E-06	2.514E-06	3.500E+01	7.589E-04	3.794E-04	4.000E+01	5.774E-03	2.887E-03
4.500E+01	1.266E-02	6.330E-03	5.000E+01	1.942E-02	9.710E-03	5.500E+01	2.552E-02
1.276E-02	6.000E+01	3.081E-02	1.541E-02	6.500E+01	3.531E-02	1.766E-02	7.000E+01
3.900E-02	1.950E-02	7.500E+01	4.206E-02	2.103E-02	8.000E+01	4.457E-02	2.228E-02
8.500E+01	4.660E-02	2.330E-02	9.000E+01	4.833E-02	2.416E-02	9.500E+01	4.887E-02
2.443E-02	1.000E+02	4.916E-02	2.458E-02	1.100E+02	4.947E-02	2.474E-02	1.200E+02
5.019E-02	2.509E-02	1.300E+02	5.180E-02	2.590E-02	1.400E+02	5.372E-02	2.686E-02
1.500E+02	5.765E-02	2.882E-02	1.600E+02	6.427E-02	3.213E-02	1.700E+02	7.091E-02
3.546E-02	1.800E+02	8.016E-02	3.440E-02	1.900E+02	9.167E-02	3.295E-02	2.000E+02
1.064E-01	3.163E-02						
0	1	48	111	30			n+Cd111
1.113E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	2.176E-10
1.088E-10	2.600E+01	1.772E-09	8.860E-10	2.800E+01	1.134E-07	5.670E-08	3.000E+01
3.525E-06	1.763E-06	3.500E+01	5.396E-04	2.698E-04	4.000E+01	4.005E-03	2.002E-03
4.500E+01	8.745E-03	4.372E-03	5.000E+01	1.345E-02	6.725E-03	5.500E+01	1.761E-02
8.805E-03	6.000E+01	2.137E-02	1.069E-02	6.500E+01	2.462E-02	1.231E-02	7.000E+01
2.736E-02	1.368E-02	7.500E+01	2.966E-02	1.483E-02	8.000E+01	3.159E-02	1.580E-02
8.500E+01	3.316E-02	1.658E-02	9.000E+01	3.450E-02	1.725E-02	9.500E+01	3.503E-02
1.751E-02	1.000E+02	3.541E-02	1.770E-02	1.100E+02	3.594E-02	1.797E-02	1.200E+02
3.677E-02	1.838E-02	1.300E+02	3.808E-02	1.904E-02	1.400E+02	4.011E-02	2.005E-02
1.500E+02	4.450E-02	2.225E-02	1.600E+02	4.987E-02	2.493E-02	1.700E+02	5.564E-02
2.646E-02	1.800E+02	6.304E-02	2.546E-02	1.900E+02	7.207E-02	2.454E-02	2.000E+02
8.362E-02	2.370E-02						
0	1	48	112	29			n+Cd112
1.206E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	2.816E-10
1.408E-10	2.800E+01	2.283E-09	1.142E-09	3.000E+01	1.429E-07	7.145E-08	3.500E+01
1.178E-04	5.890E-05	4.000E+01	2.857E-03	1.429E-03	4.500E+01	8.365E-03	4.182E-03
5.000E+01	1.419E-02	7.095E-03	5.500E+01	1.943E-02	9.715E-03	6.000E+01	2.415E-02
1.208E-02	6.500E+01	2.821E-02	1.410E-02	7.000E+01	3.161E-02	1.580E-02	7.500E+01
3.441E-02	1.721E-02	8.000E+01	3.671E-02	1.835E-02	8.500E+01	3.855E-02	1.928E-02
9.000E+01	4.006E-02	2.003E-02	9.500E+01	4.055E-02	2.028E-02	1.000E+02	4.077E-02
2.039E-02	1.100E+02	4.071E-02	2.036E-02	1.200E+02	4.060E-02	2.030E-02	1.300E+02
4.082E-02	2.041E-02	1.400E+02	4.150E-02	2.075E-02	1.500E+02	4.391E-02	2.195E-02
1.600E+02	4.733E-02	2.366E-02	1.700E+02	5.080E-02	2.540E-02	1.800E+02	5.633E-02
2.783E-02	1.900E+02	6.453E-02	2.670E-02	2.000E+02	7.373E-02	2.564E-02	
0	1	48	113	29			n+Cd113
1.294E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	2.210E-10
1.105E-10	2.800E+01	1.857E-09	9.285E-10	3.000E+01	1.746E-07	8.730E-08	3.500E+01
1.033E-04	5.165E-05	4.000E+01	2.155E-03	1.077E-03	4.500E+01	6.027E-03	3.014E-03
5.000E+01	1.012E-02	5.060E-03	5.500E+01	1.401E-02	7.005E-03	6.000E+01	1.744E-02
8.720E-03	6.500E+01	2.042E-02	1.021E-02	7.000E+01	2.252E-02	1.126E-02	7.500E+01
2.462E-02	1.231E-02	8.000E+01	2.637E-02	1.319E-02	8.500E+01	2.781E-02	1.391E-02
9.000E+01	2.898E-02	1.449E-02	9.500E+01	2.946E-02	1.473E-02	1.000E+02	2.971E-02
1.486E-02	1.100E+02	2.988E-02	1.494E-02	1.200E+02	3.001E-02	1.500E-02	1.300E+02
3.029E-02	1.515E-02	1.400E+02	3.088E-02	1.544E-02	1.500E+02	3.208E-02	1.604E-02
1.600E+02	3.522E-02	1.761E-02	1.700E+02	3.956E-02	1.978E-02	1.800E+02	4.322E-02
1.909E-02	1.900E+02	4.882E-02	1.840E-02	2.000E+02	5.530E-02	1.775E-02	
0	1	48	114	28			n+Cd114
1.417E+01	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	2.111E-10
1.055E-10	3.000E+01	1.526E-09	7.630E-10	3.500E+01	1.030E-05	5.150E-06	4.000E+01
9.869E-04	4.934E-04	4.500E+01	4.913E-03	2.456E-03	5.000E+01	9.651E-03	4.825E-03
5.500E+01	1.417E-02	7.085E-03	6.000E+01	1.828E-02	9.140E-03	6.500E+01	2.186E-02
1.093E-02	7.000E+01	2.540E-02	1.270E-02	7.500E+01	2.797E-02	1.398E-02	8.000E+01
3.009E-02	1.504E-02	8.500E+01	3.180E-02	1.590E-02	9.000E+01	3.318E-02	1.659E-02
9.500E+01	3.373E-02	1.687E-02	1.000E+02	3.400E-02	1.700E-02	1.100E+02	3.397E-02
1.699E-02	1.200E+02	3.369E-02	1.684E-02	1.300E+02	3.337E-02	1.668E-02	1.400E+02
3.323E-02	1.662E-02	1.500E+02	3.371E-02	1.685E-02	1.600E+02	3.555E-02	1.777E-02
1.700E+02	3.799E-02	1.900E-02	1.800E+02	4.029E-02	2.014E-02	1.900E+02	4.439E-02
2.219E-02	2.000E+02	4.934E-02	2.386E-02				

0	1	48	116	27	n+Cd116		
1.658E+01	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	1.042E-10
5.210E-11	3.500E+01	3.296E-07	1.648E-07	4.000E+01	1.322E-04	6.610E-05	4.500E+01
2.277E-03	1.138E-03	5.000E+01	5.884E-03	2.942E-03	5.500E+01	9.582E-03	4.791E-03
6.000E+01	1.307E-02	6.535E-03	6.500E+01	1.616E-02	8.080E-03	7.000E+01	1.918E-02
9.590E-03	7.500E+01	2.146E-02	1.073E-02	8.000E+01	2.336E-02	1.168E-02	8.500E+01
2.492E-02	1.246E-02	9.000E+01	2.617E-02	1.308E-02	9.500E+01	2.678E-02	1.339E-02
1.000E+02	2.713E-02	1.357E-02	1.100E+02	2.727E-02	1.363E-02	1.200E+02	2.700E-02
1.350E-02	1.300E+02	2.655E-02	1.328E-02	1.400E+02	2.623E-02	1.311E-02	1.500E+02
2.609E-02	1.304E-02	1.600E+02	2.705E-02	1.353E-02	1.700E+02	2.833E-02	1.417E-02
1.800E+02	2.970E-02	1.485E-02	1.900E+02	3.195E-02	1.597E-02	2.000E+02	3.483E-02
1.741E-02							
0	1	49	113	30	n+In113		
1.030E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	5.064E-10
2.532E-10	2.600E+01	3.968E-09	1.984E-09	2.800E+01	4.070E-07	2.035E-07	3.000E+01
7.742E-06	3.871E-06	3.500E+01	9.383E-04	4.691E-04	4.000E+01	6.010E-03	3.005E-03
4.500E+01	1.245E-02	6.225E-03	5.000E+01	1.882E-02	9.410E-03	5.500E+01	2.436E-02
1.218E-02	6.000E+01	2.927E-02	1.464E-02	6.500E+01	3.346E-02	1.673E-02	7.000E+01
3.690E-02	1.845E-02	7.500E+01	3.975E-02	1.988E-02	8.000E+01	4.206E-02	2.103E-02
8.500E+01	4.393E-02	2.196E-02	9.000E+01	4.545E-02	2.272E-02	9.500E+01	4.579E-02
2.289E-02	1.000E+02	4.588E-02	2.294E-02	1.100E+02	4.572E-02	2.286E-02	1.200E+02
4.577E-02	2.288E-02	1.300E+02	4.618E-02	2.309E-02	1.400E+02	4.717E-02	2.358E-02
1.500E+02	5.051E-02	2.525E-02	1.600E+02	5.460E-02	2.730E-02	1.700E+02	6.002E-02
3.001E-02	1.800E+02	6.632E-02	3.027E-02	1.900E+02	7.456E-02	2.897E-02	2.000E+02
8.501E-02	2.777E-02						
0	1	49	115	29	n+In115		
1.233E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	3.969E-10
1.984E-10	2.800E+01	3.215E-09	1.608E-09	3.000E+01	3.622E-07	1.811E-07	3.500E+01
1.590E-04	7.950E-05	4.000E+01	2.987E-03	1.494E-03	4.500E+01	8.163E-03	4.082E-03
5.000E+01	1.357E-02	6.785E-03	5.500E+01	1.857E-02	9.285E-03	6.000E+01	2.298E-02
1.149E-02	6.500E+01	2.676E-02	1.338E-02	7.000E+01	2.990E-02	1.495E-02	7.500E+01
3.251E-02	1.625E-02	8.000E+01	3.464E-02	1.732E-02	8.500E+01	3.635E-02	1.818E-02
9.000E+01	3.771E-02	1.886E-02	9.500E+01	3.812E-02	1.906E-02	1.000E+02	3.825E-02
1.912E-02	1.100E+02	3.799E-02	1.900E-02	1.200E+02	3.761E-02	1.880E-02	1.300E+02
3.730E-02	1.865E-02	1.400E+02	3.745E-02	1.872E-02	1.500E+02	3.815E-02	1.908E-02
1.600E+02	4.057E-02	2.029E-02	1.700E+02	4.347E-02	2.174E-02	1.800E+02	4.699E-02
2.349E-02	1.900E+02	5.235E-02	2.618E-02	2.000E+02	5.879E-02	2.557E-02	
0	1	50	112	32	n+Sn112		
6.516E+00	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	1.470E-10
7.350E-11	2.200E+01	9.873E-10	4.937E-10	2.400E+01	7.752E-09	3.876E-09	2.600E+01
8.845E-07	4.422E-07	2.800E+01	1.165E-05	5.825E-06	3.000E+01	9.677E-05	4.838E-05
3.500E+01	3.534E-03	1.767E-03	4.000E+01	1.164E-02	5.820E-03	4.500E+01	2.044E-02
1.022E-02	5.000E+01	2.864E-02	1.432E-02	5.500E+01	3.569E-02	1.784E-02	6.000E+01
4.188E-02	2.094E-02	6.500E+01	4.710E-02	2.355E-02	7.000E+01	5.258E-02	2.629E-02
7.500E+01	5.622E-02	2.811E-02	8.000E+01	5.921E-02	2.960E-02	8.500E+01	6.166E-02
3.083E-02	9.000E+01	6.396E-02	3.198E-02	9.500E+01	6.471E-02	3.236E-02	1.000E+02
6.527E-02	3.263E-02	1.100E+02	6.634E-02	3.317E-02	1.200E+02	6.861E-02	3.431E-02
1.300E+02	7.173E-02	3.587E-02	1.400E+02	7.667E-02	3.834E-02	1.500E+02	8.294E-02
4.147E-02	1.600E+02	9.377E-02	4.172E-02	1.700E+02	1.043E-01	4.000E-02	1.800E+02
1.184E-01	3.836E-02	1.900E+02	1.357E-01	3.684E-02	2.000E+02	1.533E-01	3.543E-02
0	1	50	114	30	n+Sn114		
8.813E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	5.265E-10
2.632E-10	2.600E+01	4.008E-09	2.004E-09	2.800E+01	3.822E-07	1.911E-07	3.000E+01
7.399E-06	3.699E-06	3.500E+01	8.988E-04	4.494E-04	4.000E+01	6.078E-03	3.039E-03
4.500E+01	1.278E-02	6.390E-03	5.000E+01	1.946E-02	9.730E-03	5.500E+01	2.538E-02
1.269E-02	6.000E+01	3.061E-02	1.530E-02	6.500E+01	3.508E-02	1.754E-02	7.000E+01
3.801E-02	1.901E-02	7.500E+01	4.105E-02	2.053E-02	8.000E+01	4.354E-02	2.177E-02
8.500E+01	4.559E-02	2.279E-02	9.000E+01	4.724E-02	2.362E-02	9.500E+01	4.784E-02
2.392E-02	1.000E+02	4.808E-02	2.404E-02	1.100E+02	4.830E-02	2.415E-02	1.200E+02
4.912E-02	2.456E-02	1.300E+02	5.027E-02	2.514E-02	1.400E+02	5.240E-02	2.620E-02
1.500E+02	5.710E-02	2.855E-02	1.600E+02	6.340E-02	3.170E-02	1.700E+02	7.101E-02
3.320E-02	1.800E+02	7.824E-02	3.181E-02	1.900E+02	8.809E-02	3.046E-02	2.000E+02
1.015E-01	2.917E-02						
0	1	50	115	30	n+Sn115		
1.022E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	2.536E-10
1.268E-10	2.600E+01	2.003E-09	1.001E-09	2.800E+01	9.875E-08	4.937E-08	3.000E+01

3.226E-06	1.613E-06	3.500E+01	4.862E-04	2.431E-04	4.000E+01	3.893E-03	1.947E-03
4.500E+01	8.530E-03	4.265E-03	5.000E+01	1.315E-02	6.575E-03	5.500E+01	1.722E-02
8.610E-03	6.000E+01	2.095E-02	1.047E-02	6.500E+01	2.416E-02	1.208E-02	7.000E+01
2.746E-02	1.373E-02	7.500E+01	2.982E-02	1.491E-02	8.000E+01	3.178E-02	1.589E-02
8.500E+01	3.342E-02	1.671E-02	9.000E+01	3.475E-02	1.738E-02	9.500E+01	3.530E-02
1.765E-02	1.000E+02	3.565E-02	1.783E-02	1.100E+02	3.606E-02	1.803E-02	1.200E+02
3.672E-02	1.836E-02	1.300E+02	3.770E-02	1.885E-02	1.400E+02	3.933E-02	1.966E-02
1.500E+02	4.085E-02	2.042E-02	1.600E+02	4.573E-02	2.286E-02	1.700E+02	5.298E-02
2.572E-02	1.800E+02	5.958E-02	2.480E-02	1.900E+02	6.898E-02	2.394E-02	2.000E+02
7.882E-02	2.316E-02						
0	1	50	116	29			n+Sn116
1.097E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	3.943E-10
1.972E-10	2.800E+01	2.705E-09	1.353E-09	3.000E+01	2.255E-07	1.128E-07	3.500E+01
1.261E-04	6.305E-05	4.000E+01	2.918E-03	1.459E-03	4.500E+01	8.235E-03	4.117E-03
5.000E+01	1.384E-02	6.920E-03	5.500E+01	1.920E-02	9.600E-03	6.000E+01	2.384E-02
1.192E-02	6.500E+01	2.785E-02	1.392E-02	7.000E+01	3.056E-02	1.528E-02	7.500E+01
3.330E-02	1.665E-02	8.000E+01	3.555E-02	1.777E-02	8.500E+01	3.737E-02	1.869E-02
9.000E+01	3.882E-02	1.941E-02	9.500E+01	3.932E-02	1.966E-02	1.000E+02	3.952E-02
1.976E-02	1.100E+02	3.947E-02	1.973E-02	1.200E+02	3.929E-02	1.964E-02	1.300E+02
3.932E-02	1.966E-02	1.400E+02	3.970E-02	1.985E-02	1.500E+02	4.075E-02	2.038E-02
1.600E+02	4.387E-02	2.193E-02	1.700E+02	4.859E-02	2.430E-02	1.800E+02	5.255E-02
2.627E-02	1.900E+02	5.902E-02	2.666E-02	2.000E+02	6.681E-02	2.563E-02	
0	1	50	117	29			n+Sn117
1.220E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	2.002E-10
1.001E-10	2.800E+01	1.632E-09	8.160E-10	3.000E+01	9.352E-08	4.676E-08	3.500E+01
7.291E-05	3.646E-05	4.000E+01	1.891E-03	9.455E-04	4.500E+01	5.482E-03	2.741E-03
5.000E+01	9.346E-03	4.673E-03	5.500E+01	1.289E-02	6.445E-03	6.000E+01	1.614E-02
8.070E-03	6.500E+01	1.898E-02	9.490E-03	7.000E+01	2.140E-02	1.070E-02	7.500E+01
2.346E-02	1.173E-02	8.000E+01	2.518E-02	1.259E-02	8.500E+01	2.661E-02	1.331E-02
9.000E+01	2.776E-02	1.388E-02	9.500E+01	2.825E-02	1.413E-02	1.000E+02	2.852E-02
1.426E-02	1.100E+02	2.870E-02	1.435E-02	1.200E+02	2.875E-02	1.438E-02	1.300E+02
2.889E-02	1.444E-02	1.400E+02	2.941E-02	1.470E-02	1.500E+02	3.145E-02	1.572E-02
1.600E+02	3.396E-02	1.698E-02	1.700E+02	3.745E-02	1.872E-02	1.800E+02	4.122E-02
2.061E-02	1.900E+02	4.626E-02	2.233E-02	2.000E+02	5.265E-02	2.156E-02	
0	1	50	118	28			n+Sn118
1.313E+01	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	2.554E-10
1.277E-10	3.000E+01	2.071E-09	1.035E-09	3.500E+01	1.136E-05	5.680E-06	4.000E+01
9.862E-04	4.931E-04	4.500E+01	4.790E-03	2.395E-03	5.000E+01	9.385E-03	4.692E-03
5.500E+01	1.395E-02	6.975E-03	6.000E+01	1.801E-02	9.005E-03	6.500E+01	2.155E-02
1.077E-02	7.000E+01	2.454E-02	1.227E-02	7.500E+01	2.706E-02	1.353E-02	8.000E+01
2.914E-02	1.457E-02	8.500E+01	3.083E-02	1.541E-02	9.000E+01	3.217E-02	1.608E-02
9.500E+01	3.272E-02	1.636E-02	1.000E+02	3.299E-02	1.649E-02	1.100E+02	3.293E-02
1.647E-02	1.200E+02	3.252E-02	1.626E-02	1.300E+02	3.206E-02	1.603E-02	1.400E+02
3.191E-02	1.596E-02	1.500E+02	3.089E-02	1.545E-02	1.600E+02	3.241E-02	1.621E-02
1.700E+02	3.452E-02	1.726E-02	1.800E+02	3.681E-02	1.841E-02	1.900E+02	4.039E-02
2.020E-02	2.000E+02	4.544E-02	2.272E-02				
0	1	50	119	28			n+Sn119
1.419E+01	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	1.598E-10
7.990E-11	3.000E+01	1.338E-09	6.690E-10	3.500E+01	7.876E-06	3.938E-06	4.000E+01
6.889E-04	3.444E-04	4.500E+01	3.297E-03	1.649E-03	5.000E+01	6.459E-03	3.230E-03
5.500E+01	9.520E-03	4.760E-03	6.000E+01	1.236E-02	6.180E-03	6.500E+01	1.486E-02
7.430E-03	7.000E+01	1.736E-02	8.680E-03	7.500E+01	1.925E-02	9.625E-03	8.000E+01
2.084E-02	1.042E-02	8.500E+01	2.216E-02	1.108E-02	9.000E+01	2.324E-02	1.162E-02
9.500E+01	2.375E-02	1.188E-02	1.000E+02	2.404E-02	1.202E-02	1.100E+02	2.419E-02
1.209E-02	1.200E+02	2.401E-02	1.201E-02	1.300E+02	2.379E-02	1.189E-02	1.400E+02
2.366E-02	1.183E-02	1.500E+02	2.387E-02	1.193E-02	1.600E+02	2.511E-02	1.256E-02
1.700E+02	2.680E-02	1.340E-02	1.800E+02	2.933E-02	1.466E-02	1.900E+02	3.227E-02
1.614E-02	2.000E+02	3.624E-02	1.812E-02				
0	1	50	120	27			n+Sn120
1.544E+01	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	1.349E-10
6.745E-11	3.500E+01	5.759E-07	2.879E-07	4.000E+01	1.652E-04	8.260E-05	4.500E+01
2.366E-03	1.183E-03	5.000E+01	5.895E-03	2.948E-03	5.500E+01	9.552E-03	4.776E-03
6.000E+01	1.299E-02	6.495E-03	6.500E+01	1.604E-02	8.020E-03	7.000E+01	1.867E-02
9.335E-03	7.500E+01	2.090E-02	1.045E-02	8.000E+01	2.277E-02	1.138E-02	8.500E+01
2.431E-02	1.215E-02	9.000E+01	2.555E-02	1.277E-02	9.500E+01	2.617E-02	1.308E-02
1.000E+02	2.652E-02	1.326E-02	1.100E+02	2.665E-02	1.333E-02	1.200E+02	2.632E-02

1.316E-02	1.300E+02	2.586E-02	1.293E-02	1.400E+02	2.536E-02	1.268E-02	1.500E+02
2.603E-02	1.302E-02	1.600E+02	2.659E-02	1.329E-02	1.700E+02	2.729E-02	1.364E-02
1.800E+02	2.885E-02	1.443E-02	1.900E+02	3.031E-02	1.516E-02	2.000E+02	3.278E-02
1.639E-02							
0	1	50	122	26			n+Sn122
1.783E+01	0.000E+00	0.000E+00	3.000E+01	0.000E+00	0.000E+00	3.500E+01	1.649E-09
8.245E-10	4.000E+01	1.225E-05	6.125E-06	4.500E+01	8.115E-04	4.058E-04	5.000E+01
3.300E-03	1.650E-03	5.500E+01	6.125E-03	3.063E-03	6.000E+01	8.955E-03	4.477E-03
6.500E+01	1.152E-02	5.760E-03	7.000E+01	1.403E-02	7.015E-03	7.500E+01	1.600E-02
8.000E-03	8.000E+01	1.767E-02	8.835E-03	8.500E+01	1.906E-02	9.530E-03	9.000E+01
2.021E-02	1.010E-02	9.500E+01	2.085E-02	1.043E-02	1.000E+02	2.127E-02	1.064E-02
1.100E+02	2.157E-02	1.078E-02	1.200E+02	2.139E-02	1.069E-02	1.300E+02	2.099E-02
1.050E-02	1.400E+02	2.049E-02	1.025E-02	1.500E+02	1.935E-02	9.675E-03	1.600E+02
1.950E-02	9.750E-03	1.700E+02	1.983E-02	9.915E-03	1.800E+02	2.047E-02	1.023E-02
1.900E+02	2.104E-02	1.052E-02	2.000E+02	2.229E-02	1.115E-02		
0	1	50	124	25			n+Sn124
2.064E+01	0.000E+00	0.000E+00	3.500E+01	0.000E+00	0.000E+00	4.000E+01	2.920E-07
1.460E-07	4.500E+01	9.321E-05	4.660E-05	5.000E+01	1.379E-03	6.895E-04	5.500E+01
3.446E-03	1.723E-03	6.000E+01	5.670E-03	2.835E-03	6.500E+01	7.769E-03	3.884E-03
7.000E+01	9.835E-03	4.917E-03	7.500E+01	1.151E-02	5.755E-03	8.000E+01	1.296E-02
6.480E-03	8.500E+01	1.418E-02	7.090E-03	9.000E+01	1.520E-02	7.600E-03	9.500E+01
1.585E-02	7.925E-03	1.000E+02	1.631E-02	8.155E-03	1.100E+02	1.677E-02	8.385E-03
1.200E+02	1.679E-02	8.395E-03	1.300E+02	1.654E-02	8.270E-03	1.400E+02	1.616E-02
8.080E-03	1.500E+02	1.569E-02	7.845E-03	1.600E+02	1.558E-02	7.790E-03	1.700E+02
1.554E-02	7.770E-03	1.800E+02	1.564E-02	7.820E-03	1.900E+02	1.588E-02	7.940E-03
2.000E+02	1.650E-02	8.250E-03					
0	1	51	121	29			n+Sb121
1.241E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	1.483E-10
7.415E-11	2.800E+01	1.025E-09	5.125E-10	3.000E+01	1.643E-08	8.215E-09	3.500E+01
5.202E-05	2.601E-05	4.000E+01	1.927E-03	9.635E-04	4.500E+01	6.311E-03	3.155E-03
5.000E+01	1.115E-02	5.575E-03	5.500E+01	1.597E-02	7.985E-03	6.000E+01	2.013E-02
1.006E-02	6.500E+01	2.371E-02	1.185E-02	7.000E+01	2.671E-02	1.336E-02	7.500E+01
2.922E-02	1.461E-02	8.000E+01	3.129E-02	1.564E-02	8.500E+01	3.295E-02	1.648E-02
9.000E+01	3.426E-02	1.713E-02	9.500E+01	3.472E-02	1.736E-02	1.000E+02	3.488E-02
1.744E-02	1.100E+02	3.462E-02	1.731E-02	1.200E+02	3.399E-02	1.699E-02	1.300E+02
3.329E-02	1.665E-02	1.400E+02	3.277E-02	1.639E-02	1.500E+02	3.281E-02	1.640E-02
1.600E+02	3.357E-02	1.679E-02	1.700E+02	3.516E-02	1.758E-02	1.800E+02	3.736E-02
1.868E-02	1.900E+02	3.945E-02	1.972E-02	2.000E+02	4.301E-02	2.150E-02	
0	1	51	123	27			n+Sb123
1.478E+01	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	6.055E-10
3.028E-10	3.500E+01	3.178E-06	1.589E-06	4.000E+01	4.548E-04	2.274E-04	4.500E+01
3.283E-03	1.641E-03	5.000E+01	7.069E-03	3.534E-03	5.500E+01	1.081E-02	5.405E-03
6.000E+01	1.427E-02	7.135E-03	6.500E+01	1.729E-02	8.645E-03	7.000E+01	2.028E-02
1.014E-02	7.500E+01	2.251E-02	1.125E-02	8.000E+01	2.436E-02	1.218E-02	8.500E+01
2.587E-02	1.294E-02	9.000E+01	2.708E-02	1.354E-02	9.500E+01	2.763E-02	1.381E-02
1.000E+02	2.790E-02	1.395E-02	1.100E+02	2.789E-02	1.395E-02	1.200E+02	2.740E-02
1.370E-02	1.300E+02	2.677E-02	1.338E-02	1.400E+02	2.614E-02	1.307E-02	1.500E+02
2.571E-02	1.286E-02	1.600E+02	2.610E-02	1.305E-02	1.700E+02	2.680E-02	1.340E-02
1.800E+02	2.798E-02	1.399E-02	1.900E+02	2.891E-02	1.446E-02	2.000E+02	3.063E-02
1.532E-02							
0	1	52	120	31			n+Te120
7.142E+00	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	2.272E-10
1.136E-10	2.400E+01	1.731E-09	8.655E-10	2.600E+01	1.295E-08	6.475E-09	2.800E+01
1.937E-06	9.685E-07	3.000E+01	2.179E-05	1.089E-05	3.500E+01	1.690E-03	8.450E-04
4.000E+01	8.282E-03	4.141E-03	4.500E+01	1.623E-02	8.115E-03	5.000E+01	2.388E-02
1.194E-02	5.500E+01	3.111E-02	1.555E-02	6.000E+01	3.709E-02	1.854E-02	6.500E+01
4.213E-02	2.107E-02	7.000E+01	4.532E-02	2.266E-02	7.500E+01	4.867E-02	2.433E-02
8.000E+01	5.139E-02	2.569E-02	8.500E+01	5.359E-02	2.679E-02	9.000E+01	5.541E-02
2.771E-02	9.500E+01	5.577E-02	2.789E-02	1.000E+02	5.586E-02	2.793E-02	1.100E+02
5.563E-02	2.781E-02	1.200E+02	5.527E-02	2.763E-02	1.300E+02	5.576E-02	2.788E-02
1.400E+02	5.690E-02	2.845E-02	1.500E+02	6.053E-02	3.027E-02	1.600E+02	6.529E-02
3.265E-02	1.700E+02	7.154E-02	3.577E-02	1.800E+02	7.887E-02	3.943E-02	1.900E+02
8.522E-02	3.994E-02	2.000E+02	9.497E-02	3.820E-02			
0	1	52	122	30			n+Te122
9.370E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.415E-10
7.075E-11	2.600E+01	9.386E-10	4.693E-10	2.800E+01	7.220E-09	3.610E-09	3.000E+01

1.183E-06	5.915E-07	3.500E+01	2.904E-04	1.452E-04	4.000E+01	4.060E-03	2.030E-03
4.500E+01	1.017E-02	5.085E-03	5.000E+01	1.647E-02	8.235E-03	5.500E+01	2.215E-02
1.107E-02	6.000E+01	2.723E-02	1.362E-02	6.500E+01	3.157E-02	1.579E-02	7.000E+01
3.592E-02	1.796E-02	7.500E+01	3.898E-02	1.949E-02	8.000E+01	4.148E-02	2.074E-02
8.500E+01	4.348E-02	2.174E-02	9.000E+01	4.508E-02	2.254E-02	9.500E+01	4.553E-02
2.277E-02	1.000E+02	4.566E-02	2.283E-02	1.100E+02	4.532E-02	2.266E-02	1.200E+02
4.470E-02	2.235E-02	1.300E+02	4.431E-02	2.216E-02	1.400E+02	4.422E-02	2.211E-02
1.500E+02	4.506E-02	2.253E-02	1.600E+02	4.755E-02	2.378E-02	1.700E+02	5.095E-02
2.548E-02	1.800E+02	5.497E-02	2.748E-02	1.900E+02	5.882E-02	2.941E-02	2.000E+02
6.516E-02	3.258E-02						
0	1	52	123	29			n+Te123
1.053E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	5.493E-10
2.746E-10	2.800E+01	4.385E-09	2.193E-09	3.000E+01	7.820E-07	3.910E-07	3.500E+01
1.709E-04	8.545E-05	4.000E+01	2.636E-03	1.318E-03	4.500E+01	6.736E-03	3.368E-03
5.000E+01	1.103E-02	5.515E-03	5.500E+01	1.510E-02	7.550E-03	6.000E+01	1.867E-02
9.335E-03	6.500E+01	2.179E-02	1.090E-02	7.000E+01	2.396E-02	1.198E-02	7.500E+01
2.617E-02	1.308E-02	8.000E+01	2.800E-02	1.400E-02	8.500E+01	2.950E-02	1.475E-02
9.000E+01	3.073E-02	1.537E-02	9.500E+01	3.120E-02	1.560E-02	1.000E+02	3.144E-02
1.572E-02	1.100E+02	3.145E-02	1.572E-02	1.200E+02	3.120E-02	1.560E-02	1.300E+02
3.116E-02	1.558E-02	1.400E+02	3.148E-02	1.574E-02	1.500E+02	3.213E-02	1.606E-02
1.600E+02	3.449E-02	1.724E-02	1.700E+02	3.744E-02	1.872E-02	1.800E+02	4.117E-02
2.058E-02	1.900E+02	4.473E-02	2.236E-02	2.000E+02	4.932E-02	2.466E-02	
0	1	52	124	28			n+Te124
1.161E+01	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	5.862E-10
2.931E-10	3.000E+01	4.629E-09	2.314E-09	3.500E+01	2.880E-05	1.440E-05	4.000E+01
1.547E-03	7.735E-04	4.500E+01	5.970E-03	2.985E-03	5.000E+01	1.104E-02	5.520E-03
5.500E+01	1.596E-02	7.980E-03	6.000E+01	2.037E-02	1.018E-02	6.500E+01	2.419E-02
1.209E-02	7.000E+01	2.743E-02	1.371E-02	7.500E+01	3.014E-02	1.507E-02	8.000E+01
3.238E-02	1.619E-02	8.500E+01	3.419E-02	1.709E-02	9.000E+01	3.563E-02	1.782E-02
9.500E+01	3.617E-02	1.809E-02	1.000E+02	3.641E-02	1.820E-02	1.100E+02	3.623E-02
1.811E-02	1.200E+02	3.558E-02	1.779E-02	1.300E+02	3.490E-02	1.745E-02	1.400E+02
3.436E-02	1.718E-02	1.500E+02	3.405E-02	1.702E-02	1.600E+02	3.510E-02	1.755E-02
1.700E+02	3.653E-02	1.826E-02	1.800E+02	3.889E-02	1.945E-02	1.900E+02	4.106E-02
2.053E-02	2.000E+02	4.513E-02	2.257E-02				
0	1	52	125	28			n+Te125
1.292E+01	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	2.755E-10
1.377E-10	3.000E+01	2.250E-09	1.125E-09	3.500E+01	1.515E-05	7.575E-06	4.000E+01
8.762E-04	4.381E-04	4.500E+01	3.716E-03	1.858E-03	5.000E+01	7.081E-03	3.540E-03
5.500E+01	1.036E-02	5.180E-03	6.000E+01	1.336E-02	6.680E-03	6.500E+01	1.600E-02
8.000E-03	7.000E+01	1.828E-02	9.140E-03	7.500E+01	2.023E-02	1.012E-02	8.000E+01
2.187E-02	1.094E-02	8.500E+01	2.322E-02	1.161E-02	9.000E+01	2.433E-02	1.217E-02
9.500E+01	2.485E-02	1.243E-02	1.000E+02	2.513E-02	1.256E-02	1.100E+02	2.522E-02
1.261E-02	1.200E+02	2.496E-02	1.248E-02	1.300E+02	2.466E-02	1.233E-02	1.400E+02
2.443E-02	1.222E-02	1.500E+02	2.437E-02	1.218E-02	1.600E+02	2.534E-02	1.267E-02
1.700E+02	2.673E-02	1.337E-02	1.800E+02	2.857E-02	1.429E-02	1.900E+02	3.083E-02
1.541E-02	2.000E+02	3.362E-02	1.681E-02				
0	1	52	126	27			n+Te126
1.390E+01	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	3.528E-10
1.764E-10	3.500E+01	1.936E-06	9.680E-07	4.000E+01	3.006E-04	1.503E-04	4.500E+01
3.001E-03	1.501E-03	5.000E+01	6.952E-03	3.476E-03	5.500E+01	1.098E-02	5.490E-03
6.000E+01	1.470E-02	7.350E-03	6.500E+01	1.799E-02	8.995E-03	7.000E+01	2.080E-02
1.040E-02	7.500E+01	2.319E-02	1.159E-02	8.000E+01	2.519E-02	1.260E-02	8.500E+01
2.682E-02	1.341E-02	9.000E+01	2.813E-02	1.406E-02	9.500E+01	2.875E-02	1.438E-02
1.000E+02	2.908E-02	1.454E-02	1.100E+02	2.913E-02	1.456E-02	1.200E+02	2.868E-02
1.434E-02	1.300E+02	2.803E-02	1.401E-02	1.400E+02	2.734E-02	1.367E-02	1.500E+02
2.687E-02	1.344E-02	1.600E+02	2.715E-02	1.358E-02	1.700E+02	2.787E-02	1.393E-02
1.800E+02	2.858E-02	1.429E-02	1.900E+02	3.004E-02	1.502E-02	2.000E+02	3.144E-02
1.572E-02							
0	1	52	128	26			n+Te128
1.609E+01	0.000E+00	0.000E+00	3.000E+01	0.000E+00	0.000E+00	3.500E+01	1.672E-08
8.360E-09	4.000E+01	3.770E-05	1.885E-05	4.500E+01	1.260E-03	6.300E-04	5.000E+01
4.177E-03	2.089E-03	5.500E+01	7.432E-03	3.716E-03	6.000E+01	1.057E-02	5.285E-03
6.500E+01	1.339E-02	6.695E-03	7.000E+01	1.586E-02	7.930E-03	7.500E+01	1.798E-02
8.990E-03	8.000E+01	1.976E-02	9.880E-03	8.500E+01	2.124E-02	1.062E-02	9.000E+01
2.245E-02	1.123E-02	9.500E+01	2.312E-02	1.156E-02	1.000E+02	2.353E-02	1.176E-02
1.100E+02	2.378E-02	1.189E-02	1.200E+02	2.351E-02	1.175E-02	1.300E+02	2.297E-02

1.149E-02	1.400E+02	2.233E-02	1.116E-02	1.500E+02	2.171E-02	1.086E-02	1.600E+02
2.169E-02	1.085E-02	1.700E+02	2.175E-02	1.087E-02	1.800E+02	2.206E-02	1.103E-02
1.900E+02	2.254E-02	1.127E-02	2.000E+02	2.309E-02	1.154E-02		
0	1	52	130	26			n+Te130
1.848E+01	0.000E+00	0.000E+00	3.000E+01	0.000E+00	0.000E+00	3.500E+01	3.240E-10
1.620E-10	4.000E+01	2.262E-06	1.131E-06	4.500E+01	3.171E-04	1.586E-04	5.000E+01
2.137E-03	1.069E-03	5.500E+01	4.639E-03	2.319E-03	6.000E+01	7.181E-03	3.590E-03
6.500E+01	9.543E-03	4.771E-03	7.000E+01	1.141E-02	5.705E-03	7.500E+01	1.321E-02
6.605E-03	8.000E+01	1.474E-02	7.370E-03	8.500E+01	1.603E-02	8.015E-03	9.000E+01
1.710E-02	8.550E-03	9.500E+01	1.776E-02	8.880E-03	1.000E+02	1.821E-02	9.105E-03
1.100E+02	1.862E-02	9.310E-03	1.200E+02	1.855E-02	9.275E-03	1.300E+02	1.820E-02
9.100E-03	1.400E+02	1.772E-02	8.860E-03	1.500E+02	1.776E-02	8.880E-03	1.600E+02
1.754E-02	8.770E-03	1.700E+02	1.737E-02	8.685E-03	1.800E+02	1.731E-02	8.655E-03
1.900E+02	1.741E-02	8.705E-03	2.000E+02	1.762E-02	8.810E-03		
0	1	53	127	29			n+I127
1.093E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	3.352E-10
1.676E-10	2.800E+01	2.602E-09	1.301E-09	3.000E+01	2.634E-07	1.317E-07	3.500E+01
1.047E-04	5.235E-05	4.000E+01	2.607E-03	1.303E-03	4.500E+01	7.612E-03	3.806E-03
5.000E+01	1.300E-02	6.500E-03	5.500E+01	1.781E-02	8.905E-03	6.000E+01	2.223E-02
1.111E-02	6.500E+01	2.605E-02	1.303E-02	7.000E+01	2.984E-02	1.492E-02	7.500E+01
3.257E-02	1.629E-02	8.000E+01	3.479E-02	1.740E-02	8.500E+01	3.658E-02	1.829E-02
9.000E+01	3.799E-02	1.900E-02	9.500E+01	3.845E-02	1.922E-02	1.000E+02	3.857E-02
1.929E-02	1.100E+02	3.819E-02	1.910E-02	1.200E+02	3.737E-02	1.869E-02	1.300E+02
3.651E-02	1.826E-02	1.400E+02	3.580E-02	1.790E-02	1.500E+02	3.442E-02	1.721E-02
1.600E+02	3.538E-02	1.769E-02	1.700E+02	3.697E-02	1.849E-02	1.800E+02	3.876E-02
1.938E-02	1.900E+02	4.189E-02	2.094E-02	2.000E+02	4.469E-02	2.235E-02	
0	1	54	124	34			n+Xe124
3.733E+00	0.000E+00	0.000E+00	1.700E+01	0.000E+00	0.000E+00	1.800E+01	1.067E-10
5.335E-11	1.900E+01	2.562E-10	1.281E-10	2.000E+01	6.561E-10	3.281E-10	2.200E+01
4.468E-09	2.234E-09	2.400E+01	2.040E-07	1.020E-07	2.600E+01	5.667E-06	2.834E-06
2.800E+01	5.239E-05	2.619E-05	3.000E+01	3.602E-04	1.801E-04	3.500E+01	6.189E-03
3.095E-03	4.000E+01	1.650E-02	8.250E-03	4.500E+01	2.717E-02	1.358E-02	5.000E+01
3.696E-02	1.848E-02	5.500E+01	4.617E-02	2.309E-02	6.000E+01	5.360E-02	2.680E-02
6.500E+01	5.982E-02	2.991E-02	7.000E+01	6.351E-02	3.175E-02	7.500E+01	6.765E-02
3.383E-02	8.000E+01	7.103E-02	3.551E-02	8.500E+01	7.378E-02	3.689E-02	9.000E+01
7.631E-02	3.816E-02	9.500E+01	7.670E-02	3.835E-02	1.000E+02	7.703E-02	3.852E-02
1.100E+02	7.770E-02	3.885E-02	1.200E+02	7.883E-02	3.941E-02	1.300E+02	8.257E-02
4.129E-02	1.400E+02	8.714E-02	4.357E-02	1.500E+02	9.426E-02	4.713E-02	1.600E+02
1.057E-01	5.285E-02	1.700E+02	1.192E-01	5.242E-02	1.800E+02	1.338E-01	5.033E-02
1.900E+02	1.495E-01	4.834E-02	2.000E+02	1.697E-01	4.652E-02		
0	1	54	126	31			n+Xe126
5.808E+00	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	4.681E-10
2.340E-10	2.400E+01	3.135E-09	1.568E-09	2.600E+01	1.039E-07	5.195E-08	2.800E+01
4.709E-06	2.355E-06	3.000E+01	4.376E-05	2.188E-05	3.500E+01	2.409E-03	1.205E-03
4.000E+01	9.892E-03	4.946E-03	4.500E+01	1.856E-02	9.280E-03	5.000E+01	2.691E-02
1.345E-02	5.500E+01	3.432E-02	1.716E-02	6.000E+01	4.072E-02	2.036E-02	6.500E+01
4.611E-02	2.305E-02	7.000E+01	5.059E-02	2.530E-02	7.500E+01	5.426E-02	2.713E-02
8.000E+01	5.721E-02	2.860E-02	8.500E+01	5.958E-02	2.979E-02	9.000E+01	6.150E-02
3.075E-02	9.500E+01	6.192E-02	3.096E-02	1.000E+02	6.190E-02	3.095E-02	1.100E+02
6.155E-02	3.078E-02	1.200E+02	6.125E-02	3.062E-02	1.300E+02	6.205E-02	3.103E-02
1.400E+02	6.311E-02	3.155E-02	1.500E+02	6.596E-02	3.298E-02	1.600E+02	7.173E-02
3.587E-02	1.700E+02	7.971E-02	3.986E-02	1.800E+02	8.916E-02	4.458E-02	1.900E+02
9.835E-02	4.324E-02	2.000E+02	1.077E-01	4.139E-02			
0	1	54	128	30			n+Xe128
7.673E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	4.064E-10
2.032E-10	2.600E+01	3.004E-09	1.502E-09	2.800E+01	2.145E-07	1.072E-07	3.000E+01
5.204E-06	2.602E-06	3.500E+01	7.014E-04	3.507E-04	4.000E+01	5.618E-03	2.809E-03
4.500E+01	1.268E-02	6.340E-03	5.000E+01	1.976E-02	9.880E-03	5.500E+01	2.642E-02
1.321E-02	6.000E+01	3.210E-02	1.605E-02	6.500E+01	3.693E-02	1.846E-02	7.000E+01
4.093E-02	2.047E-02	7.500E+01	4.425E-02	2.212E-02	8.000E+01	4.692E-02	2.346E-02
8.500E+01	4.905E-02	2.453E-02	9.000E+01	5.075E-02	2.538E-02	9.500E+01	5.119E-02
2.559E-02	1.000E+02	5.119E-02	2.559E-02	1.100E+02	5.067E-02	2.533E-02	1.200E+02
4.986E-02	2.493E-02	1.300E+02	4.938E-02	2.469E-02	1.400E+02	4.927E-02	2.464E-02
1.500E+02	4.813E-02	2.406E-02	1.600E+02	5.126E-02	2.563E-02	1.700E+02	5.527E-02
2.763E-02	1.800E+02	6.147E-02	3.073E-02	1.900E+02	6.839E-02	3.420E-02	2.000E+02
7.399E-02	3.443E-02						

0	1	54	129	30			n+Xe129
8.643E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	2.586E-10
1.293E-10	2.600E+01	1.980E-09	9.900E-10	2.800E+01	1.517E-07	7.585E-08	3.000E+01
3.697E-06	1.848E-06	3.500E+01	5.082E-04	2.541E-04	4.000E+01	4.032E-03	2.016E-03
4.500E+01	8.920E-03	4.460E-03	5.000E+01	1.393E-02	6.965E-03	5.500E+01	1.862E-02
9.310E-03	6.000E+01	2.272E-02	1.136E-02	6.500E+01	2.627E-02	1.314E-02	7.000E+01
2.868E-02	1.434E-02	7.500E+01	3.117E-02	1.558E-02	8.000E+01	3.322E-02	1.661E-02
8.500E+01	3.489E-02	1.744E-02	9.000E+01	3.624E-02	1.812E-02	9.500E+01	3.670E-02
1.835E-02	1.000E+02	3.687E-02	1.843E-02	1.100E+02	3.671E-02	1.835E-02	1.200E+02
3.633E-02	1.817E-02	1.300E+02	3.606E-02	1.803E-02	1.400E+02	3.630E-02	1.815E-02
1.500E+02	3.713E-02	1.857E-02	1.600E+02	3.964E-02	1.982E-02	1.700E+02	4.317E-02
2.159E-02	1.800E+02	4.753E-02	2.377E-02	1.900E+02	5.324E-02	2.465E-02	2.000E+02
5.892E-02	2.371E-02						
0	1	54	130	29			n+Xe130
9.416E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	4.151E-10
2.075E-10	2.800E+01	3.152E-09	1.576E-09	3.000E+01	3.210E-07	1.605E-07	3.500E+01
1.379E-04	6.895E-05	4.000E+01	3.045E-03	1.522E-03	4.500E+01	8.699E-03	4.350E-03
5.000E+01	1.473E-02	7.365E-03	5.500E+01	2.043E-02	1.022E-02	6.000E+01	2.547E-02
1.273E-02	6.500E+01	2.981E-02	1.490E-02	7.000E+01	3.346E-02	1.673E-02	7.500E+01
3.651E-02	1.826E-02	8.000E+01	3.899E-02	1.949E-02	8.500E+01	4.098E-02	2.049E-02
9.000E+01	4.256E-02	2.128E-02	9.500E+01	4.307E-02	2.153E-02	1.000E+02	4.320E-02
2.160E-02	1.100E+02	4.279E-02	2.140E-02	1.200E+02	4.188E-02	2.094E-02	1.300E+02
4.095E-02	2.048E-02	1.400E+02	4.031E-02	2.015E-02	1.500E+02	4.019E-02	2.009E-02
1.600E+02	4.163E-02	2.082E-02	1.700E+02	4.340E-02	2.170E-02	1.800E+02	4.598E-02
2.299E-02	1.900E+02	4.977E-02	2.489E-02	2.000E+02	5.310E-02	2.655E-02	
0	1	54	131	29			n+Xe131
1.029E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	3.204E-10
1.602E-10	2.800E+01	2.518E-09	1.259E-09	3.000E+01	3.236E-07	1.618E-07	3.500E+01
1.184E-04	5.920E-05	4.000E+01	2.227E-03	1.113E-03	4.500E+01	6.264E-03	3.132E-03
5.000E+01	1.060E-02	5.300E-03	5.500E+01	1.463E-02	7.315E-03	6.000E+01	1.829E-02
9.145E-03	6.500E+01	2.149E-02	1.074E-02	7.000E+01	2.468E-02	1.234E-02	7.500E+01
2.704E-02	1.352E-02	8.000E+01	2.898E-02	1.449E-02	8.500E+01	3.057E-02	1.528E-02
9.000E+01	3.186E-02	1.593E-02	9.500E+01	3.236E-02	1.618E-02	1.000E+02	3.258E-02
1.629E-02	1.100E+02	3.245E-02	1.622E-02	1.200E+02	3.192E-02	1.596E-02	1.300E+02
3.133E-02	1.566E-02	1.400E+02	3.097E-02	1.549E-02	1.500E+02	3.077E-02	1.538E-02
1.600E+02	3.195E-02	1.597E-02	1.700E+02	3.367E-02	1.683E-02	1.800E+02	3.608E-02
1.804E-02	1.900E+02	4.001E-02	2.000E-02	2.000E+02	4.323E-02	2.161E-02	
0	1	54	132	28			n+Xe132
1.104E+01	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	5.112E-10
2.556E-10	3.000E+01	3.988E-09	1.994E-09	3.500E+01	2.491E-05	1.246E-05	4.000E+01
1.428E-03	7.140E-04	4.500E+01	5.798E-03	2.899E-03	5.000E+01	1.092E-02	5.460E-03
5.500E+01	1.580E-02	7.900E-03	6.000E+01	2.024E-02	1.012E-02	6.500E+01	2.414E-02
1.207E-02	7.000E+01	2.743E-02	1.371E-02	7.500E+01	3.020E-02	1.510E-02	8.000E+01
3.247E-02	1.623E-02	8.500E+01	3.432E-02	1.716E-02	9.000E+01	3.579E-02	1.790E-02
9.500E+01	3.637E-02	1.818E-02	1.000E+02	3.661E-02	1.830E-02	1.100E+02	3.639E-02
1.819E-02	1.200E+02	3.561E-02	1.781E-02	1.300E+02	3.465E-02	1.733E-02	1.400E+02
3.383E-02	1.691E-02	1.500E+02	3.443E-02	1.722E-02	1.600E+02	3.494E-02	1.747E-02
1.700E+02	3.584E-02	1.792E-02	1.800E+02	3.722E-02	1.861E-02	1.900E+02	3.925E-02
1.963E-02	2.000E+02	4.165E-02	2.082E-02				
0	1	54	134	27			n+Xe134
1.258E+01	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	6.605E-10
3.303E-10	3.500E+01	3.931E-06	1.966E-06	4.000E+01	5.172E-04	2.586E-04	4.500E+01
3.695E-03	1.847E-03	5.000E+01	8.018E-03	4.009E-03	5.500E+01	1.241E-02	6.205E-03
6.000E+01	1.644E-02	8.220E-03	6.500E+01	1.999E-02	9.995E-03	7.000E+01	2.257E-02
1.128E-02	7.500E+01	2.511E-02	1.256E-02	8.000E+01	2.720E-02	1.360E-02	8.500E+01
2.893E-02	1.447E-02	9.000E+01	3.031E-02	1.516E-02	9.500E+01	3.096E-02	1.548E-02
1.000E+02	3.129E-02	1.564E-02	1.100E+02	3.127E-02	1.563E-02	1.200E+02	3.067E-02
1.533E-02	1.300E+02	2.981E-02	1.490E-02	1.400E+02	2.895E-02	1.448E-02	1.500E+02
2.815E-02	1.408E-02	1.600E+02	2.817E-02	1.409E-02	1.700E+02	2.850E-02	1.425E-02
1.800E+02	2.915E-02	1.457E-02	1.900E+02	3.017E-02	1.508E-02	2.000E+02	3.208E-02
1.604E-02							
0	1	54	136	27			n+Xe136
1.409E+01	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	1.777E-10
8.885E-11	3.500E+01	7.021E-07	3.511E-07	4.000E+01	1.945E-04	9.725E-05	4.500E+01
2.862E-03	1.431E-03	5.000E+01	7.510E-03	3.755E-03	5.500E+01	1.239E-02	6.195E-03
6.000E+01	1.691E-02	8.455E-03	6.500E+01	2.089E-02	1.044E-02	7.000E+01	2.429E-02

1.214E-02	7.500E+01	2.713E-02	1.357E-02	8.000E+01	2.946E-02	1.473E-02	8.500E+01
3.134E-02	1.567E-02	9.000E+01	3.284E-02	1.642E-02	9.500E+01	3.353E-02	1.676E-02
1.000E+02	3.388E-02	1.694E-02	1.100E+02	3.382E-02	1.691E-02	1.200E+02	3.310E-02
1.655E-02	1.300E+02	3.206E-02	1.603E-02	1.400E+02	3.093E-02	1.546E-02	1.500E+02
2.977E-02	1.489E-02	1.600E+02	2.933E-02	1.466E-02	1.700E+02	2.903E-02	1.452E-02
1.800E+02	2.899E-02	1.449E-02	1.900E+02	2.922E-02	1.461E-02	2.000E+02	2.958E-02
1.479E-02							
0	1	55	133	30			n+Cs133
9.138E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.487E-10
7.435E-11	2.600E+01	1.110E-09	5.550E-10	2.800E+01	7.387E-09	3.694E-09	3.000E+01
1.322E-06	6.610E-07	3.500E+01	2.895E-04	1.447E-04	4.000E+01	3.864E-03	1.932E-03
4.500E+01	9.678E-03	4.839E-03	5.000E+01	1.571E-02	7.855E-03	5.500E+01	2.127E-02
1.064E-02	6.000E+01	2.619E-02	1.310E-02	6.500E+01	3.041E-02	1.520E-02	7.000E+01
3.393E-02	1.697E-02	7.500E+01	3.686E-02	1.843E-02	8.000E+01	3.924E-02	1.962E-02
8.500E+01	4.114E-02	2.057E-02	9.000E+01	4.263E-02	2.132E-02	9.500E+01	4.304E-02
2.152E-02	1.000E+02	4.309E-02	2.155E-02	1.100E+02	4.248E-02	2.124E-02	1.200E+02
4.137E-02	2.068E-02	1.300E+02	4.021E-02	2.011E-02	1.400E+02	3.936E-02	1.968E-02
1.500E+02	3.879E-02	1.939E-02	1.600E+02	3.971E-02	1.986E-02	1.700E+02	4.119E-02
2.059E-02	1.800E+02	4.335E-02	2.167E-02	1.900E+02	4.621E-02	2.311E-02	2.000E+02
4.985E-02	2.492E-02						
0	1	56	130	32			n+Ba130
4.470E+00	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	1.233E-10
6.165E-11	2.200E+01	8.223E-10	4.112E-10	2.400E+01	5.626E-09	2.813E-09	2.600E+01
4.974E-07	2.487E-07	2.800E+01	9.046E-06	4.523E-06	3.000E+01	7.378E-05	3.689E-05
3.500E+01	2.862E-03	1.431E-03	4.000E+01	1.072E-02	5.360E-03	4.500E+01	1.966E-02
9.830E-03	5.000E+01	2.814E-02	1.407E-02	5.500E+01	3.567E-02	1.784E-02	6.000E+01
4.215E-02	2.107E-02	6.500E+01	4.764E-02	2.382E-02	7.000E+01	5.214E-02	2.607E-02
7.500E+01	5.586E-02	2.793E-02	8.000E+01	5.883E-02	2.942E-02	8.500E+01	6.120E-02
3.060E-02	9.000E+01	6.315E-02	3.157E-02	9.500E+01	6.346E-02	3.173E-02	1.000E+02
6.342E-02	3.171E-02	1.100E+02	6.276E-02	3.138E-02	1.200E+02	6.210E-02	3.105E-02
1.300E+02	6.188E-02	3.094E-02	1.400E+02	6.310E-02	3.155E-02	1.500E+02	6.538E-02
3.269E-02	1.600E+02	7.084E-02	3.542E-02	1.700E+02	7.700E-02	3.850E-02	1.800E+02
8.598E-02	4.299E-02	1.900E+02	9.658E-02	4.501E-02	2.000E+02	1.060E-01	4.310E-02
0	1	56	132	31			n+Ba132
6.115E+00	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	1.383E-10
6.915E-11	2.400E+01	9.776E-10	4.888E-10	2.600E+01	7.035E-09	3.517E-09	2.800E+01
9.888E-07	4.944E-07	3.000E+01	1.275E-05	6.375E-06	3.500E+01	1.087E-03	5.435E-04
4.000E+01	6.887E-03	3.443E-03	4.500E+01	1.449E-02	7.245E-03	5.000E+01	2.200E-02
1.100E-02	5.500E+01	2.865E-02	1.432E-02	6.000E+01	3.455E-02	1.727E-02	6.500E+01
3.957E-02	1.979E-02	7.000E+01	4.283E-02	2.142E-02	7.500E+01	4.622E-02	2.311E-02
8.000E+01	4.896E-02	2.448E-02	8.500E+01	5.114E-02	2.557E-02	9.000E+01	5.287E-02
2.644E-02	9.500E+01	5.328E-02	2.664E-02	1.000E+02	5.327E-02	2.663E-02	1.100E+02
5.263E-02	2.632E-02	1.200E+02	5.168E-02	2.584E-02	1.300E+02	5.075E-02	2.538E-02
1.400E+02	5.083E-02	2.542E-02	1.500E+02	5.296E-02	2.648E-02	1.600E+02	5.612E-02
2.806E-02	1.700E+02	5.992E-02	2.996E-02	1.800E+02	6.513E-02	3.256E-02	1.900E+02
7.184E-02	3.592E-02	2.000E+02	7.825E-02	3.788E-02			
0	1	56	134	30			n+Ba134
7.714E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.661E-10
8.305E-11	2.600E+01	1.205E-09	6.025E-10	2.800E+01	8.910E-09	4.455E-09	3.000E+01
1.633E-06	8.165E-07	3.500E+01	2.882E-04	1.441E-04	4.000E+01	4.034E-03	2.017E-03
4.500E+01	1.026E-02	5.130E-03	5.000E+01	1.674E-02	8.370E-03	5.500E+01	2.245E-02
1.123E-02	6.000E+01	2.768E-02	1.384E-02	6.500E+01	3.216E-02	1.608E-02	7.000E+01
3.670E-02	1.835E-02	7.500E+01	3.990E-02	1.995E-02	8.000E+01	4.251E-02	2.125E-02
8.500E+01	4.459E-02	2.229E-02	9.000E+01	4.625E-02	2.312E-02	9.500E+01	4.675E-02
2.337E-02	1.000E+02	4.685E-02	2.343E-02	1.100E+02	4.628E-02	2.314E-02	1.200E+02
4.526E-02	2.263E-02	1.300E+02	4.417E-02	2.209E-02	1.400E+02	4.351E-02	2.176E-02
1.500E+02	4.159E-02	2.080E-02	1.600E+02	4.294E-02	2.147E-02	1.700E+02	4.525E-02
2.262E-02	1.800E+02	4.849E-02	2.424E-02	1.900E+02	5.271E-02	2.635E-02	2.000E+02
5.759E-02	2.880E-02						
0	1	56	135	30			n+Ba135
8.610E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.115E-10
5.575E-11	2.600E+01	8.347E-10	4.174E-10	2.800E+01	6.346E-09	3.173E-09	3.000E+01
1.249E-06	6.245E-07	3.500E+01	2.456E-04	1.228E-04	4.000E+01	3.037E-03	1.519E-03
4.500E+01	7.493E-03	3.746E-03	5.000E+01	1.221E-02	6.105E-03	5.500E+01	1.643E-02
8.215E-03	6.000E+01	2.032E-02	1.016E-02	6.500E+01	2.370E-02	1.185E-02	7.000E+01
2.713E-02	1.357E-02	7.500E+01	2.962E-02	1.481E-02	8.000E+01	3.168E-02	1.584E-02

8.500E+01	3.337E-02	1.668E-02	9.000E+01	3.473E-02	1.736E-02	9.500E+01	3.523E-02
1.761E-02	1.000E+02	3.543E-02	1.772E-02	1.100E+02	3.523E-02	1.761E-02	1.200E+02
3.456E-02	1.728E-02	1.300E+02	3.385E-02	1.692E-02	1.400E+02	3.348E-02	1.674E-02
1.500E+02	3.232E-02	1.616E-02	1.600E+02	3.376E-02	1.688E-02	1.700E+02	3.577E-02
1.789E-02	1.800E+02	3.838E-02	1.919E-02	1.900E+02	4.198E-02	2.099E-02	2.000E+02
4.666E-02	2.333E-02						
0	1	56	136	29			n+Ba136
9.303E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	1.976E-10
9.880E-11	2.800E+01	1.474E-09	7.370E-10	3.000E+01	5.552E-08	2.776E-08	3.500E+01
6.515E-05	3.257E-05	4.000E+01	2.040E-03	1.020E-03	4.500E+01	6.872E-03	3.436E-03
5.000E+01	1.230E-02	6.150E-03	5.500E+01	1.739E-02	8.695E-03	6.000E+01	2.202E-02
1.101E-02	6.500E+01	2.605E-02	1.303E-02	7.000E+01	3.008E-02	1.504E-02	7.500E+01
3.299E-02	1.649E-02	8.000E+01	3.539E-02	1.769E-02	8.500E+01	3.734E-02	1.867E-02
9.000E+01	3.890E-02	1.945E-02	9.500E+01	3.949E-02	1.974E-02	1.000E+02	3.972E-02
1.986E-02	1.100E+02	3.941E-02	1.971E-02	1.200E+02	3.851E-02	1.926E-02	1.300E+02
3.748E-02	1.874E-02	1.400E+02	3.661E-02	1.830E-02	1.500E+02	3.594E-02	1.797E-02
1.600E+02	3.659E-02	1.829E-02	1.700E+02	3.768E-02	1.884E-02	1.800E+02	3.953E-02
1.977E-02	1.900E+02	4.196E-02	2.098E-02	2.000E+02	4.491E-02	2.245E-02	
0	1	56	137	29			n+Ba137
1.029E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	1.394E-10
6.970E-11	2.800E+01	1.068E-09	5.340E-10	3.000E+01	4.806E-08	2.403E-08	3.500E+01
4.416E-05	2.208E-05	4.000E+01	1.571E-03	7.855E-04	4.500E+01	5.248E-03	2.624E-03
5.000E+01	9.397E-03	4.699E-03	5.500E+01	1.343E-02	6.715E-03	6.000E+01	1.706E-02
8.530E-03	6.500E+01	2.024E-02	1.012E-02	7.000E+01	2.252E-02	1.126E-02	7.500E+01
2.479E-02	1.239E-02	8.000E+01	2.669E-02	1.334E-02	8.500E+01	2.825E-02	1.413E-02
9.000E+01	2.952E-02	1.476E-02	9.500E+01	3.006E-02	1.503E-02	1.000E+02	3.031E-02
1.516E-02	1.100E+02	3.023E-02	1.511E-02	1.200E+02	2.965E-02	1.482E-02	1.300E+02
2.889E-02	1.444E-02	1.400E+02	2.830E-02	1.415E-02	1.500E+02	2.780E-02	1.390E-02
1.600E+02	2.852E-02	1.426E-02	1.700E+02	2.951E-02	1.476E-02	1.800E+02	3.104E-02
1.552E-02	1.900E+02	3.314E-02	1.657E-02	2.000E+02	3.613E-02	1.807E-02	
0	1	56	138	28			n+Ba138
1.086E+01	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	3.473E-10
1.736E-10	3.000E+01	2.612E-09	1.306E-09	3.500E+01	1.517E-05	7.585E-06	4.000E+01
1.177E-03	5.885E-04	4.500E+01	5.802E-03	2.901E-03	5.000E+01	1.166E-02	5.830E-03
5.500E+01	1.738E-02	8.690E-03	6.000E+01	2.271E-02	1.136E-02	6.500E+01	2.720E-02
1.360E-02	7.000E+01	3.098E-02	1.549E-02	7.500E+01	3.411E-02	1.706E-02	8.000E+01
3.667E-02	1.834E-02	8.500E+01	3.871E-02	1.936E-02	9.000E+01	4.031E-02	2.015E-02
9.500E+01	4.093E-02	2.047E-02	1.000E+02	4.114E-02	2.057E-02	1.100E+02	4.075E-02
2.038E-02	1.200E+02	3.970E-02	1.985E-02	1.300E+02	3.838E-02	1.919E-02	1.400E+02
3.711E-02	1.855E-02	1.500E+02	3.438E-02	1.719E-02	1.600E+02	3.425E-02	1.713E-02
1.700E+02	3.441E-02	1.721E-02	1.800E+02	3.503E-02	1.751E-02	1.900E+02	3.606E-02
1.803E-02	2.000E+02	3.831E-02	1.915E-02				
0	1	57	138	30			n+La138
8.586E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	2.172E-10
1.086E-10	2.600E+01	1.615E-09	8.075E-10	2.800E+01	8.915E-08	4.458E-08	3.000E+01
2.836E-06	1.418E-06	3.500E+01	4.050E-04	2.025E-04	4.000E+01	3.599E-03	1.800E-03
4.500E+01	8.239E-03	4.119E-03	5.000E+01	1.305E-02	6.525E-03	5.500E+01	1.774E-02
8.870E-03	6.000E+01	2.174E-02	1.087E-02	6.500E+01	2.520E-02	1.260E-02	7.000E+01
2.756E-02	1.378E-02	7.500E+01	2.998E-02	1.499E-02	8.000E+01	3.196E-02	1.598E-02
8.500E+01	3.357E-02	1.679E-02	9.000E+01	3.485E-02	1.742E-02	9.500E+01	3.525E-02
1.762E-02	1.000E+02	3.537E-02	1.768E-02	1.100E+02	3.497E-02	1.749E-02	1.200E+02
3.418E-02	1.709E-02	1.300E+02	3.332E-02	1.666E-02	1.400E+02	3.273E-02	1.637E-02
1.500E+02	3.345E-02	1.673E-02	1.600E+02	3.424E-02	1.712E-02	1.700E+02	3.557E-02
1.778E-02	1.800E+02	3.779E-02	1.889E-02	1.900E+02	4.064E-02	2.032E-02	2.000E+02
4.401E-02	2.201E-02						
0	1	57	139	29			n+La139
9.109E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	6.217E-10
3.109E-10	2.800E+01	4.539E-09	2.270E-09	3.000E+01	4.213E-07	2.106E-07	3.500E+01
1.586E-04	7.930E-05	4.000E+01	3.428E-03	1.714E-03	4.500E+01	9.835E-03	4.917E-03
5.000E+01	1.669E-02	8.345E-03	5.500E+01	2.297E-02	1.149E-02	6.000E+01	2.855E-02
1.427E-02	6.500E+01	3.332E-02	1.666E-02	7.000E+01	3.809E-02	1.904E-02	7.500E+01
4.141E-02	2.071E-02	8.000E+01	4.407E-02	2.203E-02	8.500E+01	4.617E-02	2.309E-02
9.000E+01	4.778E-02	2.389E-02	9.500E+01	4.819E-02	2.409E-02	1.000E+02	4.817E-02
2.408E-02	1.100E+02	4.733E-02	2.366E-02	1.200E+02	4.587E-02	2.294E-02	1.300E+02
4.420E-02	2.210E-02	1.400E+02	4.257E-02	2.128E-02	1.500E+02	4.136E-02	2.068E-02
1.600E+02	4.131E-02	2.065E-02	1.700E+02	4.188E-02	2.094E-02	1.800E+02	4.292E-02

2.146E-02	1.900E+02	4.441E-02	2.220E-02	2.000E+02	4.675E-02	2.337E-02		
0	1	58	136	31				n+Ce136
4.317E+00	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	4.246E-10	
2.123E-10	2.400E+01	2.896E-09	1.448E-09	2.600E+01	1.059E-07	5.295E-08	2.800E+01	
4.111E-06	2.056E-06	3.000E+01	3.235E-05	1.618E-05	3.500E+01	1.949E-03	9.745E-04	
4.000E+01	8.820E-03	4.410E-03	4.500E+01	1.712E-02	8.560E-03	5.000E+01	2.514E-02	
1.257E-02	5.500E+01	3.247E-02	1.623E-02	6.000E+01	3.875E-02	1.937E-02	6.500E+01	
4.409E-02	2.204E-02	7.000E+01	4.744E-02	2.372E-02	7.500E+01	5.102E-02	2.551E-02	
8.000E+01	5.390E-02	2.695E-02	8.500E+01	5.620E-02	2.810E-02	9.000E+01	5.804E-02	
2.902E-02	9.500E+01	5.839E-02	2.919E-02	1.000E+02	5.835E-02	2.917E-02	1.100E+02	
5.753E-02	2.876E-02	1.200E+02	5.640E-02	2.820E-02	1.300E+02	5.561E-02	2.780E-02	
1.400E+02	5.551E-02	2.775E-02	1.500E+02	5.653E-02	2.826E-02	1.600E+02	5.982E-02	
2.991E-02	1.700E+02	6.468E-02	3.234E-02	1.800E+02	7.056E-02	3.528E-02	1.900E+02	
7.764E-02	3.882E-02	2.000E+02	8.633E-02	4.278E-02				
0	1	58	138	30				n+Ce138
6.031E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	4.135E-10	
2.068E-10	2.600E+01	2.917E-09	1.459E-09	2.800E+01	1.952E-07	9.760E-08	3.000E+01	
4.700E-06	2.350E-06	3.500E+01	6.019E-04	3.010E-04	4.000E+01	5.160E-03	2.580E-03	
4.500E+01	1.174E-02	5.870E-03	5.000E+01	1.850E-02	9.250E-03	5.500E+01	2.449E-02	
1.225E-02	6.000E+01	2.991E-02	1.495E-02	6.500E+01	3.458E-02	1.729E-02	7.000E+01	
3.848E-02	1.924E-02	7.500E+01	4.174E-02	2.087E-02	8.000E+01	4.440E-02	2.220E-02	
8.500E+01	4.654E-02	2.327E-02	9.000E+01	4.824E-02	2.412E-02	9.500E+01	4.873E-02	
2.437E-02	1.000E+02	4.881E-02	2.440E-02	1.100E+02	4.825E-02	2.413E-02	1.200E+02	
4.720E-02	2.360E-02	1.300E+02	4.616E-02	2.308E-02	1.400E+02	4.544E-02	2.272E-02	
1.500E+02	4.694E-02	2.347E-02	1.600E+02	4.859E-02	2.430E-02	1.700E+02	5.128E-02	
2.564E-02	1.800E+02	5.499E-02	2.749E-02	1.900E+02	5.944E-02	2.972E-02	2.000E+02	
6.505E-02	3.252E-02							
0	1	58	140	29				n+Ce140
7.713E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	6.627E-10	
3.313E-10	2.800E+01	4.717E-09	2.359E-09	3.000E+01	5.336E-07	2.668E-07	3.500E+01	
1.547E-04	7.735E-05	4.000E+01	3.481E-03	1.741E-03	4.500E+01	1.018E-02	5.090E-03	
5.000E+01	1.739E-02	8.695E-03	5.500E+01	2.412E-02	1.206E-02	6.000E+01	3.005E-02	
1.503E-02	6.500E+01	3.512E-02	1.756E-02	7.000E+01	3.931E-02	1.965E-02	7.500E+01	
4.279E-02	2.140E-02	8.000E+01	4.559E-02	2.279E-02	8.500E+01	4.781E-02	2.390E-02	
9.000E+01	4.954E-02	2.477E-02	9.500E+01	5.001E-02	2.500E-02	1.000E+02	5.006E-02	
2.503E-02	1.100E+02	4.929E-02	2.465E-02	1.200E+02	4.790E-02	2.395E-02	1.300E+02	
4.636E-02	2.318E-02	1.400E+02	4.501E-02	2.251E-02	1.500E+02	4.404E-02	2.202E-02	
1.600E+02	4.447E-02	2.224E-02	1.700E+02	4.547E-02	2.273E-02	1.800E+02	4.716E-02	
2.358E-02	1.900E+02	4.974E-02	2.487E-02	2.000E+02	5.288E-02	2.644E-02		
0	1	58	142	31				n+Ce142
5.853E+00	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	1.286E-10	
6.430E-11	2.400E+01	8.756E-10	4.378E-10	2.600E+01	6.121E-09	3.060E-09	2.800E+01	
6.231E-07	3.116E-07	3.000E+01	1.041E-05	5.205E-06	3.500E+01	1.133E-03	5.665E-04	
4.000E+01	8.117E-03	4.058E-03	4.500E+01	1.764E-02	8.820E-03	5.000E+01	2.717E-02	
1.358E-02	5.500E+01	3.573E-02	1.786E-02	6.000E+01	4.311E-02	2.156E-02	6.500E+01	
4.930E-02	2.465E-02	7.000E+01	5.437E-02	2.719E-02	7.500E+01	5.847E-02	2.924E-02	
8.000E+01	6.171E-02	3.086E-02	8.500E+01	6.420E-02	3.210E-02	9.000E+01	6.606E-02	
3.303E-02	9.500E+01	6.619E-02	3.309E-02	1.000E+02	6.582E-02	3.291E-02	1.100E+02	
6.403E-02	3.202E-02	1.200E+02	6.156E-02	3.078E-02	1.300E+02	5.894E-02	2.947E-02	
1.400E+02	5.651E-02	2.825E-02	1.500E+02	5.457E-02	2.729E-02	1.600E+02	5.421E-02	
2.711E-02	1.700E+02	5.430E-02	2.715E-02	1.800E+02	5.516E-02	2.758E-02	1.900E+02	
5.674E-02	2.837E-02	2.000E+02	5.846E-02	2.923E-02				
0	1	59	141	31				n+Pr141
6.182E+00	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	1.269E-10	
6.345E-11	2.400E+01	8.117E-10	4.058E-10	2.600E+01	5.606E-09	2.803E-09	2.800E+01	
5.980E-07	2.990E-07	3.000E+01	9.352E-06	4.676E-06	3.500E+01	9.613E-04	4.807E-04	
4.000E+01	6.774E-03	3.387E-03	4.500E+01	1.469E-02	7.345E-03	5.000E+01	2.263E-02	
1.132E-02	5.500E+01	2.984E-02	1.492E-02	6.000E+01	3.606E-02	1.803E-02	6.500E+01	
4.132E-02	2.066E-02	7.000E+01	4.563E-02	2.281E-02	7.500E+01	4.916E-02	2.458E-02	
8.000E+01	5.197E-02	2.599E-02	8.500E+01	5.416E-02	2.708E-02	9.000E+01	5.584E-02	
2.792E-02	9.500E+01	5.607E-02	2.804E-02	1.000E+02	5.588E-02	2.794E-02	1.100E+02	
5.465E-02	2.732E-02	1.200E+02	5.291E-02	2.645E-02	1.300E+02	5.104E-02	2.552E-02	
1.400E+02	4.951E-02	2.475E-02	1.500E+02	4.871E-02	2.436E-02	1.600E+02	4.933E-02	
2.466E-02	1.700E+02	5.064E-02	2.532E-02	1.800E+02	5.278E-02	2.639E-02	1.900E+02	
5.596E-02	2.798E-02	2.000E+02	5.967E-02	2.984E-02				
0	1	60	142	31				n+Nd142

4.801E+00	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	1.370E-10
6.850E-11	2.400E+01	8.663E-10	4.331E-10	2.600E+01	5.836E-09	2.918E-09	2.800E+01
5.870E-07	2.935E-07	3.000E+01	9.239E-06	4.620E-06	3.500E+01	9.470E-04	4.735E-04
4.000E+01	6.948E-03	3.474E-03	4.500E+01	1.530E-02	7.650E-03	5.000E+01	2.362E-02
1.181E-02	5.500E+01	3.066E-02	1.533E-02	6.000E+01	3.715E-02	1.858E-02	6.500E+01
4.266E-02	2.133E-02	7.000E+01	4.724E-02	2.362E-02	7.500E+01	5.100E-02	2.550E-02
8.000E+01	5.402E-02	2.701E-02	8.500E+01	5.640E-02	2.820E-02	9.000E+01	5.824E-02
2.912E-02	9.500E+01	5.859E-02	2.930E-02	1.000E+02	5.849E-02	2.925E-02	1.100E+02
5.738E-02	2.869E-02	1.200E+02	5.572E-02	2.786E-02	1.300E+02	5.411E-02	2.705E-02
1.400E+02	5.280E-02	2.640E-02	1.500E+02	5.219E-02	2.610E-02	1.600E+02	5.357E-02
2.678E-02	1.700E+02	5.617E-02	2.808E-02	1.800E+02	5.951E-02	2.976E-02	1.900E+02
6.383E-02	3.191E-02	2.000E+02	6.918E-02	3.459E-02			
0	1	60	143	31			n+Nd143
4.013E+00	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	6.460E-10
3.230E-10	2.400E+01	4.405E-09	2.203E-09	2.600E+01	3.805E-07	1.902E-07	2.800E+01
6.984E-06	3.492E-06	3.000E+01	5.627E-05	2.814E-05	3.500E+01	2.403E-03	1.202E-03
4.000E+01	9.128E-03	4.564E-03	4.500E+01	1.711E-02	8.555E-03	5.000E+01	2.475E-02
1.238E-02	5.500E+01	3.173E-02	1.587E-02	6.000E+01	3.769E-02	1.885E-02	6.500E+01
4.274E-02	2.137E-02	7.000E+01	4.588E-02	2.294E-02	7.500E+01	4.923E-02	2.462E-02
8.000E+01	5.191E-02	2.595E-02	8.500E+01	5.402E-02	2.701E-02	9.000E+01	5.564E-02
2.782E-02	9.500E+01	5.581E-02	2.790E-02	1.000E+02	5.554E-02	2.777E-02	1.100E+02
5.426E-02	2.713E-02	1.200E+02	5.246E-02	2.623E-02	1.300E+02	5.071E-02	2.535E-02
1.400E+02	4.930E-02	2.465E-02	1.500E+02	4.863E-02	2.431E-02	1.600E+02	5.014E-02
2.507E-02	1.700E+02	5.205E-02	2.602E-02	1.800E+02	5.494E-02	2.747E-02	1.900E+02
5.894E-02	2.947E-02	2.000E+02	6.352E-02	3.176E-02			
0	1	60	144	32			n+Nd144
3.213E+00	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	1.520E-10
7.600E-11	2.200E+01	9.680E-10	4.840E-10	2.400E+01	6.010E-09	3.005E-09	2.600E+01
3.741E-07	1.870E-07	2.800E+01	8.716E-06	4.358E-06	3.000E+01	7.166E-05	3.583E-05
3.500E+01	3.251E-03	1.625E-03	4.000E+01	1.289E-02	6.445E-03	4.500E+01	2.409E-02
1.205E-02	5.000E+01	3.479E-02	1.740E-02	5.500E+01	4.429E-02	2.215E-02	6.000E+01
5.237E-02	2.618E-02	6.500E+01	5.911E-02	2.956E-02	7.000E+01	6.452E-02	3.226E-02
7.500E+01	6.893E-02	3.447E-02	8.000E+01	7.239E-02	3.619E-02	8.500E+01	7.502E-02
3.751E-02	9.000E+01	7.695E-02	3.848E-02	9.500E+01	7.686E-02	3.843E-02	1.000E+02
7.625E-02	3.812E-02	1.100E+02	7.394E-02	3.697E-02	1.200E+02	7.100E-02	3.550E-02
1.300E+02	6.807E-02	3.404E-02	1.400E+02	6.559E-02	3.279E-02	1.500E+02	6.361E-02
3.180E-02	1.600E+02	6.394E-02	3.197E-02	1.700E+02	6.516E-02	3.258E-02	1.800E+02
6.782E-02	3.391E-02	1.900E+02	7.095E-02	3.547E-02	2.000E+02	7.497E-02	3.748E-02
0	1	60	145	31			n+Nd145
4.251E+00	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	5.544E-10
2.772E-10	2.400E+01	3.809E-09	1.905E-09	2.600E+01	2.717E-07	1.358E-07	2.800E+01
6.008E-06	3.004E-06	3.000E+01	5.006E-05	2.503E-05	3.500E+01	2.211E-03	1.105E-03
4.000E+01	9.081E-03	4.541E-03	4.500E+01	1.721E-02	8.605E-03	5.000E+01	2.503E-02
1.252E-02	5.500E+01	3.217E-02	1.608E-02	6.000E+01	3.827E-02	1.913E-02	6.500E+01
4.345E-02	2.173E-02	7.000E+01	4.673E-02	2.337E-02	7.500E+01	5.018E-02	2.509E-02
8.000E+01	5.298E-02	2.649E-02	8.500E+01	5.520E-02	2.760E-02	9.000E+01	5.694E-02
2.847E-02	9.500E+01	5.721E-02	2.860E-02	1.000E+02	5.707E-02	2.854E-02	1.100E+02
5.601E-02	2.800E-02	1.200E+02	5.454E-02	2.727E-02	1.300E+02	5.313E-02	2.656E-02
1.400E+02	5.211E-02	2.605E-02	1.500E+02	5.165E-02	2.583E-02	1.600E+02	5.321E-02
2.661E-02	1.700E+02	5.575E-02	2.788E-02	1.800E+02	5.909E-02	2.954E-02	1.900E+02
6.364E-02	3.182E-02	2.000E+02	6.933E-02	3.467E-02			
0	1	60	146	30			n+Nd146
5.395E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	5.736E-10
2.868E-10	2.600E+01	3.885E-09	1.942E-09	2.800E+01	2.434E-07	1.217E-07	3.000E+01
5.886E-06	2.943E-06	3.500E+01	7.477E-04	3.739E-04	4.000E+01	6.746E-03	3.373E-03
4.500E+01	1.561E-02	7.805E-03	5.000E+01	2.457E-02	1.229E-02	5.500E+01	3.227E-02
1.614E-02	6.000E+01	3.926E-02	1.963E-02	6.500E+01	4.519E-02	2.260E-02	7.000E+01
5.115E-02	2.558E-02	7.500E+01	5.521E-02	2.761E-02	8.000E+01	5.847E-02	2.924E-02
8.500E+01	6.104E-02	3.052E-02	9.000E+01	6.301E-02	3.150E-02	9.500E+01	6.339E-02
3.170E-02	1.000E+02	6.331E-02	3.166E-02	1.100E+02	6.222E-02	3.111E-02	1.200E+02
6.048E-02	3.024E-02	1.300E+02	5.880E-02	2.940E-02	1.400E+02	5.752E-02	2.876E-02
1.500E+02	5.475E-02	2.738E-02	1.600E+02	5.627E-02	2.814E-02	1.700E+02	5.831E-02
2.916E-02	1.800E+02	6.114E-02	3.057E-02	1.900E+02	6.538E-02	3.269E-02	2.000E+02
7.005E-02	3.503E-02						
0	1	60	148	29			n+Nd148
7.339E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	4.910E-10

2.455E-10	2.800E+01	3.450E-09	1.725E-09	3.000E+01	3.095E-07	1.548E-07	3.500E+01
1.143E-04	5.715E-05	4.000E+01	3.097E-03	1.548E-03	4.500E+01	9.708E-03	4.854E-03
5.000E+01	1.702E-02	8.510E-03	5.500E+01	2.420E-02	1.210E-02	6.000E+01	3.037E-02
1.519E-02	6.500E+01	3.566E-02	1.783E-02	7.000E+01	3.922E-02	1.961E-02	7.500E+01
4.281E-02	2.141E-02	8.000E+01	4.572E-02	2.286E-02	8.500E+01	4.804E-02	2.402E-02
9.000E+01	4.985E-02	2.492E-02	9.500E+01	5.041E-02	2.521E-02	1.000E+02	5.055E-02
2.527E-02	1.100E+02	4.995E-02	2.498E-02	1.200E+02	4.866E-02	2.433E-02	1.300E+02
4.726E-02	2.363E-02	1.400E+02	4.606E-02	2.303E-02	1.500E+02	4.726E-02	2.363E-02
1.600E+02	4.795E-02	2.397E-02	1.700E+02	4.948E-02	2.474E-02	1.800E+02	5.136E-02
2.568E-02	1.900E+02	5.413E-02	2.706E-02	2.000E+02	5.790E-02	2.895E-02	
0	1	60	150	28			n+Nd150
9.684E+00	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	2.247E-10
1.124E-10	3.000E+01	1.634E-09	8.170E-10	3.500E+01	8.837E-06	4.419E-06	4.000E+01
7.969E-04	3.985E-04	4.500E+01	4.660E-03	2.330E-03	5.000E+01	9.895E-03	4.947E-03
5.500E+01	1.514E-02	7.570E-03	6.000E+01	1.994E-02	9.970E-03	6.500E+01	2.415E-02
1.208E-02	7.000E+01	2.773E-02	1.387E-02	7.500E+01	3.075E-02	1.537E-02	8.000E+01
3.326E-02	1.663E-02	8.500E+01	3.530E-02	1.765E-02	9.000E+01	3.693E-02	1.846E-02
9.500E+01	3.766E-02	1.883E-02	1.000E+02	3.802E-02	1.901E-02	1.100E+02	3.795E-02
1.897E-02	1.200E+02	3.718E-02	1.859E-02	1.300E+02	3.612E-02	1.806E-02	1.400E+02
3.508E-02	1.754E-02	1.500E+02	3.431E-02	1.716E-02	1.600E+02	3.469E-02	1.734E-02
1.700E+02	3.505E-02	1.752E-02	1.800E+02	3.638E-02	1.819E-02	1.900E+02	3.822E-02
1.911E-02	2.000E+02	4.074E-02	2.037E-02				
0	1	62	144	32			n+Sm144
2.117E+00	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	1.617E-10
8.085E-11	2.200E+01	9.477E-10	4.738E-10	2.400E+01	6.449E-09	3.225E-09	2.600E+01
5.060E-07	2.530E-07	2.800E+01	9.093E-06	4.546E-06	3.000E+01	6.253E-05	3.126E-05
3.500E+01	2.771E-03	1.386E-03	4.000E+01	1.113E-02	5.565E-03	4.500E+01	2.096E-02
1.048E-02	5.000E+01	3.035E-02	1.517E-02	5.500E+01	3.891E-02	1.946E-02	6.000E+01
4.617E-02	2.309E-02	6.500E+01	5.231E-02	2.616E-02	7.000E+01	5.605E-02	2.803E-02
7.500E+01	6.009E-02	3.004E-02	8.000E+01	6.331E-02	3.166E-02	8.500E+01	6.586E-02
3.293E-02	9.000E+01	6.781E-02	3.390E-02	9.500E+01	6.800E-02	3.400E-02	1.000E+02
6.775E-02	3.388E-02	1.100E+02	6.630E-02	3.315E-02	1.200E+02	6.452E-02	3.226E-02
1.300E+02	6.300E-02	3.150E-02	1.400E+02	6.197E-02	3.098E-02	1.500E+02	6.202E-02
3.101E-02	1.600E+02	6.445E-02	3.222E-02	1.700E+02	6.853E-02	3.426E-02	1.800E+02
7.381E-02	3.691E-02	1.900E+02	7.994E-02	3.997E-02	2.000E+02	8.725E-02	4.362E-02
0	1	62	147	34			n+Sm147
1.541E+00	0.000E+00	0.000E+00	1.700E+01	0.000E+00	0.000E+00	1.800E+01	1.050E-10
5.250E-11	1.900E+01	2.564E-10	1.282E-10	2.000E+01	6.152E-10	3.076E-10	2.200E+01
3.950E-09	1.975E-09	2.400E+01	1.722E-07	8.610E-08	2.600E+01	5.286E-06	2.643E-06
2.800E+01	4.473E-05	2.237E-05	3.000E+01	2.908E-04	1.454E-04	3.500E+01	5.047E-03
2.524E-03	4.000E+01	1.398E-02	6.990E-03	4.500E+01	2.349E-02	1.175E-02	5.000E+01
3.197E-02	1.598E-02	5.500E+01	3.974E-02	1.987E-02	6.000E+01	4.642E-02	2.321E-02
6.500E+01	5.324E-02	2.662E-02	7.000E+01	5.801E-02	2.900E-02	7.500E+01	6.190E-02
3.095E-02	8.000E+01	6.504E-02	3.252E-02	8.500E+01	6.752E-02	3.376E-02	9.000E+01
6.945E-02	3.472E-02	9.500E+01	6.962E-02	3.481E-02	1.000E+02	6.936E-02	3.468E-02
1.100E+02	6.808E-02	3.404E-02	1.200E+02	6.626E-02	3.313E-02	1.300E+02	6.502E-02
3.251E-02	1.400E+02	6.191E-02	3.095E-02	1.500E+02	6.260E-02	3.130E-02	1.600E+02
6.557E-02	3.279E-02	1.700E+02	6.940E-02	3.470E-02	1.800E+02	7.470E-02	3.735E-02
1.900E+02	8.138E-02	4.069E-02	2.000E+02	8.879E-02	4.439E-02		
0	1	62	148	32			n+Sm148
2.519E+00	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	1.376E-10
6.880E-11	2.200E+01	8.137E-10	4.068E-10	2.400E+01	5.493E-09	2.746E-09	2.600E+01
3.230E-07	1.615E-07	2.800E+01	7.605E-06	3.803E-06	3.000E+01	5.510E-05	2.755E-05
3.500E+01	2.768E-03	1.384E-03	4.000E+01	1.186E-02	5.930E-03	4.500E+01	2.270E-02
1.135E-02	5.000E+01	3.307E-02	1.654E-02	5.500E+01	4.290E-02	2.145E-02	6.000E+01
5.090E-02	2.545E-02	6.500E+01	5.764E-02	2.882E-02	7.000E+01	6.165E-02	3.083E-02
7.500E+01	6.602E-02	3.301E-02	8.000E+01	6.950E-02	3.475E-02	8.500E+01	7.223E-02
3.612E-02	9.000E+01	7.434E-02	3.717E-02	9.500E+01	7.452E-02	3.726E-02	1.000E+02
7.422E-02	3.711E-02	1.100E+02	7.282E-02	3.641E-02	1.200E+02	7.086E-02	3.543E-02
1.300E+02	6.932E-02	3.466E-02	1.400E+02	6.828E-02	3.414E-02	1.500E+02	7.085E-02
3.542E-02	1.600E+02	7.341E-02	3.671E-02	1.700E+02	7.724E-02	3.862E-02	1.800E+02
8.187E-02	4.093E-02	1.900E+02	8.813E-02	4.407E-02	2.000E+02	9.560E-02	4.780E-02
0	1	62	149	32			n+Sm149
3.250E+00	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	1.008E-10
5.040E-11	2.200E+01	6.558E-10	3.279E-10	2.400E+01	4.401E-09	2.201E-09	2.600E+01
3.736E-07	1.868E-07	2.800E+01	6.870E-06	3.435E-06	3.000E+01	4.836E-05	2.418E-05

3.500E+01	2.211E-03	1.105E-03	4.000E+01	8.852E-03	4.426E-03	4.500E+01	1.670E-02
8.350E-03	5.000E+01	2.428E-02	1.214E-02	5.500E+01	3.095E-02	1.547E-02	6.000E+01
3.685E-02	1.843E-02	6.500E+01	4.189E-02	2.094E-02	7.000E+01	4.705E-02	2.353E-02
7.500E+01	5.057E-02	2.528E-02	8.000E+01	5.344E-02	2.672E-02	8.500E+01	5.573E-02
2.787E-02	9.000E+01	5.753E-02	2.876E-02	9.500E+01	5.790E-02	2.895E-02	1.000E+02
5.785E-02	2.892E-02	1.100E+02	5.707E-02	2.854E-02	1.200E+02	5.578E-02	2.789E-02
1.300E+02	5.481E-02	2.740E-02	1.400E+02	5.422E-02	2.711E-02	1.500E+02	5.429E-02
2.714E-02	1.600E+02	5.760E-02	2.880E-02	1.700E+02	6.186E-02	3.093E-02	1.800E+02
6.705E-02	3.352E-02	1.900E+02	7.341E-02	3.671E-02	2.000E+02	8.076E-02	4.038E-02
0	1	62	150	31			n+Sm150
4.348E+00	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	1.165E-10
5.825E-11	2.400E+01	7.801E-10	3.901E-10	2.600E+01	5.187E-09	2.594E-09	2.800E+01
3.634E-07	1.817E-07	3.000E+01	7.047E-06	3.523E-06	3.500E+01	7.960E-04	3.980E-04
4.000E+01	6.729E-03	3.364E-03	4.500E+01	1.536E-02	7.680E-03	5.000E+01	2.410E-02
1.205E-02	5.500E+01	3.205E-02	1.603E-02	6.000E+01	3.898E-02	1.949E-02	6.500E+01
4.487E-02	2.244E-02	7.000E+01	4.975E-02	2.488E-02	7.500E+01	5.376E-02	2.688E-02
8.000E+01	5.700E-02	2.850E-02	8.500E+01	5.954E-02	2.977E-02	9.000E+01	6.152E-02
3.076E-02	9.500E+01	6.194E-02	3.097E-02	1.000E+02	6.187E-02	3.094E-02	1.100E+02
6.090E-02	3.045E-02	1.200E+02	5.921E-02	2.960E-02	1.300E+02	5.757E-02	2.879E-02
1.400E+02	5.645E-02	2.823E-02	1.500E+02	5.557E-02	2.779E-02	1.600E+02	5.815E-02
2.908E-02	1.700E+02	6.101E-02	3.051E-02	1.800E+02	6.532E-02	3.266E-02	1.900E+02
7.024E-02	3.512E-02	2.000E+02	7.661E-02	3.830E-02			
0	1	62	152	29			n+Sm152
6.837E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	2.959E-10
1.479E-10	2.800E+01	2.034E-09	1.017E-09	3.000E+01	9.828E-08	4.914E-08	3.500E+01
7.305E-05	3.653E-05	4.000E+01	2.325E-03	1.162E-03	4.500E+01	7.879E-03	3.940E-03
5.000E+01	1.420E-02	7.100E-03	5.500E+01	2.002E-02	1.001E-02	6.000E+01	2.541E-02
1.270E-02	6.500E+01	3.009E-02	1.504E-02	7.000E+01	3.477E-02	1.739E-02	7.500E+01
3.813E-02	1.906E-02	8.000E+01	4.091E-02	2.046E-02	8.500E+01	4.315E-02	2.158E-02
9.000E+01	4.493E-02	2.246E-02	9.500E+01	4.560E-02	2.280E-02	1.000E+02	4.586E-02
2.293E-02	1.100E+02	4.554E-02	2.277E-02	1.200E+02	4.450E-02	2.225E-02	1.300E+02
4.331E-02	2.166E-02	1.400E+02	4.221E-02	2.110E-02	1.500E+02	3.976E-02	1.988E-02
1.600E+02	4.091E-02	2.046E-02	1.700E+02	4.243E-02	2.122E-02	1.800E+02	4.540E-02
2.270E-02	1.900E+02	4.863E-02	2.431E-02	2.000E+02	5.262E-02	2.631E-02	
0	1	62	154	27			n+Sm154
9.834E+00	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	4.967E-10
2.483E-10	3.500E+01	2.227E-06	1.114E-06	4.000E+01	3.129E-04	1.565E-04	4.500E+01
3.048E-03	1.524E-03	5.000E+01	7.278E-03	3.639E-03	5.500E+01	1.180E-02	5.900E-03
6.000E+01	1.596E-02	7.980E-03	6.500E+01	1.968E-02	9.840E-03	7.000E+01	2.290E-02
1.145E-02	7.500E+01	2.563E-02	1.282E-02	8.000E+01	2.794E-02	1.397E-02	8.500E+01
2.984E-02	1.492E-02	9.000E+01	3.138E-02	1.569E-02	9.500E+01	3.217E-02	1.608E-02
1.000E+02	3.263E-02	1.631E-02	1.100E+02	3.279E-02	1.639E-02	1.200E+02	3.227E-02
1.614E-02	1.300E+02	3.142E-02	1.571E-02	1.400E+02	3.050E-02	1.525E-02	1.500E+02
2.845E-02	1.422E-02	1.600E+02	2.864E-02	1.432E-02	1.700E+02	2.919E-02	1.460E-02
1.800E+02	3.016E-02	1.508E-02	1.900E+02	3.186E-02	1.593E-02	2.000E+02	3.413E-02
1.707E-02							
0	1	63	151	32			n+Eu151
2.744E+00	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	1.630E-10
8.150E-11	2.200E+01	9.743E-10	4.872E-10	2.400E+01	6.290E-09	3.145E-09	2.600E+01
5.076E-07	2.538E-07	2.800E+01	9.177E-06	4.589E-06	3.000E+01	7.160E-05	3.580E-05
3.500E+01	2.938E-03	1.469E-03	4.000E+01	1.138E-02	5.690E-03	4.500E+01	2.121E-02
1.060E-02	5.000E+01	3.068E-02	1.534E-02	5.500E+01	3.910E-02	1.955E-02	6.000E+01
4.636E-02	2.318E-02	6.500E+01	5.246E-02	2.623E-02	7.000E+01	5.742E-02	2.871E-02
7.500E+01	6.149E-02	3.075E-02	8.000E+01	6.475E-02	3.238E-02	8.500E+01	6.728E-02
3.364E-02	9.000E+01	6.923E-02	3.461E-02	9.500E+01	6.939E-02	3.469E-02	1.000E+02
6.908E-02	3.454E-02	1.100E+02	6.766E-02	3.383E-02	1.200E+02	6.573E-02	3.286E-02
1.300E+02	6.396E-02	3.198E-02	1.400E+02	6.289E-02	3.145E-02	1.500E+02	6.238E-02
3.119E-02	1.600E+02	6.548E-02	3.274E-02	1.700E+02	6.942E-02	3.471E-02	1.800E+02
7.422E-02	3.711E-02	1.900E+02	8.031E-02	4.016E-02	2.000E+02	8.747E-02	4.374E-02
0	1	63	153	30			n+Eu153
5.654E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	2.579E-10
1.290E-10	2.600E+01	1.725E-09	8.625E-10	2.800E+01	4.423E-08	2.211E-08	3.000E+01
1.979E-06	9.895E-07	3.500E+01	3.186E-04	1.593E-04	4.000E+01	4.107E-03	2.054E-03
4.500E+01	1.047E-02	5.235E-03	5.000E+01	1.717E-02	8.585E-03	5.500E+01	2.341E-02
1.171E-02	6.000E+01	2.893E-02	1.447E-02	6.500E+01	3.368E-02	1.684E-02	7.000E+01
3.767E-02	1.884E-02	7.500E+01	4.099E-02	2.049E-02	8.000E+01	4.373E-02	2.186E-02

8.500E+01	4.590E-02	2.295E-02	9.000E+01	4.763E-02	2.381E-02	9.500E+01	4.817E-02
2.408E-02	1.000E+02	4.830E-02	2.415E-02	1.100E+02	4.776E-02	2.388E-02	1.200E+02
4.659E-02	2.329E-02	1.300E+02	4.540E-02	2.270E-02	1.400E+02	4.437E-02	2.218E-02
1.500E+02	4.360E-02	2.180E-02	1.600E+02	4.500E-02	2.250E-02	1.700E+02	4.705E-02
2.353E-02	1.800E+02	5.038E-02	2.519E-02	1.900E+02	5.465E-02	2.732E-02	2.000E+02
5.972E-02	2.986E-02						
0	1	64	152	32			n+Gd152
1.492E+00	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	1.739E-10
8.695E-11	2.200E+01	1.030E-09	5.150E-10	2.400E+01	6.478E-09	3.239E-09	2.600E+01
4.876E-07	2.438E-07	2.800E+01	8.974E-06	4.487E-06	3.000E+01	6.961E-05	3.481E-05
3.500E+01	2.821E-03	1.411E-03	4.000E+01	1.168E-02	5.840E-03	4.500E+01	2.219E-02
1.110E-02	5.000E+01	3.229E-02	1.614E-02	5.500E+01	4.146E-02	2.073E-02	6.000E+01
4.923E-02	2.462E-02	6.500E+01	5.577E-02	2.789E-02	7.000E+01	6.260E-02	3.130E-02
7.500E+01	6.709E-02	3.354E-02	8.000E+01	7.071E-02	3.535E-02	8.500E+01	7.352E-02
3.676E-02	9.000E+01	7.573E-02	3.787E-02	9.500E+01	7.600E-02	3.800E-02	1.000E+02
7.571E-02	3.785E-02	1.100E+02	7.436E-02	3.718E-02	1.200E+02	7.243E-02	3.621E-02
1.300E+02	7.080E-02	3.540E-02	1.400E+02	7.028E-02	3.514E-02	1.500E+02	6.720E-02
3.360E-02	1.600E+02	7.147E-02	3.574E-02	1.700E+02	7.600E-02	3.800E-02	1.800E+02
8.202E-02	4.101E-02	1.900E+02	9.047E-02	4.523E-02	2.000E+02	9.898E-02	4.949E-02
0	1	64	154	30			n+Gd154
4.025E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	3.809E-10
1.904E-10	2.600E+01	2.478E-09	1.239E-09	2.800E+01	1.015E-07	5.075E-08	3.000E+01
3.351E-06	1.676E-06	3.500E+01	4.470E-04	2.235E-04	4.000E+01	4.882E-03	2.441E-03
4.500E+01	1.201E-02	6.005E-03	5.000E+01	1.942E-02	9.710E-03	5.500E+01	2.611E-02
1.306E-02	6.000E+01	3.214E-02	1.607E-02	6.500E+01	3.733E-02	1.867E-02	7.000E+01
4.168E-02	2.084E-02	7.500E+01	4.531E-02	2.266E-02	8.000E+01	4.829E-02	2.414E-02
8.500E+01	5.066E-02	2.533E-02	9.000E+01	5.256E-02	2.628E-02	9.500E+01	5.313E-02
2.656E-02	1.000E+02	5.326E-02	2.663E-02	1.100E+02	5.270E-02	2.635E-02	1.200E+02
5.147E-02	2.574E-02	1.300E+02	5.020E-02	2.510E-02	1.400E+02	4.931E-02	2.465E-02
1.500E+02	5.065E-02	2.533E-02	1.600E+02	5.261E-02	2.630E-02	1.700E+02	5.526E-02
2.763E-02	1.800E+02	5.972E-02	2.986E-02	1.900E+02	6.497E-02	3.248E-02	2.000E+02
7.138E-02	3.569E-02						
0	1	64	155	30			n+Gd155
5.430E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.446E-10
7.230E-11	2.600E+01	9.770E-10	4.885E-10	2.800E+01	1.230E-08	6.150E-09	3.000E+01
1.284E-06	6.420E-07	3.500E+01	1.906E-04	9.530E-05	4.000E+01	2.818E-03	1.409E-03
4.500E+01	7.479E-03	3.740E-03	5.000E+01	1.250E-02	6.250E-03	5.500E+01	1.725E-02
8.625E-03	6.000E+01	2.151E-02	1.076E-02	6.500E+01	2.524E-02	1.262E-02	7.000E+01
2.845E-02	1.422E-02	7.500E+01	3.116E-02	1.558E-02	8.000E+01	3.343E-02	1.672E-02
8.500E+01	3.529E-02	1.765E-02	9.000E+01	3.680E-02	1.840E-02	9.500E+01	3.740E-02
1.870E-02	1.000E+02	3.768E-02	1.884E-02	1.100E+02	3.755E-02	1.878E-02	1.200E+02
3.687E-02	1.843E-02	1.300E+02	3.604E-02	1.802E-02	1.400E+02	3.540E-02	1.770E-02
1.500E+02	3.524E-02	1.762E-02	1.600E+02	3.692E-02	1.846E-02	1.700E+02	3.880E-02
1.940E-02	1.800E+02	4.173E-02	2.087E-02	1.900E+02	4.548E-02	2.274E-02	2.000E+02
5.056E-02	2.528E-02						
0	1	64	156	29			n+Gd156
6.594E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	1.433E-10
7.165E-11	2.800E+01	9.641E-10	4.821E-10	3.000E+01	6.632E-09	3.316E-09	3.500E+01
3.310E-05	1.655E-05	4.000E+01	1.494E-03	7.470E-04	4.500E+01	6.003E-03	3.001E-03
5.000E+01	1.144E-02	5.720E-03	5.500E+01	1.673E-02	8.365E-03	6.000E+01	2.157E-02
1.078E-02	6.500E+01	2.580E-02	1.290E-02	7.000E+01	2.942E-02	1.471E-02	7.500E+01
3.248E-02	1.624E-02	8.000E+01	3.503E-02	1.751E-02	8.500E+01	3.710E-02	1.855E-02
9.000E+01	3.878E-02	1.939E-02	9.500E+01	3.950E-02	1.975E-02	1.000E+02	3.985E-02
1.992E-02	1.100E+02	3.972E-02	1.986E-02	1.200E+02	3.886E-02	1.943E-02	1.300E+02
3.773E-02	1.886E-02	1.400E+02	3.663E-02	1.832E-02	1.500E+02	3.579E-02	1.790E-02
1.600E+02	3.612E-02	1.806E-02	1.700E+02	3.718E-02	1.859E-02	1.800E+02	3.901E-02
1.951E-02	1.900E+02	4.141E-02	2.071E-02	2.000E+02	4.494E-02	2.247E-02	
0	1	64	157	28			n+Gd157
7.625E+00	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	6.588E-10
3.294E-10	3.000E+01	4.650E-09	2.325E-09	3.500E+01	2.152E-05	1.076E-05	4.000E+01
1.071E-03	5.355E-04	4.500E+01	4.468E-03	2.234E-03	5.000E+01	8.615E-03	4.307E-03
5.500E+01	1.281E-02	6.405E-03	6.000E+01	1.660E-02	8.300E-03	6.500E+01	1.995E-02
9.975E-03	7.000E+01	2.284E-02	1.142E-02	7.500E+01	2.531E-02	1.265E-02	8.000E+01
2.739E-02	1.370E-02	8.500E+01	2.910E-02	1.455E-02	9.000E+01	3.050E-02	1.525E-02
9.500E+01	3.116E-02	1.558E-02	1.000E+02	3.151E-02	1.576E-02	1.100E+02	3.154E-02
1.577E-02	1.200E+02	3.096E-02	1.548E-02	1.300E+02	3.009E-02	1.504E-02	1.400E+02

2.916E-02	1.458E-02	1.500E+02	2.734E-02	1.367E-02	1.600E+02	2.764E-02	1.382E-02
1.700E+02	2.825E-02	1.413E-02	1.800E+02	2.954E-02	1.477E-02	1.900E+02	3.087E-02
1.544E-02	2.000E+02	3.330E-02	1.665E-02				
0	1	64	158	28			n+Gd158
8.290E+00	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	1.713E-10
8.565E-11	3.000E+01	1.185E-09	5.925E-10	3.500E+01	5.675E-06	2.837E-06	4.000E+01
5.487E-04	2.743E-04	4.500E+01	3.755E-03	1.878E-03	5.000E+01	8.374E-03	4.187E-03
5.500E+01	1.306E-02	6.530E-03	6.000E+01	1.743E-02	8.715E-03	6.500E+01	2.129E-02
1.064E-02	7.000E+01	2.514E-02	1.257E-02	7.500E+01	2.804E-02	1.402E-02	8.000E+01
3.046E-02	1.523E-02	8.500E+01	3.246E-02	1.623E-02	9.000E+01	3.408E-02	1.704E-02
9.500E+01	3.488E-02	1.744E-02	1.000E+02	3.531E-02	1.766E-02	1.100E+02	3.537E-02
1.768E-02	1.200E+02	3.469E-02	1.734E-02	1.300E+02	3.362E-02	1.681E-02	1.400E+02
3.242E-02	1.621E-02	1.500E+02	3.114E-02	1.557E-02	1.600E+02	3.086E-02	1.543E-02
1.700E+02	3.092E-02	1.546E-02	1.800E+02	3.122E-02	1.561E-02	1.900E+02	3.210E-02
1.605E-02	2.000E+02	3.319E-02	1.659E-02				
0	1	64	160	27			n+Gd160
1.002E+01	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	1.784E-10
8.920E-11	3.500E+01	5.751E-07	2.876E-07	4.000E+01	1.239E-04	6.195E-05	4.500E+01
2.097E-03	1.048E-03	5.000E+01	5.812E-03	2.906E-03	5.500E+01	9.961E-03	4.980E-03
6.000E+01	1.388E-02	6.940E-03	6.500E+01	1.742E-02	8.710E-03	7.000E+01	2.050E-02
1.025E-02	7.500E+01	2.315E-02	1.158E-02	8.000E+01	2.539E-02	1.269E-02	8.500E+01
2.726E-02	1.363E-02	9.000E+01	2.878E-02	1.439E-02	9.500E+01	2.963E-02	1.482E-02
1.000E+02	3.014E-02	1.507E-02	1.100E+02	3.043E-02	1.521E-02	1.200E+02	3.001E-02
1.500E-02	1.300E+02	2.917E-02	1.459E-02	1.400E+02	2.814E-02	1.407E-02	1.500E+02
2.600E-02	1.300E-02	1.600E+02	2.553E-02	1.277E-02	1.700E+02	2.521E-02	1.260E-02
1.800E+02	2.498E-02	1.249E-02	1.900E+02	2.496E-02	1.248E-02	2.000E+02	2.532E-02
1.266E-02							
0	1	65	159	29			n+Tb159
6.595E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	2.507E-10
1.254E-10	2.800E+01	1.688E-09	8.440E-10	3.000E+01	7.873E-08	3.937E-08	3.500E+01
5.728E-05	2.864E-05	4.000E+01	1.798E-03	8.990E-04	4.500E+01	6.446E-03	3.223E-03
5.000E+01	1.186E-02	5.930E-03	5.500E+01	1.711E-02	8.555E-03	6.000E+01	2.185E-02
1.093E-02	6.500E+01	2.600E-02	1.300E-02	7.000E+01	2.953E-02	1.477E-02	7.500E+01
3.251E-02	1.625E-02	8.000E+01	3.499E-02	1.750E-02	8.500E+01	3.701E-02	1.851E-02
9.000E+01	3.862E-02	1.931E-02	9.500E+01	3.928E-02	1.964E-02	1.000E+02	3.955E-02
1.978E-02	1.100E+02	3.929E-02	1.964E-02	1.200E+02	3.828E-02	1.914E-02	1.300E+02
3.692E-02	1.846E-02	1.400E+02	3.553E-02	1.776E-02	1.500E+02	3.418E-02	1.709E-02
1.600E+02	3.380E-02	1.690E-02	1.700E+02	3.393E-02	1.697E-02	1.800E+02	3.458E-02
1.729E-02	1.900E+02	3.559E-02	1.779E-02	2.000E+02	3.725E-02	1.862E-02	
0	1	66	156	32			n+Dy156
1.179E+00	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	1.015E-10
5.075E-11	2.200E+01	5.214E-10	2.607E-10	2.400E+01	3.141E-09	1.570E-09	2.600E+01
8.205E-08	4.102E-08	2.800E+01	3.697E-06	1.848E-06	3.000E+01	3.196E-05	1.598E-05
3.500E+01	1.801E-03	9.005E-04	4.000E+01	8.793E-03	4.397E-03	4.500E+01	1.759E-02
8.795E-03	5.000E+01	2.625E-02	1.312E-02	5.500E+01	3.390E-02	1.695E-02	6.000E+01
4.070E-02	2.035E-02	6.500E+01	4.649E-02	2.324E-02	7.000E+01	5.246E-02	2.623E-02
7.500E+01	5.654E-02	2.827E-02	8.000E+01	5.986E-02	2.993E-02	8.500E+01	6.249E-02
3.124E-02	9.000E+01	6.458E-02	3.229E-02	9.500E+01	6.505E-02	3.252E-02	1.000E+02
6.503E-02	3.252E-02	1.100E+02	6.416E-02	3.208E-02	1.200E+02	6.270E-02	3.135E-02
1.300E+02	6.141E-02	3.070E-02	1.400E+02	6.095E-02	3.047E-02	1.500E+02	6.119E-02
3.060E-02	1.600E+02	6.525E-02	3.263E-02	1.700E+02	6.946E-02	3.473E-02	1.800E+02
7.578E-02	3.789E-02	1.900E+02	8.347E-02	4.174E-02	2.000E+02	9.261E-02	4.630E-02
0	1	66	158	30			n+Dy158
3.363E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	3.325E-10
1.662E-10	2.600E+01	1.918E-09	9.590E-10	2.800E+01	4.684E-08	2.342E-08	3.000E+01
2.363E-06	1.182E-06	3.500E+01	3.344E-04	1.672E-04	4.000E+01	4.174E-03	2.087E-03
4.500E+01	1.067E-02	5.335E-03	5.000E+01	1.757E-02	8.785E-03	5.500E+01	2.388E-02
1.194E-02	6.000E+01	2.959E-02	1.480E-02	6.500E+01	3.452E-02	1.726E-02	7.000E+01
3.951E-02	1.976E-02	7.500E+01	4.308E-02	2.154E-02	8.000E+01	4.601E-02	2.301E-02
8.500E+01	4.838E-02	2.419E-02	9.000E+01	5.025E-02	2.513E-02	9.500E+01	5.088E-02
2.544E-02	1.000E+02	5.106E-02	2.553E-02	1.100E+02	5.049E-02	2.525E-02	1.200E+02
4.912E-02	2.456E-02	1.300E+02	4.760E-02	2.380E-02	1.400E+02	4.627E-02	2.313E-02
1.500E+02	4.515E-02	2.258E-02	1.600E+02	4.681E-02	2.340E-02	1.700E+02	4.846E-02
2.423E-02	1.800E+02	5.134E-02	2.567E-02	1.900E+02	5.551E-02	2.775E-02	2.000E+02
6.028E-02	3.014E-02						
0	1	66	160	29			n+Dy160

4.946E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	4.108E-10
2.054E-10	2.800E+01	2.710E-09	1.355E-09	3.000E+01	1.560E-07	7.800E-08	3.500E+01
7.594E-05	3.797E-05	4.000E+01	2.222E-03	1.111E-03	4.500E+01	7.459E-03	3.730E-03
5.000E+01	1.347E-02	6.735E-03	5.500E+01	1.949E-02	9.745E-03	6.000E+01	2.477E-02
1.239E-02	6.500E+01	2.937E-02	1.469E-02	7.000E+01	3.257E-02	1.629E-02	7.500E+01
3.581E-02	1.791E-02	8.000E+01	3.850E-02	1.925E-02	8.500E+01	4.068E-02	2.034E-02
9.000E+01	4.243E-02	2.122E-02	9.500E+01	4.313E-02	2.157E-02	1.000E+02	4.341E-02
2.170E-02	1.100E+02	4.309E-02	2.155E-02	1.200E+02	4.200E-02	2.100E-02	1.300E+02
4.054E-02	2.027E-02	1.400E+02	3.905E-02	1.953E-02	1.500E+02	3.922E-02	1.961E-02
1.600E+02	3.896E-02	1.948E-02	1.700E+02	3.928E-02	1.964E-02	1.800E+02	3.980E-02
1.990E-02	1.900E+02	4.120E-02	2.060E-02	2.000E+02	4.330E-02	2.165E-02	
0	1	66	161	29			n+Dy161
5.597E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	3.675E-10
1.838E-10	2.800E+01	2.488E-09	1.244E-09	3.000E+01	2.695E-07	1.348E-07	3.500E+01
8.287E-05	4.143E-05	4.000E+01	1.897E-03	9.485E-04	4.500E+01	6.034E-03	3.017E-03
5.000E+01	1.073E-02	5.365E-03	5.500E+01	1.533E-02	7.665E-03	6.000E+01	1.947E-02
9.735E-03	6.500E+01	2.310E-02	1.155E-02	7.000E+01	2.571E-02	1.286E-02	7.500E+01
2.833E-02	1.417E-02	8.000E+01	3.052E-02	1.526E-02	8.500E+01	3.233E-02	1.616E-02
9.000E+01	3.379E-02	1.690E-02	9.500E+01	3.443E-02	1.722E-02	1.000E+02	3.474E-02
1.737E-02	1.100E+02	3.462E-02	1.731E-02	1.200E+02	3.383E-02	1.691E-02	1.300E+02
3.271E-02	1.636E-02	1.400E+02	3.152E-02	1.576E-02	1.500E+02	3.043E-02	1.521E-02
1.600E+02	3.027E-02	1.513E-02	1.700E+02	3.043E-02	1.521E-02	1.800E+02	3.102E-02
1.551E-02	1.900E+02	3.227E-02	1.614E-02	2.000E+02	3.409E-02	1.705E-02	
0	1	66	162	28			n+Dy162
6.556E+00	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	4.956E-10
2.478E-10	3.000E+01	3.356E-09	1.678E-09	3.500E+01	1.436E-05	7.180E-06	4.000E+01
9.382E-04	4.691E-04	4.500E+01	4.824E-03	2.412E-03	5.000E+01	9.857E-03	4.928E-03
5.500E+01	1.496E-02	7.480E-03	6.000E+01	1.960E-02	9.800E-03	6.500E+01	2.371E-02
1.185E-02	7.000E+01	2.669E-02	1.334E-02	7.500E+01	2.964E-02	1.482E-02	8.000E+01
3.211E-02	1.605E-02	8.500E+01	3.414E-02	1.707E-02	9.000E+01	3.579E-02	1.790E-02
9.500E+01	3.657E-02	1.828E-02	1.000E+02	3.697E-02	1.849E-02	1.100E+02	3.695E-02
1.847E-02	1.200E+02	3.617E-02	1.809E-02	1.300E+02	3.498E-02	1.749E-02	1.400E+02
3.371E-02	1.685E-02	1.500E+02	3.241E-02	1.621E-02	1.600E+02	3.196E-02	1.598E-02
1.700E+02	3.182E-02	1.591E-02	1.800E+02	3.200E-02	1.600E-02	1.900E+02	3.247E-02
1.623E-02	2.000E+02	3.355E-02	1.678E-02				
0	1	66	163	28			n+Dy163
7.397E+00	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	3.846E-10
1.923E-10	3.000E+01	2.656E-09	1.328E-09	3.500E+01	1.357E-05	6.785E-06	4.000E+01
7.730E-04	3.865E-04	4.500E+01	3.900E-03	1.950E-03	5.000E+01	7.936E-03	3.968E-03
5.500E+01	1.200E-02	6.000E-03	6.000E+01	1.575E-02	7.875E-03	6.500E+01	1.909E-02
9.545E-03	7.000E+01	2.198E-02	1.099E-02	7.500E+01	2.447E-02	1.223E-02	8.000E+01
2.656E-02	1.328E-02	8.500E+01	2.831E-02	1.415E-02	9.000E+01	2.973E-02	1.486E-02
9.500E+01	3.045E-02	1.523E-02	1.000E+02	3.085E-02	1.542E-02	1.100E+02	3.093E-02
1.546E-02	1.200E+02	3.036E-02	1.518E-02	1.300E+02	2.943E-02	1.472E-02	1.400E+02
2.835E-02	1.418E-02	1.500E+02	2.723E-02	1.362E-02	1.600E+02	2.682E-02	1.341E-02
1.700E+02	2.665E-02	1.333E-02	1.800E+02	2.670E-02	1.335E-02	1.900E+02	2.701E-02
1.350E-02	2.000E+02	2.767E-02	1.384E-02				
0	1	66	164	27			n+Dy164
8.511E+00	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	4.235E-10
2.117E-10	3.500E+01	1.705E-06	8.525E-07	4.000E+01	2.158E-04	1.079E-04	4.500E+01
2.645E-03	1.323E-03	5.000E+01	6.730E-03	3.365E-03	5.500E+01	1.106E-02	5.530E-03
6.000E+01	1.516E-02	7.580E-03	6.500E+01	1.884E-02	9.420E-03	7.000E+01	2.250E-02
1.125E-02	7.500E+01	2.530E-02	1.265E-02	8.000E+01	2.766E-02	1.383E-02	8.500E+01
2.963E-02	1.482E-02	9.000E+01	3.123E-02	1.562E-02	9.500E+01	3.209E-02	1.605E-02
1.000E+02	3.260E-02	1.630E-02	1.100E+02	3.284E-02	1.642E-02	1.200E+02	3.232E-02
1.616E-02	1.300E+02	3.138E-02	1.569E-02	1.400E+02	3.025E-02	1.512E-02	1.500E+02
2.896E-02	1.448E-02	1.600E+02	2.839E-02	1.419E-02	1.700E+02	2.800E-02	1.400E-02
1.800E+02	2.775E-02	1.388E-02	1.900E+02	2.775E-02	1.388E-02	2.000E+02	2.797E-02
1.398E-02							
0	1	67	165	29			n+Ho165
6.590E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	1.151E-10
5.755E-11	2.800E+01	7.609E-10	3.805E-10	3.000E+01	5.126E-09	2.563E-09	3.500E+01
2.506E-05	1.253E-05	4.000E+01	1.160E-03	5.800E-04	4.500E+01	5.195E-03	2.597E-03
5.000E+01	1.022E-02	5.110E-03	5.500E+01	1.526E-02	7.630E-03	6.000E+01	1.983E-02
9.915E-03	6.500E+01	2.386E-02	1.193E-02	7.000E+01	2.677E-02	1.338E-02	7.500E+01
2.966E-02	1.483E-02	8.000E+01	3.207E-02	1.604E-02	8.500E+01	3.405E-02	1.702E-02

9.000E+01	3.566E-02	1.783E-02	9.500E+01	3.639E-02	1.819E-02	1.000E+02	3.674E-02
1.837E-02	1.100E+02	3.665E-02	1.833E-02	1.200E+02	3.582E-02	1.791E-02	1.300E+02
3.460E-02	1.730E-02	1.400E+02	3.325E-02	1.663E-02	1.500E+02	3.189E-02	1.595E-02
1.600E+02	3.134E-02	1.567E-02	1.700E+02	3.116E-02	1.558E-02	1.800E+02	3.113E-02
1.557E-02	1.900E+02	3.140E-02	1.570E-02	2.000E+02	3.208E-02	1.604E-02	
0	1	68	162	31			n+Er162
1.508E+00	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	1.746E-10
8.730E-11	2.400E+01	1.059E-09	5.295E-10	2.600E+01	6.614E-09	3.307E-09	2.800E+01
8.024E-07	4.012E-07	3.000E+01	9.927E-06	4.963E-06	3.500E+01	7.806E-04	3.903E-04
4.000E+01	6.034E-03	3.017E-03	4.500E+01	1.364E-02	6.820E-03	5.000E+01	2.142E-02
1.071E-02	5.500E+01	2.832E-02	1.416E-02	6.000E+01	3.458E-02	1.729E-02	6.500E+01
3.994E-02	1.997E-02	7.000E+01	4.445E-02	2.223E-02	7.500E+01	4.823E-02	2.412E-02
8.000E+01	5.131E-02	2.566E-02	8.500E+01	5.378E-02	2.689E-02	9.000E+01	5.573E-02
2.787E-02	9.500E+01	5.626E-02	2.813E-02	1.000E+02	5.630E-02	2.815E-02	1.100E+02
5.540E-02	2.770E-02	1.200E+02	5.373E-02	2.686E-02	1.300E+02	5.180E-02	2.590E-02
1.400E+02	5.004E-02	2.502E-02	1.500E+02	5.055E-02	2.527E-02	1.600E+02	5.086E-02
2.543E-02	1.700E+02	5.235E-02	2.618E-02	1.800E+02	5.421E-02	2.711E-02	1.900E+02
5.689E-02	2.845E-02	2.000E+02	6.081E-02	3.041E-02			
0	1	68	164	30			n+Er164
2.970E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	2.418E-10
1.209E-10	2.600E+01	1.375E-09	6.875E-10	2.800E+01	8.834E-09	4.417E-09	3.000E+01
1.461E-06	7.305E-07	3.500E+01	2.383E-04	1.191E-04	4.000E+01	3.641E-03	1.821E-03
4.500E+01	9.928E-03	4.964E-03	5.000E+01	1.674E-02	8.370E-03	5.500E+01	2.335E-02
1.167E-02	6.000E+01	2.913E-02	1.456E-02	6.500E+01	3.414E-02	1.707E-02	7.000E+01
3.840E-02	1.920E-02	7.500E+01	4.198E-02	2.099E-02	8.000E+01	4.493E-02	2.246E-02
8.500E+01	4.732E-02	2.366E-02	9.000E+01	4.922E-02	2.461E-02	9.500E+01	4.991E-02
2.496E-02	1.000E+02	5.011E-02	2.506E-02	1.100E+02	4.954E-02	2.477E-02	1.200E+02
4.816E-02	2.408E-02	1.300E+02	4.640E-02	2.320E-02	1.400E+02	4.461E-02	2.230E-02
1.500E+02	4.113E-02	2.056E-02	1.600E+02	4.093E-02	2.047E-02	1.700E+02	4.136E-02
2.068E-02	1.800E+02	4.218E-02	2.109E-02	1.900E+02	4.363E-02	2.182E-02	2.000E+02
4.594E-02	2.297E-02						
0	1	68	166	29			n+Er166
4.710E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	2.354E-10
1.177E-10	2.800E+01	1.527E-09	7.635E-10	3.000E+01	5.137E-08	2.569E-08	3.500E+01
4.710E-05	2.355E-05	4.000E+01	1.640E-03	8.200E-04	4.500E+01	6.344E-03	3.172E-03
5.000E+01	1.198E-02	5.990E-03	5.500E+01	1.778E-02	8.890E-03	6.000E+01	2.288E-02
1.144E-02	6.500E+01	2.734E-02	1.367E-02	7.000E+01	3.116E-02	1.558E-02	7.500E+01
3.441E-02	1.721E-02	8.000E+01	3.710E-02	1.855E-02	8.500E+01	3.932E-02	1.966E-02
9.000E+01	4.111E-02	2.056E-02	9.500E+01	4.189E-02	2.094E-02	1.000E+02	4.225E-02
2.113E-02	1.100E+02	4.207E-02	2.104E-02	1.200E+02	4.108E-02	2.054E-02	1.300E+02
3.967E-02	1.983E-02	1.400E+02	3.815E-02	1.908E-02	1.500E+02	3.672E-02	1.836E-02
1.600E+02	3.622E-02	1.811E-02	1.700E+02	3.621E-02	1.810E-02	1.800E+02	3.619E-02
1.809E-02	1.900E+02	3.689E-02	1.844E-02	2.000E+02	3.797E-02	1.898E-02	
0	1	68	167	29			n+Er167
5.516E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	1.855E-10
9.275E-11	2.800E+01	1.228E-09	6.140E-10	3.000E+01	5.217E-08	2.609E-08	3.500E+01
4.015E-05	2.008E-05	4.000E+01	1.424E-03	7.120E-04	4.500E+01	5.261E-03	2.631E-03
5.000E+01	9.814E-03	4.907E-03	5.500E+01	1.427E-02	7.135E-03	6.000E+01	1.838E-02
9.190E-03	6.500E+01	2.201E-02	1.100E-02	7.000E+01	2.463E-02	1.231E-02	7.500E+01
2.726E-02	1.363E-02	8.000E+01	2.946E-02	1.473E-02	8.500E+01	3.129E-02	1.564E-02
9.000E+01	3.278E-02	1.639E-02	9.500E+01	3.347E-02	1.673E-02	1.000E+02	3.382E-02
1.691E-02	1.100E+02	3.378E-02	1.689E-02	1.200E+02	3.307E-02	1.654E-02	1.300E+02
3.199E-02	1.599E-02	1.400E+02	3.081E-02	1.541E-02	1.500E+02	3.070E-02	1.535E-02
1.600E+02	3.027E-02	1.513E-02	1.700E+02	3.012E-02	1.506E-02	1.800E+02	3.015E-02
1.507E-02	1.900E+02	3.049E-02	1.524E-02	2.000E+02	3.129E-02	1.564E-02	
0	1	68	168	28			n+Er168
6.447E+00	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	2.479E-10
1.239E-10	3.000E+01	1.639E-09	8.195E-10	3.500E+01	7.472E-06	3.736E-06	4.000E+01
6.150E-04	3.075E-04	4.500E+01	4.009E-03	2.005E-03	5.000E+01	8.735E-03	4.367E-03
5.500E+01	1.352E-02	6.760E-03	6.000E+01	1.803E-02	9.015E-03	6.500E+01	2.203E-02
1.102E-02	7.000E+01	2.550E-02	1.275E-02	7.500E+01	2.847E-02	1.423E-02	8.000E+01
3.096E-02	1.548E-02	8.500E+01	3.303E-02	1.651E-02	9.000E+01	3.472E-02	1.736E-02
9.500E+01	3.556E-02	1.778E-02	1.000E+02	3.603E-02	1.801E-02	1.100E+02	3.613E-02
1.807E-02	1.200E+02	3.544E-02	1.772E-02	1.300E+02	3.432E-02	1.716E-02	1.400E+02
3.303E-02	1.651E-02	1.500E+02	3.295E-02	1.648E-02	1.600E+02	3.228E-02	1.614E-02
1.700E+02	3.191E-02	1.596E-02	1.800E+02	3.157E-02	1.579E-02	1.900E+02	3.155E-02

7.300E-11	2.800E+01	9.273E-10	4.636E-10	3.000E+01	6.001E-09	3.001E-09	3.500E+01
2.740E-05	1.370E-05	4.000E+01	1.283E-03	6.415E-04	4.500E+01	5.595E-03	2.798E-03
5.000E+01	1.098E-02	5.490E-03	5.500E+01	1.638E-02	8.190E-03	6.000E+01	2.130E-02
1.065E-02	6.500E+01	2.565E-02	1.282E-02	7.000E+01	3.000E-02	1.500E-02	7.500E+01
3.324E-02	1.662E-02	8.000E+01	3.596E-02	1.798E-02	8.500E+01	3.820E-02	1.910E-02
9.000E+01	4.001E-02	2.000E-02	9.500E+01	4.085E-02	2.042E-02	1.000E+02	4.128E-02
2.064E-02	1.100E+02	4.122E-02	2.061E-02	1.200E+02	4.032E-02	2.016E-02	1.300E+02
3.895E-02	1.947E-02	1.400E+02	3.744E-02	1.872E-02	1.500E+02	3.451E-02	1.725E-02
1.600E+02	3.394E-02	1.697E-02	1.700E+02	3.361E-02	1.681E-02	1.800E+02	3.374E-02
1.687E-02	1.900E+02	3.394E-02	1.697E-02	2.000E+02	3.466E-02	1.733E-02	
0	1	70	173	29			n+Yb173
5.349E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	1.072E-10
5.360E-11	2.800E+01	6.967E-10	3.483E-10	3.000E+01	4.601E-09	2.301E-09	3.500E+01
2.201E-05	1.101E-05	4.000E+01	1.036E-03	5.180E-04	4.500E+01	4.477E-03	2.239E-03
5.000E+01	8.870E-03	4.435E-03	5.500E+01	1.332E-02	6.660E-03	6.000E+01	1.739E-02
8.695E-03	6.500E+01	2.100E-02	1.050E-02	7.000E+01	2.363E-02	1.182E-02	7.500E+01
2.626E-02	1.313E-02	8.000E+01	2.847E-02	1.423E-02	8.500E+01	3.031E-02	1.516E-02
9.000E+01	3.182E-02	1.591E-02	9.500E+01	3.255E-02	1.628E-02	1.000E+02	3.295E-02
1.648E-02	1.100E+02	3.301E-02	1.650E-02	1.200E+02	3.238E-02	1.619E-02	1.300E+02
3.136E-02	1.568E-02	1.400E+02	3.019E-02	1.510E-02	1.500E+02	2.900E-02	1.450E-02
1.600E+02	2.850E-02	1.425E-02	1.700E+02	2.817E-02	1.409E-02	1.800E+02	2.815E-02
1.408E-02	1.900E+02	2.833E-02	1.417E-02	2.000E+02	2.860E-02	1.430E-02	
0	1	70	174	28			n+Yb174
6.119E+00	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	1.711E-10
8.555E-11	3.000E+01	1.113E-09	5.565E-10	3.500E+01	4.761E-06	2.380E-06	4.000E+01
4.143E-04	2.071E-04	4.500E+01	3.435E-03	1.718E-03	5.000E+01	7.980E-03	3.990E-03
5.500E+01	1.272E-02	6.360E-03	6.000E+01	1.718E-02	8.590E-03	6.500E+01	2.116E-02
1.058E-02	7.000E+01	2.461E-02	1.230E-02	7.500E+01	2.756E-02	1.378E-02	8.000E+01
3.006E-02	1.503E-02	8.500E+01	3.213E-02	1.606E-02	9.000E+01	3.382E-02	1.691E-02
9.500E+01	3.470E-02	1.735E-02	1.000E+02	3.521E-02	1.760E-02	1.100E+02	3.539E-02
1.769E-02	1.200E+02	3.478E-02	1.739E-02	1.300E+02	3.373E-02	1.687E-02	1.400E+02
3.243E-02	1.622E-02	1.500E+02	3.100E-02	1.550E-02	1.600E+02	3.035E-02	1.517E-02
1.700E+02	2.977E-02	1.489E-02	1.800E+02	2.943E-02	1.472E-02	1.900E+02	2.916E-02
1.458E-02	2.000E+02	2.921E-02	1.460E-02				
0	1	70	176	27			n+Yb176
7.573E+00	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	2.583E-10
1.291E-10	3.500E+01	7.087E-07	3.543E-07	4.000E+01	1.263E-04	6.315E-05	4.500E+01
2.107E-03	1.053E-03	5.000E+01	5.935E-03	2.968E-03	5.500E+01	1.020E-02	5.100E-03
6.000E+01	1.428E-02	7.140E-03	6.500E+01	1.796E-02	8.980E-03	7.000E+01	2.121E-02
1.060E-02	7.500E+01	2.401E-02	1.201E-02	8.000E+01	2.639E-02	1.320E-02	8.500E+01
2.838E-02	1.419E-02	9.000E+01	3.002E-02	1.501E-02	9.500E+01	3.095E-02	1.547E-02
1.000E+02	3.153E-02	1.577E-02	1.100E+02	3.191E-02	1.596E-02	1.200E+02	3.151E-02
1.576E-02	1.300E+02	3.065E-02	1.533E-02	1.400E+02	2.953E-02	1.477E-02	1.500E+02
2.822E-02	1.411E-02	1.600E+02	2.755E-02	1.378E-02	1.700E+02	2.689E-02	1.345E-02
1.800E+02	2.636E-02	1.318E-02	1.900E+02	2.593E-02	1.297E-02	2.000E+02	2.565E-02
1.282E-02							
0	1	71	175	29			n+Lu175
4.090E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	3.328E-10
1.664E-10	2.800E+01	2.109E-09	1.055E-09	3.000E+01	1.264E-07	6.320E-08	3.500E+01
6.136E-05	3.068E-05	4.000E+01	1.882E-03	9.410E-04	4.500E+01	6.674E-03	3.337E-03
5.000E+01	1.229E-02	6.145E-03	5.500E+01	1.805E-02	9.025E-03	6.000E+01	2.312E-02
1.156E-02	6.500E+01	2.757E-02	1.379E-02	7.000E+01	3.073E-02	1.537E-02	7.500E+01
3.390E-02	1.695E-02	8.000E+01	3.654E-02	1.827E-02	8.500E+01	3.871E-02	1.936E-02
9.000E+01	4.045E-02	2.022E-02	9.500E+01	4.120E-02	2.060E-02	1.000E+02	4.154E-02
2.077E-02	1.100E+02	4.133E-02	2.066E-02	1.200E+02	4.029E-02	2.014E-02	1.300E+02
3.885E-02	1.943E-02	1.400E+02	3.724E-02	1.862E-02	1.500E+02	3.707E-02	1.853E-02
1.600E+02	3.632E-02	1.816E-02	1.700E+02	3.571E-02	1.785E-02	1.800E+02	3.555E-02
1.777E-02	1.900E+02	3.545E-02	1.773E-02	2.000E+02	3.575E-02	1.787E-02	
0	1	71	176	29			n+Lu176
4.869E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	2.830E-10
1.415E-10	2.800E+01	1.821E-09	9.105E-10	3.000E+01	1.141E-07	5.705E-08	3.500E+01
5.532E-05	2.766E-05	4.000E+01	1.663E-03	8.315E-04	4.500E+01	5.801E-03	2.900E-03
5.000E+01	1.065E-02	5.325E-03	5.500E+01	1.539E-02	7.695E-03	6.000E+01	1.971E-02
9.855E-03	6.500E+01	2.351E-02	1.175E-02	7.000E+01	2.679E-02	1.340E-02	7.500E+01
2.958E-02	1.479E-02	8.000E+01	3.190E-02	1.595E-02	8.500E+01	3.382E-02	1.691E-02
9.000E+01	3.538E-02	1.769E-02	9.500E+01	3.606E-02	1.803E-02	1.000E+02	3.638E-02

1.819E-02	1.100E+02	3.624E-02	1.812E-02	1.200E+02	3.537E-02	1.768E-02	1.300E+02
3.412E-02	1.706E-02	1.400E+02	3.272E-02	1.636E-02	1.500E+02	3.128E-02	1.564E-02
1.600E+02	3.062E-02	1.531E-02	1.700E+02	3.008E-02	1.504E-02	1.800E+02	2.983E-02
1.491E-02	1.900E+02	2.990E-02	1.495E-02	2.000E+02	3.020E-02	1.510E-02	
0	1	72	174	31			n+Hf174
5.518E-01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	1.149E-10
5.745E-11	2.400E+01	6.695E-10	3.348E-10	2.600E+01	4.055E-09	2.027E-09	2.800E+01
2.334E-07	1.167E-07	3.000E+01	4.784E-06	2.392E-06	3.500E+01	4.969E-04	2.484E-04
4.000E+01	4.992E-03	2.496E-03	4.500E+01	1.224E-02	6.120E-03	5.000E+01	1.986E-02
9.930E-03	5.500E+01	2.685E-02	1.342E-02	6.000E+01	3.311E-02	1.656E-02	6.500E+01
3.856E-02	1.928E-02	7.000E+01	4.225E-02	2.113E-02	7.500E+01	4.605E-02	2.303E-02
8.000E+01	4.917E-02	2.458E-02	8.500E+01	5.171E-02	2.585E-02	9.000E+01	5.370E-02
2.685E-02	9.500E+01	5.436E-02	2.718E-02	1.000E+02	5.451E-02	2.726E-02	1.100E+02
5.377E-02	2.688E-02	1.200E+02	5.218E-02	2.609E-02	1.300E+02	5.017E-02	2.508E-02
1.400E+02	4.807E-02	2.404E-02	1.500E+02	4.803E-02	2.402E-02	1.600E+02	4.748E-02
2.374E-02	1.700E+02	4.731E-02	2.365E-02	1.800E+02	4.788E-02	2.394E-02	1.900E+02
4.866E-02	2.433E-02	2.000E+02	5.038E-02	2.519E-02			
0	1	72	176	30			n+Hf176
2.174E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.285E-10
6.425E-11	2.600E+01	7.126E-10	3.563E-10	2.800E+01	4.420E-09	2.210E-09	3.000E+01
4.834E-07	2.417E-07	3.500E+01	1.179E-04	5.895E-05	4.000E+01	2.655E-03	1.327E-03
4.500E+01	8.370E-03	4.185E-03	5.000E+01	1.486E-02	7.430E-03	5.500E+01	2.127E-02
1.064E-02	6.000E+01	2.695E-02	1.348E-02	6.500E+01	3.192E-02	1.596E-02	7.000E+01
3.613E-02	1.807E-02	7.500E+01	3.971E-02	1.986E-02	8.000E+01	4.268E-02	2.134E-02
8.500E+01	4.511E-02	2.255E-02	9.000E+01	4.705E-02	2.353E-02	9.500E+01	4.783E-02
2.391E-02	1.000E+02	4.816E-02	2.408E-02	1.100E+02	4.779E-02	2.389E-02	1.200E+02
4.654E-02	2.327E-02	1.300E+02	4.485E-02	2.243E-02	1.400E+02	4.300E-02	2.150E-02
1.500E+02	3.963E-02	1.981E-02	1.600E+02	3.903E-02	1.952E-02	1.700E+02	3.869E-02
1.935E-02	1.800E+02	3.890E-02	1.945E-02	1.900E+02	3.939E-02	1.970E-02	2.000E+02
4.034E-02	2.017E-02						
0	1	72	177	30			n+Hf177
2.880E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.060E-10
5.300E-11	2.600E+01	6.586E-10	3.293E-10	2.800E+01	4.178E-09	2.089E-09	3.000E+01
5.653E-07	2.827E-07	3.500E+01	1.168E-04	5.840E-05	4.000E+01	2.347E-03	1.174E-03
4.500E+01	7.115E-03	3.557E-03	5.000E+01	1.248E-02	6.240E-03	5.500E+01	1.755E-02
8.775E-03	6.000E+01	2.222E-02	1.111E-02	6.500E+01	2.632E-02	1.316E-02	7.000E+01
2.986E-02	1.493E-02	7.500E+01	3.287E-02	1.644E-02	8.000E+01	3.539E-02	1.769E-02
8.500E+01	3.747E-02	1.874E-02	9.000E+01	3.915E-02	1.957E-02	9.500E+01	3.987E-02
1.994E-02	1.000E+02	4.020E-02	2.010E-02	1.100E+02	4.000E-02	2.000E-02	1.200E+02
3.903E-02	1.952E-02	1.300E+02	3.764E-02	1.882E-02	1.400E+02	3.613E-02	1.807E-02
1.500E+02	3.595E-02	1.798E-02	1.600E+02	3.533E-02	1.767E-02	1.700E+02	3.487E-02
1.743E-02	1.800E+02	3.487E-02	1.743E-02	1.900E+02	3.511E-02	1.756E-02	2.000E+02
3.564E-02	1.782E-02						
0	1	72	178	29			n+Hf178
3.674E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	1.625E-10
8.125E-11	2.800E+01	1.013E-09	5.065E-10	3.000E+01	6.446E-09	3.223E-09	3.500E+01
2.872E-05	1.436E-05	4.000E+01	1.307E-03	6.535E-04	4.500E+01	5.688E-03	2.844E-03
5.000E+01	1.128E-02	5.640E-03	5.500E+01	1.692E-02	8.460E-03	6.000E+01	2.204E-02
1.102E-02	6.500E+01	2.657E-02	1.328E-02	7.000E+01	2.984E-02	1.492E-02	7.500E+01
3.310E-02	1.655E-02	8.000E+01	3.583E-02	1.792E-02	8.500E+01	3.808E-02	1.904E-02
9.000E+01	3.991E-02	1.996E-02	9.500E+01	4.076E-02	2.038E-02	1.000E+02	4.120E-02
2.060E-02	1.100E+02	4.115E-02	2.057E-02	1.200E+02	4.025E-02	2.013E-02	1.300E+02
3.887E-02	1.944E-02	1.400E+02	3.730E-02	1.865E-02	1.500E+02	3.571E-02	1.785E-02
1.600E+02	3.492E-02	1.746E-02	1.700E+02	3.432E-02	1.716E-02	1.800E+02	3.411E-02
1.706E-02	1.900E+02	3.401E-02	1.700E-02	2.000E+02	3.439E-02	1.719E-02	
0	1	72	179	29			n+Hf179
4.542E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	1.192E-10
5.960E-11	2.800E+01	7.611E-10	3.805E-10	3.000E+01	6.447E-09	3.223E-09	3.500E+01
2.314E-05	1.157E-05	4.000E+01	1.006E-03	5.030E-04	4.500E+01	4.534E-03	2.267E-03
5.000E+01	8.995E-03	4.497E-03	5.500E+01	1.347E-02	6.735E-03	6.000E+01	1.760E-02
8.800E-03	6.500E+01	2.127E-02	1.064E-02	7.000E+01	2.445E-02	1.222E-02	7.500E+01
2.718E-02	1.359E-02	8.000E+01	2.949E-02	1.474E-02	8.500E+01	3.141E-02	1.571E-02
9.000E+01	3.298E-02	1.649E-02	9.500E+01	3.375E-02	1.688E-02	1.000E+02	3.419E-02
1.709E-02	1.100E+02	3.426E-02	1.713E-02	1.200E+02	3.361E-02	1.681E-02	1.300E+02
3.252E-02	1.626E-02	1.400E+02	3.127E-02	1.563E-02	1.500E+02	2.994E-02	1.497E-02
1.600E+02	2.929E-02	1.465E-02	1.700E+02	2.886E-02	1.443E-02	1.800E+02	2.850E-02

1.425E-02	1.900E+02	2.855E-02	1.427E-02	2.000E+02	2.883E-02	1.442E-02	
0	1	72	180	28			n+Hf180
5.569E+00	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	1.526E-10
7.630E-11	3.000E+01	8.795E-10	4.398E-10	3.500E+01	3.513E-06	1.757E-06	4.000E+01
3.598E-04	1.799E-04	4.500E+01	3.258E-03	1.629E-03	5.000E+01	7.793E-03	3.896E-03
5.500E+01	1.254E-02	6.270E-03	6.000E+01	1.704E-02	8.520E-03	6.500E+01	2.106E-02
1.053E-02	7.000E+01	2.509E-02	1.255E-02	7.500E+01	2.816E-02	1.408E-02	8.000E+01
3.076E-02	1.538E-02	8.500E+01	3.293E-02	1.647E-02	9.000E+01	3.470E-02	1.735E-02
9.500E+01	3.564E-02	1.782E-02	1.000E+02	3.620E-02	1.810E-02	1.100E+02	3.645E-02
1.823E-02	1.200E+02	3.587E-02	1.793E-02	1.300E+02	3.479E-02	1.740E-02	1.400E+02
3.347E-02	1.673E-02	1.500E+02	3.197E-02	1.598E-02	1.600E+02	3.123E-02	1.562E-02
1.700E+02	3.057E-02	1.528E-02	1.800E+02	3.003E-02	1.502E-02	1.900E+02	2.973E-02
1.486E-02	2.000E+02	2.958E-02	1.479E-02				
0	1	73	180	30			n+Ta180
2.781E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.862E-10
9.310E-11	2.600E+01	1.158E-09	5.790E-10	2.800E+01	1.684E-08	8.420E-09	3.000E+01
1.358E-06	6.790E-07	3.500E+01	1.934E-04	9.670E-05	4.000E+01	2.743E-03	1.372E-03
4.500E+01	7.641E-03	3.821E-03	5.000E+01	1.303E-02	6.515E-03	5.500E+01	1.840E-02
9.200E-03	6.000E+01	2.310E-02	1.155E-02	6.500E+01	2.722E-02	1.361E-02	7.000E+01
3.013E-02	1.507E-02	7.500E+01	3.307E-02	1.654E-02	8.000E+01	3.553E-02	1.776E-02
8.500E+01	3.755E-02	1.878E-02	9.000E+01	3.918E-02	1.959E-02	9.500E+01	3.984E-02
1.992E-02	1.000E+02	4.011E-02	2.005E-02	1.100E+02	3.983E-02	1.991E-02	1.200E+02
3.878E-02	1.939E-02	1.300E+02	3.734E-02	1.867E-02	1.400E+02	3.578E-02	1.789E-02
1.500E+02	3.554E-02	1.777E-02	1.600E+02	3.484E-02	1.742E-02	1.700E+02	3.430E-02
1.715E-02	1.800E+02	3.408E-02	1.704E-02	1.900E+02	3.441E-02	1.721E-02	2.000E+02
3.486E-02	1.743E-02						
0	1	73	181	29			n+Ta181
3.846E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	2.062E-10
1.031E-10	2.800E+01	1.279E-09	6.395E-10	3.000E+01	2.105E-08	1.052E-08	3.500E+01
3.596E-05	1.798E-05	4.000E+01	1.443E-03	7.215E-04	4.500E+01	5.915E-03	2.958E-03
5.000E+01	1.143E-02	5.715E-03	5.500E+01	1.660E-02	8.300E-03	6.000E+01	2.152E-02
1.076E-02	6.500E+01	2.587E-02	1.294E-02	7.000E+01	2.960E-02	1.480E-02	7.500E+01
3.279E-02	1.639E-02	8.000E+01	3.547E-02	1.774E-02	8.500E+01	3.767E-02	1.884E-02
9.000E+01	3.945E-02	1.972E-02	9.500E+01	4.027E-02	2.014E-02	1.000E+02	4.068E-02
2.034E-02	1.100E+02	4.059E-02	2.030E-02	1.200E+02	3.967E-02	1.983E-02	1.300E+02
3.827E-02	1.913E-02	1.400E+02	3.669E-02	1.835E-02	1.500E+02	3.512E-02	1.756E-02
1.600E+02	3.438E-02	1.719E-02	1.700E+02	3.370E-02	1.685E-02	1.800E+02	3.332E-02
1.666E-02	1.900E+02	3.334E-02	1.667E-02	2.000E+02	3.360E-02	1.680E-02	
0	1	74	180	30			n+W180
3.958E-01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	3.481E-10
1.741E-10	2.600E+01	2.067E-09	1.033E-09	2.800E+01	5.049E-08	2.524E-08	3.000E+01
2.307E-06	1.154E-06	3.500E+01	2.917E-04	1.458E-04	4.000E+01	3.919E-03	1.959E-03
4.500E+01	1.052E-02	5.260E-03	5.000E+01	1.768E-02	8.840E-03	5.500E+01	2.445E-02
1.222E-02	6.000E+01	3.052E-02	1.526E-02	6.500E+01	3.581E-02	1.791E-02	7.000E+01
4.032E-02	2.016E-02	7.500E+01	4.414E-02	2.207E-02	8.000E+01	4.730E-02	2.365E-02
8.500E+01	4.988E-02	2.494E-02	9.000E+01	5.194E-02	2.597E-02	9.500E+01	5.271E-02
2.635E-02	1.000E+02	5.298E-02	2.649E-02	1.100E+02	5.246E-02	2.623E-02	1.200E+02
5.098E-02	2.549E-02	1.300E+02	4.907E-02	2.454E-02	1.400E+02	4.700E-02	2.350E-02
1.500E+02	4.496E-02	2.248E-02	1.600E+02	4.435E-02	2.218E-02	1.700E+02	4.414E-02
2.207E-02	1.800E+02	4.424E-02	2.212E-02	1.900E+02	4.529E-02	2.264E-02	2.000E+02
4.620E-02	2.310E-02						
0	1	74	182	29			n+W182
2.466E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	2.639E-10
1.319E-10	2.800E+01	1.608E-09	8.040E-10	3.000E+01	4.899E-08	2.449E-08	3.500E+01
4.286E-05	2.143E-05	4.000E+01	1.592E-03	7.960E-04	4.500E+01	6.358E-03	3.179E-03
5.000E+01	1.218E-02	6.090E-03	5.500E+01	1.776E-02	8.880E-03	6.000E+01	2.299E-02
1.150E-02	6.500E+01	2.761E-02	1.380E-02	7.000E+01	3.226E-02	1.613E-02	7.500E+01
3.572E-02	1.786E-02	8.000E+01	3.862E-02	1.931E-02	8.500E+01	4.101E-02	2.050E-02
9.000E+01	4.295E-02	2.148E-02	9.500E+01	4.384E-02	2.192E-02	1.000E+02	4.429E-02
2.215E-02	1.100E+02	4.421E-02	2.210E-02	1.200E+02	4.322E-02	2.161E-02	1.300E+02
4.173E-02	2.087E-02	1.400E+02	4.005E-02	2.003E-02	1.500E+02	3.683E-02	1.842E-02
1.600E+02	3.615E-02	1.808E-02	1.700E+02	3.565E-02	1.783E-02	1.800E+02	3.555E-02
1.777E-02	1.900E+02	3.584E-02	1.792E-02	2.000E+02	3.654E-02	1.827E-02	
0	1	74	183	29			n+W183
3.093E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	2.504E-10
1.252E-10	2.800E+01	1.560E-09	7.800E-10	3.000E+01	8.316E-08	4.158E-08	3.500E+01

4.405E-05	2.203E-05	4.000E+01	1.467E-03	7.335E-04	4.500E+01	5.510E-03	2.755E-03
5.000E+01	1.038E-02	5.190E-03	5.500E+01	1.512E-02	7.560E-03	6.000E+01	1.954E-02
9.770E-03	6.500E+01	2.345E-02	1.172E-02	7.000E+01	2.683E-02	1.341E-02	7.500E+01
2.972E-02	1.486E-02	8.000E+01	3.216E-02	1.608E-02	8.500E+01	3.419E-02	1.709E-02
9.000E+01	3.584E-02	1.792E-02	9.500E+01	3.662E-02	1.831E-02	1.000E+02	3.705E-02
1.852E-02	1.100E+02	3.705E-02	1.852E-02	1.200E+02	3.628E-02	1.814E-02	1.300E+02
3.506E-02	1.753E-02	1.400E+02	3.366E-02	1.683E-02	1.500E+02	3.353E-02	1.676E-02
1.600E+02	3.284E-02	1.642E-02	1.700E+02	3.232E-02	1.616E-02	1.800E+02	3.195E-02
1.597E-02	1.900E+02	3.210E-02	1.605E-02	2.000E+02	3.250E-02	1.625E-02	
0	1	74	184	28			n+W184
3.728E+00	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	4.836E-10
2.418E-10	3.000E+01	3.021E-09	1.510E-09	3.500E+01	1.291E-05	6.455E-06	4.000E+01
7.689E-04	3.844E-04	4.500E+01	4.592E-03	2.296E-03	5.000E+01	9.858E-03	4.929E-03
5.500E+01	1.512E-02	7.560E-03	6.000E+01	2.008E-02	1.004E-02	6.500E+01	2.449E-02
1.225E-02	7.000E+01	2.829E-02	1.414E-02	7.500E+01	3.155E-02	1.578E-02	8.000E+01
3.430E-02	1.715E-02	8.500E+01	3.657E-02	1.828E-02	9.000E+01	3.842E-02	1.921E-02
9.500E+01	3.935E-02	1.968E-02	1.000E+02	3.987E-02	1.994E-02	1.100E+02	3.997E-02
1.998E-02	1.200E+02	3.919E-02	1.960E-02	1.300E+02	3.790E-02	1.895E-02	1.400E+02
3.638E-02	1.819E-02	1.500E+02	3.610E-02	1.805E-02	1.600E+02	3.521E-02	1.760E-02
1.700E+02	3.442E-02	1.721E-02	1.800E+02	3.375E-02	1.688E-02	1.900E+02	3.348E-02
1.674E-02	2.000E+02	3.331E-02	1.665E-02				
0	1	74	186	27			n+W186
5.836E+00	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	3.254E-10
1.627E-10	3.500E+01	9.857E-07	4.928E-07	4.000E+01	1.486E-04	7.430E-05	4.500E+01
2.229E-03	1.115E-03	5.000E+01	6.189E-03	3.095E-03	5.500E+01	1.055E-02	5.275E-03
6.000E+01	1.475E-02	7.375E-03	6.500E+01	1.858E-02	9.290E-03	7.000E+01	2.150E-02
1.075E-02	7.500E+01	2.434E-02	1.217E-02	8.000E+01	2.676E-02	1.338E-02	8.500E+01
2.877E-02	1.439E-02	9.000E+01	3.045E-02	1.523E-02	9.500E+01	3.140E-02	1.570E-02
1.000E+02	3.201E-02	1.600E-02	1.100E+02	3.242E-02	1.621E-02	1.200E+02	3.204E-02
1.602E-02	1.300E+02	3.117E-02	1.558E-02	1.400E+02	3.005E-02	1.503E-02	1.500E+02
2.993E-02	1.496E-02	1.600E+02	2.921E-02	1.460E-02	1.700E+02	2.850E-02	1.425E-02
1.800E+02	2.787E-02	1.393E-02	1.900E+02	2.740E-02	1.370E-02	2.000E+02	2.715E-02
1.358E-02							
0	1	75	185	29			n+Re185
2.470E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	3.960E-10
1.980E-10	2.800E+01	2.408E-09	1.204E-09	3.000E+01	1.729E-07	8.645E-08	3.500E+01
6.341E-05	3.171E-05	4.000E+01	1.885E-03	9.425E-04	4.500E+01	6.776E-03	3.388E-03
5.000E+01	1.257E-02	6.285E-03	5.500E+01	1.806E-02	9.030E-03	6.000E+01	2.320E-02
1.160E-02	6.500E+01	2.773E-02	1.387E-02	7.000E+01	3.229E-02	1.614E-02	7.500E+01
3.567E-02	1.784E-02	8.000E+01	3.849E-02	1.925E-02	8.500E+01	4.081E-02	2.040E-02
9.000E+01	4.269E-02	2.134E-02	9.500E+01	4.352E-02	2.176E-02	1.000E+02	4.392E-02
2.196E-02	1.100E+02	4.375E-02	2.187E-02	1.200E+02	4.268E-02	2.134E-02	1.300E+02
4.111E-02	2.056E-02	1.400E+02	3.936E-02	1.968E-02	1.500E+02	3.612E-02	1.806E-02
1.600E+02	3.530E-02	1.765E-02	1.700E+02	3.457E-02	1.728E-02	1.800E+02	3.412E-02
1.706E-02	1.900E+02	3.402E-02	1.701E-02	2.000E+02	3.426E-02	1.713E-02	
0	1	75	187	28			n+Re187
4.197E+00	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	4.020E-10
2.010E-10	3.000E+01	2.500E-09	1.250E-09	3.500E+01	1.056E-05	5.280E-06	4.000E+01
7.014E-04	3.507E-04	4.500E+01	4.186E-03	2.093E-03	5.000E+01	9.016E-03	4.508E-03
5.500E+01	1.396E-02	6.980E-03	6.000E+01	1.858E-02	9.290E-03	6.500E+01	2.270E-02
1.135E-02	7.000E+01	2.627E-02	1.314E-02	7.500E+01	2.932E-02	1.466E-02	8.000E+01
3.190E-02	1.595E-02	8.500E+01	3.404E-02	1.702E-02	9.000E+01	3.579E-02	1.790E-02
9.500E+01	3.668E-02	1.834E-02	1.000E+02	3.719E-02	1.860E-02	1.100E+02	3.733E-02
1.867E-02	1.200E+02	3.663E-02	1.832E-02	1.300E+02	3.545E-02	1.773E-02	1.400E+02
3.403E-02	1.701E-02	1.500E+02	3.244E-02	1.622E-02	1.600E+02	3.163E-02	1.581E-02
1.700E+02	3.092E-02	1.546E-02	1.800E+02	3.029E-02	1.515E-02	1.900E+02	2.992E-02
1.496E-02	2.000E+02	2.973E-02	1.486E-02				
0	1	76	184	30			n+Os184
0.000E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	4.222E-10
2.111E-10	2.600E+01	2.448E-09	1.224E-09	2.800E+01	8.781E-08	4.391E-08	3.000E+01
2.770E-06	1.385E-06	3.500E+01	3.176E-04	1.588E-04	4.000E+01	3.915E-03	1.958E-03
4.500E+01	1.054E-02	5.270E-03	5.000E+01	1.772E-02	8.860E-03	5.500E+01	2.443E-02
1.222E-02	6.000E+01	3.049E-02	1.524E-02	6.500E+01	3.578E-02	1.789E-02	7.000E+01
4.117E-02	2.058E-02	7.500E+01	4.506E-02	2.253E-02	8.000E+01	4.830E-02	2.415E-02
8.500E+01	5.092E-02	2.546E-02	9.000E+01	5.303E-02	2.652E-02	9.500E+01	5.382E-02
2.691E-02	1.000E+02	5.411E-02	2.705E-02	1.100E+02	5.358E-02	2.679E-02	1.200E+02

5.205E-02	2.602E-02	1.300E+02	5.007E-02	2.504E-02	1.400E+02	4.794E-02	2.397E-02
1.500E+02	4.579E-02	2.289E-02	1.600E+02	4.506E-02	2.253E-02	1.700E+02	4.463E-02
2.232E-02	1.800E+02	4.470E-02	2.235E-02	1.900E+02	4.547E-02	2.273E-02	2.000E+02
4.669E-02	2.335E-02						
0	1	76	186	30			n+Os186
9.147E-01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.060E-10
5.300E-11	2.600E+01	6.197E-10	3.099E-10	2.800E+01	3.705E-09	1.852E-09	3.000E+01
3.636E-07	1.818E-07	3.500E+01	9.183E-05	4.591E-05	4.000E+01	2.226E-03	1.113E-03
4.500E+01	7.670E-03	3.835E-03	5.000E+01	1.404E-02	7.020E-03	5.500E+01	2.016E-02
1.008E-02	6.000E+01	2.577E-02	1.289E-02	6.500E+01	3.070E-02	1.535E-02	7.000E+01
3.566E-02	1.783E-02	7.500E+01	3.933E-02	1.966E-02	8.000E+01	4.240E-02	2.120E-02
8.500E+01	4.491E-02	2.245E-02	9.000E+01	4.694E-02	2.347E-02	9.500E+01	4.782E-02
2.391E-02	1.000E+02	4.824E-02	2.412E-02	1.100E+02	4.801E-02	2.400E-02	1.200E+02
4.681E-02	2.340E-02	1.300E+02	4.509E-02	2.254E-02	1.400E+02	4.321E-02	2.160E-02
1.500E+02	4.127E-02	2.064E-02	1.600E+02	4.037E-02	2.019E-02	1.700E+02	3.965E-02
1.982E-02	1.800E+02	3.919E-02	1.960E-02	1.900E+02	3.922E-02	1.961E-02	2.000E+02
3.959E-02	1.980E-02						
0	1	76	187	29			n+Os187
1.513E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	5.537E-10
2.768E-10	2.800E+01	3.394E-09	1.697E-09	3.000E+01	4.269E-07	2.134E-07	3.500E+01
8.898E-05	4.449E-05	4.000E+01	1.923E-03	9.615E-04	4.500E+01	6.288E-03	3.144E-03
5.000E+01	1.126E-02	5.630E-03	5.500E+01	1.617E-02	8.085E-03	6.000E+01	2.064E-02
1.032E-02	6.500E+01	2.460E-02	1.230E-02	7.000E+01	2.804E-02	1.402E-02	7.500E+01
3.098E-02	1.549E-02	8.000E+01	3.347E-02	1.673E-02	8.500E+01	3.552E-02	1.776E-02
9.000E+01	3.721E-02	1.861E-02	9.500E+01	3.800E-02	1.900E-02	1.000E+02	3.842E-02
1.921E-02	1.100E+02	3.839E-02	1.920E-02	1.200E+02	3.754E-02	1.877E-02	1.300E+02
3.625E-02	1.812E-02	1.400E+02	3.605E-02	1.802E-02	1.500E+02	3.451E-02	1.725E-02
1.600E+02	3.379E-02	1.690E-02	1.700E+02	3.322E-02	1.661E-02	1.800E+02	3.277E-02
1.639E-02	1.900E+02	3.280E-02	1.640E-02	2.000E+02	3.312E-02	1.656E-02	
0	1	76	188	28			n+Os188
2.791E+00	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	5.343E-10
2.672E-10	3.000E+01	3.261E-09	1.630E-09	3.500E+01	1.335E-05	6.675E-06	4.000E+01
8.148E-04	4.074E-04	4.500E+01	4.643E-03	2.322E-03	5.000E+01	9.890E-03	4.945E-03
5.500E+01	1.506E-02	7.530E-03	6.000E+01	1.999E-02	9.995E-03	6.500E+01	2.438E-02
1.219E-02	7.000E+01	2.876E-02	1.438E-02	7.500E+01	3.208E-02	1.604E-02	8.000E+01
3.488E-02	1.744E-02	8.500E+01	3.719E-02	1.860E-02	9.000E+01	3.909E-02	1.954E-02
9.500E+01	4.005E-02	2.003E-02	1.000E+02	4.059E-02	2.030E-02	1.100E+02	4.073E-02
2.037E-02	1.200E+02	3.996E-02	1.998E-02	1.300E+02	3.867E-02	1.934E-02	1.400E+02
3.715E-02	1.858E-02	1.500E+02	3.403E-02	1.701E-02	1.600E+02	3.325E-02	1.663E-02
1.700E+02	3.256E-02	1.628E-02	1.800E+02	3.200E-02	1.600E-02	1.900E+02	3.177E-02
1.588E-02	2.000E+02	3.182E-02	1.591E-02				
0	1	76	189	28			n+Os189
3.416E+00	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	4.532E-10
2.266E-10	3.000E+01	2.841E-09	1.421E-09	3.500E+01	1.243E-05	6.215E-06	4.000E+01
7.050E-04	3.525E-04	4.500E+01	3.700E-03	1.850E-03	5.000E+01	7.730E-03	3.865E-03
5.500E+01	1.182E-02	5.910E-03	6.000E+01	1.566E-02	7.830E-03	6.500E+01	1.913E-02
9.565E-03	7.000E+01	2.260E-02	1.130E-02	7.500E+01	2.527E-02	1.264E-02	8.000E+01
2.756E-02	1.378E-02	8.500E+01	2.947E-02	1.473E-02	9.000E+01	3.106E-02	1.553E-02
9.500E+01	3.192E-02	1.596E-02	1.000E+02	3.245E-02	1.622E-02	1.100E+02	3.271E-02
1.636E-02	1.200E+02	3.221E-02	1.611E-02	1.300E+02	3.125E-02	1.562E-02	1.400E+02
3.007E-02	1.503E-02	1.500E+02	2.870E-02	1.435E-02	1.600E+02	2.803E-02	1.401E-02
1.700E+02	2.744E-02	1.372E-02	1.800E+02	2.691E-02	1.345E-02	1.900E+02	2.661E-02
1.331E-02	2.000E+02	2.655E-02	1.328E-02				
0	1	76	190	27			n+Os190
4.930E+00	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	3.803E-10
1.902E-10	3.500E+01	1.188E-06	5.940E-07	4.000E+01	1.443E-04	7.215E-05	4.500E+01
2.167E-03	1.084E-03	5.000E+01	6.033E-03	3.017E-03	5.500E+01	1.021E-02	5.105E-03
6.000E+01	1.431E-02	7.155E-03	6.500E+01	1.804E-02	9.020E-03	7.000E+01	2.174E-02
1.087E-02	7.500E+01	2.463E-02	1.231E-02	8.000E+01	2.711E-02	1.355E-02	8.500E+01
2.918E-02	1.459E-02	9.000E+01	3.091E-02	1.545E-02	9.500E+01	3.191E-02	1.596E-02
1.000E+02	3.256E-02	1.628E-02	1.100E+02	3.302E-02	1.651E-02	1.200E+02	3.266E-02
1.633E-02	1.300E+02	3.180E-02	1.590E-02	1.400E+02	3.067E-02	1.533E-02	1.500E+02
2.821E-02	1.410E-02	1.600E+02	2.752E-02	1.376E-02	1.700E+02	2.687E-02	1.344E-02
1.800E+02	2.626E-02	1.313E-02	1.900E+02	2.578E-02	1.289E-02	2.000E+02	2.554E-02
1.277E-02							
0	1	76	192	26			n+Os192

7.186E+00	0.000E+00	0.000E+00	3.000E+01	0.000E+00	0.000E+00	3.500E+01	6.104E-09
3.052E-09	4.000E+01	1.609E-05	8.045E-06	4.500E+01	7.400E-04	3.700E-04	5.000E+01
3.304E-03	1.652E-03	5.500E+01	6.623E-03	3.312E-03	6.000E+01	9.998E-03	4.999E-03
6.500E+01	1.315E-02	6.575E-03	7.000E+01	1.629E-02	8.145E-03	7.500E+01	1.881E-02
9.405E-03	8.000E+01	2.099E-02	1.050E-02	8.500E+01	2.284E-02	1.142E-02	9.000E+01
2.440E-02	1.220E-02	9.500E+01	2.540E-02	1.270E-02	1.000E+02	2.610E-02	1.305E-02
1.100E+02	2.678E-02	1.339E-02	1.200E+02	2.673E-02	1.337E-02	1.300E+02	2.621E-02
1.311E-02	1.400E+02	2.540E-02	1.270E-02	1.500E+02	2.347E-02	1.174E-02	1.600E+02
2.293E-02	1.146E-02	1.700E+02	2.236E-02	1.118E-02	1.800E+02	2.180E-02	1.090E-02
1.900E+02	2.128E-02	1.064E-02	2.000E+02	2.089E-02	1.044E-02		
0	1	77	191	28			n+Ir191
3.025E+00	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	5.960E-10
2.980E-10	3.000E+01	3.645E-09	1.823E-09	3.500E+01	1.515E-05	7.575E-06	4.000E+01
8.416E-04	4.208E-04	4.500E+01	4.451E-03	2.226E-03	5.000E+01	9.308E-03	4.654E-03
5.500E+01	1.419E-02	7.095E-03	6.000E+01	1.879E-02	9.395E-03	6.500E+01	2.288E-02
1.144E-02	7.000E+01	2.699E-02	1.350E-02	7.500E+01	3.011E-02	1.506E-02	8.000E+01
3.274E-02	1.637E-02	8.500E+01	3.493E-02	1.747E-02	9.000E+01	3.673E-02	1.836E-02
9.500E+01	3.765E-02	1.883E-02	1.000E+02	3.818E-02	1.909E-02	1.100E+02	3.833E-02
1.917E-02	1.200E+02	3.761E-02	1.880E-02	1.300E+02	3.640E-02	1.820E-02	1.400E+02
3.495E-02	1.748E-02	1.500E+02	3.341E-02	1.671E-02	1.600E+02	3.260E-02	1.630E-02
1.700E+02	3.184E-02	1.592E-02	1.800E+02	3.121E-02	1.561E-02	1.900E+02	3.082E-02
1.541E-02	2.000E+02	3.080E-02	1.540E-02				
0	1	77	193	27			n+Ir193
5.495E+00	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	2.869E-10
1.435E-10	3.500E+01	8.747E-07	4.373E-07	4.000E+01	1.225E-04	6.125E-05	4.500E+01
1.853E-03	9.265E-04	5.000E+01	5.197E-03	2.599E-03	5.500E+01	9.075E-03	4.537E-03
6.000E+01	1.280E-02	6.400E-03	6.500E+01	1.619E-02	8.095E-03	7.000E+01	1.920E-02
9.600E-03	7.500E+01	2.181E-02	1.090E-02	8.000E+01	2.405E-02	1.202E-02	8.500E+01
2.595E-02	1.298E-02	9.000E+01	2.753E-02	1.376E-02	9.500E+01	2.847E-02	1.423E-02
1.000E+02	2.909E-02	1.455E-02	1.100E+02	2.958E-02	1.479E-02	1.200E+02	2.931E-02
1.465E-02	1.300E+02	2.858E-02	1.429E-02	1.400E+02	2.759E-02	1.379E-02	1.500E+02
2.549E-02	1.274E-02	1.600E+02	2.487E-02	1.243E-02	1.700E+02	2.425E-02	1.213E-02
1.800E+02	2.366E-02	1.183E-02	1.900E+02	2.317E-02	1.158E-02	2.000E+02	2.295E-02
1.148E-02							
0	1	78	190	30			n+Pt190
0.000E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	2.620E-10
1.310E-10	2.600E+01	1.473E-09	7.365E-10	2.800E+01	1.427E-08	7.135E-09	3.000E+01
1.389E-06	6.945E-07	3.500E+01	1.930E-04	9.650E-05	4.000E+01	3.136E-03	1.568E-03
4.500E+01	9.304E-03	4.652E-03	5.000E+01	1.622E-02	8.110E-03	5.500E+01	2.297E-02
1.149E-02	6.000E+01	2.895E-02	1.448E-02	6.500E+01	3.422E-02	1.711E-02	7.000E+01
3.789E-02	1.895E-02	7.500E+01	4.162E-02	2.081E-02	8.000E+01	4.473E-02	2.236E-02
8.500E+01	4.727E-02	2.363E-02	9.000E+01	4.933E-02	2.466E-02	9.500E+01	5.017E-02
2.508E-02	1.000E+02	5.054E-02	2.527E-02	1.100E+02	5.018E-02	2.509E-02	1.200E+02
4.887E-02	2.443E-02	1.300E+02	4.707E-02	2.354E-02	1.400E+02	4.513E-02	2.257E-02
1.500E+02	4.316E-02	2.158E-02	1.600E+02	4.236E-02	2.118E-02	1.700E+02	4.176E-02
2.088E-02	1.800E+02	4.146E-02	2.073E-02	1.900E+02	4.165E-02	2.082E-02	2.000E+02
4.254E-02	2.127E-02						
0	1	78	192	29			n+Pt192
1.490E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	1.573E-10
7.865E-11	2.800E+01	9.258E-10	4.629E-10	3.000E+01	5.572E-09	2.786E-09	3.500E+01
2.260E-05	1.130E-05	4.000E+01	1.066E-03	5.330E-04	4.500E+01	5.073E-03	2.537E-03
5.000E+01	1.041E-02	5.205E-03	5.500E+01	1.588E-02	7.940E-03	6.000E+01	2.089E-02
1.044E-02	6.500E+01	2.536E-02	1.268E-02	7.000E+01	2.984E-02	1.492E-02	7.500E+01
3.322E-02	1.661E-02	8.000E+01	3.608E-02	1.804E-02	8.500E+01	3.846E-02	1.923E-02
9.000E+01	4.041E-02	2.021E-02	9.500E+01	4.139E-02	2.070E-02	1.000E+02	4.195E-02
2.098E-02	1.100E+02	4.207E-02	2.104E-02	1.200E+02	4.126E-02	2.063E-02	1.300E+02
3.992E-02	1.996E-02	1.400E+02	3.834E-02	1.917E-02	1.500E+02	3.525E-02	1.762E-02
1.600E+02	3.448E-02	1.724E-02	1.700E+02	3.373E-02	1.687E-02	1.800E+02	3.328E-02
1.664E-02	1.900E+02	3.305E-02	1.653E-02	2.000E+02	3.335E-02	1.667E-02	
0	1	78	194	27			n+Pt194
3.814E+00	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	4.998E-10
2.499E-10	3.500E+01	1.617E-06	8.085E-07	4.000E+01	1.873E-04	9.365E-05	4.500E+01
2.341E-03	1.171E-03	5.000E+01	6.235E-03	3.118E-03	5.500E+01	1.036E-02	5.180E-03
6.000E+01	1.443E-02	7.215E-03	6.500E+01	1.812E-02	9.060E-03	7.000E+01	2.140E-02
1.070E-02	7.500E+01	2.423E-02	1.212E-02	8.000E+01	2.665E-02	1.333E-02	8.500E+01
2.870E-02	1.435E-02	9.000E+01	3.041E-02	1.520E-02	9.500E+01	3.140E-02	1.570E-02

1.000E+02	3.205E-02	1.603E-02	1.100E+02	3.252E-02	1.626E-02	1.200E+02	3.218E-02
1.609E-02	1.300E+02	3.135E-02	1.568E-02	1.400E+02	3.024E-02	1.512E-02	1.500E+02
2.901E-02	1.451E-02	1.600E+02	2.833E-02	1.417E-02	1.700E+02	2.767E-02	1.384E-02
1.800E+02	2.705E-02	1.353E-02	1.900E+02	2.659E-02	1.329E-02	2.000E+02	2.640E-02
1.320E-02							
0	1	78	195	27			n+Pt195
5.044E+00	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	2.272E-10
1.136E-10	3.500E+01	7.104E-07	3.552E-07	4.000E+01	9.826E-05	4.913E-05	4.500E+01
1.495E-03	7.475E-04	5.000E+01	4.230E-03	2.115E-03	5.500E+01	7.326E-03	3.663E-03
6.000E+01	1.037E-02	5.185E-03	6.500E+01	1.317E-02	6.585E-03	7.000E+01	1.567E-02
7.835E-03	7.500E+01	1.786E-02	8.930E-03	8.000E+01	1.976E-02	9.880E-03	8.500E+01
2.138E-02	1.069E-02	9.000E+01	2.276E-02	1.138E-02	9.500E+01	2.361E-02	1.180E-02
1.000E+02	2.420E-02	1.210E-02	1.100E+02	2.474E-02	1.237E-02	1.200E+02	2.464E-02
1.232E-02	1.300E+02	2.412E-02	1.206E-02	1.400E+02	2.335E-02	1.167E-02	1.500E+02
2.241E-02	1.120E-02	1.600E+02	2.192E-02	1.096E-02	1.700E+02	2.142E-02	1.071E-02
1.800E+02	2.098E-02	1.049E-02	1.900E+02	2.062E-02	1.031E-02	2.000E+02	2.047E-02
1.023E-02							
0	1	78	196	26			n+Pt196
6.081E+00	0.000E+00	0.000E+00	3.000E+01	0.000E+00	0.000E+00	3.500E+01	2.994E-08
1.497E-08	4.000E+01	2.254E-05	1.127E-05	4.500E+01	8.571E-04	4.285E-04	5.000E+01
3.488E-03	1.744E-03	5.500E+01	6.769E-03	3.384E-03	6.000E+01	1.013E-02	5.065E-03
6.500E+01	1.325E-02	6.625E-03	7.000E+01	1.605E-02	8.025E-03	7.500E+01	1.852E-02
9.260E-03	8.000E+01	2.065E-02	1.033E-02	8.500E+01	2.247E-02	1.124E-02	9.000E+01
2.400E-02	1.200E-02	9.500E+01	2.498E-02	1.249E-02	1.000E+02	2.567E-02	1.283E-02
1.100E+02	2.634E-02	1.317E-02	1.200E+02	2.629E-02	1.315E-02	1.300E+02	2.578E-02
1.289E-02	1.400E+02	2.500E-02	1.250E-02	1.500E+02	2.397E-02	1.199E-02	1.600E+02
2.342E-02	1.171E-02	1.700E+02	2.281E-02	1.141E-02	1.800E+02	2.221E-02	1.111E-02
1.900E+02	2.166E-02	1.083E-02	2.000E+02	2.127E-02	1.064E-02		
0	1	78	198	26			n+Pt198
7.998E+00	0.000E+00	0.000E+00	3.000E+01	0.000E+00	0.000E+00	3.500E+01	6.598E-10
3.299E-10	4.000E+01	2.855E-06	1.428E-06	4.500E+01	2.471E-04	1.235E-04	5.000E+01
1.966E-03	9.830E-04	5.500E+01	4.657E-03	2.328E-03	6.000E+01	7.541E-03	3.770E-03
6.500E+01	1.030E-02	5.150E-03	7.000E+01	1.282E-02	6.410E-03	7.500E+01	1.505E-02
7.525E-03	8.000E+01	1.700E-02	8.500E-03	8.500E+01	1.868E-02	9.340E-03	9.000E+01
2.010E-02	1.005E-02	9.500E+01	2.108E-02	1.054E-02	1.000E+02	2.178E-02	1.089E-02
1.100E+02	2.257E-02	1.128E-02	1.200E+02	2.270E-02	1.135E-02	1.300E+02	2.239E-02
1.120E-02	1.400E+02	2.181E-02	1.090E-02	1.500E+02	2.024E-02	1.012E-02	1.600E+02
1.980E-02	9.900E-03	1.700E+02	1.929E-02	9.645E-03	1.800E+02	1.875E-02	9.375E-03
1.900E+02	1.821E-02	9.105E-03	2.000E+02	1.773E-02	8.865E-03		
0	1	79	197	27			n+Au197
4.514E+00	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	3.441E-10
1.720E-10	3.500E+01	1.081E-06	5.405E-07	4.000E+01	1.344E-04	6.720E-05	4.500E+01
1.828E-03	9.140E-04	5.000E+01	5.130E-03	2.565E-03	5.500E+01	8.841E-03	4.420E-03
6.000E+01	1.245E-02	6.225E-03	6.500E+01	1.575E-02	7.875E-03	7.000E+01	1.868E-02
9.340E-03	7.500E+01	2.124E-02	1.062E-02	8.000E+01	2.344E-02	1.172E-02	8.500E+01
2.531E-02	1.265E-02	9.000E+01	2.688E-02	1.344E-02	9.500E+01	2.783E-02	1.392E-02
1.000E+02	2.846E-02	1.423E-02	1.100E+02	2.898E-02	1.449E-02	1.200E+02	2.876E-02
1.438E-02	1.300E+02	2.807E-02	1.404E-02	1.400E+02	2.710E-02	1.355E-02	1.500E+02
2.592E-02	1.296E-02	1.600E+02	2.528E-02	1.264E-02	1.700E+02	2.461E-02	1.230E-02
1.800E+02	2.399E-02	1.200E-02	1.900E+02	2.346E-02	1.173E-02	2.000E+02	2.315E-02
1.158E-02							
0	1	80	196	29			n+Hg196
8.233E-01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	1.293E-10
6.465E-11	2.800E+01	7.481E-10	3.741E-10	3.000E+01	4.431E-09	2.216E-09	3.500E+01
1.739E-05	8.695E-06	4.000E+01	8.778E-04	4.389E-04	4.500E+01	4.519E-03	2.259E-03
5.000E+01	9.425E-03	4.712E-03	5.500E+01	1.456E-02	7.280E-03	6.000E+01	1.929E-02
9.645E-03	6.500E+01	2.350E-02	1.175E-02	7.000E+01	2.720E-02	1.360E-02	7.500E+01
3.038E-02	1.519E-02	8.000E+01	3.308E-02	1.654E-02	8.500E+01	3.534E-02	1.767E-02
9.000E+01	3.723E-02	1.861E-02	9.500E+01	3.822E-02	1.911E-02	1.000E+02	3.881E-02
1.940E-02	1.100E+02	3.906E-02	1.953E-02	1.200E+02	3.840E-02	1.920E-02	1.300E+02
3.722E-02	1.861E-02	1.400E+02	3.577E-02	1.789E-02	1.500E+02	3.279E-02	1.639E-02
1.600E+02	3.202E-02	1.601E-02	1.700E+02	3.132E-02	1.566E-02	1.800E+02	3.075E-02
1.537E-02	1.900E+02	3.042E-02	1.521E-02	2.000E+02	3.051E-02	1.525E-02	
0	1	80	198	28			n+Hg198
2.787E+00	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	1.002E-10
5.010E-11	3.000E+01	5.960E-10	2.980E-10	3.500E+01	1.967E-06	9.835E-07	4.000E+01

2.041E-04	1.021E-04	4.500E+01	2.332E-03	1.166E-03	5.000E+01	6.076E-03	3.038E-03
5.500E+01	1.011E-02	5.055E-03	6.000E+01	1.405E-02	7.025E-03	6.500E+01	1.763E-02
8.815E-03	7.000E+01	2.081E-02	1.040E-02	7.500E+01	2.357E-02	1.179E-02	8.000E+01
2.594E-02	1.297E-02	8.500E+01	2.796E-02	1.398E-02	9.000E+01	2.965E-02	1.482E-02
9.500E+01	3.065E-02	1.533E-02	1.000E+02	3.131E-02	1.565E-02	1.100E+02	3.182E-02
1.591E-02	1.200E+02	3.153E-02	1.577E-02	1.300E+02	3.073E-02	1.537E-02	1.400E+02
2.965E-02	1.482E-02	1.500E+02	2.945E-02	1.473E-02	1.600E+02	2.873E-02	1.436E-02
1.700E+02	2.799E-02	1.400E-02	1.800E+02	2.731E-02	1.366E-02	1.900E+02	2.674E-02
1.337E-02	2.000E+02	2.640E-02	1.320E-02				
0	1	80	199	27			n+Hg199
3.873E+00	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	3.558E-10
1.779E-10	3.500E+01	1.189E-06	5.945E-07	4.000E+01	1.356E-04	6.780E-05	4.500E+01
1.706E-03	8.530E-04	5.000E+01	4.571E-03	2.286E-03	5.500E+01	7.701E-03	3.851E-03
6.000E+01	1.081E-02	5.405E-03	6.500E+01	1.366E-02	6.830E-03	7.000E+01	1.621E-02
8.105E-03	7.500E+01	1.845E-02	9.225E-03	8.000E+01	2.039E-02	1.019E-02	8.500E+01
2.205E-02	1.103E-02	9.000E+01	2.346E-02	1.173E-02	9.500E+01	2.434E-02	1.217E-02
1.000E+02	2.493E-02	1.247E-02	1.100E+02	2.548E-02	1.274E-02	1.200E+02	2.536E-02
1.268E-02	1.300E+02	2.481E-02	1.240E-02	1.400E+02	2.401E-02	1.201E-02	1.500E+02
2.306E-02	1.153E-02	1.600E+02	2.252E-02	1.126E-02	1.700E+02	2.193E-02	1.097E-02
1.800E+02	2.138E-02	1.069E-02	1.900E+02	2.089E-02	1.044E-02	2.000E+02	2.048E-02
1.024E-02							
0	1	80	200	26			n+Hg200
4.794E+00	0.000E+00	0.000E+00	3.000E+01	0.000E+00	0.000E+00	3.500E+01	9.055E-08
4.528E-08	4.000E+01	3.305E-05	1.652E-05	4.500E+01	1.017E-03	5.085E-04	5.000E+01
3.787E-03	1.894E-03	5.500E+01	7.192E-03	3.596E-03	6.000E+01	1.061E-02	5.305E-03
6.500E+01	1.379E-02	6.895E-03	7.000E+01	1.664E-02	8.320E-03	7.500E+01	1.914E-02
9.570E-03	8.000E+01	2.131E-02	1.065E-02	8.500E+01	2.316E-02	1.158E-02	9.000E+01
2.473E-02	1.236E-02	9.500E+01	2.573E-02	1.286E-02	1.000E+02	2.642E-02	1.321E-02
1.100E+02	2.710E-02	1.355E-02	1.200E+02	2.705E-02	1.353E-02	1.300E+02	2.651E-02
1.325E-02	1.400E+02	2.569E-02	1.285E-02	1.500E+02	2.470E-02	1.235E-02	1.600E+02
2.410E-02	1.205E-02	1.700E+02	2.344E-02	1.172E-02	1.800E+02	2.279E-02	1.140E-02
1.900E+02	2.215E-02	1.107E-02	2.000E+02	2.162E-02	1.081E-02		
0	1	80	201	26			n+Hg201
5.701E+00	0.000E+00	0.000E+00	3.000E+01	0.000E+00	0.000E+00	3.500E+01	6.980E-08
3.490E-08	4.000E+01	2.554E-05	1.277E-05	4.500E+01	7.631E-04	3.815E-04	5.000E+01
2.929E-03	1.465E-03	5.500E+01	5.575E-03	2.788E-03	6.000E+01	8.286E-03	4.143E-03
6.500E+01	1.082E-02	5.410E-03	7.000E+01	1.312E-02	6.560E-03	7.500E+01	1.514E-02
7.570E-03	8.000E+01	1.691E-02	8.455E-03	8.500E+01	1.844E-02	9.220E-03	9.000E+01
1.974E-02	9.870E-03	9.500E+01	2.060E-02	1.030E-02	1.000E+02	2.122E-02	1.061E-02
1.100E+02	2.187E-02	1.094E-02	1.200E+02	2.192E-02	1.096E-02	1.300E+02	2.156E-02
1.078E-02	1.400E+02	2.095E-02	1.047E-02	1.500E+02	2.088E-02	1.044E-02	1.600E+02
2.041E-02	1.021E-02	1.700E+02	1.988E-02	9.940E-03	1.800E+02	1.933E-02	9.665E-03
1.900E+02	1.881E-02	9.405E-03	2.000E+02	1.833E-02	9.165E-03		
0	1	80	202	26			n+Hg202
6.798E+00	0.000E+00	0.000E+00	3.000E+01	0.000E+00	0.000E+00	3.500E+01	9.875E-10
4.937E-10	4.000E+01	4.280E-06	2.140E-06	4.500E+01	3.110E-04	1.555E-04	5.000E+01
2.121E-03	1.061E-03	5.500E+01	4.824E-03	2.412E-03	6.000E+01	7.696E-03	3.848E-03
6.500E+01	1.044E-02	5.220E-03	7.000E+01	1.269E-02	6.345E-03	7.500E+01	1.486E-02
7.430E-03	8.000E+01	1.676E-02	8.380E-03	8.500E+01	1.840E-02	9.200E-03	9.000E+01
1.980E-02	9.900E-03	9.500E+01	2.075E-02	1.038E-02	1.000E+02	2.144E-02	1.072E-02
1.100E+02	2.221E-02	1.111E-02	1.200E+02	2.235E-02	1.117E-02	1.300E+02	2.205E-02
1.103E-02	1.400E+02	2.148E-02	1.074E-02	1.500E+02	2.067E-02	1.034E-02	1.600E+02
2.021E-02	1.010E-02	1.700E+02	1.969E-02	9.845E-03	1.800E+02	1.913E-02	9.565E-03
1.900E+02	1.857E-02	9.285E-03	2.000E+02	1.802E-02	9.010E-03		
0	1	80	204	25			n+Hg204
1.215E+01	0.000E+00	0.000E+00	3.500E+01	0.000E+00	0.000E+00	4.000E+01	4.143E-10
2.072E-10	4.500E+01	1.704E-06	8.520E-07	5.000E+01	1.458E-04	7.290E-05	5.500E+01
1.154E-03	5.770E-04	6.000E+01	2.685E-03	1.342E-03	6.500E+01	4.377E-03	2.188E-03
7.000E+01	5.917E-03	2.959E-03	7.500E+01	7.412E-03	3.706E-03	8.000E+01	8.757E-03
4.378E-03	8.500E+01	9.946E-03	4.973E-03	9.000E+01	1.098E-02	5.490E-03	9.500E+01
1.178E-02	5.890E-03	1.000E+02	1.241E-02	6.205E-03	1.100E+02	1.326E-02	6.630E-03
1.200E+02	1.367E-02	6.835E-03	1.300E+02	1.375E-02	6.875E-03	1.400E+02	1.360E-02
6.800E-03	1.500E+02	1.326E-02	6.630E-03	1.600E+02	1.308E-02	6.540E-03	1.700E+02
1.282E-02	6.410E-03	1.800E+02	1.253E-02	6.265E-03	1.900E+02	1.221E-02	6.105E-03
2.000E+02	1.188E-02	5.940E-03					
0	1	81	203	26			n+Tl203

5.218E+00	0.000E+00	0.000E+00	3.000E+01	0.000E+00	0.000E+00	3.500E+01	8.469E-08
4.234E-08	4.000E+01	3.001E-05	1.500E-05	4.500E+01	9.126E-04	4.563E-04	5.000E+01
3.396E-03	1.698E-03	5.500E+01	6.478E-03	3.239E-03	6.000E+01	9.591E-03	4.798E-03
6.500E+01	1.249E-02	6.245E-03	7.000E+01	1.481E-02	7.405E-03	7.500E+01	1.708E-02
8.540E-03	8.000E+01	1.904E-02	9.520E-03	8.500E+01	2.073E-02	1.036E-02	9.000E+01
2.216E-02	1.108E-02	9.500E+01	2.309E-02	1.154E-02	1.000E+02	2.375E-02	1.188E-02
1.100E+02	2.442E-02	1.221E-02	1.200E+02	2.442E-02	1.221E-02	1.300E+02	2.397E-02
1.199E-02	1.400E+02	2.325E-02	1.162E-02	1.500E+02	2.231E-02	1.115E-02	1.600E+02
2.177E-02	1.089E-02	1.700E+02	2.118E-02	1.059E-02	1.800E+02	2.056E-02	1.028E-02
1.900E+02	1.996E-02	9.980E-03	2.000E+02	1.938E-02	9.690E-03		
0	1	81	205	26			n+Tl205
7.153E+00	0.000E+00	0.000E+00	3.000E+01	0.000E+00	0.000E+00	3.500E+01	9.181E-10
4.590E-10	4.000E+01	4.009E-06	2.005E-06	4.500E+01	2.861E-04	1.431E-04	5.000E+01
1.927E-03	9.635E-04	5.500E+01	4.398E-03	2.199E-03	6.000E+01	6.996E-03	3.498E-03
6.500E+01	9.505E-03	4.752E-03	7.000E+01	1.181E-02	5.905E-03	7.500E+01	1.385E-02
6.925E-03	8.000E+01	1.564E-02	7.820E-03	8.500E+01	1.719E-02	8.595E-03	9.000E+01
1.852E-02	9.260E-03	9.500E+01	1.943E-02	9.715E-03	1.000E+02	2.011E-02	1.005E-02
1.100E+02	2.089E-02	1.044E-02	1.200E+02	2.106E-02	1.053E-02	1.300E+02	2.081E-02
1.040E-02	1.400E+02	2.028E-02	1.014E-02	1.500E+02	1.886E-02	9.430E-03	1.600E+02
1.845E-02	9.225E-03	1.700E+02	1.797E-02	8.985E-03	1.800E+02	1.746E-02	8.730E-03
1.900E+02	1.693E-02	8.465E-03	2.000E+02	1.640E-02	8.200E-03		
0	1	82	204	27			n+Pb204
2.915E+00	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	2.620E-10
1.310E-10	3.500E+01	6.848E-07	3.424E-07	4.000E+01	9.522E-05	4.761E-05	4.500E+01
1.577E-03	7.885E-04	5.000E+01	4.783E-03	2.391E-03	5.500E+01	8.378E-03	4.189E-03
6.000E+01	1.198E-02	5.990E-03	6.500E+01	1.529E-02	7.645E-03	7.000E+01	1.862E-02
9.310E-03	7.500E+01	2.124E-02	1.062E-02	8.000E+01	2.352E-02	1.176E-02	8.500E+01
2.547E-02	1.273E-02	9.000E+01	2.711E-02	1.355E-02	9.500E+01	2.813E-02	1.406E-02
1.000E+02	2.883E-02	1.442E-02	1.100E+02	2.947E-02	1.473E-02	1.200E+02	2.934E-02
1.467E-02	1.300E+02	2.870E-02	1.435E-02	1.400E+02	2.776E-02	1.388E-02	1.500E+02
2.559E-02	1.280E-02	1.600E+02	2.496E-02	1.248E-02	1.700E+02	2.428E-02	1.214E-02
1.800E+02	2.360E-02	1.180E-02	1.900E+02	2.296E-02	1.148E-02	2.000E+02	2.238E-02
1.119E-02							
0	1	82	206	26			n+Pb206
4.905E+00	0.000E+00	0.000E+00	3.000E+01	0.000E+00	0.000E+00	3.500E+01	7.954E-09
3.977E-09	4.000E+01	1.367E-05	6.835E-06	4.500E+01	6.001E-04	3.001E-04	5.000E+01
2.750E-03	1.375E-03	5.500E+01	5.687E-03	2.844E-03	6.000E+01	8.705E-03	4.352E-03
6.500E+01	1.155E-02	5.775E-03	7.000E+01	1.414E-02	7.070E-03	7.500E+01	1.643E-02
8.215E-03	8.000E+01	1.841E-02	9.205E-03	8.500E+01	2.014E-02	1.007E-02	9.000E+01
2.161E-02	1.081E-02	9.500E+01	2.259E-02	1.129E-02	1.000E+02	2.331E-02	1.166E-02
1.100E+02	2.408E-02	1.204E-02	1.200E+02	2.418E-02	1.209E-02	1.300E+02	2.382E-02
1.191E-02	1.400E+02	2.316E-02	1.158E-02	1.500E+02	2.147E-02	1.073E-02	1.600E+02
2.098E-02	1.049E-02	1.700E+02	2.043E-02	1.022E-02	1.800E+02	1.985E-02	9.925E-03
1.900E+02	1.927E-02	9.635E-03	2.000E+02	1.871E-02	9.355E-03		
0	1	82	207	26			n+Pb207
6.441E+00	0.000E+00	0.000E+00	3.000E+01	0.000E+00	0.000E+00	3.500E+01	1.204E-09
6.020E-10	4.000E+01	5.358E-06	2.679E-06	4.500E+01	3.276E-04	1.638E-04	5.000E+01
1.930E-03	9.650E-04	5.500E+01	4.227E-03	2.113E-03	6.000E+01	6.678E-03	3.339E-03
6.500E+01	9.023E-03	4.511E-03	7.000E+01	1.096E-02	5.480E-03	7.500E+01	1.284E-02
6.420E-03	8.000E+01	1.449E-02	7.245E-03	8.500E+01	1.592E-02	7.960E-03	9.000E+01
1.714E-02	8.570E-03	9.500E+01	1.799E-02	8.995E-03	1.000E+02	1.862E-02	9.310E-03
1.100E+02	1.934E-02	9.670E-03	1.200E+02	1.951E-02	9.755E-03	1.300E+02	1.929E-02
9.645E-03	1.400E+02	1.882E-02	9.410E-03	1.500E+02	1.820E-02	9.100E-03	1.600E+02
1.781E-02	8.905E-03	1.700E+02	1.736E-02	8.680E-03	1.800E+02	1.688E-02	8.440E-03
1.900E+02	1.639E-02	8.195E-03	2.000E+02	1.590E-02	7.950E-03		
0	1	82	208	26			n+Pb208
6.882E+00	0.000E+00	0.000E+00	3.000E+01	0.000E+00	0.000E+00	3.500E+01	6.013E-10
3.006E-10	4.000E+01	2.281E-06	1.140E-06	4.500E+01	2.095E-04	1.047E-04	5.000E+01
2.002E-03	1.001E-03	5.500E+01	5.017E-03	2.508E-03	6.000E+01	8.292E-03	4.146E-03
6.500E+01	1.146E-02	5.730E-03	7.000E+01	1.406E-02	7.030E-03	7.500E+01	1.655E-02
8.275E-03	8.000E+01	1.871E-02	9.355E-03	8.500E+01	2.054E-02	1.027E-02	9.000E+01
2.210E-02	1.105E-02	9.500E+01	2.314E-02	1.157E-02	1.000E+02	2.390E-02	1.195E-02
1.100E+02	2.472E-02	1.236E-02	1.200E+02	2.484E-02	1.242E-02	1.300E+02	2.449E-02
1.225E-02	1.400E+02	2.384E-02	1.192E-02	1.500E+02	2.290E-02	1.145E-02	1.600E+02
2.236E-02	1.118E-02	1.700E+02	2.174E-02	1.087E-02	1.800E+02	2.106E-02	1.053E-02
1.900E+02	2.037E-02	1.018E-02	2.000E+02	1.968E-02	9.840E-03		

	0	1	83	209	28		n+Bi209
2.827E+00	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	1.044E-10
5.220E-11	3.000E+01	6.034E-10	3.017E-10	3.500E+01	1.807E-06	9.035E-07	4.000E+01
1.953E-04	9.765E-05	4.500E+01	2.510E-03	1.255E-03	5.000E+01	6.825E-03	3.413E-03
5.500E+01	1.152E-02	5.760E-03	6.000E+01	1.609E-02	8.045E-03	6.500E+01	2.022E-02
1.011E-02	7.000E+01	2.384E-02	1.192E-02	7.500E+01	2.697E-02	1.349E-02	8.000E+01
2.962E-02	1.481E-02	8.500E+01	3.184E-02	1.592E-02	9.000E+01	3.367E-02	1.683E-02
9.500E+01	3.470E-02	1.735E-02	1.000E+02	3.535E-02	1.767E-02	1.100E+02	3.577E-02
1.789E-02	1.200E+02	3.533E-02	1.767E-02	1.300E+02	3.436E-02	1.718E-02	1.400E+02
3.308E-02	1.654E-02	1.500E+02	3.279E-02	1.639E-02	1.600E+02	3.184E-02	1.592E-02
1.700E+02	3.084E-02	1.542E-02	1.800E+02	2.982E-02	1.491E-02	1.900E+02	2.881E-02
1.440E-02	2.000E+02	2.783E-02	1.392E-02				

Appendix B: Calculated (p,x)⁷Be reaction cross-sections for 274 targets at the primary proton energies up to 200 MeV

See the description of the format of the data in comments to Appendix A.

The sample Fortran routine to read data is given in Appendix C.

1	1	6	12	28			p+C12
2.446E+01	0.000E+00	0.000E+00	2.600E+01	3.162E-02	1.581E-02	2.800E+01	1.774E-01
8.870E-02	3.000E+01	3.866E-01	1.933E-01	3.500E+01	2.580E+00	7.175E-01	4.000E+01
1.051E+01	9.662E-01	4.500E+01	1.834E+01	2.788E+00	5.000E+01	2.184E+01	4.717E+00
5.500E+01	2.260E+01	5.737E+00	6.000E+01	2.211E+01	6.266E+00	6.500E+01	2.120E+01
6.085E+00	7.000E+01	1.917E+01	6.038E+00	7.500E+01	1.691E+01	5.793E+00	8.000E+01
1.657E+01	5.651E+00	8.500E+01	1.582E+01	5.347E+00	9.000E+01	1.533E+01	5.001E+00
9.500E+01	1.274E+01	4.603E+00	1.000E+02	1.372E+01	4.545E+00	1.100E+02	1.341E+01
4.358E+00	1.200E+02	1.271E+01	4.282E+00	1.300E+02	1.191E+01	4.029E+00	1.400E+02
1.089E+01	3.762E+00	1.500E+02	9.832E+00	3.636E+00	1.600E+02	9.403E+00	3.507E+00
1.700E+02	9.099E+00	3.446E+00	1.800E+02	8.742E+00	3.313E+00	1.900E+02	8.664E+00
3.289E+00	2.000E+02	8.288E+00	3.162E+00				
1	1	6	13	30			p+C13
2.183E+01	0.000E+00	0.000E+00	2.200E+01	9.618E-05	3.784E-05	2.400E+01	5.657E-02
2.829E-02	2.600E+01	2.210E-01	1.105E-01	2.800E+01	3.934E-01	1.967E-01	3.000E+01
5.254E-01	2.627E-01	3.500E+01	7.124E-01	3.562E-01	4.000E+01	9.817E-01	4.909E-01
4.500E+01	1.701E+00	6.566E-01	5.000E+01	3.460E+00	5.107E-01	5.500E+01	6.330E+00
3.362E-01	6.000E+01	9.588E+00	4.033E-01	6.500E+01	1.172E+01	9.066E-01	7.000E+01
1.348E+01	1.409E+00	7.500E+01	1.373E+01	1.936E+00	8.000E+01	1.510E+01	2.205E+00
8.500E+01	1.597E+01	2.551E+00	9.000E+01	1.609E+01	2.697E+00	9.500E+01	1.593E+01
2.772E+00	1.000E+02	1.565E+01	2.851E+00	1.100E+02	1.507E+01	3.035E+00	1.200E+02
1.650E+01	3.447E+00	1.300E+02	1.627E+01	3.573E+00	1.400E+02	1.564E+01	3.602E+00
1.500E+02	1.447E+01	3.592E+00	1.600E+02	1.354E+01	3.420E+00	1.700E+02	1.305E+01
3.348E+00	1.800E+02	1.221E+01	3.133E+00	1.900E+02	1.182E+01	2.952E+00	2.000E+02
1.180E+01	2.825E+00						
1	1	7	14	39			p+N14
1.128E+01	0.000E+00	0.000E+00	1.200E+01	1.914E-03	8.544E-04	1.300E+01	4.680E-01
2.340E-01	1.400E+01	1.671E+00	8.355E-01	1.500E+01	3.102E+00	1.551E+00	1.600E+01
4.606E+00	2.303E+00	1.700E+01	7.993E+00	3.132E+00	1.800E+01	1.191E+01	3.806E+00
1.900E+01	1.569E+01	4.553E+00	2.000E+01	1.849E+01	5.288E+00	2.200E+01	2.263E+01
6.334E+00	2.400E+01	2.392E+01	6.934E+00	2.600E+01	2.340E+01	7.202E+00	2.800E+01
2.231E+01	7.072E+00	3.000E+01	2.060E+01	6.757E+00	3.500E+01	1.569E+01	5.589E+00
4.000E+01	1.191E+01	4.490E+00	4.500E+01	9.347E+00	3.701E+00	5.000E+01	7.623E+00
3.169E+00	5.500E+01	6.379E+00	2.748E+00	6.000E+01	5.649E+00	2.397E+00	6.500E+01
5.430E+00	2.036E+00	7.000E+01	5.471E+00	1.812E+00	7.500E+01	4.989E+00	1.159E+00
8.000E+01	5.267E+00	1.118E+00	8.500E+01	5.770E+00	1.221E+00	9.000E+01	6.516E+00
1.194E+00	9.500E+01	6.712E+00	1.206E+00	1.000E+02	7.209E+00	1.397E+00	1.100E+02
9.702E+00	1.601E+00	1.200E+02	1.170E+01	2.019E+00	1.300E+02	1.203E+01	2.393E+00
1.400E+02	1.308E+01	2.515E+00	1.500E+02	1.393E+01	2.694E+00	1.600E+02	1.296E+01
3.065E+00	1.700E+02	1.267E+01	3.046E+00	1.800E+02	1.339E+01	3.060E+00	1.900E+02
1.225E+01	3.220E+00	2.000E+02	1.189E+01	3.137E+00			
1	1	7	15	30			p+N15
2.101E+01	0.000E+00	0.000E+00	2.200E+01	2.916E-02	9.368E-03	2.400E+01	3.149E-01
1.436E-01	2.600E+01	7.100E-01	3.366E-01	2.800E+01	1.183E+00	5.674E-01	3.000E+01
1.733E+00	7.279E-01	3.500E+01	5.072E+00	1.293E+00	4.000E+01	8.274E+00	2.087E+00
4.500E+01	9.999E+00	2.661E+00	5.000E+01	1.041E+01	3.028E+00	5.500E+01	9.600E+00
2.987E+00	6.000E+01	8.780E+00	2.886E+00	6.500E+01	6.927E+00	2.255E+00	7.000E+01
5.994E+00	2.038E+00	7.500E+01	5.296E+00	1.832E+00	8.000E+01	4.682E+00	1.633E+00
8.500E+01	4.314E+00	1.422E+00	9.000E+01	4.227E+00	1.250E+00	9.500E+01	3.789E+00
1.000E+00	1.000E+02	3.881E+00	8.946E-01	1.100E+02	3.662E+00	7.422E-01	1.200E+02
3.442E+00	6.602E-01	1.300E+02	3.912E+00	6.363E-01	1.400E+02	5.001E+00	7.518E-01
1.500E+02	5.593E+00	8.179E-01	1.600E+02	6.804E+00	9.504E-01	1.700E+02	7.481E+00

1.075E+00	1.800E+02	8.641E+00	1.118E+00	1.900E+02	8.960E+00	1.385E+00	2.000E+02
9.238E+00	1.448E+00						
	1		8		16		27
		1					p+O16
2.686E+01	0.000E+00	0.000E+00	2.800E+01	9.228E-02	2.309E-02	3.000E+01	4.850E-01
1.667E-01	3.500E+01	1.458E+00	5.990E-01	4.000E+01	1.823E+00	8.048E-01	4.500E+01
2.104E+00	9.562E-01	5.000E+01	2.796E+00	1.145E+00	5.500E+01	4.042E+00	1.344E+00
6.000E+01	5.342E+00	1.573E+00	6.500E+01	6.655E+00	1.864E+00	7.000E+01	6.070E+00
1.644E+00	7.500E+01	6.506E+00	1.925E+00	8.000E+01	6.830E+00	2.142E+00	8.500E+01
7.099E+00	2.343E+00	9.000E+01	7.152E+00	2.460E+00	9.500E+01	7.022E+00	2.526E+00
1.000E+02	7.528E+00	2.758E+00	1.100E+02	7.265E+00	2.742E+00	1.200E+02	7.104E+00
2.710E+00	1.300E+02	6.662E+00	2.648E+00	1.400E+02	6.646E+00	2.628E+00	1.500E+02
6.360E+00	2.616E+00	1.600E+02	6.573E+00	2.649E+00	1.700E+02	6.881E+00	2.546E+00
1.800E+02	6.771E+00	2.587E+00	1.900E+02	7.169E+00	2.570E+00	2.000E+02	7.182E+00
2.551E+00							
	1		8		17		31
		1					p+O17
1.902E+01	0.000E+00	0.000E+00	2.000E+01	4.276E-02	1.141E-02	2.200E+01	3.582E-01
1.416E-01	2.400E+01	7.965E-01	3.430E-01	2.600E+01	1.165E+00	5.159E-01	2.800E+01
1.387E+00	6.219E-01	3.000E+01	1.507E+00	6.894E-01	3.500E+01	1.627E+00	7.426E-01
4.000E+01	1.657E+00	7.422E-01	4.500E+01	1.735E+00	7.645E-01	5.000E+01	1.777E+00
7.838E-01	5.500E+01	1.892E+00	8.118E-01	6.000E+01	2.157E+00	8.202E-01	6.500E+01
2.073E+00	5.771E-01	7.000E+01	2.775E+00	6.250E-01	7.500E+01	3.579E+00	7.287E-01
8.000E+01	4.030E+00	8.015E-01	8.500E+01	4.822E+00	9.772E-01	9.000E+01	5.434E+00
1.198E+00	9.500E+01	5.894E+00	1.285E+00	1.000E+02	5.930E+00	1.336E+00	1.100E+02
5.944E+00	1.417E+00	1.200E+02	6.479E+00	1.681E+00	1.300E+02	6.860E+00	1.862E+00
1.400E+02	6.712E+00	1.893E+00	1.500E+02	6.462E+00	1.914E+00	1.600E+02	6.760E+00
1.914E+00	1.700E+02	6.336E+00	1.919E+00	1.800E+02	6.350E+00	1.885E+00	1.900E+02
6.236E+00	1.871E+00	2.000E+02	6.414E+00	1.852E+00			
	1		8		18		29
		1					p+O18
2.390E+01	0.000E+00	0.000E+00	2.400E+01	2.229E-02	9.795E-03	2.600E+01	8.832E-02
4.233E-02	2.800E+01	2.556E-01	1.278E-01	3.000E+01	4.494E-01	2.247E-01	3.500E+01
8.580E-01	4.290E-01	4.000E+01	1.175E+00	5.875E-01	4.500E+01	1.362E+00	6.810E-01
5.000E+01	1.446E+00	7.230E-01	5.500E+01	1.089E+00	5.445E-01	6.000E+01	1.086E+00
5.430E-01	6.500E+01	1.100E+00	5.500E-01	7.000E+01	1.175E+00	5.875E-01	7.500E+01
1.251E+00	6.255E-01	8.000E+01	1.555E+00	6.467E-01	8.500E+01	1.844E+00	6.756E-01
9.000E+01	2.440E+00	7.220E-01	9.500E+01	2.724E+00	7.179E-01	1.000E+02	3.013E+00
7.743E-01	1.100E+02	3.599E+00	9.190E-01	1.200E+02	3.785E+00	1.012E+00	1.300E+02
3.967E+00	1.088E+00	1.400E+02	4.342E+00	1.243E+00	1.500E+02	4.542E+00	1.400E+00
1.600E+02	4.516E+00	1.510E+00	1.700E+02	4.739E+00	1.583E+00	1.800E+02	4.649E+00
1.610E+00	1.900E+02	5.019E+00	1.728E+00	2.000E+02	4.955E+00	1.726E+00	
	1		9		19		37
		1					p+F19
1.379E+01	0.000E+00	0.000E+00	1.400E+01	4.885E-04	2.443E-04	1.500E+01	1.816E-03
8.499E-04	1.600E+01	5.354E-03	2.511E-03	1.700E+01	1.264E-02	6.320E-03	1.800E+01
2.417E-02	1.209E-02	1.900E+01	5.207E-02	2.603E-02	2.000E+01	1.062E-01	5.310E-02
2.200E+01	3.055E-01	1.527E-01	2.400E+01	5.790E-01	2.895E-01	2.600E+01	8.006E-01
4.003E-01	2.800E+01	9.963E-01	4.981E-01	3.000E+01	1.146E+00	5.730E-01	3.500E+01
1.490E+00	7.450E-01	4.000E+01	1.710E+00	8.550E-01	4.500E+01	2.118E+00	1.059E+00
5.000E+01	2.155E+00	1.077E+00	5.500E+01	2.435E+00	1.218E+00	6.000E+01	2.571E+00
1.286E+00	6.500E+01	2.494E+00	1.247E+00	7.000E+01	2.334E+00	1.167E+00	7.500E+01
2.166E+00	1.083E+00	8.000E+01	2.159E+00	1.079E+00	8.500E+01	2.029E+00	1.014E+00
9.000E+01	2.072E+00	1.036E+00	9.500E+01	2.007E+00	1.004E+00	1.000E+02	2.220E+00
1.110E+00	1.100E+02	2.294E+00	1.147E+00	1.200E+02	2.387E+00	1.194E+00	1.300E+02
2.540E+00	1.270E+00	1.400E+02	2.495E+00	1.248E+00	1.500E+02	2.509E+00	1.254E+00
1.600E+02	2.933E+00	1.466E+00	1.700E+02	3.228E+00	1.614E+00	1.800E+02	3.645E+00
1.823E+00	1.900E+02	3.806E+00	1.903E+00	2.000E+02	4.186E+00	2.093E+00	
	1		10		20		31
		1					p+Ne20
1.945E+01	0.000E+00	0.000E+00	2.000E+01	1.297E-02	6.485E-03	2.200E+01	3.850E-02
1.925E-02	2.400E+01	8.589E-02	3.554E-02	2.600E+01	2.500E-01	1.092E-01	2.800E+01
8.325E-01	4.163E-01	3.000E+01	1.600E+00	8.000E-01	3.500E+01	2.998E+00	1.499E+00
4.000E+01	3.413E+00	1.706E+00	4.500E+01	3.616E+00	1.808E+00	5.000E+01	3.788E+00
1.894E+00	5.500E+01	2.307E+00	1.153E+00	6.000E+01	2.499E+00	1.250E+00	6.500E+01
2.825E+00	1.413E+00	7.000E+01	3.251E+00	1.625E+00	7.500E+01	3.660E+00	1.830E+00
8.000E+01	4.267E+00	2.134E+00	8.500E+01	5.180E+00	2.590E+00	9.000E+01	5.490E+00
2.745E+00	9.500E+01	5.728E+00	2.864E+00	1.000E+02	5.785E+00	2.893E+00	1.100E+02
5.892E+00	2.946E+00	1.200E+02	6.049E+00	3.025E+00	1.300E+02	6.128E+00	3.064E+00
1.400E+02	6.264E+00	3.132E+00	1.500E+02	6.737E+00	3.369E+00	1.600E+02	6.485E+00

3.243E+00	1.700E+02	6.832E+00	3.416E+00	1.800E+02	6.866E+00	3.433E+00	1.900E+02
7.243E+00	3.622E+00	2.000E+02	7.458E+00	3.729E+00			
	1	1	10	21	35		p+Ne21
1.505E+01	0.000E+00	0.000E+00	1.600E+01	8.384E-04	4.016E-04	1.700E+01	3.265E-03
1.343E-03	1.800E+01	9.539E-03	3.905E-03	1.900E+01	2.266E-02	9.614E-03	2.000E+01
4.724E-02	2.163E-02	2.200E+01	1.946E-01	9.730E-02	2.400E+01	5.960E-01	2.980E-01
2.600E+01	1.090E+00	5.450E-01	2.800E+01	1.543E+00	7.715E-01	3.000E+01	1.877E+00
9.385E-01	3.500E+01	2.329E+00	1.165E+00	4.000E+01	2.636E+00	1.318E+00	4.500E+01
2.980E+00	1.490E+00	5.000E+01	2.363E+00	1.181E+00	5.500E+01	2.469E+00	1.234E+00
6.000E+01	2.570E+00	1.285E+00	6.500E+01	2.682E+00	1.341E+00	7.000E+01	2.291E+00
1.145E+00	7.500E+01	2.487E+00	1.244E+00	8.000E+01	2.722E+00	1.361E+00	8.500E+01
3.172E+00	1.586E+00	9.000E+01	3.529E+00	1.764E+00	9.500E+01	4.068E+00	2.034E+00
1.000E+02	4.130E+00	2.065E+00	1.100E+02	4.359E+00	2.179E+00	1.200E+02	4.373E+00
2.187E+00	1.300E+02	4.508E+00	2.254E+00	1.400E+02	4.943E+00	2.471E+00	1.500E+02
5.299E+00	2.650E+00	1.600E+02	5.493E+00	2.747E+00	1.700E+02	5.985E+00	2.993E+00
1.800E+02	5.990E+00	2.995E+00	1.900E+02	6.389E+00	3.195E+00	2.000E+02	6.470E+00
3.235E+00							
	1	1	10	22	29		p+Ne22
2.321E+01	0.000E+00	0.000E+00	2.400E+01	1.801E-03	9.005E-04	2.600E+01	5.810E-03
2.905E-03	2.800E+01	1.354E-02	6.584E-03	3.000E+01	4.990E-02	2.495E-02	3.500E+01
3.555E-01	1.777E-01	4.000E+01	7.805E-01	3.902E-01	4.500E+01	9.782E-01	4.891E-01
5.000E+01	1.235E+00	6.175E-01	5.500E+01	1.450E+00	7.250E-01	6.000E+01	1.586E+00
7.930E-01	6.500E+01	1.500E+00	7.500E-01	7.000E+01	1.638E+00	8.190E-01	7.500E+01
1.691E+00	8.455E-01	8.000E+01	1.825E+00	9.125E-01	8.500E+01	1.903E+00	9.515E-01
9.000E+01	2.116E+00	1.058E+00	9.500E+01	2.171E+00	1.085E+00	1.000E+02	2.246E+00
1.123E+00	1.100E+02	2.274E+00	1.137E+00	1.200E+02	2.523E+00	1.262E+00	1.300E+02
2.628E+00	1.314E+00	1.400E+02	2.661E+00	1.331E+00	1.500E+02	2.815E+00	1.407E+00
1.600E+02	3.152E+00	1.576E+00	1.700E+02	3.594E+00	1.797E+00	1.800E+02	3.659E+00
1.829E+00	1.900E+02	4.056E+00	2.028E+00	2.000E+02	4.186E+00	2.093E+00	
	1	1	11	23	32		p+Na23
1.805E+01	0.000E+00	0.000E+00	1.900E+01	5.041E-05	2.521E-05	2.000E+01	2.028E-04
1.014E-04	2.200E+01	1.929E-03	9.645E-04	2.400E+01	1.018E-02	5.090E-03	2.600E+01
3.873E-02	1.937E-02	2.800E+01	1.101E-01	5.505E-02	3.000E+01	1.941E-01	9.705E-02
3.500E+01	4.106E-01	2.053E-01	4.000E+01	5.474E-01	2.737E-01	4.500E+01	7.415E-01
3.708E-01	5.000E+01	9.235E-01	4.617E-01	5.500E+01	1.080E+00	5.400E-01	6.000E+01
1.112E+00	5.560E-01	6.500E+01	1.245E+00	6.225E-01	7.000E+01	1.350E+00	6.750E-01
7.500E+01	1.526E+00	7.630E-01	8.000E+01	1.525E+00	7.625E-01	8.500E+01	1.650E+00
8.250E-01	9.000E+01	1.758E+00	8.790E-01	9.500E+01	1.821E+00	9.105E-01	1.000E+02
1.877E+00	9.385E-01	1.100E+02	1.983E+00	9.915E-01	1.200E+02	1.964E+00	9.820E-01
1.300E+02	1.962E+00	9.810E-01	1.400E+02	2.075E+00	1.038E+00	1.500E+02	2.101E+00
1.050E+00	1.600E+02	2.340E+00	1.170E+00	1.700E+02	2.551E+00	1.276E+00	1.800E+02
2.784E+00	1.392E+00	1.900E+02	2.869E+00	1.435E+00	2.000E+02	2.991E+00	1.496E+00
	1	1	12	24	28		p+Mg24
2.427E+01	0.000E+00	0.000E+00	2.600E+01	1.797E-03	7.519E-04	2.800E+01	6.394E-03
2.447E-03	3.000E+01	1.385E-02	5.025E-03	3.500E+01	9.304E-02	4.652E-02	4.000E+01
2.240E-01	1.120E-01	4.500E+01	2.178E-01	1.089E-01	5.000E+01	3.110E-01	1.555E-01
5.500E+01	4.300E-01	2.150E-01	6.000E+01	5.514E-01	2.757E-01	6.500E+01	5.797E-01
2.898E-01	7.000E+01	7.207E-01	3.604E-01	7.500E+01	8.902E-01	4.451E-01	8.000E+01
1.071E+00	5.355E-01	8.500E+01	1.225E+00	6.125E-01	9.000E+01	1.469E+00	7.345E-01
9.500E+01	1.519E+00	7.595E-01	1.000E+02	1.608E+00	8.040E-01	1.100E+02	1.685E+00
8.425E-01	1.200E+02	1.842E+00	9.210E-01	1.300E+02	2.004E+00	1.002E+00	1.400E+02
2.134E+00	1.067E+00	1.500E+02	2.282E+00	1.141E+00	1.600E+02	2.445E+00	1.222E+00
1.700E+02	2.591E+00	1.296E+00	1.800E+02	2.788E+00	1.394E+00	1.900E+02	2.871E+00
1.435E+00	2.000E+02	3.009E+00	1.504E+00				
	1	1	12	25	30		p+Mg25
2.100E+01	0.000E+00	0.000E+00	2.200E+01	1.924E-05	7.857E-06	2.400E+01	2.711E-04
1.016E-04	2.600E+01	2.468E-03	8.588E-04	2.800E+01	1.032E-02	4.157E-03	3.000E+01
3.322E-02	1.661E-02	3.500E+01	1.604E-01	8.020E-02	4.000E+01	2.276E-01	1.138E-01
4.500E+01	3.286E-01	1.643E-01	5.000E+01	4.579E-01	2.289E-01	5.500E+01	5.965E-01
2.983E-01	6.000E+01	6.189E-01	3.095E-01	6.500E+01	7.456E-01	3.728E-01	7.000E+01
8.647E-01	4.324E-01	7.500E+01	1.010E+00	5.050E-01	8.000E+01	1.200E+00	6.000E-01
8.500E+01	1.384E+00	6.920E-01	9.000E+01	1.600E+00	8.000E-01	9.500E+01	1.734E+00
8.670E-01	1.000E+02	1.805E+00	9.025E-01	1.100E+02	2.010E+00	1.005E+00	1.200E+02
2.093E+00	1.046E+00	1.300E+02	2.158E+00	1.079E+00	1.400E+02	2.400E+00	1.200E+00
1.500E+02	2.702E+00	1.351E+00	1.600E+02	3.021E+00	1.510E+00	1.700E+02	3.222E+00
1.611E+00	1.800E+02	3.449E+00	1.724E+00	1.900E+02	3.669E+00	1.835E+00	2.000E+02

1.065E-02	5.325E-03	3.500E+01	8.932E-02	4.466E-02	4.000E+01	1.929E-01	9.645E-02
4.500E+01	2.327E-01	1.163E-01	5.000E+01	2.928E-01	1.464E-01	5.500E+01	3.568E-01
1.784E-01	6.000E+01	3.636E-01	1.818E-01	6.500E+01	4.190E-01	2.095E-01	7.000E+01
4.798E-01	2.399E-01	7.500E+01	5.465E-01	2.732E-01	8.000E+01	6.159E-01	3.080E-01
8.500E+01	7.364E-01	3.682E-01	9.000E+01	8.623E-01	4.311E-01	9.500E+01	9.489E-01
4.744E-01	1.000E+02	1.023E+00	5.115E-01	1.100E+02	1.120E+00	5.600E-01	1.200E+02
1.167E+00	5.835E-01	1.300E+02	1.202E+00	6.010E-01	1.400E+02	1.204E+00	6.020E-01
1.500E+02	1.256E+00	6.280E-01	1.600E+02	1.454E+00	7.270E-01	1.700E+02	1.627E+00
8.135E-01	1.800E+02	1.765E+00	8.825E-01	1.900E+02	1.930E+00	9.650E-01	2.000E+02
2.123E+00	1.062E+00						
	1	1	16	32	29		p+S32
2.299E+01	0.000E+00	0.000E+00	2.400E+01	7.626E-06	3.287E-06	2.600E+01	1.172E-04
5.109E-05	2.800E+01	9.693E-04	4.054E-04	3.000E+01	4.400E-03	1.623E-03	3.500E+01
3.210E-02	1.024E-02	4.000E+01	1.009E-01	3.874E-02	4.500E+01	1.506E-01	5.749E-02
5.000E+01	1.309E-01	4.481E-02	5.500E+01	1.507E-01	5.278E-02	6.000E+01	1.764E-01
6.391E-02	6.500E+01	1.725E-01	6.361E-02	7.000E+01	2.378E-01	9.097E-02	7.500E+01
2.977E-01	1.159E-01	8.000E+01	3.725E-01	1.464E-01	8.500E+01	4.734E-01	1.867E-01
9.000E+01	5.595E-01	2.210E-01	9.500E+01	5.947E-01	2.350E-01	1.000E+02	6.510E-01
2.571E-01	1.100E+02	7.023E-01	2.771E-01	1.200E+02	7.549E-01	2.987E-01	1.300E+02
8.178E-01	3.243E-01	1.400E+02	9.027E-01	3.579E-01	1.500E+02	9.799E-01	3.890E-01
1.600E+02	1.113E+00	4.394E-01	1.700E+02	1.267E+00	4.976E-01	1.800E+02	1.376E+00
5.379E-01	1.900E+02	1.457E+00	5.681E-01	2.000E+02	1.607E+00	6.232E-01	
	1	1	16	33	32		p+S33
1.842E+01	0.000E+00	0.000E+00	1.900E+01	2.399E-08	8.147E-09	2.000E+01	9.789E-08
3.202E-08	2.200E+01	1.513E-05	6.559E-06	2.400E+01	2.203E-04	8.570E-05	2.600E+01
1.794E-03	6.451E-04	2.800E+01	7.951E-03	2.487E-03	3.000E+01	1.949E-02	5.998E-03
3.500E+01	7.605E-02	2.630E-02	4.000E+01	1.309E-01	4.447E-02	4.500E+01	1.481E-01
4.596E-02	5.000E+01	1.716E-01	5.205E-02	5.500E+01	1.961E-01	5.966E-02	6.000E+01
1.737E-01	5.184E-02	6.500E+01	1.882E-01	5.752E-02	7.000E+01	2.037E-01	6.394E-02
7.500E+01	2.541E-01	8.159E-02	8.000E+01	3.155E-01	1.018E-01	8.500E+01	3.731E-01
1.222E-01	9.000E+01	4.351E-01	1.438E-01	9.500E+01	4.645E-01	1.545E-01	1.000E+02
4.997E-01	1.663E-01	1.100E+02	5.439E-01	1.825E-01	1.200E+02	5.719E-01	1.929E-01
1.300E+02	5.715E-01	1.943E-01	1.400E+02	5.979E-01	2.045E-01	1.500E+02	6.740E-01
2.311E-01	1.600E+02	7.651E-01	2.620E-01	1.700E+02	8.378E-01	2.867E-01	1.800E+02
9.329E-01	3.180E-01	1.900E+02	1.040E+00	3.530E-01	2.000E+02	1.110E+00	3.761E-01
	1	1	16	34	29		p+S34
2.220E+01	0.000E+00	0.000E+00	2.400E+01	1.378E-05	6.890E-06	2.600E+01	1.403E-04
7.015E-05	2.800E+01	1.162E-03	5.745E-04	3.000E+01	3.886E-03	1.748E-03	3.500E+01
2.780E-02	9.063E-03	4.000E+01	6.395E-02	2.161E-02	4.500E+01	9.651E-02	3.194E-02
5.000E+01	1.230E-01	3.970E-02	5.500E+01	1.491E-01	4.764E-02	6.000E+01	1.407E-01
4.375E-02	6.500E+01	1.564E-01	4.904E-02	7.000E+01	1.669E-01	5.287E-02	7.500E+01
1.817E-01	5.808E-02	8.000E+01	2.240E-01	7.225E-02	8.500E+01	2.687E-01	8.731E-02
9.000E+01	3.154E-01	1.030E-01	9.500E+01	3.486E-01	1.140E-01	1.000E+02	3.706E-01
1.213E-01	1.100E+02	4.047E-01	1.332E-01	1.200E+02	4.186E-01	1.381E-01	1.300E+02
4.289E-01	1.423E-01	1.400E+02	4.212E-01	1.407E-01	1.500E+02	4.442E-01	1.495E-01
1.600E+02	5.017E-01	1.685E-01	1.700E+02	5.721E-01	1.914E-01	1.800E+02	6.553E-01
2.181E-01	1.900E+02	7.263E-01	2.408E-01	2.000E+02	7.753E-01	2.565E-01	
	1	1	16	36	29		p+S36
2.393E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	8.089E-06
4.044E-06	2.800E+01	1.139E-04	5.695E-05	3.000E+01	8.761E-04	4.380E-04	3.500E+01
6.187E-03	2.822E-03	4.000E+01	1.565E-02	6.164E-03	4.500E+01	2.665E-02	9.980E-03
5.000E+01	3.447E-02	1.248E-02	5.500E+01	4.433E-02	1.555E-02	6.000E+01	5.525E-02
1.890E-02	6.500E+01	6.595E-02	2.216E-02	7.000E+01	6.889E-02	2.289E-02	7.500E+01
8.706E-02	2.867E-02	8.000E+01	1.129E-01	3.707E-02	8.500E+01	1.368E-01	4.470E-02
9.000E+01	1.606E-01	5.250E-02	9.500E+01	1.810E-01	5.917E-02	1.000E+02	1.971E-01
6.436E-02	1.100E+02	2.172E-01	7.081E-02	1.200E+02	2.386E-01	7.774E-02	1.300E+02
2.399E-01	7.846E-02	1.400E+02	2.423E-01	7.965E-02	1.500E+02	2.362E-01	7.884E-02
1.600E+02	2.680E-01	8.949E-02	1.700E+02	2.933E-01	9.783E-02	1.800E+02	3.293E-01
1.093E-01	1.900E+02	3.776E-01	1.244E-01	2.000E+02	4.212E-01	1.379E-01	
	1	1	17	35	34		p+C135
1.605E+01	0.000E+00	0.000E+00	1.700E+01	2.960E-08	8.274E-09	1.800E+01	1.109E-07
3.103E-08	1.900E+01	9.667E-07	4.548E-07	2.000E+01	8.059E-06	4.030E-06	2.200E+01
1.803E-04	7.486E-05	2.400E+01	1.733E-03	6.999E-04	2.600E+01	8.649E-03	3.215E-03
2.800E+01	3.122E-02	1.175E-02	3.000E+01	7.747E-02	3.080E-02	3.500E+01	2.225E-01
8.706E-02	4.000E+01	3.208E-01	1.168E-01	4.500E+01	4.002E-01	1.388E-01	5.000E+01
4.851E-01	1.627E-01	5.500E+01	4.813E-01	1.584E-01	6.000E+01	5.214E-01	1.706E-01

6.500E+01	5.616E-01	1.837E-01	7.000E+01	5.368E-01	1.765E-01	7.500E+01	5.661E-01
1.873E-01	8.000E+01	6.152E-01	2.039E-01	8.500E+01	7.219E-01	2.380E-01	9.000E+01
8.568E-01	2.794E-01	9.500E+01	9.034E-01	2.943E-01	1.000E+02	9.410E-01	3.062E-01
1.100E+02	1.010E+00	3.274E-01	1.200E+02	1.008E+00	3.278E-01	1.300E+02	1.004E+00
3.284E-01	1.400E+02	9.873E-01	3.254E-01	1.500E+02	9.426E-01	3.152E-01	1.600E+02
1.076E+00	3.579E-01	1.700E+02	1.176E+00	3.907E-01	1.800E+02	1.297E+00	4.283E-01
1.900E+02	1.414E+00	4.648E-01	2.000E+02	1.518E+00	4.974E-01		
	1	1	17	37	33		p+C137
1.777E+01	0.000E+00	0.000E+00	1.800E+01	1.943E-09	8.632E-10	1.900E+01	1.066E-08
3.842E-09	2.000E+01	4.043E-08	1.477E-08	2.200E+01	7.360E-06	3.680E-06	2.400E+01
9.496E-05	4.425E-05	2.600E+01	8.812E-04	3.733E-04	2.800E+01	3.680E-03	1.313E-03
3.000E+01	9.340E-03	3.122E-03	3.500E+01	3.363E-02	1.171E-02	4.000E+01	6.227E-02
2.127E-02	4.500E+01	9.190E-02	3.045E-02	5.000E+01	1.063E-01	3.360E-02	5.500E+01
1.302E-01	4.051E-02	6.000E+01	1.483E-01	4.570E-02	6.500E+01	1.514E-01	4.601E-02
7.000E+01	1.689E-01	5.135E-02	7.500E+01	1.921E-01	5.870E-02	8.000E+01	2.237E-01
6.893E-02	8.500E+01	2.742E-01	8.435E-02	9.000E+01	3.175E-01	9.764E-02	9.500E+01
3.486E-01	1.072E-01	1.000E+02	3.796E-01	1.165E-01	1.100E+02	4.100E-01	1.256E-01
1.200E+02	4.354E-01	1.332E-01	1.300E+02	4.394E-01	1.347E-01	1.400E+02	4.469E-01
1.378E-01	1.500E+02	4.423E-01	1.376E-01	1.600E+02	4.896E-01	1.525E-01	1.700E+02
5.294E-01	1.649E-01	1.800E+02	5.799E-01	1.801E-01	1.900E+02	6.375E-01	1.971E-01
2.000E+02	7.013E-01	2.158E-01					
	1	1	18	36	31		p+Ar36
1.903E+01	0.000E+00	0.000E+00	2.000E+01	2.199E-07	1.076E-07	2.200E+01	2.936E-05
1.468E-05	2.400E+01	3.419E-04	1.710E-04	2.600E+01	2.646E-03	1.323E-03	2.800E+01
1.059E-02	4.844E-03	3.000E+01	2.170E-02	8.501E-03	3.500E+01	1.210E-01	3.837E-02
4.000E+01	2.264E-01	7.060E-02	4.500E+01	2.293E-01	6.817E-02	5.000E+01	2.714E-01
7.976E-02	5.500E+01	3.212E-01	9.432E-02	6.000E+01	2.807E-01	8.510E-02	6.500E+01
3.553E-01	1.065E-01	7.000E+01	4.479E-01	1.325E-01	7.500E+01	5.816E-01	1.698E-01
8.000E+01	6.984E-01	2.026E-01	8.500E+01	7.813E-01	2.262E-01	9.000E+01	9.101E-01
2.620E-01	9.500E+01	9.817E-01	2.815E-01	1.000E+02	1.007E+00	2.885E-01	1.100E+02
1.050E+00	3.007E-01	1.200E+02	1.073E+00	3.082E-01	1.300E+02	1.120E+00	3.235E-01
1.400E+02	1.186E+00	3.429E-01	1.500E+02	1.299E+00	3.758E-01	1.600E+02	1.427E+00
4.123E-01	1.700E+02	1.531E+00	4.410E-01	1.800E+02	1.672E+00	4.798E-01	1.900E+02
1.808E+00	5.172E-01	2.000E+02	1.899E+00	5.437E-01			
	1	1	18	38	31		p+Ar38
1.939E+01	0.000E+00	0.000E+00	2.000E+01	3.473E-08	1.412E-08	2.200E+01	6.851E-06
3.074E-06	2.400E+01	9.175E-05	4.251E-05	2.600E+01	8.767E-04	3.792E-04	2.800E+01
3.529E-03	1.386E-03	3.000E+01	9.477E-03	3.132E-03	3.500E+01	5.468E-02	1.634E-02
4.000E+01	1.071E-01	3.185E-02	4.500E+01	1.587E-01	4.560E-02	5.000E+01	1.855E-01
5.112E-02	5.500E+01	2.210E-01	6.011E-02	6.000E+01	2.498E-01	6.759E-02	6.500E+01
2.570E-01	6.891E-02	7.000E+01	2.751E-01	7.425E-02	7.500E+01	3.031E-01	8.224E-02
8.000E+01	3.601E-01	9.789E-02	8.500E+01	4.416E-01	1.194E-01	9.000E+01	5.119E-01
1.380E-01	9.500E+01	5.585E-01	1.500E-01	1.000E+02	5.973E-01	1.603E-01	1.100E+02
6.552E-01	1.750E-01	1.200E+02	6.860E-01	1.830E-01	1.300E+02	6.955E-01	1.857E-01
1.400E+02	6.949E-01	1.866E-01	1.500E+02	6.858E-01	1.857E-01	1.600E+02	7.726E-01
2.084E-01	1.700E+02	8.859E-01	2.374E-01	1.800E+02	9.761E-01	2.602E-01	1.900E+02
1.070E+00	2.839E-01	2.000E+02	1.146E+00	3.031E-01			
	1	1	18	40	31		p+Ar40
1.953E+01	0.000E+00	0.000E+00	2.000E+01	1.641E-08	7.238E-09	2.200E+01	4.488E-06
2.002E-06	2.400E+01	6.064E-05	2.823E-05	2.600E+01	5.242E-04	2.358E-04	2.800E+01
2.512E-03	1.051E-03	3.000E+01	5.831E-03	2.254E-03	3.500E+01	2.133E-02	6.492E-03
4.000E+01	4.118E-02	1.194E-02	4.500E+01	5.696E-02	1.592E-02	5.000E+01	7.486E-02
2.032E-02	5.500E+01	9.042E-02	2.410E-02	6.000E+01	9.629E-02	2.529E-02	6.500E+01
1.103E-01	2.879E-02	7.000E+01	1.265E-01	3.299E-02	7.500E+01	1.589E-01	4.129E-02
8.000E+01	1.988E-01	5.148E-02	8.500E+01	2.430E-01	6.318E-02	9.000E+01	2.904E-01
7.561E-02	9.500E+01	3.190E-01	8.274E-02	1.000E+02	3.370E-01	8.744E-02	1.100E+02
3.835E-01	9.930E-02	1.200E+02	3.994E-01	1.033E-01	1.300E+02	4.183E-01	1.083E-01
1.400E+02	4.125E-01	1.073E-01	1.500E+02	4.124E-01	1.084E-01	1.600E+02	4.511E-01
1.188E-01	1.700E+02	4.912E-01	1.295E-01	1.800E+02	5.473E-01	1.439E-01	1.900E+02
6.034E-01	1.576E-01	2.000E+02	6.659E-01	1.727E-01			
	1	1	19	39	34		p+K39
1.611E+01	0.000E+00	0.000E+00	1.700E+01	5.361E-09	1.276E-09	1.800E+01	2.038E-08
4.865E-09	1.900E+01	6.038E-08	1.510E-08	2.000E+01	3.851E-07	1.354E-07	2.200E+01
1.746E-05	7.507E-06	2.400E+01	2.569E-04	9.311E-05	2.600E+01	1.897E-03	6.477E-04
2.800E+01	7.792E-03	2.380E-03	3.000E+01	2.061E-02	6.597E-03	3.500E+01	7.591E-02
2.513E-02	4.000E+01	1.402E-01	4.434E-02	4.500E+01	1.979E-01	5.997E-02	5.000E+01

2.415E-01	7.056E-02	5.500E+01	3.028E-01	8.749E-02	6.000E+01	3.585E-01	1.029E-01
6.500E+01	3.899E-01	1.108E-01	7.000E+01	4.477E-01	1.267E-01	7.500E+01	4.969E-01
1.400E-01	8.000E+01	5.318E-01	1.491E-01	8.500E+01	6.378E-01	1.779E-01	9.000E+01
7.652E-01	2.115E-01	9.500E+01	8.312E-01	2.283E-01	1.000E+02	9.053E-01	2.468E-01
1.100E+02	1.012E+00	2.728E-01	1.200E+02	1.066E+00	2.855E-01	1.300E+02	1.090E+00
2.911E-01	1.400E+02	1.108E+00	2.958E-01	1.500E+02	1.120E+00	2.999E-01	1.600E+02
1.241E+00	3.309E-01	1.700E+02	1.393E+00	3.695E-01	1.800E+02	1.516E+00	4.004E-01
1.900E+02	1.620E+00	4.267E-01	2.000E+02	1.776E+00	4.647E-01		
	1	1	19	40	38		p+K40
1.239E+01	0.000E+00	0.000E+00	1.300E+01	2.154E-10	6.094E-11	1.400E+01	1.503E-09
4.315E-10	1.500E+01	5.887E-09	1.704E-09	1.600E+01	1.796E-08	5.184E-09	1.700E+01
5.705E-08	1.680E-08	1.800E+01	2.382E-07	7.404E-08	1.900E+01	5.630E-06	1.946E-06
2.000E+01	2.502E-05	8.941E-06	2.200E+01	2.933E-04	1.088E-04	2.400E+01	2.185E-03
8.000E-04	2.600E+01	7.358E-03	2.585E-03	2.800E+01	1.667E-02	5.747E-03	3.000E+01
2.852E-02	9.803E-03	3.500E+01	6.072E-02	2.013E-02	4.000E+01	9.477E-02	3.021E-02
4.500E+01	1.203E-01	3.702E-02	5.000E+01	1.513E-01	4.595E-02	5.500E+01	1.831E-01
5.525E-02	6.000E+01	1.965E-01	5.880E-02	6.500E+01	2.337E-01	6.989E-02	7.000E+01
2.751E-01	8.245E-02	7.500E+01	3.390E-01	1.011E-01	8.000E+01	4.272E-01	1.268E-01
8.500E+01	5.145E-01	1.524E-01	9.000E+01	6.013E-01	1.771E-01	9.500E+01	6.507E-01
1.901E-01	1.000E+02	6.950E-01	2.024E-01	1.100E+02	7.664E-01	2.216E-01	1.200E+02
8.005E-01	2.303E-01	1.300E+02	8.336E-01	2.391E-01	1.400E+02	8.303E-01	2.385E-01
1.500E+02	8.485E-01	2.447E-01	1.600E+02	9.688E-01	2.778E-01	1.700E+02	1.100E+00
3.131E-01	1.800E+02	1.217E+00	3.445E-01	1.900E+02	1.306E+00	3.676E-01	2.000E+02
1.400E+00	3.930E-01						
	1	1	19	41	35		p+K41
1.557E+01	0.000E+00	0.000E+00	1.600E+01	1.241E-09	4.494E-10	1.700E+01	5.895E-09
1.863E-09	1.800E+01	1.944E-08	6.438E-09	1.900E+01	6.826E-08	2.425E-08	2.000E+01
1.967E-06	9.206E-07	2.200E+01	5.048E-05	2.372E-05	2.400E+01	4.791E-04	2.174E-04
2.600E+01	3.092E-03	1.293E-03	2.800E+01	9.183E-03	3.409E-03	3.000E+01	1.804E-02
6.194E-03	3.500E+01	4.843E-02	1.490E-02	4.000E+01	8.254E-02	2.400E-02	4.500E+01
1.086E-01	3.060E-02	5.000E+01	1.386E-01	3.775E-02	5.500E+01	1.679E-01	4.471E-02
6.000E+01	1.819E-01	4.804E-02	6.500E+01	2.070E-01	5.412E-02	7.000E+01	2.334E-01
6.041E-02	7.500E+01	2.459E-01	6.355E-02	8.000E+01	3.081E-01	7.845E-02	8.500E+01
3.750E-01	9.489E-02	9.000E+01	4.463E-01	1.122E-01	9.500E+01	4.819E-01	1.209E-01
1.000E+02	5.191E-01	1.301E-01	1.100E+02	5.920E-01	1.474E-01	1.200E+02	6.366E-01
1.579E-01	1.300E+02	6.684E-01	1.654E-01	1.400E+02	7.049E-01	1.741E-01	1.500E+02
6.990E-01	1.733E-01	1.600E+02	7.641E-01	1.895E-01	1.700E+02	8.453E-01	2.092E-01
1.800E+02	9.261E-01	2.286E-01	1.900E+02	9.853E-01	2.431E-01	2.000E+02	1.052E+00
2.592E-01							
	1	1	20	40	31		p+Ca40
1.936E+01	0.000E+00	0.000E+00	2.000E+01	2.061E-08	8.212E-09	2.200E+01	7.538E-07
3.285E-07	2.400E+01	3.590E-05	1.716E-05	2.600E+01	3.925E-04	1.860E-04	2.800E+01
2.939E-03	1.267E-03	3.000E+01	8.908E-03	3.460E-03	3.500E+01	5.569E-02	1.633E-02
4.000E+01	1.028E-01	2.962E-02	4.500E+01	1.437E-01	4.022E-02	5.000E+01	1.888E-01
5.201E-02	5.500E+01	1.816E-01	5.039E-02	6.000E+01	2.238E-01	6.234E-02	6.500E+01
2.999E-01	8.359E-02	7.000E+01	4.181E-01	1.160E-01	7.500E+01	5.421E-01	1.498E-01
8.000E+01	6.730E-01	1.854E-01	8.500E+01	8.462E-01	2.315E-01	9.000E+01	1.001E+00
2.714E-01	9.500E+01	1.076E+00	2.902E-01	1.000E+02	1.171E+00	3.136E-01	1.100E+02
1.306E+00	3.463E-01	1.200E+02	1.380E+00	3.634E-01	1.300E+02	1.484E+00	3.898E-01
1.400E+02	1.596E+00	4.178E-01	1.500E+02	1.724E+00	4.505E-01	1.600E+02	1.955E+00
5.073E-01	1.700E+02	2.158E+00	5.571E-01	1.800E+02	2.385E+00	6.121E-01	1.900E+02
2.543E+00	6.497E-01	2.000E+02	2.776E+00	7.047E-01			
	1	1	20	42	33		p+Ca42
1.793E+01	0.000E+00	0.000E+00	1.800E+01	1.725E-08	5.599E-09	1.900E+01	6.566E-08
2.102E-08	2.000E+01	2.318E-07	7.715E-08	2.200E+01	4.345E-05	1.608E-05	2.400E+01
6.825E-04	2.600E-04	2.600E+01	5.749E-03	2.246E-03	2.800E+01	2.415E-02	9.467E-03
3.000E+01	5.235E-02	2.116E-02	3.500E+01	1.529E-01	5.957E-02	4.000E+01	2.565E-01
9.838E-02	4.500E+01	3.368E-01	1.320E-01	5.000E+01	4.044E-01	1.587E-01	5.500E+01
4.575E-01	1.799E-01	6.000E+01	4.823E-01	1.941E-01	6.500E+01	5.151E-01	2.055E-01
7.000E+01	5.522E-01	2.147E-01	7.500E+01	6.145E-01	2.225E-01	8.000E+01	6.920E-01
2.309E-01	8.500E+01	7.623E-01	2.382E-01	9.000E+01	8.402E-01	2.466E-01	9.500E+01
8.858E-01	2.487E-01	1.000E+02	9.131E-01	2.486E-01	1.100E+02	9.473E-01	2.468E-01
1.200E+02	9.717E-01	2.447E-01	1.300E+02	9.849E-01	2.422E-01	1.400E+02	9.682E-01
2.358E-01	1.500E+02	9.987E-01	2.408E-01	1.600E+02	1.082E+00	2.564E-01	1.700E+02
1.180E+00	2.760E-01	1.800E+02	1.299E+00	3.012E-01	1.900E+02	1.396E+00	3.229E-01
2.000E+02	1.475E+00	3.411E-01					

	1	1	20	43	35			p+Ca43
1.548E+01	0.000E+00	0.000E+00	1.600E+01	1.261E-09	5.045E-10	1.700E+01	5.505E-09	
2.031E-09	1.800E+01	1.931E-08	7.516E-09	1.900E+01	5.881E-08	2.465E-08	2.000E+01	
7.776E-07	3.888E-07	2.200E+01	3.868E-05	1.934E-05	2.400E+01	4.769E-04	2.384E-04	
2.600E+01	3.073E-03	1.537E-03	2.800E+01	1.051E-02	5.255E-03	3.000E+01	2.170E-02	
1.021E-02	3.500E+01	5.584E-02	2.347E-02	4.000E+01	9.474E-02	3.674E-02	4.500E+01	
1.284E-01	4.788E-02	5.000E+01	1.619E-01	5.749E-02	5.500E+01	1.965E-01	6.628E-02	
6.000E+01	2.127E-01	7.161E-02	6.500E+01	2.357E-01	7.684E-02	7.000E+01	2.640E-01	
8.144E-02	7.500E+01	2.995E-01	8.808E-02	8.000E+01	3.493E-01	9.687E-02	8.500E+01	
4.143E-01	1.090E-01	9.000E+01	4.949E-01	1.247E-01	9.500E+01	5.362E-01	1.326E-01	
1.000E+02	5.615E-01	1.373E-01	1.100E+02	6.202E-01	1.489E-01	1.200E+02	6.675E-01	
1.583E-01	1.300E+02	6.737E-01	1.591E-01	1.400E+02	6.990E-01	1.646E-01	1.500E+02	
6.993E-01	1.653E-01	1.600E+02	7.437E-01	1.758E-01	1.700E+02	8.202E-01	1.932E-01	
1.800E+02	9.355E-01	2.189E-01	1.900E+02	1.031E+00	2.397E-01	2.000E+02	1.114E+00	
2.581E-01								
	1	1	20	44	30			p+Ca44
2.061E+01	0.000E+00	0.000E+00	2.200E+01	3.935E-08	1.967E-08	2.400E+01	5.596E-06	
2.798E-06	2.600E+01	1.348E-04	6.740E-05	2.800E+01	1.564E-03	7.820E-04	3.000E+01	
8.898E-03	4.449E-03	3.500E+01	4.616E-02	2.308E-02	4.000E+01	9.424E-02	4.712E-02	
4.500E+01	1.399E-01	6.995E-02	5.000E+01	1.831E-01	9.155E-02	5.500E+01	2.186E-01	
1.093E-01	6.000E+01	2.532E-01	1.266E-01	6.500E+01	2.822E-01	1.411E-01	7.000E+01	
3.036E-01	1.518E-01	7.500E+01	3.307E-01	1.653E-01	8.000E+01	3.647E-01	1.824E-01	
8.500E+01	4.032E-01	2.016E-01	9.000E+01	4.537E-01	2.268E-01	9.500E+01	4.829E-01	
2.414E-01	1.000E+02	4.989E-01	2.495E-01	1.100E+02	5.340E-01	2.491E-01	1.200E+02	
5.577E-01	2.406E-01	1.300E+02	5.665E-01	2.310E-01	1.400E+02	5.778E-01	2.226E-01	
1.500E+02	5.723E-01	2.134E-01	1.600E+02	5.981E-01	2.115E-01	1.700E+02	6.384E-01	
2.120E-01	1.800E+02	7.262E-01	2.214E-01	1.900E+02	8.029E-01	2.300E-01	2.000E+02	
8.611E-01	2.372E-01							
	1	1	20	46	28			p+Ca46
2.459E+01	0.000E+00	0.000E+00	2.600E+01	1.440E-08	7.200E-09	2.800E+01	3.110E-06	
1.555E-06	3.000E+01	7.187E-05	3.594E-05	3.500E+01	7.171E-03	3.586E-03	4.000E+01	
2.626E-02	1.313E-02	4.500E+01	4.640E-02	2.320E-02	5.000E+01	6.554E-02	3.277E-02	
5.500E+01	8.355E-02	4.177E-02	6.000E+01	9.904E-02	4.952E-02	6.500E+01	1.128E-01	
5.640E-02	7.000E+01	1.252E-01	6.260E-02	7.500E+01	1.363E-01	6.815E-02	8.000E+01	
1.476E-01	7.380E-02	8.500E+01	1.615E-01	8.075E-02	9.000E+01	1.777E-01	8.885E-02	
9.500E+01	1.880E-01	9.400E-02	1.000E+02	1.983E-01	9.915E-02	1.100E+02	2.165E-01	
1.082E-01	1.200E+02	2.300E-01	1.150E-01	1.300E+02	2.396E-01	1.198E-01	1.400E+02	
2.435E-01	1.217E-01	1.500E+02	2.492E-01	1.246E-01	1.600E+02	2.672E-01	1.336E-01	
1.700E+02	2.836E-01	1.418E-01	1.800E+02	3.031E-01	1.515E-01	1.900E+02	3.350E-01	
1.660E-01	2.000E+02	3.770E-01	1.626E-01					
	1	1	20	48	26			p+Ca48
2.837E+01	0.000E+00	0.000E+00	3.000E+01	9.765E-09	4.883E-09	3.500E+01	1.677E-04	
8.385E-05	4.000E+01	6.725E-03	3.363E-03	4.500E+01	1.763E-02	8.815E-03	5.000E+01	
2.897E-02	1.448E-02	5.500E+01	3.895E-02	1.947E-02	6.000E+01	4.798E-02	2.399E-02	
6.500E+01	5.584E-02	2.792E-02	7.000E+01	6.262E-02	3.131E-02	7.500E+01	6.866E-02	
3.433E-02	8.000E+01	7.371E-02	3.685E-02	8.500E+01	7.850E-02	3.925E-02	9.000E+01	
8.336E-02	4.168E-02	9.500E+01	8.663E-02	4.331E-02	1.000E+02	8.973E-02	4.487E-02	
1.100E+02	9.500E-02	4.750E-02	1.200E+02	9.904E-02	4.952E-02	1.300E+02	1.032E-01	
5.160E-02	1.400E+02	1.046E-01	5.230E-02	1.500E+02	1.077E-01	5.385E-02	1.600E+02	
1.161E-01	5.805E-02	1.700E+02	1.231E-01	6.155E-02	1.800E+02	1.289E-01	6.445E-02	
1.900E+02	1.402E-01	7.010E-02	2.000E+02	1.528E-01	7.640E-02			
	1	1	21	45	34			p+Sc45
1.667E+01	0.000E+00	0.000E+00	1.700E+01	1.907E-10	9.535E-11	1.800E+01	9.553E-10	
4.776E-10	1.900E+01	3.099E-09	1.550E-09	2.000E+01	9.962E-09	4.981E-09	2.200E+01	
7.562E-07	3.781E-07	2.400E+01	2.405E-05	1.202E-05	2.600E+01	2.404E-04	1.202E-04	
2.800E+01	1.717E-03	8.585E-04	3.000E+01	5.329E-03	2.665E-03	3.500E+01	2.009E-02	
1.005E-02	4.000E+01	4.032E-02	2.016E-02	4.500E+01	6.433E-02	3.216E-02	5.000E+01	
8.764E-02	4.382E-02	5.500E+01	1.149E-01	5.741E-02	6.000E+01	1.412E-01	6.538E-02	
6.500E+01	1.631E-01	7.272E-02	7.000E+01	1.915E-01	7.947E-02	7.500E+01	2.216E-01	
8.585E-02	8.000E+01	2.604E-01	9.335E-02	8.500E+01	2.889E-01	9.884E-02	9.000E+01	
3.368E-01	1.081E-01	9.500E+01	3.867E-01	1.168E-01	1.000E+02	4.400E-01	1.263E-01	
1.100E+02	5.110E-01	1.385E-01	1.200E+02	5.718E-01	1.492E-01	1.300E+02	6.163E-01	
1.567E-01	1.400E+02	6.606E-01	1.646E-01	1.500E+02	6.917E-01	1.706E-01	1.600E+02	
7.585E-01	1.847E-01	1.700E+02	8.185E-01	1.975E-01	1.800E+02	8.945E-01	2.139E-01	
1.900E+02	9.946E-01	2.357E-01	2.000E+02	1.089E+00	2.561E-01			
	1	1	22	46	31			p+Ti46

1.949E+01	0.000E+00	0.000E+00	2.000E+01	4.457E-09	2.228E-09	2.200E+01	5.063E-08
2.531E-08	2.400E+01	8.347E-06	4.173E-06	2.600E+01	1.430E-04	7.150E-05	2.800E+01
1.555E-03	7.775E-04	3.000E+01	9.260E-03	4.630E-03	3.500E+01	5.513E-02	2.756E-02
4.000E+01	1.183E-01	5.915E-02	4.500E+01	1.779E-01	8.895E-02	5.000E+01	2.350E-01
1.175E-01	5.500E+01	2.823E-01	1.411E-01	6.000E+01	3.280E-01	1.640E-01	6.500E+01
3.685E-01	1.842E-01	7.000E+01	4.037E-01	2.019E-01	7.500E+01	4.412E-01	2.206E-01
8.000E+01	4.813E-01	2.407E-01	8.500E+01	5.451E-01	2.726E-01	9.000E+01	6.106E-01
3.053E-01	9.500E+01	6.485E-01	3.242E-01	1.000E+02	6.791E-01	3.396E-01	1.100E+02
7.385E-01	3.693E-01	1.200E+02	7.725E-01	3.862E-01	1.300E+02	7.830E-01	3.734E-01
1.400E+02	7.924E-01	3.540E-01	1.500E+02	8.144E-01	3.380E-01	1.600E+02	9.029E-01
3.345E-01	1.700E+02	9.883E-01	3.321E-01	1.800E+02	1.103E+00	3.360E-01	1.900E+02
1.224E+00	3.428E-01	2.000E+02	1.327E+00	3.496E-01			
	1	1	22	47	32		p+Ti47
1.824E+01	0.000E+00	0.000E+00	1.900E+01	2.127E-10	1.063E-10	2.000E+01	7.485E-10
3.742E-10	2.200E+01	8.469E-09	4.234E-09	2.400E+01	7.733E-07	3.866E-07	2.600E+01
2.504E-05	1.252E-05	2.800E+01	2.393E-04	1.196E-04	3.000E+01	1.721E-03	8.605E-04
3.500E+01	1.244E-02	6.220E-03	4.000E+01	2.682E-02	1.341E-02	4.500E+01	4.263E-02
2.132E-02	5.000E+01	5.961E-02	2.981E-02	5.500E+01	7.534E-02	3.767E-02	6.000E+01
9.270E-02	4.635E-02	6.500E+01	1.105E-01	5.525E-02	7.000E+01	1.308E-01	6.540E-02
7.500E+01	1.498E-01	7.490E-02	8.000E+01	1.738E-01	8.690E-02	8.500E+01	2.055E-01
1.027E-01	9.000E+01	2.527E-01	1.263E-01	9.500E+01	2.858E-01	1.272E-01	1.000E+02
3.152E-01	1.276E-01	1.100E+02	3.720E-01	1.282E-01	1.200E+02	4.149E-01	1.280E-01
1.300E+02	4.488E-01	1.279E-01	1.400E+02	4.722E-01	1.272E-01	1.500E+02	5.010E-01
1.268E-01	1.600E+02	5.592E-01	1.350E-01	1.700E+02	6.027E-01	1.413E-01	1.800E+02
6.754E-01	1.534E-01	1.900E+02	7.775E-01	1.715E-01	2.000E+02	8.900E-01	1.920E-01
	1	1	22	48	29		p+Ti48
2.241E+01	0.000E+00	0.000E+00	2.400E+01	2.959E-09	1.479E-09	2.600E+01	1.436E-07
7.180E-08	2.800E+01	8.336E-06	4.168E-06	3.000E+01	1.091E-04	5.455E-05	3.500E+01
4.672E-03	2.336E-03	4.000E+01	1.356E-02	6.780E-03	4.500E+01	2.355E-02	1.178E-02
5.000E+01	3.323E-02	1.662E-02	5.500E+01	4.301E-02	2.150E-02	6.000E+01	5.260E-02
2.630E-02	6.500E+01	6.067E-02	3.034E-02	7.000E+01	7.040E-02	3.520E-02	7.500E+01
7.973E-02	3.986E-02	8.000E+01	8.916E-02	4.458E-02	8.500E+01	1.092E-01	5.460E-02
9.000E+01	1.307E-01	6.535E-02	9.500E+01	1.484E-01	7.420E-02	1.000E+02	1.675E-01
8.375E-02	1.100E+02	2.056E-01	1.028E-01	1.200E+02	2.375E-01	1.187E-01	1.300E+02
2.641E-01	1.241E-01	1.400E+02	2.809E-01	1.205E-01	1.500E+02	2.864E-01	1.134E-01
1.600E+02	3.278E-01	1.162E-01	1.700E+02	3.791E-01	1.215E-01	1.800E+02	4.300E-01
1.276E-01	1.900E+02	4.915E-01	1.365E-01	2.000E+02	5.528E-01	1.457E-01	
	1	1	22	49	30		p+Ti49
2.087E+01	0.000E+00	0.000E+00	2.200E+01	1.390E-10	6.950E-11	2.400E+01	1.868E-09
9.340E-10	2.600E+01	3.923E-08	1.962E-08	2.800E+01	5.256E-06	2.628E-06	3.000E+01
7.408E-05	3.704E-05	3.500E+01	3.624E-03	1.812E-03	4.000E+01	1.021E-02	5.105E-03
4.500E+01	1.716E-02	8.580E-03	5.000E+01	2.392E-02	1.196E-02	5.500E+01	3.040E-02
1.520E-02	6.000E+01	3.693E-02	1.846E-02	6.500E+01	4.242E-02	2.121E-02	7.000E+01
4.790E-02	2.395E-02	7.500E+01	5.394E-02	2.697E-02	8.000E+01	6.011E-02	3.005E-02
8.500E+01	7.090E-02	3.545E-02	9.000E+01	8.302E-02	4.151E-02	9.500E+01	9.200E-02
4.600E-02	1.000E+02	1.022E-01	5.110E-02	1.100E+02	1.254E-01	5.909E-02	1.200E+02
1.421E-01	5.846E-02	1.300E+02	1.607E-01	5.828E-02	1.400E+02	1.724E-01	5.760E-02
1.500E+02	1.781E-01	5.753E-02	1.600E+02	2.032E-01	5.999E-02	1.700E+02	2.315E-01
6.339E-02	1.800E+02	2.550E-01	6.653E-02	1.900E+02	2.878E-01	7.153E-02	2.000E+02
3.315E-01	7.883E-02						
	1	1	22	50	28		p+Ti50
2.458E+01	0.000E+00	0.000E+00	2.600E+01	3.514E-09	1.757E-09	2.800E+01	4.034E-08
2.017E-08	3.000E+01	1.110E-05	5.550E-06	3.500E+01	3.411E-03	1.705E-03	4.000E+01
1.898E-02	9.490E-03	4.500E+01	3.749E-02	1.875E-02	5.000E+01	5.530E-02	2.765E-02
5.500E+01	7.125E-02	3.562E-02	6.000E+01	8.497E-02	4.249E-02	6.500E+01	9.716E-02
4.858E-02	7.000E+01	1.092E-01	5.460E-02	7.500E+01	1.174E-01	5.870E-02	8.000E+01
1.252E-01	6.260E-02	8.500E+01	1.320E-01	6.600E-02	9.000E+01	1.396E-01	6.980E-02
9.500E+01	1.447E-01	7.235E-02	1.000E+02	1.485E-01	7.425E-02	1.100E+02	1.578E-01
7.890E-02	1.200E+02	1.629E-01	8.145E-02	1.300E+02	1.690E-01	8.450E-02	1.400E+02
1.742E-01	8.710E-02	1.500E+02	1.749E-01	8.745E-02	1.600E+02	1.925E-01	8.821E-02
1.700E+02	2.056E-01	8.649E-02	1.800E+02	2.148E-01	8.463E-02	1.900E+02	2.301E-01
8.353E-02	2.000E+02	2.504E-01	8.333E-02				
	1	1	23	50	31		p+v50
1.656E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	6.655E-10
2.850E-10	2.400E+01	5.672E-09	2.787E-09	2.600E+01	9.798E-07	4.899E-07	2.800E+01
1.229E-05	6.145E-06	3.000E+01	9.606E-05	4.803E-05	3.500E+01	9.674E-04	4.837E-04

4.000E+01	2.702E-03	1.249E-03	4.500E+01	5.026E-03	1.994E-03	5.000E+01	7.994E-03
2.846E-03	5.500E+01	1.169E-02	3.849E-03	6.000E+01	1.467E-02	4.622E-03	6.500E+01
1.896E-02	5.736E-03	7.000E+01	2.329E-02	6.856E-03	7.500E+01	2.754E-02	7.954E-03
8.000E+01	3.285E-02	9.371E-03	8.500E+01	4.558E-02	1.266E-02	9.000E+01	6.264E-02
1.696E-02	9.500E+01	7.557E-02	2.014E-02	1.000E+02	8.808E-02	2.315E-02	1.100E+02
1.146E-01	2.933E-02	1.200E+02	1.422E-01	3.541E-02	1.300E+02	1.608E-01	3.933E-02
1.400E+02	1.823E-01	4.373E-02	1.500E+02	1.931E-01	4.590E-02	1.600E+02	2.296E-01
5.389E-02	1.700E+02	2.616E-01	6.080E-02	1.800E+02	2.937E-01	6.766E-02	1.900E+02
3.417E-01	7.768E-02	2.000E+02	3.930E-01	8.837E-02			
1	1	23	51	30			p+v51
2.026E+01	0.000E+00	0.000E+00	2.200E+01	1.546E-10	7.634E-11	2.400E+01	2.065E-09
1.032E-09	2.600E+01	2.175E-08	1.087E-08	2.800E+01	5.617E-06	2.808E-06	3.000E+01
7.613E-05	3.807E-05	3.500E+01	3.479E-03	1.739E-03	4.000E+01	1.060E-02	5.300E-03
4.500E+01	1.833E-02	9.027E-03	5.000E+01	2.603E-02	1.240E-02	5.500E+01	3.396E-02
1.546E-02	6.000E+01	4.086E-02	1.805E-02	6.500E+01	4.789E-02	2.035E-02	7.000E+01
5.389E-02	2.223E-02	7.500E+01	6.029E-02	2.389E-02	8.000E+01	6.788E-02	2.551E-02
8.500E+01	7.523E-02	2.699E-02	9.000E+01	8.360E-02	2.856E-02	9.500E+01	9.323E-02
3.003E-02	1.000E+02	1.033E-01	3.165E-02	1.100E+02	1.278E-01	3.609E-02	1.200E+02
1.462E-01	3.958E-02	1.300E+02	1.665E-01	4.369E-02	1.400E+02	1.846E-01	4.739E-02
1.500E+02	1.957E-01	4.959E-02	1.600E+02	2.272E-01	5.680E-02	1.700E+02	2.574E-01
6.369E-02	1.800E+02	2.869E-01	7.051E-02	1.900E+02	3.166E-01	7.727E-02	2.000E+02
3.514E-01	8.543E-02						
1	1	24	50	30			p+Cr50
2.135E+01	0.000E+00	0.000E+00	2.200E+01	8.407E-10	4.042E-10	2.400E+01	1.039E-08
5.192E-09	2.600E+01	1.027E-07	5.135E-08	2.800E+01	2.316E-05	1.158E-05	3.000E+01
2.922E-04	1.461E-04	3.500E+01	1.484E-02	7.420E-03	4.000E+01	4.745E-02	2.372E-02
4.500E+01	8.330E-02	4.165E-02	5.000E+01	1.169E-01	5.845E-02	5.500E+01	1.465E-01
7.325E-02	6.000E+01	1.726E-01	8.630E-02	6.500E+01	1.939E-01	9.695E-02	7.000E+01
2.159E-01	1.080E-01	7.500E+01	2.334E-01	1.167E-01	8.000E+01	2.497E-01	1.249E-01
8.500E+01	2.704E-01	1.352E-01	9.000E+01	2.949E-01	1.474E-01	9.500E+01	3.128E-01
1.564E-01	1.000E+02	3.316E-01	1.658E-01	1.100E+02	3.739E-01	1.715E-01	1.200E+02
3.988E-01	1.656E-01	1.300E+02	4.303E-01	1.604E-01	1.400E+02	4.524E-01	1.551E-01
1.500E+02	4.617E-01	1.493E-01	1.600E+02	5.144E-01	1.510E-01	1.700E+02	5.726E-01
1.546E-01	1.800E+02	6.316E-01	1.594E-01	1.900E+02	7.096E-01	1.680E-01	2.000E+02
7.773E-01	1.762E-01						
1	1	24	52	29			p+Cr52
2.257E+01	0.000E+00	0.000E+00	2.400E+01	1.645E-09	6.623E-10	2.600E+01	2.088E-08
8.913E-09	2.800E+01	2.834E-06	1.198E-06	3.000E+01	6.985E-05	3.215E-05	3.500E+01
8.871E-03	4.092E-03	4.000E+01	4.115E-02	2.051E-02	4.500E+01	7.840E-02	3.920E-02
5.000E+01	1.149E-01	5.745E-02	5.500E+01	1.480E-01	7.400E-02	6.000E+01	1.759E-01
8.795E-02	6.500E+01	1.999E-01	9.995E-02	7.000E+01	2.237E-01	1.119E-01	7.500E+01
2.399E-01	1.200E-01	8.000E+01	2.557E-01	1.278E-01	8.500E+01	2.689E-01	1.344E-01
9.000E+01	2.869E-01	1.403E-01	9.500E+01	2.955E-01	1.406E-01	1.000E+02	3.047E-01
1.402E-01	1.100E+02	3.248E-01	1.379E-01	1.200E+02	3.342E-01	1.338E-01	1.300E+02
3.447E-01	1.296E-01	1.400E+02	3.574E-01	1.259E-01	1.500E+02	3.490E-01	1.175E-01
1.600E+02	3.778E-01	1.185E-01	1.700E+02	4.053E-01	1.202E-01	1.800E+02	4.348E-01
1.230E-01	1.900E+02	4.671E-01	1.270E-01	2.000E+02	5.151E-01	1.348E-01	
1	1	24	53	31			p+Cr53
1.980E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	1.771E-10
8.855E-11	2.400E+01	2.181E-09	1.090E-09	2.600E+01	2.173E-08	1.087E-08	2.800E+01
5.405E-06	2.702E-06	3.000E+01	7.118E-05	3.559E-05	3.500E+01	3.574E-03	1.787E-03
4.000E+01	1.014E-02	5.070E-03	4.500E+01	1.691E-02	8.455E-03	5.000E+01	2.344E-02
1.172E-02	5.500E+01	2.950E-02	1.475E-02	6.000E+01	3.469E-02	1.734E-02	6.500E+01
3.970E-02	1.985E-02	7.000E+01	4.392E-02	2.196E-02	7.500E+01	4.756E-02	2.378E-02
8.000E+01	5.151E-02	2.552E-02	8.500E+01	5.851E-02	2.659E-02	9.000E+01	6.720E-02
2.777E-02	9.500E+01	7.277E-02	2.826E-02	1.000E+02	7.848E-02	2.880E-02	1.100E+02
9.061E-02	3.026E-02	1.200E+02	1.039E-01	3.240E-02	1.300E+02	1.117E-01	3.361E-02
1.400E+02	1.224E-01	3.581E-02	1.500E+02	1.259E-01	3.635E-02	1.600E+02	1.441E-01
4.092E-02	1.700E+02	1.644E-01	4.626E-02	1.800E+02	1.825E-01	5.117E-02	1.900E+02
2.022E-01	5.650E-02	2.000E+02	2.294E-01	6.401E-02			
1	1	24	54	30			p+Cr54
2.131E+01	0.000E+00	0.000E+00	2.200E+01	4.084E-10	1.794E-10	2.400E+01	5.513E-09
2.534E-09	2.600E+01	2.161E-07	9.418E-08	2.800E+01	1.940E-05	9.216E-06	3.000E+01
2.548E-04	1.248E-04	3.500E+01	1.138E-02	5.690E-03	4.000E+01	3.471E-02	1.735E-02
4.500E+01	5.896E-02	2.948E-02	5.000E+01	8.194E-02	4.097E-02	5.500E+01	1.016E-01
5.080E-02	6.000E+01	1.186E-01	5.930E-02	6.500E+01	1.329E-01	6.645E-02	7.000E+01

1.439E-01	7.195E-02	7.500E+01	1.533E-01	7.665E-02	8.000E+01	1.611E-01	8.055E-02
8.500E+01	1.699E-01	8.495E-02	9.000E+01	1.775E-01	8.875E-02	9.500E+01	1.808E-01
9.040E-02	1.000E+02	1.836E-01	9.180E-02	1.100E+02	1.895E-01	9.307E-02	1.200E+02
1.925E-01	8.948E-02	1.300E+02	1.950E-01	8.557E-02	1.400E+02	1.958E-01	8.172E-02
1.500E+02	1.937E-01	7.790E-02	1.600E+02	2.031E-01	7.629E-02	1.700E+02	2.153E-01
7.536E-02	1.800E+02	2.274E-01	7.488E-02	1.900E+02	2.439E-01	7.544E-02	2.000E+02
2.537E-01	7.539E-02						
1	1	25	55	31			p+Mn55
1.796E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	8.025E-10
4.012E-10	2.400E+01	9.660E-09	4.830E-09	2.600E+01	1.469E-06	7.345E-07	2.800E+01
2.514E-05	1.257E-05	3.000E+01	2.537E-04	1.268E-04	3.500E+01	4.412E-03	2.206E-03
4.000E+01	1.029E-02	5.145E-03	4.500E+01	1.656E-02	8.280E-03	5.000E+01	2.279E-02
1.140E-02	5.500E+02	2.841E-02	1.421E-02	6.000E+01	3.383E-02	1.691E-02	6.500E+01
3.802E-02	1.871E-02	7.000E+01	4.202E-02	2.021E-02	7.500E+01	4.591E-02	2.147E-02
8.000E+01	4.929E-02	2.248E-02	8.500E+01	5.489E-02	2.357E-02	9.000E+01	6.288E-02
2.491E-02	9.500E+01	6.940E-02	2.580E-02	1.000E+02	7.502E-02	2.658E-02	1.100E+02
8.824E-02	2.875E-02	1.200E+02	1.026E-01	3.154E-02	1.300E+02	1.122E-01	3.347E-02
1.400E+02	1.217E-01	3.555E-02	1.500E+02	1.285E-01	3.702E-02	1.600E+02	1.480E-01
4.202E-02	1.700E+02	1.692E-01	4.766E-02	1.800E+02	1.876E-01	5.263E-02	1.900E+02
2.062E-01	5.767E-02	2.000E+02	2.226E-01	6.209E-02			
1	1	26	54	30			p+Fe54
2.064E+01	0.000E+00	0.000E+00	2.200E+01	5.544E-10	2.122E-10	2.400E+01	6.718E-09
2.726E-09	2.600E+01	6.226E-08	2.865E-08	2.800E+01	1.198E-05	5.664E-06	3.000E+01
1.658E-04	8.290E-05	3.500E+01	1.123E-02	5.566E-03	4.000E+01	4.190E-02	2.095E-02
4.500E+01	7.605E-02	3.803E-02	5.000E+01	1.094E-01	5.470E-02	5.500E+01	1.402E-01
7.010E-02	6.000E+01	1.655E-01	8.275E-02	6.500E+01	1.869E-01	9.345E-02	7.000E+01
2.002E-01	1.001E-01	7.500E+01	2.139E-01	1.070E-01	8.000E+01	2.259E-01	1.129E-01
8.500E+01	2.379E-01	1.190E-01	9.000E+01	2.533E-01	1.259E-01	9.500E+01	2.625E-01
1.256E-01	1.000E+02	2.699E-01	1.245E-01	1.100E+02	2.859E-01	1.214E-01	1.200E+02
3.012E-01	1.177E-01	1.300E+02	3.096E-01	1.135E-01	1.400E+02	3.191E-01	1.099E-01
1.500E+02	3.266E-01	1.093E-01	1.600E+02	3.551E-01	1.106E-01	1.700E+02	3.854E-01
1.132E-01	1.800E+02	4.234E-01	1.182E-01	1.900E+02	4.615E-01	1.243E-01	2.000E+02
5.000E-01	1.313E-01						
1	1	26	56	30			p+Fe56
2.022E+01	0.000E+00	0.000E+00	2.200E+01	6.953E-10	3.035E-10	2.400E+01	7.353E-09
3.506E-09	2.600E+01	2.376E-07	1.098E-07	2.800E+01	1.958E-05	9.790E-06	3.000E+01
2.400E-04	1.200E-04	3.500E+01	1.127E-02	5.635E-03	4.000E+01	3.604E-02	1.802E-02
4.500E+01	6.254E-02	3.127E-02	5.000E+01	8.793E-02	4.396E-02	5.500E+01	1.082E-01
5.410E-02	6.000E+01	1.270E-01	6.350E-02	6.500E+01	1.425E-01	7.125E-02	7.000E+01
1.541E-01	7.705E-02	7.500E+01	1.646E-01	8.230E-02	8.000E+01	1.731E-01	8.655E-02
8.500E+01	1.860E-01	9.300E-02	9.000E+01	2.002E-01	1.001E-01	9.500E+01	2.098E-01
1.049E-01	1.000E+02	2.169E-01	1.085E-01	1.100E+02	2.299E-01	1.076E-01	1.200E+02
2.460E-01	1.058E-01	1.300E+02	2.555E-01	1.031E-01	1.400E+02	2.641E-01	1.008E-01
1.500E+02	2.671E-01	9.810E-02	1.600E+02	2.931E-01	1.009E-01	1.700E+02	3.167E-01
1.039E-01	1.800E+02	3.430E-01	1.081E-01	1.900E+02	3.711E-01	1.134E-01	2.000E+02
4.035E-01	1.201E-01						
1	1	26	57	32			p+Fe57
1.675E+01	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	2.988E-10
1.430E-10	2.200E+01	3.365E-09	1.682E-09	2.400E+01	3.438E-08	1.719E-08	2.600E+01
7.924E-06	3.962E-06	2.800E+01	9.790E-05	4.895E-05	3.000E+01	8.186E-04	4.093E-04
3.500E+01	8.317E-03	4.158E-03	4.000E+01	1.808E-02	9.040E-03	4.500E+01	2.788E-02
1.394E-02	5.000E+01	3.699E-02	1.850E-02	5.500E+01	4.444E-02	2.222E-02	6.000E+01
5.129E-02	2.565E-02	6.500E+01	5.716E-02	2.858E-02	7.000E+01	6.119E-02	3.060E-02
7.500E+01	6.504E-02	3.252E-02	8.000E+01	7.195E-02	3.570E-02	8.500E+01	8.041E-02
3.689E-02	9.000E+01	9.049E-02	3.804E-02	9.500E+01	9.571E-02	3.808E-02	1.000E+02
1.028E-01	3.826E-02	1.100E+02	1.148E-01	3.849E-02	1.200E+02	1.271E-01	3.904E-02
1.300E+02	1.361E-01	3.940E-02	1.400E+02	1.450E-01	4.001E-02	1.500E+02	1.504E-01
4.070E-02	1.600E+02	1.664E-01	4.347E-02	1.700E+02	1.788E-01	4.578E-02	1.800E+02
2.008E-01	5.023E-02	1.900E+02	2.265E-01	5.568E-02	2.000E+02	2.539E-01	6.173E-02
1	1	26	58	31			p+Fe58
1.953E+01	0.000E+00	0.000E+00	2.000E+01	1.141E-10	5.031E-11	2.200E+01	1.607E-09
7.270E-10	2.400E+01	1.618E-08	8.090E-09	2.600E+01	2.065E-06	1.019E-06	2.800E+01
5.210E-05	2.605E-05	3.000E+01	5.858E-04	2.929E-04	3.500E+01	1.621E-02	8.105E-03
4.000E+01	4.459E-02	2.229E-02	4.500E+01	7.422E-02	3.711E-02	5.000E+01	1.019E-01
5.095E-02	5.500E+01	1.269E-01	6.345E-02	6.000E+01	1.478E-01	7.390E-02	6.500E+01
1.649E-01	8.245E-02	7.000E+01	1.787E-01	8.935E-02	7.500E+01	1.901E-01	9.505E-02

8.000E+01	2.000E-01	1.000E-01	8.500E+01	2.111E-01	1.056E-01	9.000E+01	2.219E-01
1.109E-01	9.500E+01	2.268E-01	1.134E-01	1.000E+02	2.298E-01	1.149E-01	1.100E+02
2.356E-01	1.178E-01	1.200E+02	2.404E-01	1.184E-01	1.300E+02	2.414E-01	1.125E-01
1.400E+02	2.422E-01	1.067E-01	1.500E+02	2.337E-01	9.742E-02	1.600E+02	2.448E-01
9.445E-02	1.700E+02	2.548E-01	9.174E-02	1.800E+02	2.718E-01	9.000E-02	1.900E+02
2.903E-01	8.868E-02	2.000E+02	3.080E-01	8.781E-02			
1	1	27	59	33			p+Co59
1.569E+01	0.000E+00	0.000E+00	1.800E+01	0.000E+00	0.000E+00	1.900E+01	1.573E-10
6.555E-11	2.000E+01	5.156E-10	2.305E-10	2.200E+01	5.321E-09	2.661E-09	2.400E+01
3.562E-07	1.781E-07	2.600E+01	1.167E-05	5.835E-06	2.800E+01	1.278E-04	6.390E-05
3.000E+01	9.236E-04	4.618E-04	3.500E+01	7.205E-03	3.602E-03	4.000E+01	1.490E-02
7.450E-03	4.500E+01	2.326E-02	1.163E-02	5.000E+01	3.128E-02	1.564E-02	5.500E+01
3.909E-02	1.954E-02	6.000E+01	4.643E-02	2.321E-02	6.500E+01	5.216E-02	2.592E-02
7.000E+01	5.802E-02	2.776E-02	7.500E+01	6.275E-02	2.921E-02	8.000E+01	6.769E-02
3.029E-02	8.500E+01	7.303E-02	3.108E-02	9.000E+01	8.345E-02	3.179E-02	9.500E+01
9.260E-02	3.177E-02	1.000E+02	1.020E-01	3.172E-02	1.100E+02	1.179E-01	3.155E-02
1.200E+02	1.311E-01	3.137E-02	1.300E+02	1.470E-01	3.185E-02	1.400E+02	1.567E-01
3.199E-02	1.500E+02	1.668E-01	3.248E-02	1.600E+02	1.859E-01	3.467E-02	1.700E+02
2.046E-01	3.705E-02	1.800E+02	2.282E-01	4.038E-02	1.900E+02	2.561E-01	4.455E-02
2.000E+02	2.784E-01	4.802E-02					
1	1	28	58	32			p+Ni58
1.832E+01	0.000E+00	0.000E+00	1.900E+01	1.215E-10	3.305E-11	2.000E+01	4.178E-10
1.165E-10	2.200E+01	4.349E-09	1.391E-09	2.400E+01	4.098E-08	1.492E-08	2.600E+01
5.106E-06	1.854E-06	2.800E+01	9.483E-05	4.011E-05	3.000E+01	9.362E-04	4.108E-04
3.500E+01	2.579E-02	1.219E-02	4.000E+01	7.355E-02	3.678E-02	4.500E+01	1.233E-01
6.165E-02	5.000E+01	1.695E-01	8.475E-02	5.500E+01	2.076E-01	1.038E-01	6.000E+01
2.371E-01	1.186E-01	6.500E+01	2.616E-01	1.308E-01	7.000E+01	2.790E-01	1.395E-01
7.500E+01	2.937E-01	1.469E-01	8.000E+01	3.110E-01	1.555E-01	8.500E+01	3.276E-01
1.638E-01	9.000E+01	3.436E-01	1.718E-01	9.500E+01	3.493E-01	1.701E-01	1.000E+02
3.548E-01	1.673E-01	1.100E+02	3.606E-01	1.600E-01	1.200E+02	3.665E-01	1.519E-01
1.300E+02	3.690E-01	1.437E-01	1.400E+02	3.657E-01	1.356E-01	1.500E+02	3.676E-01
1.329E-01	1.600E+02	3.873E-01	1.288E-01	1.700E+02	4.138E-01	1.258E-01	1.800E+02
4.457E-01	1.241E-01	1.900E+02	4.749E-01	1.229E-01	2.000E+02	5.083E-01	1.230E-01
1	1	28	60	33			p+Ni60
1.769E+01	0.000E+00	0.000E+00	1.800E+01	0.000E+00	0.000E+00	1.900E+01	2.124E-10
6.753E-11	2.000E+01	7.147E-10	2.403E-10	2.200E+01	7.121E-09	2.763E-09	2.400E+01
7.810E-08	3.285E-08	2.600E+01	1.371E-05	6.171E-06	2.800E+01	1.949E-04	9.444E-05
3.000E+01	1.787E-03	8.773E-04	3.500E+01	2.958E-02	1.479E-02	4.000E+01	7.456E-02
3.728E-02	4.500E+01	1.210E-01	6.050E-02	5.000E+01	1.632E-01	8.160E-02	5.500E+01
1.992E-01	9.960E-02	6.000E+01	2.287E-01	1.143E-01	6.500E+01	2.520E-01	1.260E-01
7.000E+01	2.707E-01	1.353E-01	7.500E+01	2.906E-01	1.453E-01	8.000E+01	3.059E-01
1.530E-01	8.500E+01	3.206E-01	1.603E-01	9.000E+01	3.353E-01	1.676E-01	9.500E+01
3.424E-01	1.712E-01	1.000E+02	3.477E-01	1.739E-01	1.100E+02	3.545E-01	1.701E-01
1.200E+02	3.543E-01	1.609E-01	1.300E+02	3.577E-01	1.517E-01	1.400E+02	3.547E-01
1.428E-01	1.500E+02	3.515E-01	1.343E-01	1.600E+02	3.622E-01	1.292E-01	1.700E+02
3.779E-01	1.245E-01	1.800E+02	3.982E-01	1.203E-01	1.900E+02	4.203E-01	1.169E-01
2.000E+02	4.481E-01	1.141E-01					
1	1	28	61	33			p+Ni61
1.524E+01	0.000E+00	0.000E+00	1.800E+01	0.000E+00	0.000E+00	1.900E+01	2.860E-10
1.122E-10	2.000E+01	8.913E-10	3.754E-10	2.200E+01	8.155E-09	3.830E-09	2.400E+01
6.783E-07	3.220E-07	2.600E+01	1.753E-05	8.765E-06	2.800E+01	1.898E-04	9.490E-05
3.000E+01	1.386E-03	6.930E-04	3.500E+01	1.135E-02	5.675E-03	4.000E+01	2.336E-02
1.168E-02	4.500E+01	3.575E-02	1.787E-02	5.000E+01	4.695E-02	2.347E-02	5.500E+01
5.746E-02	2.873E-02	6.000E+01	6.662E-02	3.331E-02	6.500E+01	7.398E-02	3.699E-02
7.000E+01	7.895E-02	3.853E-02	7.500E+01	8.532E-02	4.033E-02	8.000E+01	9.454E-02
4.165E-02	8.500E+01	1.056E-01	4.262E-02	9.000E+01	1.179E-01	4.337E-02	9.500E+01
1.271E-01	4.299E-02	1.000E+02	1.360E-01	4.250E-02	1.100E+02	1.508E-01	4.133E-02
1.200E+02	1.632E-01	4.016E-02	1.300E+02	1.755E-01	3.932E-02	1.400E+02	1.819E-01
3.833E-02	1.500E+02	1.891E-01	3.772E-02	1.600E+02	2.008E-01	3.822E-02	1.700E+02
2.204E-01	3.990E-02	1.800E+02	2.464E-01	4.260E-02	1.900E+02	2.717E-01	4.547E-02
2.000E+02	3.110E-01	5.047E-02					
1	1	28	62	32			p+Ni62
1.862E+01	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	1.409E-10
5.359E-11	2.200E+01	1.639E-09	6.730E-10	2.400E+01	1.635E-08	7.342E-09	2.600E+01
1.674E-06	7.396E-07	2.800E+01	4.731E-05	2.296E-05	3.000E+01	5.288E-04	2.629E-04
3.500E+01	1.706E-02	8.530E-03	4.000E+01	4.977E-02	2.489E-02	4.500E+01	8.505E-02

4.253E-02	5.000E+01	1.172E-01	5.860E-02	5.500E+01	1.447E-01	7.235E-02	6.000E+01
1.692E-01	8.460E-02	6.500E+01	1.889E-01	9.445E-02	7.000E+01	2.051E-01	1.026E-01
7.500E+01	2.181E-01	1.090E-01	8.000E+01	2.300E-01	1.150E-01	8.500E+01	2.426E-01
1.213E-01	9.000E+01	2.550E-01	1.275E-01	9.500E+01	2.604E-01	1.302E-01	1.000E+02
2.636E-01	1.318E-01	1.100E+02	2.688E-01	1.279E-01	1.200E+02	2.732E-01	1.215E-01
1.300E+02	2.743E-01	1.149E-01	1.400E+02	2.730E-01	1.084E-01	1.500E+02	2.773E-01
1.061E-01	1.600E+02	2.885E-01	1.019E-01	1.700E+02	3.009E-01	9.803E-02	1.800E+02
3.096E-01	9.441E-02	1.900E+02	3.294E-01	9.132E-02	2.000E+02	3.431E-01	8.829E-02
	1	1	28	64	31		p+Ni64
1.998E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	2.009E-10
1.004E-10	2.400E+01	1.931E-09	9.655E-10	2.600E+01	2.250E-08	1.125E-08	2.800E+01
4.626E-06	2.313E-06	3.000E+01	7.997E-05	3.998E-05	3.500E+01	7.201E-03	3.600E-03
4.000E+01	2.899E-02	1.449E-02	4.500E+01	5.401E-02	2.701E-02	5.000E+01	7.739E-02
3.870E-02	5.500E+01	9.828E-02	4.914E-02	6.000E+01	1.164E-01	5.820E-02	6.500E+01
1.316E-01	6.580E-02	7.000E+01	1.470E-01	7.350E-02	7.500E+01	1.577E-01	7.885E-02
8.000E+01	1.666E-01	8.330E-02	8.500E+01	1.748E-01	8.740E-02	9.000E+01	1.822E-01
9.110E-02	9.500E+01	1.850E-01	9.250E-02	1.000E+02	1.876E-01	9.380E-02	1.100E+02
1.910E-01	9.550E-02	1.200E+02	1.915E-01	9.575E-02	1.300E+02	1.912E-01	9.560E-02
1.400E+02	1.915E-01	9.575E-02	1.500E+02	1.877E-01	9.385E-02	1.600E+02	1.953E-01
9.765E-02	1.700E+02	2.027E-01	1.013E-01	1.800E+02	2.112E-01	1.056E-01	1.900E+02
2.210E-01	1.105E-01	2.000E+02	2.306E-01	1.115E-01			
	1	1	29	63	34		p+Cu63
1.410E+01	0.000E+00	0.000E+00	1.700E+01	0.000E+00	0.000E+00	1.800E+01	2.601E-10
8.773E-11	1.900E+01	7.590E-10	2.913E-10	2.000E+01	2.252E-09	9.681E-10	2.200E+01
1.952E-08	9.760E-09	2.400E+01	2.689E-06	1.345E-06	2.600E+01	4.497E-05	2.248E-05
2.800E+01	4.309E-04	2.155E-04	3.000E+01	2.493E-03	1.246E-03	3.500E+01	1.464E-02
7.320E-03	4.000E+01	2.974E-02	1.487E-02	4.500E+01	4.557E-02	2.278E-02	5.000E+01
6.061E-02	3.030E-02	5.500E+01	7.469E-02	3.735E-02	6.000E+01	8.665E-02	4.333E-02
6.500E+01	9.641E-02	4.820E-02	7.000E+01	1.061E-01	5.285E-02	7.500E+01	1.120E-01
5.540E-02	8.000E+01	1.200E-01	5.726E-02	8.500E+01	1.356E-01	5.877E-02	9.000E+01
1.534E-01	5.991E-02	9.500E+01	1.638E-01	5.942E-02	1.000E+02	1.754E-01	5.873E-02
1.100E+02	1.971E-01	5.712E-02	1.200E+02	2.160E-01	5.545E-02	1.300E+02	2.306E-01
5.387E-02	1.400E+02	2.406E-01	5.234E-02	1.500E+02	2.498E-01	5.006E-02	1.600E+02
2.746E-01	5.150E-02	1.700E+02	2.940E-01	5.268E-02	1.800E+02	3.199E-01	5.494E-02
1.900E+02	3.497E-01	5.800E-02	2.000E+02	3.842E-01	6.186E-02		
	1	1	29	65	32		p+Cu65
1.532E+01	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	2.933E-10
1.310E-10	2.200E+01	2.960E-09	1.456E-09	2.400E+01	6.663E-08	3.284E-08	2.600E+01
7.423E-06	3.711E-06	2.800E+01	9.163E-05	4.582E-05	3.000E+01	6.747E-04	3.373E-04
3.500E+01	8.249E-03	4.124E-03	4.000E+01	1.863E-02	9.315E-03	4.500E+01	2.930E-02
1.465E-02	5.000E+01	3.941E-02	1.971E-02	5.500E+01	4.878E-02	2.439E-02	6.000E+01
5.734E-02	2.867E-02	6.500E+01	6.476E-02	3.238E-02	7.000E+01	7.126E-02	3.563E-02
7.500E+01	7.629E-02	3.814E-02	8.000E+01	8.138E-02	4.069E-02	8.500E+01	8.945E-02
4.410E-02	9.000E+01	9.847E-02	4.496E-02	9.500E+01	1.060E-01	4.468E-02	1.000E+02
1.131E-01	4.418E-02	1.100E+02	1.243E-01	4.272E-02	1.200E+02	1.347E-01	4.109E-02
1.300E+02	1.465E-01	3.966E-02	1.400E+02	1.536E-01	3.822E-02	1.500E+02	1.614E-01
3.709E-02	1.600E+02	1.768E-01	3.737E-02	1.700E+02	1.912E-01	3.780E-02	1.800E+02
2.064E-01	3.861E-02	1.900E+02	2.235E-01	3.988E-02	2.000E+02	2.493E-01	4.241E-02
	1	1	30	64	35		p+Zn64
1.487E+01	0.000E+00	0.000E+00	1.600E+01	0.000E+00	0.000E+00	1.700E+01	3.102E-10
8.011E-11	1.800E+01	8.714E-10	2.664E-10	1.900E+01	2.444E-09	8.865E-10	2.000E+01
6.519E-09	2.772E-09	2.200E+01	5.641E-08	2.821E-08	2.400E+01	8.279E-06	4.139E-06
2.600E+01	1.243E-04	6.215E-05	2.800E+01	9.884E-04	4.942E-04	3.000E+01	5.523E-03
2.762E-03	3.500E+01	3.339E-02	1.670E-02	4.000E+01	6.741E-02	3.370E-02	4.500E+01
1.021E-01	5.105E-02	5.000E+01	1.324E-01	6.620E-02	5.500E+01	1.598E-01	7.990E-02
6.000E+01	1.829E-01	9.145E-02	6.500E+01	1.980E-01	9.900E-02	7.000E+01	2.126E-01
1.063E-01	7.500E+01	2.270E-01	1.135E-01	8.000E+01	2.489E-01	1.245E-01	8.500E+01
2.690E-01	1.345E-01	9.000E+01	2.968E-01	1.484E-01	9.500E+01	3.092E-01	1.546E-01
1.000E+02	3.245E-01	1.623E-01	1.100E+02	3.566E-01	1.583E-01	1.200E+02	3.676E-01
1.485E-01	1.300E+02	3.831E-01	1.394E-01	1.400E+02	3.927E-01	1.310E-01	1.500E+02
3.922E-01	1.186E-01	1.600E+02	4.264E-01	1.156E-01	1.700E+02	4.441E-01	1.120E-01
1.800E+02	4.775E-01	1.100E-01	1.900E+02	5.249E-01	1.098E-01	2.000E+02	5.809E-01
1.110E-01							
	1	1	30	66	34		p+Zn66
1.597E+01	0.000E+00	0.000E+00	1.700E+01	0.000E+00	0.000E+00	1.800E+01	1.116E-10
4.149E-11	1.900E+01	3.468E-10	1.416E-10	2.000E+01	1.066E-09	4.764E-10	2.200E+01

1.007E-08	5.035E-09	2.400E+01	5.934E-07	2.881E-07	2.600E+01	2.273E-05	1.137E-05
2.800E+01	2.170E-04	1.085E-04	3.000E+01	1.752E-03	8.760E-04	3.500E+01	1.872E-02
9.360E-03	4.000E+01	4.226E-02	2.113E-02	4.500E+01	6.635E-02	3.318E-02	5.000E+01
8.832E-02	4.416E-02	5.500E+01	1.085E-01	5.425E-02	6.000E+01	1.249E-01	6.245E-02
6.500E+01	1.389E-01	6.945E-02	7.000E+01	1.503E-01	7.515E-02	7.500E+01	1.598E-01
7.990E-02	8.000E+01	1.719E-01	8.595E-02	8.500E+01	1.867E-01	9.335E-02	9.000E+01
2.015E-01	1.008E-01	9.500E+01	2.104E-01	1.017E-01	1.000E+02	2.194E-01	9.976E-02
1.100E+02	2.404E-01	9.504E-02	1.200E+02	2.496E-01	8.966E-02	1.300E+02	2.601E-01
8.451E-02	1.400E+02	2.691E-01	7.982E-02	1.500E+02	2.742E-01	7.555E-02	1.600E+02
2.981E-01	7.375E-02	1.700E+02	3.091E-01	7.166E-02	1.800E+02	3.303E-01	7.066E-02
1.900E+02	3.559E-01	7.024E-02	2.000E+02	3.934E-01	7.131E-02		
1	1	30	67	34			p+Zn67
1.367E+01	0.000E+00	0.000E+00	1.700E+01	0.000E+00	0.000E+00	1.800E+01	2.940E-10
1.225E-10	1.900E+01	9.333E-10	4.187E-10	2.000E+01	2.960E-09	1.412E-09	2.200E+01
2.745E-08	1.373E-08	2.400E+01	4.260E-06	2.130E-06	2.600E+01	7.232E-05	3.616E-05
2.800E+01	7.093E-04	3.546E-04	3.000E+01	4.145E-03	2.073E-03	3.500E+01	2.451E-02
1.226E-02	4.000E+01	4.995E-02	2.498E-02	4.500E+01	7.468E-02	3.734E-02	5.000E+01
9.712E-02	4.856E-02	5.500E+01	1.169E-01	5.845E-02	6.000E+01	1.333E-01	6.665E-02
6.500E+01	1.473E-01	7.365E-02	7.000E+01	1.579E-01	7.895E-02	7.500E+01	1.696E-01
8.480E-02	8.000E+01	1.817E-01	9.085E-02	8.500E+01	1.951E-01	9.755E-02	9.000E+01
2.075E-01	1.037E-01	9.500E+01	2.157E-01	1.079E-01	1.000E+02	2.197E-01	1.088E-01
1.100E+02	2.299E-01	1.038E-01	1.200E+02	2.380E-01	9.831E-02	1.300E+02	2.435E-01
9.276E-02	1.400E+02	2.468E-01	8.753E-02	1.500E+02	2.477E-01	8.267E-02	1.600E+02
2.670E-01	8.043E-02	1.700E+02	2.797E-01	7.816E-02	1.800E+02	2.941E-01	7.640E-02
1.900E+02	3.082E-01	7.475E-02	2.000E+02	3.353E-01	7.432E-02		
1	1	30	68	32			p+Zn68
1.731E+01	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	1.174E-10
5.870E-11	2.200E+01	1.242E-09	6.210E-10	2.400E+01	1.265E-08	6.325E-09	2.600E+01
2.015E-06	1.008E-06	2.800E+01	3.876E-05	1.938E-05	3.000E+01	4.007E-04	2.003E-04
3.500E+01	9.307E-03	4.653E-03	4.000E+01	2.523E-02	1.261E-02	4.500E+01	4.166E-02
2.083E-02	5.000E+01	5.719E-02	2.859E-02	5.500E+01	7.028E-02	3.514E-02	6.000E+01
8.208E-02	4.104E-02	6.500E+01	9.226E-02	4.613E-02	7.000E+01	1.027E-01	5.135E-02
7.500E+01	1.101E-01	5.505E-02	8.000E+01	1.173E-01	5.865E-02	8.500E+01	1.256E-01
6.280E-02	9.000E+01	1.348E-01	6.740E-02	9.500E+01	1.404E-01	7.020E-02	1.000E+02
1.449E-01	7.245E-02	1.100E+02	1.529E-01	7.214E-02	1.200E+02	1.600E-01	6.857E-02
1.300E+02	1.669E-01	6.485E-02	1.400E+02	1.712E-01	6.124E-02	1.500E+02	1.705E-01
5.567E-02	1.600E+02	1.840E-01	5.392E-02	1.700E+02	1.975E-01	5.240E-02	1.800E+02
2.076E-01	5.097E-02	1.900E+02	2.243E-01	5.004E-02	2.000E+02	2.422E-01	4.935E-02
1	1	30	70	31			p+Zn70
1.852E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	3.558E-10
1.779E-10	2.400E+01	3.568E-09	1.784E-09	2.600E+01	4.176E-08	2.088E-08	2.800E+01
1.074E-05	5.370E-06	3.000E+01	1.232E-04	6.160E-05	3.500E+01	8.737E-03	4.368E-03
4.000E+01	3.181E-02	1.590E-02	4.500E+01	5.745E-02	2.873E-02	5.000E+01	8.215E-02
4.108E-02	5.500E+01	1.059E-01	5.295E-02	6.000E+01	1.249E-01	6.245E-02	6.500E+01
1.412E-01	7.060E-02	7.000E+01	1.545E-01	7.725E-02	7.500E+01	1.654E-01	8.270E-02
8.000E+01	1.751E-01	8.755E-02	8.500E+01	1.832E-01	9.160E-02	9.000E+01	1.904E-01
9.520E-02	9.500E+01	1.926E-01	9.630E-02	1.000E+02	1.937E-01	9.685E-02	1.100E+02
1.949E-01	9.745E-02	1.200E+02	1.945E-01	9.725E-02	1.300E+02	1.915E-01	9.575E-02
1.400E+02	1.887E-01	9.435E-02	1.500E+02	1.842E-01	9.210E-02	1.600E+02	1.873E-01
9.365E-02	1.700E+02	1.915E-01	9.575E-02	1.800E+02	1.945E-01	9.725E-02	1.900E+02
1.997E-01	9.526E-02	2.000E+02	2.064E-01	9.113E-02			
1	1	31	69	35			p+Ga69
1.248E+01	0.000E+00	0.000E+00	1.600E+01	0.000E+00	0.000E+00	1.700E+01	1.665E-10
4.730E-11	1.800E+01	4.220E-10	1.514E-10	1.900E+01	1.197E-09	4.897E-10	2.000E+01
3.452E-09	1.574E-09	2.200E+01	4.313E-08	2.157E-08	2.400E+01	6.179E-06	3.089E-06
2.600E+01	7.510E-05	3.755E-05	2.800E+01	5.490E-04	2.745E-04	3.000E+01	2.546E-03
1.273E-03	3.500E+01	1.166E-02	5.830E-03	4.000E+01	2.281E-02	1.141E-02	4.500E+01
3.442E-02	1.721E-02	5.000E+01	4.589E-02	2.295E-02	5.500E+01	5.769E-02	2.884E-02
6.000E+01	6.844E-02	3.321E-02	6.500E+01	7.748E-02	3.639E-02	7.000E+01	8.621E-02
3.816E-02	7.500E+01	9.429E-02	4.006E-02	8.000E+01	1.013E-01	4.148E-02	8.500E+01
1.124E-01	4.267E-02	9.000E+01	1.259E-01	4.367E-02	9.500E+01	1.388E-01	4.357E-02
1.000E+02	1.506E-01	4.332E-02	1.100E+02	1.764E-01	4.287E-02	1.200E+02	1.980E-01
4.234E-02	1.300E+02	2.112E-01	4.149E-02	1.400E+02	2.261E-01	4.111E-02	1.500E+02
2.362E-01	4.064E-02	1.600E+02	2.617E-01	4.240E-02	1.700E+02	2.936E-01	4.507E-02
1.800E+02	3.103E-01	4.643E-02	1.900E+02	3.422E-01	4.963E-02	2.000E+02	3.695E-01
5.247E-02							

1		1		31		71		33		p+Ga71	
1.369E+01	0.000E+00	0.000E+00	1.800E+01	0.000E+00	0.000E+00	0.000E+00	1.900E+01	1.591E-10			
7.955E-11	2.000E+01	5.035E-10	2.517E-10	2.200E+01	4.876E-09	2.438E-09	2.400E+01				
6.344E-07	3.172E-07	2.600E+01	1.412E-05	7.060E-06	2.800E+01	1.258E-04	6.290E-05				
3.000E+01	8.942E-04	4.471E-04	3.500E+01	6.719E-03	3.360E-03	4.000E+01	1.422E-02				
7.110E-03	4.500E+01	2.173E-02	1.086E-02	5.000E+01	2.907E-02	1.453E-02	5.500E+01				
3.604E-02	1.802E-02	6.000E+01	4.260E-02	2.130E-02	6.500E+01	4.861E-02	2.431E-02				
7.000E+01	5.501E-02	2.751E-02	7.500E+01	6.095E-02	3.047E-02	8.000E+01	6.608E-02				
3.304E-02	8.500E+01	7.133E-02	3.567E-02	9.000E+01	8.004E-02	3.668E-02	9.500E+01				
8.514E-02	3.643E-02	1.000E+02	9.160E-02	3.600E-02	1.100E+02	1.058E-01	3.486E-02				
1.200E+02	1.179E-01	3.354E-02	1.300E+02	1.255E-01	3.212E-02	1.400E+02	1.342E-01				
3.093E-02	1.500E+02	1.442E-01	3.001E-02	1.600E+02	1.592E-01	3.012E-02	1.700E+02				
1.744E-01	3.048E-02	1.800E+02	1.894E-01	3.101E-02	1.900E+02	2.026E-01	3.158E-02				
2.000E+02	2.234E-01	3.304E-02									
1		1		32		70		36		p+Ge70	
1.382E+01	0.000E+00	0.000E+00	1.500E+01	0.000E+00	0.000E+00	1.600E+01	1.454E-10				
2.254E-11	1.700E+01	3.984E-10	7.612E-11	1.800E+01	1.123E-09	2.592E-10	1.900E+01				
3.261E-09	8.785E-10	2.000E+01	9.120E-09	2.788E-09	2.200E+01	8.182E-08	3.021E-08				
2.400E+01	1.347E-05	5.433E-06	2.600E+01	1.934E-04	8.769E-05	2.800E+01	1.786E-03				
8.496E-04	3.000E+01	9.843E-03	4.842E-03	3.500E+01	5.966E-02	2.983E-02	4.000E+01				
1.261E-01	6.305E-02	4.500E+01	1.916E-01	9.580E-02	5.000E+01	2.507E-01	1.253E-01				
5.500E+01	3.020E-01	1.510E-01	6.000E+01	3.429E-01	1.714E-01	6.500E+01	3.777E-01				
1.888E-01	7.000E+01	4.054E-01	2.027E-01	7.500E+01	4.384E-01	2.192E-01	8.000E+01				
4.594E-01	2.297E-01	8.500E+01	4.882E-01	2.441E-01	9.000E+01	5.113E-01	2.556E-01				
9.500E+01	5.220E-01	2.610E-01	1.000E+02	5.312E-01	2.656E-01	1.100E+02	5.534E-01				
2.553E-01	1.200E+02	5.660E-01	2.402E-01	1.300E+02	5.618E-01	2.250E-01	1.400E+02				
5.685E-01	2.108E-01	1.500E+02	5.666E-01	1.973E-01	1.600E+02	5.967E-01	1.893E-01				
1.700E+02	6.265E-01	1.820E-01	1.800E+02	6.505E-01	1.752E-01	1.900E+02	6.827E-01				
1.688E-01	2.000E+02	7.230E-01	1.637E-01								
1		1		32		72		34		p+Ge72	
1.502E+01	0.000E+00	0.000E+00	1.700E+01	0.000E+00	0.000E+00	1.800E+01	1.587E-10				
5.252E-11	1.900E+01	4.636E-10	1.700E-10	2.000E+01	1.439E-09	5.712E-10	2.200E+01				
1.401E-08	6.290E-09	2.400E+01	8.027E-07	3.425E-07	2.600E+01	3.452E-05	1.726E-05				
2.800E+01	4.019E-04	2.010E-04	3.000E+01	2.824E-03	1.412E-03	3.500E+01	3.392E-02				
1.696E-02	4.000E+01	8.176E-02	4.088E-02	4.500E+01	1.297E-01	6.485E-02	5.000E+01				
1.747E-01	8.735E-02	5.500E+01	2.118E-01	1.059E-01	6.000E+01	2.442E-01	1.221E-01				
6.500E+01	2.720E-01	1.360E-01	7.000E+01	2.942E-01	1.471E-01	7.500E+01	3.129E-01				
1.565E-01	8.000E+01	3.274E-01	1.637E-01	8.500E+01	3.434E-01	1.717E-01	9.000E+01				
3.605E-01	1.802E-01	9.500E+01	3.657E-01	1.829E-01	1.000E+02	3.723E-01	1.862E-01				
1.100E+02	3.810E-01	1.905E-01	1.200E+02	3.844E-01	1.865E-01	1.300E+02	3.844E-01				
1.752E-01	1.400E+02	3.882E-01	1.644E-01	1.500E+02	3.939E-01	1.603E-01	1.600E+02				
4.106E-01	1.532E-01	1.700E+02	4.322E-01	1.466E-01	1.800E+02	4.474E-01	1.405E-01				
1.900E+02	4.597E-01	1.345E-01	2.000E+02	4.851E-01	1.291E-01						
1		1		32		73		34		p+Ge73	
1.263E+01	0.000E+00	0.000E+00	1.700E+01	0.000E+00	0.000E+00	1.800E+01	1.845E-10				
8.412E-11	1.900E+01	5.576E-10	2.692E-10	2.000E+01	1.697E-09	8.485E-10	2.200E+01				
1.621E-08	8.105E-09	2.400E+01	2.893E-06	1.447E-06	2.600E+01	4.389E-05	2.195E-05				
2.800E+01	4.138E-04	2.069E-04	3.000E+01	2.032E-03	1.016E-03	3.500E+01	1.172E-02				
5.860E-03	4.000E+01	2.353E-02	1.176E-02	4.500E+01	3.479E-02	1.740E-02	5.000E+01				
4.550E-02	2.275E-02	5.500E+01	5.575E-02	2.788E-02	6.000E+01	6.424E-02	3.212E-02				
6.500E+01	7.195E-02	3.598E-02	7.000E+01	7.715E-02	3.857E-02	7.500E+01	8.289E-02				
4.145E-02	8.000E+01	9.168E-02	4.584E-02	8.500E+01	1.008E-01	4.925E-02	9.000E+01				
1.111E-01	4.992E-02	9.500E+01	1.180E-01	4.926E-02	1.000E+02	1.255E-01	4.836E-02				
1.100E+02	1.399E-01	4.621E-02	1.200E+02	1.544E-01	4.402E-02	1.300E+02	1.647E-01				
4.190E-02	1.400E+02	1.733E-01	3.999E-02	1.500E+02	1.810E-01	3.952E-02	1.600E+02				
2.015E-01	3.932E-02	1.700E+02	2.244E-01	3.961E-02	1.800E+02	2.411E-01	3.983E-02				
1.900E+02	2.598E-01	4.034E-02	2.000E+02	2.873E-01	4.178E-02						
1		1		32		74		32		p+Ge74	
1.656E+01	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	1.457E-10				
6.039E-11	2.200E+01	1.458E-09	6.621E-10	2.400E+01	1.502E-08	7.494E-09	2.600E+01				
1.920E-06	9.343E-07	2.800E+01	4.626E-05	2.313E-05	3.000E+01	4.893E-04	2.447E-04				
3.500E+01	1.518E-02	7.590E-03	4.000E+01	4.677E-02	2.338E-02	4.500E+01	8.055E-02				
4.027E-02	5.000E+01	1.127E-01	5.635E-02	5.500E+01	1.404E-01	7.020E-02	6.000E+01				
1.649E-01	8.245E-02	6.500E+01	1.859E-01	9.295E-02	7.000E+01	2.072E-01	1.036E-01				
7.500E+01	2.214E-01	1.107E-01	8.000E+01	2.333E-01	1.167E-01	8.500E+01	2.444E-01				
1.222E-01	9.000E+01	2.555E-01	1.278E-01	9.500E+01	2.596E-01	1.298E-01	1.000E+02				

2.630E-01	1.315E-01	1.100E+02	2.649E-01	1.325E-01	1.200E+02	2.666E-01	1.333E-01
1.300E+02	2.690E-01	1.345E-01	1.400E+02	2.672E-01	1.336E-01	1.500E+02	2.644E-01
1.283E-01	1.600E+02	2.771E-01	1.229E-01	1.700E+02	2.844E-01	1.177E-01	1.800E+02
2.951E-01	1.128E-01	1.900E+02	3.026E-01	1.081E-01	2.000E+02	3.158E-01	1.036E-01
1	1	32	76	30			p+Ge76
1.897E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	5.065E-10
2.532E-10	2.600E+01	5.843E-09	2.921E-09	2.800E+01	5.213E-07	2.606E-07	3.000E+01
1.877E-05	9.385E-06	3.500E+01	3.218E-03	1.609E-03	4.000E+01	2.019E-02	1.009E-02
4.500E+01	4.177E-02	2.089E-02	5.000E+01	6.339E-02	3.170E-02	5.500E+01	8.332E-02
4.166E-02	6.000E+01	1.008E-01	5.040E-02	6.500E+01	1.159E-01	5.795E-02	7.000E+01
1.309E-01	6.545E-02	7.500E+01	1.416E-01	7.080E-02	8.000E+01	1.508E-01	7.540E-02
8.500E+01	1.581E-01	7.905E-02	9.000E+01	1.647E-01	8.235E-02	9.500E+01	1.677E-01
8.385E-02	1.000E+02	1.699E-01	8.495E-02	1.100E+02	1.719E-01	8.595E-02	1.200E+02
1.716E-01	8.580E-02	1.300E+02	1.712E-01	8.560E-02	1.400E+02	1.706E-01	8.530E-02
1.500E+02	1.631E-01	8.155E-02	1.600E+02	1.699E-01	8.495E-02	1.700E+02	1.759E-01
8.795E-02	1.800E+02	1.818E-01	8.751E-02	1.900E+02	1.885E-01	8.410E-02	2.000E+02
1.941E-01	8.082E-02						
1	1	33	75	32			p+As75
1.327E+01	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	2.770E-10
1.340E-10	2.200E+01	2.540E-09	1.270E-09	2.400E+01	1.433E-07	7.165E-08	2.600E+01
5.261E-06	2.631E-06	2.800E+01	6.166E-05	3.083E-05	3.000E+01	4.938E-04	2.469E-04
3.500E+01	5.429E-03	2.714E-03	4.000E+01	1.245E-02	6.225E-03	4.500E+01	1.951E-02
9.755E-03	5.000E+01	2.656E-02	1.328E-02	5.500E+01	3.358E-02	1.679E-02	6.000E+01
3.998E-02	1.999E-02	6.500E+01	4.638E-02	2.319E-02	7.000E+01	5.231E-02	2.616E-02
7.500E+01	5.818E-02	2.909E-02	8.000E+01	6.432E-02	3.191E-02	8.500E+01	6.931E-02
3.296E-02	9.000E+01	7.655E-02	3.378E-02	9.500E+01	8.435E-02	3.376E-02	1.000E+02
9.266E-02	3.357E-02	1.100E+02	1.124E-01	3.305E-02	1.200E+02	1.298E-01	3.236E-02
1.300E+02	1.466E-01	3.176E-02	1.400E+02	1.648E-01	3.150E-02	1.500E+02	1.748E-01
3.026E-02	1.600E+02	2.066E-01	3.207E-02	1.700E+02	2.358E-01	3.400E-02	1.800E+02
2.652E-01	3.614E-02	1.900E+02	2.959E-01	3.866E-02	2.000E+02	3.205E-01	4.073E-02
1	1	34	74	35			p+Se74
1.379E+01	0.000E+00	0.000E+00	1.600E+01	0.000E+00	0.000E+00	1.700E+01	1.619E-10
2.874E-11	1.800E+01	4.209E-10	9.377E-11	1.900E+01	1.116E-09	3.052E-10	2.000E+01
3.114E-09	9.879E-10	2.200E+01	2.601E-08	1.020E-08	2.400E+01	1.477E-06	6.309E-07
2.600E+01	5.429E-05	2.640E-05	2.800E+01	5.001E-04	2.500E-04	3.000E+01	3.739E-03
1.870E-03	3.500E+01	4.222E-02	2.111E-02	4.000E+01	1.020E-01	5.100E-02	4.500E+01
1.620E-01	8.100E-02	5.000E+01	2.182E-01	1.091E-01	5.500E+01	2.674E-01	1.337E-01
6.000E+01	3.096E-01	1.548E-01	6.500E+01	3.448E-01	1.724E-01	7.000E+01	3.734E-01
1.867E-01	7.500E+01	3.879E-01	1.940E-01	8.000E+01	4.067E-01	2.034E-01	8.500E+01
4.307E-01	2.154E-01	9.000E+01	4.564E-01	2.282E-01	9.500E+01	4.665E-01	2.333E-01
1.000E+02	4.789E-01	2.394E-01	1.100E+02	5.003E-01	2.377E-01	1.200E+02	5.223E-01
2.248E-01	1.300E+02	5.353E-01	2.115E-01	1.400E+02	5.433E-01	1.987E-01	1.500E+02
5.527E-01	1.869E-01	1.600E+02	5.979E-01	1.803E-01	1.700E+02	6.380E-01	1.742E-01
1.800E+02	6.819E-01	1.689E-01	1.900E+02	7.169E-01	1.638E-01	2.000E+02	7.785E-01
1.605E-01							
1	1	34	76	33			p+Se76
1.502E+01	0.000E+00	0.000E+00	1.800E+01	0.000E+00	0.000E+00	1.900E+01	1.635E-10
5.508E-11	2.000E+01	4.609E-10	1.718E-10	2.200E+01	4.186E-09	1.833E-09	2.400E+01
4.298E-08	2.037E-08	2.600E+01	6.237E-06	3.118E-06	2.800E+01	1.015E-04	5.075E-05
3.000E+01	9.395E-04	4.698E-04	3.500E+01	2.271E-02	1.136E-02	4.000E+01	6.481E-02
3.241E-02	4.500E+01	1.097E-01	5.485E-02	5.000E+01	1.523E-01	7.615E-02	5.500E+01
1.895E-01	9.475E-02	6.000E+01	2.218E-01	1.109E-01	6.500E+01	2.493E-01	1.246E-01
7.000E+01	2.711E-01	1.356E-01	7.500E+01	2.895E-01	1.447E-01	8.000E+01	3.039E-01
1.520E-01	8.500E+01	3.174E-01	1.587E-01	9.000E+01	3.323E-01	1.661E-01	9.500E+01
3.380E-01	1.690E-01	1.000E+02	3.439E-01	1.719E-01	1.100E+02	3.518E-01	1.759E-01
1.200E+02	3.579E-01	1.789E-01	1.300E+02	3.636E-01	1.818E-01	1.400E+02	3.679E-01
1.736E-01	1.500E+02	3.701E-01	1.636E-01	1.600E+02	3.966E-01	1.570E-01	1.700E+02
4.220E-01	1.508E-01	1.800E+02	4.453E-01	1.450E-01	1.900E+02	4.715E-01	1.398E-01
2.000E+02	4.969E-01	1.348E-01					
1	1	34	77	33			p+Se77
1.311E+01	0.000E+00	0.000E+00	1.800E+01	0.000E+00	0.000E+00	1.900E+01	1.102E-10
5.510E-11	2.000E+01	3.206E-10	1.603E-10	2.200E+01	2.877E-09	1.438E-09	2.400E+01
2.574E-08	1.287E-08	2.600E+01	5.710E-06	2.855E-06	2.800E+01	6.877E-05	3.438E-05
3.000E+01	5.618E-04	2.809E-04	3.500E+01	7.535E-03	3.768E-03	4.000E+01	1.783E-02
8.915E-03	4.500E+01	2.815E-02	1.408E-02	5.000E+01	3.797E-02	1.898E-02	5.500E+01
4.667E-02	2.334E-02	6.000E+01	5.439E-02	2.720E-02	6.500E+01	6.132E-02	3.066E-02

7.000E+01	6.736E-02	3.368E-02	7.500E+01	7.281E-02	3.640E-02	8.000E+01	7.847E-02
3.923E-02	8.500E+01	8.558E-02	4.279E-02	9.000E+01	9.309E-02	4.655E-02	9.500E+01
9.914E-02	4.826E-02	1.000E+02	1.045E-01	4.750E-02	1.100E+02	1.181E-01	4.555E-02
1.200E+02	1.327E-01	4.344E-02	1.300E+02	1.434E-01	4.131E-02	1.400E+02	1.540E-01
3.941E-02	1.500E+02	1.658E-01	3.786E-02	1.600E+02	1.904E-01	3.784E-02	1.700E+02
2.147E-01	3.815E-02	1.800E+02	2.388E-01	3.876E-02	1.900E+02	2.653E-01	3.983E-02
2.000E+02	2.911E-01	4.111E-02					
	1	1	34	78	31		p+Se78
1.714E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	2.238E-10
9.960E-11	2.400E+01	2.271E-09	1.108E-09	2.600E+01	2.393E-08	1.196E-08	2.800E+01
4.304E-06	2.152E-06	3.000E+01	5.768E-05	2.884E-05	3.500E+01	6.463E-03	3.231E-03
4.000E+01	3.105E-02	1.553E-02	4.500E+01	6.071E-02	3.036E-02	5.000E+01	8.997E-02
4.498E-02	5.500E+01	1.158E-01	5.790E-02	6.000E+01	1.390E-01	6.950E-02	6.500E+01
1.589E-01	7.945E-02	7.000E+01	1.790E-01	8.950E-02	7.500E+01	1.928E-01	9.640E-02
8.000E+01	2.047E-01	1.023E-01	8.500E+01	2.141E-01	1.071E-01	9.000E+01	2.230E-01
1.115E-01	9.500E+01	2.274E-01	1.137E-01	1.000E+02	2.298E-01	1.149E-01	1.100E+02
2.333E-01	1.167E-01	1.200E+02	2.355E-01	1.177E-01	1.300E+02	2.371E-01	1.186E-01
1.400E+02	2.369E-01	1.184E-01	1.500E+02	2.390E-01	1.195E-01	1.600E+02	2.514E-01
1.200E-01	1.700E+02	2.629E-01	1.152E-01	1.800E+02	2.780E-01	1.107E-01	1.900E+02
2.928E-01	1.064E-01	2.000E+02	3.055E-01	1.023E-01			
	1	1	34	80	30		p+Se80
1.842E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	3.279E-10
1.640E-10	2.600E+01	3.554E-09	1.777E-09	2.800E+01	7.732E-08	3.866E-08	3.000E+01
9.208E-06	4.604E-06	3.500E+01	2.344E-03	1.172E-03	4.000E+01	1.807E-02	9.035E-03
4.500E+01	4.009E-02	2.005E-02	5.000E+01	6.262E-02	3.131E-02	5.500E+01	8.219E-02
4.109E-02	6.000E+01	1.005E-01	5.025E-02	6.500E+01	1.161E-01	5.805E-02	7.000E+01
1.318E-01	6.590E-02	7.500E+01	1.431E-01	7.155E-02	8.000E+01	1.524E-01	7.620E-02
8.500E+01	1.599E-01	7.995E-02	9.000E+01	1.661E-01	8.305E-02	9.500E+01	1.685E-01
8.425E-02	1.000E+02	1.697E-01	8.485E-02	1.100E+02	1.705E-01	8.525E-02	1.200E+02
1.698E-01	8.490E-02	1.300E+02	1.679E-01	8.395E-02	1.400E+02	1.661E-01	8.305E-02
1.500E+02	1.583E-01	7.915E-02	1.600E+02	1.620E-01	8.100E-02	1.700E+02	1.694E-01
8.470E-02	1.800E+02	1.766E-01	8.830E-02	1.900E+02	1.839E-01	9.074E-02	2.000E+02
1.933E-01	8.722E-02						
	1	1	34	82	29		p+Se82
2.002E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	3.627E-10
1.813E-10	2.800E+01	3.965E-09	1.983E-09	3.000E+01	3.420E-07	1.710E-07	3.500E+01
4.343E-04	2.171E-04	4.000E+01	8.795E-03	4.398E-03	4.500E+01	2.414E-02	1.207E-02
5.000E+01	4.075E-02	2.038E-02	5.500E+01	5.595E-02	2.797E-02	6.000E+01	7.019E-02
3.510E-02	6.500E+01	8.243E-02	4.122E-02	7.000E+01	9.292E-02	4.646E-02	7.500E+01
1.018E-01	5.090E-02	8.000E+01	1.092E-01	5.460E-02	8.500E+01	1.152E-01	5.760E-02
9.000E+01	1.202E-01	6.010E-02	9.500E+01	1.224E-01	6.120E-01	1.000E+02	1.238E-01
6.190E-02	1.100E+02	1.242E-01	6.210E-02	1.200E+02	1.226E-01	6.130E-02	1.300E+02
1.208E-01	6.040E-02	1.400E+02	1.187E-01	5.935E-02	1.500E+02	1.191E-01	5.955E-02
1.600E+02	1.197E-01	5.985E-02	1.700E+02	1.215E-01	6.075E-02	1.800E+02	1.247E-01
6.235E-02	1.900E+02	1.268E-01	6.340E-02	2.000E+02	1.300E-01	6.500E-02	
	1	1	35	79	31		p+Br79
1.342E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	6.655E-10
3.328E-10	2.400E+01	6.404E-09	3.202E-09	2.600E+01	1.128E-06	5.640E-07	2.800E+01
1.441E-05	7.205E-06	3.000E+01	1.346E-04	6.730E-05	3.500E+01	3.485E-03	1.742E-03
4.000E+01	9.542E-03	4.771E-03	4.500E+01	1.582E-02	7.910E-03	5.000E+01	2.212E-02
1.106E-02	5.500E+01	2.832E-02	1.416E-02	6.000E+01	3.400E-02	1.700E-02	6.500E+01
3.933E-02	1.966E-02	7.000E+01	4.341E-02	2.170E-02	7.500E+01	4.798E-02	2.399E-02
8.000E+01	5.241E-02	2.620E-02	8.500E+01	5.698E-02	2.849E-02	9.000E+01	6.207E-02
3.104E-02	9.500E+01	6.667E-02	3.161E-02	1.000E+02	7.226E-02	3.136E-02	1.100E+02
8.434E-02	3.049E-02	1.200E+02	9.757E-02	2.940E-02	1.300E+02	1.132E-01	2.843E-02
1.400E+02	1.282E-01	2.761E-02	1.500E+02	1.401E-01	2.766E-02	1.600E+02	1.649E-01
2.823E-02	1.700E+02	1.934E-01	2.937E-02	1.800E+02	2.207E-01	3.069E-02	1.900E+02
2.532E-01	3.277E-02	2.000E+02	2.831E-01	3.487E-02			
	1	1	35	81	30		p+Br81
1.478E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	9.650E-10
4.825E-10	2.600E+01	1.485E-08	7.425E-09	2.800E+01	2.424E-06	1.212E-06	3.000E+01
2.875E-05	1.438E-05	3.500E+01	1.684E-03	8.420E-04	4.000E+01	6.059E-03	3.030E-03
4.500E+01	1.084E-02	5.420E-03	5.000E+01	1.548E-02	7.740E-03	5.500E+01	1.993E-02
9.965E-03	6.000E+01	2.398E-02	1.199E-02	6.500E+01	2.761E-02	1.380E-02	7.000E+01
3.071E-02	1.536E-02	7.500E+01	3.370E-02	1.685E-02	8.000E+01	3.650E-02	1.825E-02
8.500E+01	3.921E-02	1.961E-02	9.000E+01	4.174E-02	2.087E-02	9.500E+01	4.361E-02

2.181E-02	1.000E+02	4.576E-02	2.288E-02	1.100E+02	5.059E-02	2.530E-02	1.200E+02
5.710E-02	2.528E-02	1.300E+02	6.444E-02	2.411E-02	1.400E+02	7.022E-02	2.293E-02
1.500E+02	7.390E-02	2.101E-02	1.600E+02	8.881E-02	2.069E-02	1.700E+02	1.045E-01
2.057E-02	1.800E+02	1.194E-01	2.060E-02	1.900E+02	1.366E-01	2.094E-02	2.000E+02
1.497E-01	2.120E-02						
1	1	36	78	33			p+Kr78
1.462E+01	0.000E+00	0.000E+00	1.800E+01	0.000E+00	0.000E+00	1.900E+01	1.335E-10
3.566E-11	2.000E+01	3.587E-10	1.129E-10	2.200E+01	2.859E-09	1.129E-09	2.400E+01
2.517E-08	1.146E-08	2.600E+01	2.225E-06	1.007E-06	2.800E+01	5.043E-05	2.522E-05
3.000E+01	4.901E-04	2.451E-04	3.500E+01	1.871E-02	9.355E-03	4.000E+01	6.209E-02
3.104E-02	4.500E+01	1.104E-01	5.520E-02	5.000E+01	1.570E-01	7.850E-02	5.500E+01
1.977E-01	9.885E-02	6.000E+01	2.365E-01	1.182E-01	6.500E+01	2.672E-01	1.336E-01
7.000E+01	2.922E-01	1.461E-01	7.500E+01	3.054E-01	1.527E-01	8.000E+01	3.237E-01
1.618E-01	8.500E+01	3.399E-01	1.699E-01	9.000E+01	3.571E-01	1.785E-01	9.500E+01
3.664E-01	1.832E-01	1.000E+02	3.716E-01	1.858E-01	1.100E+02	3.868E-01	1.934E-01
1.200E+02	4.027E-01	2.014E-01	1.300E+02	4.156E-01	1.981E-01	1.400E+02	4.252E-01
1.867E-01	1.500E+02	4.429E-01	1.826E-01	1.600E+02	4.906E-01	1.758E-01	1.700E+02
5.251E-01	1.692E-01	1.800E+02	5.604E-01	1.632E-01	1.900E+02	6.066E-01	1.577E-01
2.000E+02	6.363E-01	1.522E-01					
1	1	36	80	31			p+Kr80
1.571E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	5.886E-10
2.532E-10	2.400E+01	5.316E-09	2.576E-09	2.600E+01	5.320E-08	2.660E-08	2.800E+01
8.415E-06	4.207E-06	3.000E+01	1.127E-04	5.635E-05	3.500E+01	9.273E-03	4.636E-03
4.000E+01	4.074E-02	2.037E-02	4.500E+01	7.787E-02	3.893E-02	5.000E+01	1.147E-01
5.735E-02	5.500E+01	1.475E-01	7.375E-02	6.000E+01	1.787E-01	8.935E-02	6.500E+01
2.036E-01	1.018E-01	7.000E+01	2.240E-01	1.120E-01	7.500E+01	2.355E-01	1.177E-01
8.000E+01	2.490E-01	1.245E-01	8.500E+01	2.603E-01	1.301E-01	9.000E+01	2.716E-01
1.358E-01	9.500E+01	2.763E-01	1.381E-01	1.000E+02	2.797E-01	1.399E-01	1.100E+02
2.828E-01	1.414E-01	1.200E+02	2.864E-01	1.432E-01	1.300E+02	2.927E-01	1.464E-01
1.400E+02	2.974E-01	1.487E-01	1.500E+02	3.044E-01	1.522E-01	1.600E+02	3.223E-01
1.523E-01	1.700E+02	3.424E-01	1.463E-01	1.800E+02	3.685E-01	1.408E-01	1.900E+02
3.919E-01	1.356E-01	2.000E+02	4.174E-01	1.305E-01			
1	1	36	82	30			p+Kr82
1.699E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.014E-09
4.738E-10	2.600E+01	8.654E-09	4.327E-09	2.800E+01	6.106E-07	3.038E-07	3.000E+01
2.051E-05	1.025E-05	3.500E+01	3.655E-03	1.827E-03	4.000E+01	2.440E-02	1.220E-02
4.500E+01	5.269E-02	2.635E-02	5.000E+01	8.135E-02	4.068E-02	5.500E+01	1.083E-01
5.415E-02	6.000E+01	1.319E-01	6.595E-02	6.500E+01	1.519E-01	7.595E-02	7.000E+01
1.685E-01	8.425E-02	7.500E+01	1.826E-01	9.130E-02	8.000E+01	1.940E-01	9.700E-02
8.500E+01	2.032E-01	1.016E-01	9.000E+01	2.109E-01	1.055E-01	9.500E+01	2.140E-01
1.070E-01	1.000E+02	2.160E-01	1.080E-01	1.100E+02	2.170E-01	1.085E-01	1.200E+02
2.164E-01	1.082E-01	1.300E+02	2.161E-01	1.080E-01	1.400E+02	2.152E-01	1.076E-01
1.500E+02	2.056E-01	1.028E-01	1.600E+02	2.139E-01	1.070E-01	1.700E+02	2.271E-01
1.078E-01	1.800E+02	2.391E-01	1.036E-01	1.900E+02	2.514E-01	9.961E-02	2.000E+02
2.652E-01	9.589E-02						
1	1	36	83	30			p+Kr83
1.472E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	8.918E-10
4.459E-10	2.600E+01	8.855E-09	4.428E-09	2.800E+01	1.720E-06	8.600E-07	3.000E+01
2.325E-05	1.162E-05	3.500E+01	1.837E-03	9.185E-04	4.000E+01	7.647E-03	3.824E-03
4.500E+01	1.416E-02	7.080E-03	5.000E+01	2.045E-02	1.022E-02	5.500E+01	2.633E-02
1.316E-02	6.000E+01	3.153E-02	1.577E-02	6.500E+01	3.596E-02	1.798E-02	7.000E+01
3.986E-02	1.993E-02	7.500E+01	4.322E-02	2.161E-02	8.000E+01	4.607E-02	2.303E-02
8.500E+01	4.867E-02	2.433E-02	9.000E+01	5.102E-02	2.551E-02	9.500E+01	5.275E-02
2.637E-02	1.000E+02	5.429E-02	2.714E-02	1.100E+02	5.772E-02	2.886E-02	1.200E+02
6.225E-02	2.924E-02	1.300E+02	6.703E-02	2.775E-02	1.400E+02	7.096E-02	2.627E-02
1.500E+02	7.565E-02	2.397E-02	1.600E+02	8.472E-02	2.331E-02	1.700E+02	9.727E-02
2.288E-02	1.800E+02	1.078E-01	2.250E-02	1.900E+02	1.220E-01	2.246E-02	2.000E+02
1.364E-01	2.259E-02						
1	1	36	84	30			p+Kr84
1.831E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.413E-10
7.065E-11	2.600E+01	1.256E-09	6.280E-10	2.800E+01	1.256E-08	6.280E-09	3.000E+01
1.968E-06	9.840E-07	3.500E+01	9.593E-04	4.796E-04	4.000E+01	1.341E-02	6.705E-03
4.500E+01	3.347E-02	1.673E-02	5.000E+01	5.494E-02	2.747E-02	5.500E+01	7.625E-02
3.812E-02	6.000E+01	9.479E-02	4.739E-02	6.500E+01	1.106E-01	5.530E-02	7.000E+01
1.241E-01	6.205E-02	7.500E+01	1.355E-01	6.775E-02	8.000E+01	1.450E-01	7.250E-02
8.500E+01	1.526E-01	7.630E-02	9.000E+01	1.589E-01	7.945E-02	9.500E+01	1.615E-01

8.075E-02	1.000E+02	1.630E-01	8.150E-02	1.100E+02	1.633E-01	8.165E-02	1.200E+02
1.619E-01	8.095E-02	1.300E+02	1.600E-01	8.000E-02	1.400E+02	1.576E-01	7.880E-02
1.500E+02	1.547E-01	7.735E-02	1.600E+02	1.579E-01	7.895E-02	1.700E+02	1.608E-01
8.040E-02	1.800E+02	1.664E-01	8.320E-02	1.900E+02	1.724E-01	8.620E-02	2.000E+02
1.791E-01	8.751E-02						
1	1	36	86	29			p+Kr86
1.982E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	1.535E-10
7.675E-11	2.800E+01	1.583E-09	7.915E-10	3.000E+01	1.661E-08	8.305E-09	3.500E+01
1.445E-04	7.225E-05	4.000E+01	6.020E-03	3.010E-03	4.500E+01	1.954E-02	9.770E-03
5.000E+01	3.477E-02	1.739E-02	5.500E+01	4.958E-02	2.479E-02	6.000E+01	6.324E-02
3.162E-02	6.500E+01	7.511E-02	3.755E-02	7.000E+01	8.701E-02	4.351E-02	7.500E+01
9.601E-02	4.800E-02	8.000E+01	1.035E-01	5.175E-02	8.500E+01	1.096E-01	5.480E-02
9.000E+01	1.147E-01	5.735E-02	9.500E+01	1.171E-01	5.855E-02	1.000E+02	1.185E-01
5.925E-02	1.100E+02	1.194E-01	5.970E-02	1.200E+02	1.182E-01	5.910E-02	1.300E+02
1.161E-01	5.805E-02	1.400E+02	1.142E-01	5.710E-02	1.500E+02	1.112E-01	5.560E-02
1.600E+02	1.118E-01	5.590E-02	1.700E+02	1.132E-01	5.660E-02	1.800E+02	1.157E-01
5.785E-02	1.900E+02	1.186E-01	5.930E-02	2.000E+02	1.209E-01	6.045E-02	
1	1	37	85	30			p+Rb85
1.491E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	2.639E-10
1.319E-10	2.600E+01	2.596E-09	1.298E-09	2.800E+01	3.408E-07	1.704E-07	3.000E+01
6.710E-06	3.355E-06	3.500E+01	8.171E-04	4.085E-04	4.000E+01	4.421E-03	2.210E-03
4.500E+01	8.742E-03	4.371E-03	5.000E+01	1.302E-02	6.510E-03	5.500E+01	1.685E-02
8.425E-03	6.000E+01	2.054E-02	1.027E-02	6.500E+01	2.383E-02	1.192E-02	7.000E+01
2.684E-02	1.342E-02	7.500E+01	2.952E-02	1.476E-02	8.000E+01	3.193E-02	1.597E-02
8.500E+01	3.417E-02	1.708E-02	9.000E+01	3.637E-02	1.818E-02	9.500E+01	3.739E-02
1.869E-02	1.000E+02	3.906E-02	1.953E-02	1.100E+02	4.317E-02	2.159E-02	1.200E+02
4.762E-02	2.196E-02	1.300E+02	5.265E-02	2.107E-02	1.400E+02	5.778E-02	2.016E-02
1.500E+02	6.377E-02	1.997E-02	1.600E+02	7.402E-02	1.964E-02	1.700E+02	8.432E-02
1.940E-02	1.800E+02	9.740E-02	1.940E-02	1.900E+02	1.106E-01	1.958E-02	2.000E+02
1.250E-01	1.995E-02						
1	1	37	87	29			p+Rb87
1.688E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	1.772E-10
8.860E-11	2.800E+01	1.768E-09	8.840E-10	3.000E+01	2.650E-07	1.325E-07	3.500E+01
1.447E-04	7.235E-05	4.000E+01	2.044E-03	1.022E-03	4.500E+01	5.018E-03	2.509E-03
5.000E+01	8.153E-03	4.077E-03	5.500E+01	1.108E-02	5.540E-03	6.000E+01	1.374E-02
6.870E-03	6.500E+01	1.582E-02	7.910E-03	7.000E+01	1.788E-02	8.940E-03	7.500E+01
1.975E-02	9.875E-03	8.000E+01	2.135E-02	1.068E-02	8.500E+01	2.279E-02	1.140E-02
9.000E+01	2.416E-02	1.208E-02	9.500E+01	2.482E-02	1.241E-02	1.000E+02	2.542E-02
1.271E-02	1.100E+02	2.700E-02	1.350E-02	1.200E+02	2.833E-02	1.417E-02	1.300E+02
3.017E-02	1.508E-02	1.400E+02	3.347E-02	1.673E-02	1.500E+02	3.584E-02	1.705E-02
1.600E+02	4.059E-02	1.660E-02	1.700E+02	4.606E-02	1.617E-02	1.800E+02	5.220E-02
1.580E-02	1.900E+02	6.025E-02	1.555E-02	2.000E+02	6.817E-02	1.537E-02	
1	1	38	84	31			p+Sr84
1.586E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	1.727E-10
6.640E-11	2.400E+01	1.468E-09	6.490E-10	2.600E+01	1.414E-08	6.787E-09	2.800E+01
8.128E-07	3.908E-07	3.000E+01	2.547E-05	1.273E-05	3.500E+01	4.131E-03	2.066E-03
4.000E+01	2.878E-02	1.439E-02	4.500E+01	6.203E-02	3.102E-02	5.000E+01	9.603E-02
4.802E-02	5.500E+01	1.271E-01	6.355E-02	6.000E+01	1.542E-01	7.710E-02	6.500E+01
1.775E-01	8.875E-02	7.000E+01	1.973E-01	9.865E-02	7.500E+01	2.178E-01	1.089E-01
8.000E+01	2.314E-01	1.157E-01	8.500E+01	2.421E-01	1.211E-01	9.000E+01	2.515E-01
1.258E-01	9.500E+01	2.555E-01	1.278E-01	1.000E+02	2.580E-01	1.290E-01	1.100E+02
2.610E-01	1.305E-01	1.200E+02	2.618E-01	1.309E-01	1.300E+02	2.619E-01	1.310E-01
1.400E+02	2.631E-01	1.316E-01	1.500E+02	2.622E-01	1.311E-01	1.600E+02	2.735E-01
1.299E-01	1.700E+02	2.879E-01	1.246E-01	1.800E+02	3.087E-01	1.195E-01	1.900E+02
3.271E-01	1.147E-01	2.000E+02	3.467E-01	1.102E-01			
1	1	38	86	30			p+Sr86
1.732E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	2.146E-10
1.003E-10	2.600E+01	1.762E-09	8.810E-10	2.800E+01	1.630E-08	8.150E-09	3.000E+01
2.440E-06	1.220E-06	3.500E+01	1.020E-03	5.100E-04	4.000E+01	1.467E-02	7.335E-03
4.500E+01	3.820E-02	1.910E-02	5.000E+01	6.326E-02	3.163E-02	5.500E+01	8.558E-02
4.279E-02	6.000E+01	1.068E-01	5.340E-02	6.500E+01	1.249E-01	6.245E-02	7.000E+01
1.404E-01	7.020E-02	7.500E+01	1.537E-01	7.685E-02	8.000E+01	1.646E-01	8.230E-02
8.500E+01	1.735E-01	8.675E-02	9.000E+01	1.809E-01	9.045E-02	9.500E+01	1.834E-01
9.170E-02	1.000E+02	1.854E-01	9.270E-02	1.100E+02	1.862E-01	9.310E-02	1.200E+02
1.856E-01	9.280E-02	1.300E+02	1.846E-01	9.230E-02	1.400E+02	1.842E-01	9.210E-02
1.500E+02	1.816E-01	9.080E-02	1.600E+02	1.873E-01	9.365E-02	1.700E+02	1.945E-01

9.725E-02	1.800E+02	2.039E-01	1.019E-01	1.900E+02	2.140E-01	1.013E-01	2.000E+02	
2.252E-01	9.751E-02							
1	1	38	87	30				p+Sr87
1.557E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.126E-10	
5.630E-11	2.600E+01	1.051E-09	5.255E-10	2.800E+01	9.762E-09	4.881E-09	3.000E+01	
1.645E-06	8.225E-07	3.500E+01	4.589E-04	2.294E-04	4.000E+01	4.365E-03	2.182E-03	
4.500E+01	9.702E-03	4.851E-03	5.000E+01	1.500E-02	7.500E-03	5.500E+01	2.000E-02	
1.000E-02	6.000E+01	2.450E-02	1.225E-02	6.500E+01	2.838E-02	1.419E-02	7.000E+01	
3.178E-02	1.589E-02	7.500E+01	3.474E-02	1.737E-02	8.000E+01	3.728E-02	1.864E-02	
8.500E+01	3.948E-02	1.974E-02	9.000E+01	4.142E-02	2.071E-02	9.500E+01	4.241E-02	
2.121E-02	1.000E+02	4.344E-02	2.172E-02	1.100E+02	4.573E-02	2.286E-02	1.200E+02	
4.812E-02	2.406E-02	1.300E+02	5.081E-02	2.541E-02	1.400E+02	5.468E-02	2.724E-02	
1.500E+02	5.809E-02	2.573E-02	1.600E+02	6.526E-02	2.480E-02	1.700E+02	7.273E-02	
2.391E-02	1.800E+02	8.350E-02	2.315E-02	1.900E+02	9.327E-02	2.250E-02	2.000E+02	
1.045E-01	2.201E-02							
1	1	38	88	29				p+Sr88
1.912E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	1.465E-10	
7.325E-11	2.800E+01	1.392E-09	6.960E-10	3.000E+01	1.351E-08	6.755E-09	3.500E+01	
1.200E-04	6.000E-05	4.000E+01	5.650E-03	2.825E-03	4.500E+01	2.058E-02	1.029E-02	
5.000E+01	3.799E-02	1.900E-02	5.500E+01	5.519E-02	2.760E-02	6.000E+01	7.093E-02	
3.547E-02	6.500E+01	8.477E-02	4.238E-02	7.000E+01	9.690E-02	4.845E-02	7.500E+01	
1.073E-01	5.365E-02	8.000E+01	1.160E-01	5.800E-02	8.500E+01	1.232E-01	6.160E-02	
9.000E+01	1.291E-01	6.455E-02	9.500E+01	1.317E-01	6.585E-02	1.000E+02	1.334E-01	
6.670E-02	1.100E+02	1.345E-01	6.725E-02	1.200E+02	1.335E-01	6.675E-02	1.300E+02	
1.317E-01	6.585E-02	1.400E+02	1.298E-01	6.490E-02	1.500E+02	1.280E-01	6.400E-02	
1.600E+02	1.297E-01	6.485E-02	1.700E+02	1.328E-01	6.640E-02	1.800E+02	1.371E-01	
6.855E-02	1.900E+02	1.407E-01	7.035E-02	2.000E+02	1.466E-01	7.330E-02		
1	1	39	89	29				p+Y89
1.638E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	1.672E-10	
8.360E-11	2.800E+01	1.295E-09	6.475E-10	3.000E+01	9.188E-08	4.594E-08	3.500E+01	
9.262E-05	4.631E-05	4.000E+01	2.103E-03	1.051E-03	4.500E+01	5.645E-03	2.822E-03	
5.000E+01	9.326E-03	4.663E-03	5.500E+01	1.302E-02	6.510E-03	6.000E+01	1.630E-02	
8.150E-03	6.500E+01	1.924E-02	9.620E-03	7.000E+01	2.185E-02	1.093E-02	7.500E+01	
2.419E-02	1.209E-02	8.000E+01	2.625E-02	1.312E-02	8.500E+01	2.809E-02	1.405E-02	
9.000E+01	2.967E-02	1.483E-02	9.500E+01	3.050E-02	1.525E-02	1.000E+02	3.121E-02	
1.561E-02	1.100E+02	3.314E-02	1.657E-02	1.200E+02	3.537E-02	1.768E-02	1.300E+02	
3.823E-02	1.912E-02	1.400E+02	4.146E-02	1.927E-02	1.500E+02	4.367E-02	1.764E-02	
1.600E+02	5.035E-02	1.708E-02	1.700E+02	5.686E-02	1.654E-02	1.800E+02	6.516E-02	
1.608E-02	1.900E+02	7.516E-02	1.575E-02	2.000E+02	8.536E-02	1.553E-02		
1	1	40	90	29				p+Zr90
1.769E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	3.993E-10	
1.997E-10	2.800E+01	3.508E-09	1.754E-09	3.000E+01	4.314E-08	2.157E-08	3.500E+01	
2.345E-04	1.173E-04	4.000E+01	8.328E-03	4.164E-03	4.500E+01	2.835E-02	1.418E-02	
5.000E+01	5.127E-02	2.564E-02	5.500E+01	7.283E-02	3.642E-02	6.000E+01	9.302E-02	
4.651E-02	6.500E+01	1.106E-01	5.530E-02	7.000E+01	1.285E-01	6.425E-02	7.500E+01	
1.417E-01	7.085E-02	8.000E+01	1.525E-01	7.625E-02	8.500E+01	1.615E-01	8.075E-02	
9.000E+01	1.687E-01	8.435E-02	9.500E+01	1.714E-01	8.570E-02	1.000E+02	1.732E-01	
8.660E-02	1.100E+02	1.738E-01	8.690E-02	1.200E+02	1.716E-01	8.580E-02	1.300E+02	
1.685E-01	8.425E-02	1.400E+02	1.658E-01	8.290E-02	1.500E+02	1.571E-01	7.855E-02	
1.600E+02	1.597E-01	7.985E-02	1.700E+02	1.629E-01	8.145E-02	1.800E+02	1.674E-01	
8.370E-02	1.900E+02	1.752E-01	8.760E-02	2.000E+02	1.833E-01	9.058E-02		
1	1	40	91	30				p+Zr91
1.436E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.913E-10	
9.565E-11	2.600E+01	1.794E-09	8.970E-10	2.800E+01	2.786E-08	1.393E-08	3.000E+01	
2.899E-06	1.450E-06	3.500E+01	6.254E-04	3.127E-04	4.000E+01	5.181E-03	2.590E-03	
4.500E+01	1.127E-02	5.635E-03	5.000E+01	1.736E-02	8.680E-03	5.500E+01	2.304E-02	
1.152E-02	6.000E+01	2.798E-02	1.399E-02	6.500E+01	3.221E-02	1.611E-02	7.000E+01	
3.579E-02	1.790E-02	7.500E+01	3.877E-02	1.938E-02	8.000E+01	4.116E-02	2.058E-02	
8.500E+01	4.325E-02	2.162E-02	9.000E+01	4.517E-02	2.259E-02	9.500E+01	4.592E-02	
2.296E-02	1.000E+02	4.644E-02	2.322E-02	1.100E+02	4.718E-02	2.359E-02	1.200E+02	
4.773E-02	2.387E-02	1.300E+02	4.894E-02	2.447E-02	1.400E+02	5.080E-02	2.540E-02	
1.500E+02	5.095E-02	2.548E-02	1.600E+02	5.539E-02	2.698E-02	1.700E+02	6.131E-02	
2.607E-02	1.800E+02	6.785E-02	2.524E-02	1.900E+02	7.554E-02	2.451E-02	2.000E+02	
8.341E-02	2.385E-02							
1	1	40	92	31				p+Zr92
1.434E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	2.733E-10	

1.245E-10	2.400E+01	2.679E-09	1.319E-09	2.600E+01	2.429E-08	1.215E-08	2.800E+01
3.130E-06	1.565E-06	3.000E+01	5.001E-05	2.500E-05	3.500E+01	5.661E-03	2.831E-03
4.000E+01	3.001E-02	1.500E-02	4.500E+01	6.182E-02	3.091E-02	5.000E+01	9.312E-02
4.656E-02	5.500E+01	1.218E-01	6.090E-02	6.000E+01	1.469E-01	7.345E-02	6.500E+01
1.682E-01	8.410E-02	7.000E+01	1.900E-01	9.500E-02	7.500E+01	2.047E-01	1.023E-01
8.000E+01	2.165E-01	1.082E-01	8.500E+01	2.258E-01	1.129E-01	9.000E+01	2.329E-01
1.164E-01	9.500E+01	2.341E-01	1.171E-01	1.000E+02	2.336E-01	1.168E-01	1.100E+02
2.289E-01	1.144E-01	1.200E+02	2.217E-01	1.109E-01	1.300E+02	2.136E-01	1.068E-01
1.400E+02	2.054E-01	1.027E-01	1.500E+02	1.977E-01	9.885E-02	1.600E+02	1.949E-01
9.745E-02	1.700E+02	1.931E-01	9.655E-02	1.800E+02	1.922E-01	9.610E-02	1.900E+02
1.928E-01	9.640E-02	2.000E+02	1.941E-01	9.705E-02			
	1	1	40	94	32		p+Zr94
1.328E+01	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	1.018E-10
4.713E-11	2.200E+01	9.853E-10	4.927E-10	2.400E+01	9.010E-09	4.505E-09	2.600E+01
5.607E-07	2.803E-07	2.800E+01	1.991E-05	9.955E-06	3.000E+01	1.831E-04	9.155E-05
3.500E+01	1.042E-02	5.210E-03	4.000E+01	3.900E-02	1.950E-02	4.500E+01	7.325E-02
3.662E-02	5.000E+01	1.060E-01	5.300E-02	5.500E+01	1.364E-01	6.820E-02	6.000E+01
1.620E-01	8.100E-02	6.500E+01	1.841E-01	9.205E-02	7.000E+01	2.024E-01	1.012E-01
7.500E+01	2.171E-01	1.085E-01	8.000E+01	2.290E-01	1.145E-01	8.500E+01	2.386E-01
1.193E-01	9.000E+01	2.459E-01	1.230E-01	9.500E+01	2.471E-01	1.235E-01	1.000E+02
2.464E-01	1.232E-01	1.100E+02	2.415E-01	1.207E-01	1.200E+02	2.340E-01	1.170E-01
1.300E+02	2.257E-01	1.129E-01	1.400E+02	2.170E-01	1.085E-01	1.500E+02	2.082E-01
1.041E-01	1.600E+02	2.053E-01	1.027E-01	1.700E+02	2.034E-01	1.017E-01	1.800E+02
2.014E-01	1.007E-01	1.900E+02	2.007E-01	1.003E-01	2.000E+02	2.022E-01	1.011E-01
	1	1	40	96	31		p+Zr96
1.472E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	1.459E-10
7.295E-11	2.400E+01	1.398E-09	6.990E-10	2.600E+01	1.153E-08	5.765E-09	2.800E+01
1.541E-06	7.705E-07	3.000E+01	3.013E-05	1.507E-05	3.500E+01	4.115E-03	2.057E-03
4.000E+01	2.379E-02	1.189E-02	4.500E+01	5.007E-02	2.504E-02	5.000E+01	7.668E-02
3.834E-02	5.500E+01	1.015E-01	5.075E-02	6.000E+01	1.229E-01	6.145E-02	6.500E+01
1.416E-01	7.080E-02	7.000E+01	1.574E-01	7.870E-02	7.500E+01	1.702E-01	8.510E-02
8.000E+01	1.807E-01	9.035E-02	8.500E+01	1.892E-01	9.460E-02	9.000E+01	1.959E-01
9.795E-02	9.500E+01	1.978E-01	9.890E-02	1.000E+02	1.983E-01	9.915E-02	1.100E+02
1.960E-01	9.800E-02	1.200E+02	1.911E-01	9.555E-02	1.300E+02	1.849E-01	9.245E-02
1.400E+02	1.786E-01	8.930E-02	1.500E+02	1.725E-01	8.625E-02	1.600E+02	1.705E-01
8.525E-02	1.700E+02	1.692E-01	8.460E-02	1.800E+02	1.683E-01	8.415E-02	1.900E+02
1.673E-01	8.365E-02	2.000E+02	1.678E-01	8.390E-02			
	1	1	41	93	31		p+Nb93
1.093E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	5.208E-10
2.604E-10	2.400E+01	4.623E-09	2.312E-09	2.600E+01	4.733E-07	2.366E-07	2.800E+01
8.506E-06	4.253E-06	3.000E+01	7.688E-05	3.844E-05	3.500E+01	2.556E-03	1.278E-03
4.000E+01	7.528E-03	3.764E-03	4.500E+01	1.293E-02	6.465E-03	5.000E+01	1.807E-02
9.035E-03	5.500E+01	2.273E-02	1.137E-02	6.000E+01	2.684E-02	1.342E-02	6.500E+01
3.039E-02	1.520E-02	7.000E+01	3.272E-02	1.636E-02	7.500E+01	3.515E-02	1.758E-02
8.000E+01	3.716E-02	1.858E-02	8.500E+01	3.886E-02	1.943E-02	9.000E+01	4.071E-02
2.036E-02	9.500E+01	4.163E-02	2.082E-02	1.000E+02	4.217E-02	2.108E-02	1.100E+02
4.373E-02	2.186E-02	1.200E+02	4.554E-02	2.277E-02	1.300E+02	4.818E-02	2.409E-02
1.400E+02	5.089E-02	2.544E-02	1.500E+02	5.441E-02	2.716E-02	1.600E+02	6.034E-02
2.605E-02	1.700E+02	6.746E-02	2.501E-02	1.800E+02	7.573E-02	2.408E-02	1.900E+02
8.477E-02	2.326E-02	2.000E+02	9.426E-02	2.255E-02			
	1	1	42	92	30		p+Mo92
1.618E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.257E-10
5.900E-11	2.600E+01	9.797E-10	4.899E-10	2.800E+01	8.034E-09	4.017E-09	3.000E+01
4.266E-07	2.133E-07	3.500E+01	4.256E-04	2.128E-04	4.000E+01	1.173E-02	5.865E-03
4.500E+01	3.624E-02	1.812E-02	5.000E+01	6.403E-02	3.202E-02	5.500E+01	9.116E-02
4.558E-02	6.000E+01	1.155E-01	5.775E-02	6.500E+01	1.368E-01	6.840E-02	7.000E+01
1.553E-01	7.765E-02	7.500E+01	1.708E-01	8.540E-02	8.000E+01	1.836E-01	9.180E-02
8.500E+01	1.941E-01	9.705E-02	9.000E+01	2.025E-01	1.013E-01	9.500E+01	2.055E-01
1.027E-01	1.000E+02	2.076E-01	1.038E-01	1.100E+02	2.080E-01	1.040E-01	1.200E+02
2.058E-01	1.029E-01	1.300E+02	2.035E-01	1.017E-01	1.400E+02	2.011E-01	1.006E-01
1.500E+02	1.983E-01	9.915E-02	1.600E+02	2.030E-01	1.015E-01	1.700E+02	2.077E-01
1.038E-01	1.800E+02	2.135E-01	1.067E-01	1.900E+02	2.232E-01	1.116E-01	2.000E+02
2.336E-01	1.134E-01						
	1	1	42	94	31		p+Mo94
1.273E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	8.434E-10
3.917E-10	2.400E+01	7.441E-09	3.721E-09	2.600E+01	5.866E-08	2.933E-08	2.800E+01

1.082E-05	5.410E-06	3.000E+01	1.247E-04	6.235E-05	3.500E+01	9.281E-03	4.640E-03
4.000E+01	4.133E-02	2.066E-02	4.500E+01	8.141E-02	4.070E-02	5.000E+01	1.207E-01
6.035E-02	5.500E+01	1.571E-01	7.855E-02	6.000E+01	1.865E-01	9.325E-02	6.500E+01
2.128E-01	1.064E-01	7.000E+01	2.349E-01	1.174E-01	7.500E+01	2.521E-01	1.260E-01
8.000E+01	2.658E-01	1.329E-01	8.500E+01	2.767E-01	1.384E-01	9.000E+01	2.853E-01
1.426E-01	9.500E+01	2.864E-01	1.432E-01	1.000E+02	2.856E-01	1.428E-01	1.100E+02
2.798E-01	1.399E-01	1.200E+02	2.709E-01	1.354E-01	1.300E+02	2.617E-01	1.308E-01
1.400E+02	2.531E-01	1.265E-01	1.500E+02	2.527E-01	1.263E-01	1.600E+02	2.517E-01
1.258E-01	1.700E+02	2.511E-01	1.255E-01	1.800E+02	2.515E-01	1.258E-01	1.900E+02
2.545E-01	1.273E-01	2.000E+02	2.596E-01	1.298E-01			
	1	1	42	95	34		p+Mo95
8.577E+00	0.000E+00	0.000E+00	1.700E+01	0.000E+00	0.000E+00	1.800E+01	1.882E-10
9.410E-11	1.900E+01	4.979E-10	2.490E-10	2.000E+01	1.364E-09	6.820E-10	2.200E+01
1.101E-08	5.505E-09	2.400E+01	1.102E-06	5.510E-07	2.600E+01	1.982E-05	9.910E-06
2.800E+01	1.713E-04	8.565E-05	3.000E+01	1.103E-03	5.515E-04	3.500E+01	1.042E-02
5.210E-03	4.000E+01	2.316E-02	1.158E-02	4.500E+01	3.650E-02	1.825E-02	5.000E+01
4.857E-02	2.429E-02	5.500E+01	5.835E-02	2.917E-02	6.000E+01	6.722E-02	3.361E-02
6.500E+01	7.464E-02	3.732E-02	7.000E+01	8.042E-02	4.021E-02	7.500E+01	8.470E-02
4.235E-02	8.000E+01	8.825E-02	4.412E-02	8.500E+01	9.159E-02	4.580E-02	9.000E+01
9.470E-02	4.735E-02	9.500E+01	9.502E-02	4.751E-02	1.000E+02	9.532E-02	4.766E-02
1.100E+02	9.564E-02	4.782E-02	1.200E+02	9.634E-02	4.817E-02	1.300E+02	9.678E-02
4.839E-02	1.400E+02	9.842E-02	4.921E-02	1.500E+02	9.970E-02	4.985E-02	1.600E+02
1.077E-01	4.796E-02	1.700E+02	1.164E-01	4.582E-02	1.800E+02	1.252E-01	4.384E-02
1.900E+02	1.359E-01	4.204E-02	2.000E+02	1.473E-01	4.044E-02		
	1	1	42	96	33		p+Mo96
1.090E+01	0.000E+00	0.000E+00	1.800E+01	0.000E+00	0.000E+00	1.900E+01	2.745E-10
1.179E-10	2.000E+01	8.070E-10	3.746E-10	2.200E+01	7.142E-09	3.571E-09	2.400E+01
7.790E-08	3.895E-08	2.600E+01	1.038E-05	5.190E-06	2.800E+01	1.266E-04	6.330E-05
3.000E+01	1.039E-03	5.195E-04	3.500E+01	2.289E-02	1.145E-02	4.000E+01	6.525E-02
3.263E-02	4.500E+01	1.125E-01	5.625E-02	5.000E+01	1.569E-01	7.845E-02	5.500E+01
1.989E-01	9.945E-02	6.000E+01	2.331E-01	1.166E-01	6.500E+01	2.625E-01	1.313E-01
7.000E+01	2.866E-01	1.433E-01	7.500E+01	3.059E-01	1.530E-01	8.000E+01	3.210E-01
1.605E-01	8.500E+01	3.334E-01	1.667E-01	9.000E+01	3.431E-01	1.716E-01	9.500E+01
3.442E-01	1.721E-01	1.000E+02	3.424E-01	1.712E-01	1.100E+02	3.356E-01	1.678E-01
1.200E+02	3.259E-01	1.630E-01	1.300E+02	3.155E-01	1.578E-01	1.400E+02	3.056E-01
1.528E-01	1.500E+02	2.836E-01	1.418E-01	1.600E+02	2.842E-01	1.421E-01	1.700E+02
2.847E-01	1.424E-01	1.800E+02	2.883E-01	1.442E-01	1.900E+02	2.916E-01	1.458E-01
2.000E+02	2.975E-01	1.487E-01					
	1	1	42	97	32		p+Mo97
9.777E+00	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	2.653E-10
1.327E-10	2.200E+01	2.250E-09	1.125E-09	2.400E+01	1.809E-08	9.045E-09	2.600E+01
3.481E-06	1.740E-06	2.800E+01	3.930E-05	1.965E-05	3.000E+01	3.162E-04	1.581E-04
3.500E+01	5.947E-03	2.974E-03	4.000E+01	1.538E-02	7.690E-03	4.500E+01	2.559E-02
1.280E-02	5.000E+01	3.502E-02	1.751E-02	5.500E+01	4.377E-02	2.189E-02	6.000E+01
5.103E-02	2.551E-02	6.500E+01	5.746E-02	2.873E-02	7.000E+01	6.138E-02	3.069E-02
7.500E+01	6.583E-02	3.291E-02	8.000E+01	6.973E-02	3.487E-02	8.500E+01	7.384E-02
3.692E-02	9.000E+01	7.786E-02	3.893E-02	9.500E+01	7.976E-02	3.988E-02	1.000E+02
8.158E-02	4.079E-02	1.100E+02	8.488E-02	4.244E-02	1.200E+02	8.768E-02	4.384E-02
1.300E+02	9.059E-02	4.530E-02	1.400E+02	9.447E-02	4.723E-02	1.500E+02	9.615E-02
4.501E-02	1.600E+02	1.050E-01	4.309E-02	1.700E+02	1.139E-01	4.128E-02	1.800E+02
1.235E-01	3.961E-02	1.900E+02	1.345E-01	3.806E-02	2.000E+02	1.479E-01	3.670E-02
	1	1	42	98	32		p+Mo98
1.190E+01	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	2.070E-10
1.035E-10	2.200E+01	1.896E-09	9.480E-10	2.400E+01	1.593E-08	7.965E-09	2.600E+01
1.623E-06	8.115E-07	2.800E+01	3.446E-05	1.723E-05	3.000E+01	3.304E-04	1.652E-04
3.500E+01	1.343E-02	6.715E-03	4.000E+01	4.617E-02	2.309E-02	4.500E+01	8.456E-02
4.228E-02	5.000E+01	1.217E-01	6.085E-02	5.500E+01	1.550E-01	7.750E-02	6.000E+01
1.837E-01	9.185E-02	6.500E+01	2.087E-01	1.043E-01	7.000E+01	2.246E-01	1.123E-01
7.500E+01	2.410E-01	1.205E-01	8.000E+01	2.542E-01	1.271E-01	8.500E+01	2.649E-01
1.325E-01	9.000E+01	2.735E-01	1.368E-01	9.500E+01	2.753E-01	1.376E-01	1.000E+02
2.750E-01	1.375E-01	1.100E+02	2.715E-01	1.358E-01	1.200E+02	2.652E-01	1.326E-01
1.300E+02	2.575E-01	1.288E-01	1.400E+02	2.505E-01	1.253E-01	1.500E+02	2.510E-01
1.255E-01	1.600E+02	2.529E-01	1.265E-01	1.700E+02	2.544E-01	1.272E-01	1.800E+02
2.568E-01	1.284E-01	1.900E+02	2.592E-01	1.296E-01	2.000E+02	2.650E-01	1.325E-01
	1	1	42	100	31		p+Mo100
1.244E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	8.599E-10

4.299E-10	2.400E+01	7.805E-09	3.902E-09	2.600E+01	2.987E-07	1.493E-07	2.800E+01
1.459E-05	7.295E-06	3.000E+01	1.594E-04	7.970E-05	3.500E+01	9.127E-03	4.563E-03
4.000E+01	3.550E-02	1.775E-02	4.500E+01	6.752E-02	3.376E-02	5.000E+01	9.888E-02
4.944E-02	5.500E+01	1.282E-01	6.410E-02	6.000E+01	1.531E-01	7.655E-02	6.500E+01
1.750E-01	8.750E-02	7.000E+01	1.889E-01	9.445E-02	7.500E+01	2.033E-01	1.017E-01
8.000E+01	2.150E-01	1.075E-01	8.500E+01	2.245E-01	1.123E-01	9.000E+01	2.319E-01
1.159E-01	9.500E+01	2.336E-01	1.168E-01	1.000E+02	2.335E-01	1.168E-01	1.100E+02
2.302E-01	1.151E-01	1.200E+02	2.243E-01	1.121E-01	1.300E+02	2.177E-01	1.089E-01
1.400E+02	2.106E-01	1.053E-01	1.500E+02	2.049E-01	1.024E-01	1.600E+02	2.029E-01
1.014E-01	1.700E+02	2.028E-01	1.014E-01	1.800E+02	2.041E-01	1.021E-01	1.900E+02
2.053E-01	1.027E-01	2.000E+02	2.079E-01	1.040E-01			
	1	1	44	96	32		p+Ru96
1.202E+01	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	1.162E-10
3.872E-11	2.200E+01	8.622E-10	3.640E-10	2.400E+01	6.838E-09	3.349E-09	2.600E+01
5.801E-08	2.901E-08	2.800E+01	8.530E-06	4.265E-06	3.000E+01	1.028E-04	5.140E-05
3.500E+01	7.980E-03	3.990E-03	4.000E+01	4.118E-02	2.059E-02	4.500E+01	8.464E-02
4.232E-02	5.000E+01	1.276E-01	6.380E-02	5.500E+01	1.674E-01	8.370E-02	6.000E+01
2.026E-01	1.013E-01	6.500E+01	2.323E-01	1.162E-01	7.000E+01	2.572E-01	1.286E-01
7.500E+01	2.826E-01	1.413E-01	8.000E+01	2.986E-01	1.493E-01	8.500E+01	3.110E-01
1.555E-01	9.000E+01	3.213E-01	1.606E-01	9.500E+01	3.229E-01	1.615E-01	1.000E+02
3.228E-01	1.614E-01	1.100E+02	3.174E-01	1.587E-01	1.200E+02	3.091E-01	1.545E-01
1.300E+02	3.003E-01	1.502E-01	1.400E+02	2.922E-01	1.461E-01	1.500E+02	2.729E-01
1.364E-01	1.600E+02	2.755E-01	1.378E-01	1.700E+02	2.800E-01	1.400E-01	1.800E+02
2.849E-01	1.424E-01	1.900E+02	2.918E-01	1.459E-01	2.000E+02	3.026E-01	1.513E-01
	1	1	44	98	34		p+Ru98
1.036E+01	0.000E+00	0.000E+00	1.700E+01	0.000E+00	0.000E+00	1.800E+01	1.035E-10
2.862E-11	1.900E+01	2.507E-10	8.495E-11	2.000E+01	6.800E-10	2.625E-10	2.200E+01
5.445E-09	2.502E-09	2.400E+01	4.498E-08	2.249E-08	2.600E+01	6.209E-06	3.105E-06
2.800E+01	8.576E-05	4.288E-05	3.000E+01	7.148E-04	3.574E-04	3.500E+01	2.033E-02
1.017E-02	4.000E+01	6.540E-02	3.270E-02	4.500E+01	1.174E-01	5.870E-02	5.000E+01
1.669E-01	8.345E-02	5.500E+01	2.119E-01	1.060E-01	6.000E+01	2.457E-01	1.229E-01
6.500E+01	2.783E-01	1.391E-01	7.000E+01	3.053E-01	1.527E-01	7.500E+01	3.267E-01
1.633E-01	8.000E+01	3.438E-01	1.719E-01	8.500E+01	3.574E-01	1.787E-01	9.000E+01
3.685E-01	1.842E-01	9.500E+01	3.703E-01	1.852E-01	1.000E+02	3.700E-01	1.850E-01
1.100E+02	3.652E-01	1.826E-01	1.200E+02	3.582E-01	1.791E-01	1.300E+02	3.493E-01
1.746E-01	1.400E+02	3.419E-01	1.709E-01	1.500E+02	3.323E-01	1.661E-01	1.600E+02
3.374E-01	1.687E-01	1.700E+02	3.438E-01	1.719E-01	1.800E+02	3.537E-01	1.769E-01
1.900E+02	3.638E-01	1.819E-01	2.000E+02	3.784E-01	1.892E-01		
	1	1	44	99	33		p+Ru99
8.980E+00	0.000E+00	0.000E+00	1.800E+01	0.000E+00	0.000E+00	1.900E+01	1.179E-10
5.895E-11	2.000E+01	3.152E-10	1.576E-10	2.200E+01	2.267E-09	1.134E-09	2.400E+01
1.793E-08	8.965E-09	2.600E+01	2.969E-06	1.484E-06	2.800E+01	3.428E-05	1.714E-05
3.000E+01	2.716E-04	1.358E-04	3.500E+01	5.867E-03	2.933E-03	4.000E+01	1.598E-02
7.990E-03	4.500E+01	2.710E-02	1.355E-02	5.000E+01	3.751E-02	1.876E-02	5.500E+01
4.680E-02	2.340E-02	6.000E+01	5.492E-02	2.746E-02	6.500E+01	6.214E-02	3.107E-02
7.000E+01	6.986E-02	3.493E-02	7.500E+01	7.507E-02	3.753E-02	8.000E+01	7.981E-02
3.991E-02	8.500E+01	8.413E-02	4.206E-02	9.000E+01	8.927E-02	4.464E-02	9.500E+01
9.114E-02	4.557E-02	1.000E+02	9.384E-02	4.692E-02	1.100E+02	9.955E-02	4.977E-02
1.200E+02	1.061E-01	5.305E-02	1.300E+02	1.120E-01	5.462E-02	1.400E+02	1.187E-01
5.123E-02	1.500E+02	1.262E-01	4.805E-02	1.600E+02	1.400E-01	4.609E-02	1.700E+02
1.541E-01	4.430E-02	1.800E+02	1.714E-01	4.266E-02	1.900E+02	1.886E-01	4.124E-02
2.000E+02	2.076E-01	4.008E-02					
	1	1	44	100	32		p+Ru100
1.145E+01	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	1.529E-10
6.484E-11	2.200E+01	1.292E-09	6.251E-10	2.400E+01	1.129E-08	5.645E-09	2.600E+01
3.800E-07	1.900E-07	2.800E+01	1.779E-05	8.895E-06	3.000E+01	1.836E-04	9.180E-05
3.500E+01	1.061E-02	5.305E-03	4.000E+01	4.318E-02	2.159E-02	4.500E+01	8.319E-02
4.160E-02	5.000E+01	1.227E-01	6.135E-02	5.500E+01	1.597E-01	7.985E-02	6.000E+01
1.910E-01	9.550E-02	6.500E+01	2.186E-01	1.093E-01	7.000E+01	2.361E-01	1.181E-01
7.500E+01	2.543E-01	1.272E-01	8.000E+01	2.692E-01	1.346E-01	8.500E+01	2.810E-01
1.405E-01	9.000E+01	2.907E-01	1.454E-01	9.500E+01	2.932E-01	1.466E-01	1.000E+02
2.939E-01	1.469E-01	1.100E+02	2.925E-01	1.462E-01	1.200E+02	2.879E-01	1.439E-01
1.300E+02	2.818E-01	1.409E-01	1.400E+02	2.771E-01	1.386E-01	1.500E+02	2.731E-01
1.366E-01	1.600E+02	2.784E-01	1.392E-01	1.700E+02	2.858E-01	1.429E-01	1.800E+02
2.949E-01	1.474E-01	1.900E+02	3.057E-01	1.529E-01	2.000E+02	3.173E-01	1.587E-01
	1	1	44	101	31		p+Ru101

9.745E+00	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	8.109E-10
4.054E-10	2.400E+01	6.159E-09	3.079E-09	2.600E+01	6.772E-07	3.386E-07	2.800E+01
1.221E-05	6.105E-06	3.000E+01	1.093E-04	5.465E-05	3.500E+01	3.776E-03	1.888E-03
4.000E+01	1.176E-02	5.880E-03	4.500E+01	2.078E-02	1.039E-02	5.000E+01	2.935E-02
1.468E-02	5.500E+01	3.726E-02	1.863E-02	6.000E+01	4.396E-02	2.198E-02	6.500E+01
4.987E-02	2.493E-02	7.000E+01	5.359E-02	2.679E-02	7.500E+01	5.758E-02	2.879E-02
8.000E+01	6.113E-02	3.056E-02	8.500E+01	6.428E-02	3.214E-02	9.000E+01	6.760E-02
3.380E-02	9.500E+01	6.866E-02	3.433E-02	1.000E+02	7.013E-02	3.506E-02	1.100E+02
7.294E-02	3.647E-02	1.200E+02	7.674E-02	3.837E-02	1.300E+02	8.097E-02	4.049E-02
1.400E+02	8.577E-02	4.288E-02	1.500E+02	9.041E-02	4.096E-02	1.600E+02	1.001E-01
3.935E-02	1.700E+02	1.124E-01	3.784E-02	1.800E+02	1.256E-01	3.644E-02	1.900E+02
1.403E-01	3.520E-02	2.000E+02	1.558E-01	3.413E-02			
	1	1	44	102	31		p+Ru102
1.209E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	5.464E-10
2.732E-10	2.400E+01	4.382E-09	2.191E-09	2.600E+01	3.700E-08	1.850E-08	2.800E+01
7.021E-06	3.511E-06	3.000E+01	8.571E-05	4.286E-05	3.500E+01	6.889E-03	3.445E-03
4.000E+01	3.285E-02	1.642E-02	4.500E+01	6.678E-02	3.339E-02	5.000E+01	1.009E-01
5.045E-02	5.500E+01	1.316E-01	6.580E-02	6.000E+01	1.589E-01	7.945E-02	6.500E+01
1.829E-01	9.145E-02	7.000E+01	2.069E-01	1.035E-01	7.500E+01	2.236E-01	1.118E-01
8.000E+01	2.373E-01	1.187E-01	8.500E+01	2.482E-01	1.241E-01	9.000E+01	2.568E-01
1.284E-01	9.500E+01	2.592E-01	1.296E-01	1.000E+02	2.597E-01	1.298E-01	1.100E+02
2.571E-01	1.285E-01	1.200E+02	2.514E-01	1.257E-01	1.300E+02	2.447E-01	1.224E-01
1.400E+02	2.388E-01	1.194E-01	1.500E+02	2.339E-01	1.169E-01	1.600E+02	2.348E-01
1.174E-01	1.700E+02	2.384E-01	1.192E-01	1.800E+02	2.434E-01	1.217E-01	1.900E+02
2.507E-01	1.253E-01	2.000E+02	2.593E-01	1.296E-01			
	1	1	44	104	31		p+Ru104
1.317E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	1.313E-10
6.565E-11	2.400E+01	1.111E-09	5.555E-10	2.600E+01	9.645E-09	4.822E-09	2.800E+01
1.035E-06	5.175E-07	3.000E+01	1.931E-05	9.655E-06	3.500E+01	2.937E-03	1.468E-03
4.000E+01	2.155E-02	1.077E-02	4.500E+01	4.828E-02	2.414E-02	5.000E+01	7.622E-02
3.811E-02	5.500E+01	1.022E-01	5.110E-02	6.000E+01	1.253E-01	6.265E-02	6.500E+01
1.459E-01	7.295E-02	7.000E+01	1.629E-01	8.145E-02	7.500E+01	1.773E-01	8.865E-02
8.000E+01	1.892E-01	9.460E-02	8.500E+01	1.988E-01	9.940E-02	9.000E+01	2.064E-01
1.032E-01	9.500E+01	2.090E-01	1.045E-01	1.000E+02	2.099E-01	1.050E-01	1.100E+02
2.084E-01	1.042E-01	1.200E+02	2.043E-01	1.022E-01	1.300E+02	1.990E-01	9.950E-02
1.400E+02	1.932E-01	9.660E-02	1.500E+02	1.885E-01	9.425E-02	1.600E+02	1.883E-01
9.415E-02	1.700E+02	1.879E-01	9.395E-02	1.800E+02	1.905E-01	9.525E-02	1.900E+02
1.947E-01	9.735E-02	2.000E+02	2.001E-01	1.001E-01			
	1	1	45	103	31		p+Rh103
9.051E+00	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	7.248E-10
3.624E-10	2.400E+01	5.929E-09	2.964E-09	2.600E+01	8.877E-07	4.438E-07	2.800E+01
1.062E-05	5.310E-06	3.000E+01	9.281E-05	4.641E-05	3.500E+01	2.911E-03	1.455E-03
4.000E+01	8.931E-03	4.465E-03	4.500E+01	1.564E-02	7.820E-03	5.000E+01	2.210E-02
1.105E-02	5.500E+01	2.831E-02	1.415E-02	6.000E+01	3.361E-02	1.681E-02	6.500E+01
3.842E-02	1.921E-02	7.000E+01	4.244E-02	2.122E-02	7.500E+01	4.606E-02	2.303E-02
8.000E+01	4.921E-02	2.460E-02	8.500E+01	5.189E-02	2.594E-02	9.000E+01	5.434E-02
2.717E-02	9.500E+01	5.563E-02	2.781E-02	1.000E+02	5.686E-02	2.843E-02	1.100E+02
6.014E-02	3.007E-02	1.200E+02	6.384E-02	3.192E-02	1.300E+02	6.899E-02	3.449E-02
1.400E+02	7.380E-02	3.690E-02	1.500E+02	7.774E-02	3.395E-02	1.600E+02	8.817E-02
3.266E-02	1.700E+02	9.989E-02	3.142E-02	1.800E+02	1.158E-01	3.033E-02	1.900E+02
1.305E-01	2.934E-02	2.000E+02	1.461E-01	2.854E-02			
	1	1	46	102	32		p+Pd102
1.069E+01	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	1.961E-10
7.092E-11	2.200E+01	1.401E-09	6.326E-10	2.400E+01	1.087E-08	5.435E-09	2.600E+01
2.902E-07	1.451E-07	2.800E+01	1.592E-05	7.960E-06	3.000E+01	1.656E-04	8.280E-05
3.500E+01	1.040E-02	5.200E-03	4.000E+01	4.596E-02	2.298E-02	4.500E+01	9.158E-02
4.579E-02	5.000E+01	1.368E-01	6.840E-02	5.500E+01	1.783E-01	8.915E-02	6.000E+01
2.151E-01	1.076E-01	6.500E+01	2.469E-01	1.235E-01	7.000E+01	2.731E-01	1.366E-01
7.500E+01	3.009E-01	1.505E-01	8.000E+01	3.189E-01	1.595E-01	8.500E+01	3.329E-01
1.664E-01	9.000E+01	3.442E-01	1.721E-01	9.500E+01	3.475E-01	1.737E-01	1.000E+02
3.483E-01	1.741E-01	1.100E+02	3.467E-01	1.734E-01	1.200E+02	3.419E-01	1.709E-01
1.300E+02	3.353E-01	1.676E-01	1.400E+02	3.296E-01	1.648E-01	1.500E+02	3.163E-01
1.582E-01	1.600E+02	3.225E-01	1.613E-01	1.700E+02	3.339E-01	1.669E-01	1.800E+02
3.457E-01	1.729E-01	1.900E+02	3.599E-01	1.799E-01	2.000E+02	3.738E-01	1.745E-01
	1	1	46	104	31		p+Pd104
1.155E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	4.525E-10

2.167E-10	2.400E+01	3.676E-09	1.838E-09	2.600E+01	2.879E-08	1.439E-08	2.800E+01
4.229E-06	2.114E-06	3.000E+01	5.219E-05	2.610E-05	3.500E+01	5.398E-03	2.699E-03
4.000E+01	3.237E-02	1.619E-02	4.500E+01	6.923E-02	3.461E-02	5.000E+01	1.069E-01
5.345E-02	5.500E+01	1.417E-01	7.085E-02	6.000E+01	1.710E-01	8.550E-02	6.500E+01
1.979E-01	9.895E-02	7.000E+01	2.200E-01	1.100E-01	7.500E+01	2.384E-01	1.192E-01
8.000E+01	2.536E-01	1.268E-01	8.500E+01	2.657E-01	1.328E-01	9.000E+01	2.752E-01
1.376E-01	9.500E+01	2.781E-01	1.391E-01	1.000E+02	2.790E-01	1.395E-01	1.100E+02
2.770E-01	1.385E-01	1.200E+02	2.719E-01	1.359E-01	1.300E+02	2.655E-01	1.328E-01
1.400E+02	2.591E-01	1.295E-01	1.500E+02	2.652E-01	1.326E-01	1.600E+02	2.657E-01
1.328E-01	1.700E+02	2.714E-01	1.357E-01	1.800E+02	2.785E-01	1.393E-01	1.900E+02
2.875E-01	1.437E-01	2.000E+02	2.972E-01	1.486E-01			
	1	1	46	105	31		p+Pd105
9.663E+00	0.000E+00	0.000E+00	2.000E+00	0.000E+00	0.000E+00	2.200E+01	3.275E-10
1.638E-10	2.400E+01	2.572E-09	1.286E-09	2.600E+01	5.528E-08	2.764E-08	2.800E+01
3.849E-06	1.924E-06	3.000E+01	3.978E-05	1.989E-05	3.500E+01	2.365E-03	1.182E-03
4.000E+01	9.471E-03	4.736E-03	4.500E+01	1.781E-02	8.905E-03	5.000E+01	2.594E-02
1.297E-02	5.500E+01	3.305E-02	1.653E-02	6.000E+01	3.954E-02	1.977E-02	6.500E+01
4.526E-02	2.263E-02	7.000E+01	4.988E-02	2.494E-02	7.500E+01	5.386E-02	2.693E-02
8.000E+01	5.716E-02	2.858E-02	8.500E+01	5.991E-02	2.995E-02	9.000E+01	6.249E-02
3.124E-02	9.500E+01	6.378E-02	3.189E-02	1.000E+02	6.455E-02	3.227E-02	1.100E+02
6.638E-02	3.319E-02	1.200E+02	6.779E-02	3.390E-02	1.300E+02	7.007E-02	3.503E-02
1.400E+02	7.322E-02	3.661E-02	1.500E+02	7.888E-02	3.944E-02	1.600E+02	8.580E-02
4.007E-02	1.700E+02	9.597E-02	3.843E-02	1.800E+02	1.071E-01	3.691E-02	1.900E+02
1.198E-01	3.551E-02	2.000E+02	1.343E-01	3.426E-02			
	1	1	46	106	31		p+Pd106
1.249E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	1.258E-10
6.290E-11	2.400E+01	1.088E-09	5.440E-10	2.600E+01	8.340E-09	4.170E-09	2.800E+01
4.999E-07	2.499E-07	3.000E+01	1.621E-05	8.105E-06	3.500E+01	2.572E-03	1.286E-03
4.000E+01	2.152E-02	1.076E-02	4.500E+01	5.067E-02	2.533E-02	5.000E+01	8.160E-02
4.080E-02	5.500E+01	1.100E-01	5.500E-02	6.000E+01	1.359E-01	6.795E-02	6.500E+01
1.588E-01	7.940E-02	7.000E+01	1.814E-01	9.070E-02	7.500E+01	1.978E-01	9.890E-02
8.000E+01	2.114E-01	1.057E-01	8.500E+01	2.223E-01	1.111E-01	9.000E+01	2.309E-01
1.154E-01	9.500E+01	2.340E-01	1.170E-01	1.000E+02	2.350E-01	1.175E-01	1.100E+02
2.332E-01	1.166E-01	1.200E+02	2.280E-01	1.140E-01	1.300E+02	2.217E-01	1.109E-01
1.400E+02	2.156E-01	1.078E-01	1.500E+02	2.101E-01	1.051E-01	1.600E+02	2.112E-01
1.056E-01	1.700E+02	2.122E-01	1.061E-01	1.800E+02	2.158E-01	1.079E-01	1.900E+02
2.198E-01	1.099E-01	2.000E+02	2.243E-01	1.121E-01			
	1	1	46	108	30		p+Pd108
1.357E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	2.627E-10
1.313E-10	2.600E+01	2.207E-09	1.103E-09	2.800E+01	1.702E-08	8.510E-09	3.000E+01
2.839E-06	1.419E-06	3.500E+01	8.683E-04	4.342E-04	4.000E+01	1.350E-02	6.750E-03
4.500E+01	3.626E-02	1.813E-02	5.000E+01	6.150E-02	3.075E-02	5.500E+01	8.562E-02
4.281E-02	6.000E+01	1.078E-01	5.390E-02	6.500E+01	1.273E-01	6.365E-02	7.000E+01
1.437E-01	7.185E-02	7.500E+01	1.578E-01	7.890E-02	8.000E+01	1.695E-01	8.475E-02
8.500E+01	1.790E-01	8.950E-02	9.000E+01	1.866E-01	9.330E-02	9.500E+01	1.898E-01
9.490E-02	1.000E+02	1.912E-01	9.560E-02	1.100E+02	1.903E-01	9.515E-02	1.200E+02
1.864E-01	9.320E-02	1.300E+02	1.810E-01	9.050E-02	1.400E+02	1.751E-01	8.755E-02
1.500E+02	1.699E-01	8.495E-02	1.600E+02	1.688E-01	8.440E-02	1.700E+02	1.679E-01
8.395E-02	1.800E+02	1.686E-01	8.430E-02	1.900E+02	1.695E-01	8.475E-02	2.000E+02
1.718E-01	8.590E-02						
	1	1	46	110	29		p+Pd110
1.448E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	6.514E-10
3.257E-10	2.800E+01	5.764E-09	2.882E-09	3.000E+01	4.998E-07	2.499E-07	3.500E+01
3.086E-04	1.543E-04	4.000E+01	8.630E-03	4.315E-03	4.500E+01	2.691E-02	1.345E-02
5.000E+01	4.819E-02	2.409E-02	5.500E+01	6.931E-02	3.465E-02	6.000E+01	8.875E-02
4.437E-02	6.500E+01	1.058E-01	5.290E-02	7.000E+01	1.204E-01	6.020E-02	7.500E+01
1.331E-01	6.655E-02	8.000E+01	1.437E-01	7.185E-02	8.500E+01	1.523E-01	7.615E-02
9.000E+01	1.593E-01	7.965E-02	9.500E+01	1.625E-01	8.125E-02	1.000E+02	1.642E-01
8.210E-02	1.100E+02	1.641E-01	8.205E-02	1.200E+02	1.610E-01	8.050E-02	1.300E+02
1.563E-01	7.815E-02	1.400E+02	1.509E-01	7.545E-02	1.500E+02	1.405E-01	7.025E-02
1.600E+02	1.386E-01	6.930E-02	1.700E+02	1.369E-01	6.845E-02	1.800E+02	1.356E-01
6.780E-02	1.900E+02	1.350E-01	6.750E-02	2.000E+02	1.348E-01	6.740E-02	
	1	1	47	107	31		p+Ag107
9.017E+00	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	2.962E-10
1.481E-10	2.400E+01	2.303E-09	1.152E-09	2.600E+01	1.344E-07	6.720E-08	2.800E+01
4.222E-06	2.111E-06	3.000E+01	3.467E-05	1.733E-05	3.500E+01	1.885E-03	9.425E-04

4.000E+01	7.323E-03	3.661E-03	4.500E+01	1.369E-02	6.845E-03	5.000E+01	2.000E-02
1.000E-02	5.500E+01	2.582E-02	1.291E-02	6.000E+01	3.108E-02	1.554E-02	6.500E+01
3.581E-02	1.791E-02	7.000E+01	3.979E-02	1.989E-02	7.500E+01	4.333E-02	2.167E-02
8.000E+01	4.638E-02	2.319E-02	8.500E+01	4.901E-02	2.450E-02	9.000E+01	5.142E-02
2.571E-02	9.500E+01	5.235E-02	2.618E-02	1.000E+02	5.338E-02	2.669E-02	1.100E+02
5.586E-02	2.793E-02	1.200E+02	5.805E-02	2.902E-02	1.300E+02	6.087E-02	3.044E-02
1.400E+02	6.412E-02	3.206E-02	1.500E+02	6.803E-02	3.401E-02	1.600E+02	7.679E-02
3.433E-02	1.700E+02	8.613E-02	3.299E-02	1.800E+02	9.790E-02	3.174E-02	1.900E+02
1.101E-01	3.058E-02	2.000E+02	1.248E-01	2.955E-02			
1	1	47	109	30			p+Ag109
1.004E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	6.316E-10
3.158E-10	2.600E+01	5.209E-09	2.604E-09	2.800E+01	7.414E-07	3.707E-07	3.000E+01
1.014E-05	5.070E-06	3.500E+01	9.557E-04	4.778E-04	4.000E+01	5.009E-03	2.505E-03
4.500E+01	1.009E-02	5.045E-03	5.000E+01	1.522E-02	7.610E-03	5.500E+01	2.008E-02
1.004E-02	6.000E+01	2.444E-02	1.222E-02	6.500E+01	2.831E-02	1.415E-02	7.000E+01
3.096E-02	1.548E-02	7.500E+01	3.380E-02	1.690E-02	8.000E+01	3.623E-02	1.811E-02
8.500E+01	3.827E-02	1.913E-02	9.000E+01	3.998E-02	1.999E-02	9.500E+01	4.068E-02
2.034E-02	1.000E+02	4.127E-02	2.064E-02	1.100E+02	4.219E-02	2.109E-02	1.200E+02
4.333E-02	2.167E-02	1.300E+02	4.470E-02	2.235E-02	1.400E+02	4.608E-02	2.304E-02
1.500E+02	4.839E-02	2.420E-02	1.600E+02	5.365E-02	2.683E-02	1.700E+02	5.840E-02
2.872E-02	1.800E+02	6.506E-02	2.764E-02	1.900E+02	7.337E-02	2.663E-02	2.000E+02
8.304E-02	2.571E-02						
1	1	48	106	32			p+Cd106
1.012E+01	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	1.691E-10
5.387E-11	2.200E+01	1.142E-09	4.831E-10	2.400E+01	7.986E-09	3.993E-09	2.600E+01
6.294E-08	3.147E-08	2.800E+01	1.040E-05	5.200E-06	3.000E+01	1.051E-04	5.255E-05
3.500E+01	8.171E-03	4.085E-03	4.000E+01	4.297E-02	2.149E-02	4.500E+01	8.891E-02
4.446E-02	5.000E+01	1.354E-01	6.770E-02	5.500E+01	1.780E-01	8.900E-02	6.000E+01
2.167E-01	1.084E-01	6.500E+01	2.499E-01	1.250E-01	7.000E+01	2.772E-01	1.386E-01
7.500E+01	3.066E-01	1.533E-01	8.000E+01	3.256E-01	1.628E-01	8.500E+01	3.405E-01
1.703E-01	9.000E+01	3.520E-01	1.760E-01	9.500E+01	3.551E-01	1.776E-01	1.000E+02
3.558E-01	1.779E-01	1.100E+02	3.522E-01	1.761E-01	1.200E+02	3.452E-01	1.726E-01
1.300E+02	3.386E-01	1.693E-01	1.400E+02	3.308E-01	1.654E-01	1.500E+02	3.135E-01
1.568E-01	1.600E+02	3.210E-01	1.605E-01	1.700E+02	3.278E-01	1.639E-01	1.800E+02
3.381E-01	1.691E-01	1.900E+02	3.522E-01	1.761E-01	2.000E+02	3.666E-01	1.833E-01
1	1	48	108	31			p+Cd108
1.106E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	3.163E-10
1.429E-10	2.400E+01	2.418E-09	1.209E-09	2.600E+01	1.878E-08	9.390E-09	2.800E+01
1.931E-06	9.655E-07	3.000E+01	3.531E-05	1.765E-05	3.500E+01	3.856E-03	1.928E-03
4.000E+01	2.915E-02	1.457E-02	4.500E+01	6.597E-02	3.299E-02	5.000E+01	1.046E-01
5.230E-02	5.500E+01	1.403E-01	7.015E-02	6.000E+01	1.710E-01	8.550E-02	6.500E+01
1.989E-01	9.945E-02	7.000E+01	2.222E-01	1.111E-01	7.500E+01	2.418E-01	1.209E-01
8.000E+01	2.580E-01	1.290E-01	8.500E+01	2.709E-01	1.354E-01	9.000E+01	2.810E-01
1.405E-01	9.500E+01	2.840E-01	1.420E-01	1.000E+02	2.850E-01	1.425E-01	1.100E+02
2.825E-01	1.412E-01	1.200E+02	2.769E-01	1.384E-01	1.300E+02	2.699E-01	1.349E-01
1.400E+02	2.624E-01	1.312E-01	1.500E+02	2.649E-01	1.325E-01	1.600E+02	2.673E-01
1.336E-01	1.700E+02	2.691E-01	1.346E-01	1.800E+02	2.727E-01	1.363E-01	1.900E+02
2.822E-01	1.411E-01	2.000E+02	2.896E-01	1.448E-01			
1	1	48	110	30			p+Cd110
1.199E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	7.557E-10
3.778E-10	2.600E+01	5.523E-09	2.762E-09	2.800E+01	1.177E-07	5.885E-08	3.000E+01
9.057E-06	4.528E-06	3.500E+01	1.727E-03	8.635E-04	4.000E+01	1.926E-02	9.630E-03
4.500E+01	4.798E-02	2.399E-02	5.000E+01	7.952E-02	3.976E-02	5.500E+01	1.087E-01
5.435E-02	6.000E+01	1.358E-01	6.790E-02	6.500E+01	1.594E-01	7.970E-02	7.000E+01
1.829E-01	9.145E-02	7.500E+01	2.004E-01	1.002E-01	8.000E+01	2.147E-01	1.074E-01
8.500E+01	2.262E-01	1.131E-01	9.000E+01	2.354E-01	1.177E-01	9.500E+01	2.388E-01
1.194E-01	1.000E+02	2.402E-01	1.201E-01	1.100E+02	2.384E-01	1.192E-01	1.200E+02
2.330E-01	1.165E-01	1.300E+02	2.261E-01	1.130E-01	1.400E+02	2.188E-01	1.094E-01
1.500E+02	2.129E-01	1.065E-01	1.600E+02	2.125E-01	1.062E-01	1.700E+02	2.122E-01
1.061E-01	1.800E+02	2.135E-01	1.067E-01	1.900E+02	2.161E-01	1.080E-01	2.000E+02
2.210E-01	1.105E-01						
1	1	48	111	30			p+Cd111
9.983E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	6.291E-10
3.146E-10	2.600E+01	4.971E-09	2.486E-09	2.800E+01	6.603E-07	3.301E-07	3.000E+01
1.027E-05	5.135E-06	3.500E+01	9.878E-04	4.939E-04	4.000E+01	6.244E-03	3.122E-03
4.500E+01	1.309E-02	6.545E-03	5.000E+01	2.006E-02	1.003E-02	5.500E+01	2.642E-02

1.321E-02	6.000E+01	3.222E-02	1.611E-02	6.500E+01	3.719E-02	1.860E-02	7.000E+01
4.140E-02	2.070E-02	7.500E+01	4.500E-02	2.250E-02	8.000E+01	4.795E-02	2.397E-02
8.500E+01	5.032E-02	2.516E-02	9.000E+01	5.231E-02	2.616E-02	9.500E+01	5.302E-02
2.651E-02	1.000E+02	5.341E-02	2.670E-02	1.100E+02	5.356E-02	2.678E-02	1.200E+02
5.358E-02	2.679E-02	1.300E+02	5.347E-02	2.673E-02	1.400E+02	5.417E-02	2.709E-02
1.500E+02	5.514E-02	2.757E-02	1.600E+02	5.983E-02	2.992E-02	1.700E+02	6.424E-02
3.212E-02	1.800E+02	6.957E-02	3.479E-02	1.900E+02	7.596E-02	3.387E-02	2.000E+02
8.341E-02	3.250E-02						
	1	1	48	112	30		p+Cd112
1.281E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	2.397E-10
1.199E-10	2.600E+01	1.949E-09	9.745E-10	2.800E+01	1.628E-08	8.140E-09	3.000E+01
2.523E-06	1.261E-06	3.500E+01	7.657E-04	3.829E-04	4.000E+01	1.284E-02	6.420E-03
4.500E+01	3.620E-02	1.810E-02	5.000E+01	6.260E-02	3.130E-02	5.500E+01	8.822E-02
4.411E-02	6.000E+01	1.118E-01	5.590E-02	6.500E+01	1.323E-01	6.615E-02	7.000E+01
1.470E-01	7.350E-02	7.500E+01	1.619E-01	8.095E-02	8.000E+01	1.742E-01	8.710E-02
8.500E+01	1.842E-01	9.210E-02	9.000E+01	1.923E-01	9.615E-02	9.500E+01	1.957E-01
9.785E-02	1.000E+02	1.972E-01	9.860E-02	1.100E+02	1.965E-01	9.825E-02	1.200E+02
1.924E-01	9.620E-02	1.300E+02	1.868E-01	9.340E-02	1.400E+02	1.806E-01	9.030E-02
1.500E+02	1.741E-01	8.705E-02	1.600E+02	1.721E-01	8.605E-02	1.700E+02	1.701E-01
8.505E-02	1.800E+02	1.694E-01	8.470E-02	1.900E+02	1.710E-01	8.550E-02	2.000E+02
1.727E-01	8.635E-02						
	1	1	48	113	30		p+Cd113
1.076E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	2.255E-10
1.127E-10	2.600E+01	1.831E-09	9.155E-10	2.800E+01	1.136E-07	5.680E-08	3.000E+01
3.627E-06	1.814E-06	3.500E+01	5.036E-04	2.518E-04	4.000E+01	4.502E-03	2.251E-03
4.500E+01	1.018E-02	5.090E-03	5.000E+01	1.610E-02	8.050E-03	5.500E+01	2.139E-02
1.069E-02	6.000E+01	2.635E-02	1.317E-02	6.500E+01	3.062E-02	1.531E-02	7.000E+01
3.425E-02	1.713E-02	7.500E+01	3.735E-02	1.868E-02	8.000E+01	3.990E-02	1.995E-02
8.500E+01	4.198E-02	2.099E-02	9.000E+01	4.366E-02	2.183E-02	9.500E+01	4.425E-02
2.212E-02	1.000E+02	4.444E-02	2.222E-02	1.100E+02	4.429E-02	2.215E-02	1.200E+02
4.388E-02	2.194E-02	1.300E+02	4.355E-02	2.177E-02	1.400E+02	4.322E-02	2.161E-02
1.500E+02	4.433E-02	2.217E-02	1.600E+02	4.629E-02	2.314E-02	1.700E+02	4.941E-02
2.471E-02	1.800E+02	5.241E-02	2.620E-02	1.900E+02	5.584E-02	2.792E-02	2.000E+02
6.002E-02	2.968E-02						
	1	1	48	114	29		p+Cd114
1.360E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	7.102E-10
3.551E-10	2.800E+01	6.052E-09	3.026E-09	3.000E+01	4.805E-07	2.402E-07	3.500E+01
3.287E-04	1.644E-04	4.000E+01	8.654E-03	4.327E-03	4.500E+01	2.781E-02	1.391E-02
5.000E+01	5.034E-02	2.517E-02	5.500E+01	7.207E-02	3.603E-02	6.000E+01	9.261E-02
4.630E-02	6.500E+01	1.106E-01	5.530E-02	7.000E+01	1.238E-01	6.190E-02	7.500E+01
1.371E-01	6.855E-02	8.000E+01	1.482E-01	7.410E-02	8.500E+01	1.573E-01	7.865E-02
9.000E+01	1.648E-01	8.240E-02	9.500E+01	1.682E-01	8.410E-02	1.000E+02	1.701E-01
8.505E-02	1.100E+02	1.701E-01	8.505E-02	1.200E+02	1.669E-01	8.345E-02	1.300E+02
1.620E-01	8.100E-02	1.400E+02	1.563E-01	7.815E-02	1.500E+02	1.559E-01	7.795E-02
1.600E+02	1.532E-01	7.660E-02	1.700E+02	1.509E-01	7.545E-02	1.800E+02	1.487E-01
7.435E-02	1.900E+02	1.475E-01	7.375E-02	2.000E+02	1.468E-01	7.340E-02	
	1	1	48	116	29		p+Cd116
1.455E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	2.024E-10
1.012E-10	2.800E+01	1.754E-09	8.770E-10	3.000E+01	1.512E-08	7.560E-09	3.500E+01
1.071E-04	5.355E-05	4.000E+01	5.199E-03	2.599E-03	4.500E+01	1.985E-02	9.925E-03
5.000E+01	3.832E-02	1.916E-02	5.500E+01	5.691E-02	2.846E-02	6.000E+01	7.451E-02
3.726E-02	6.500E+01	8.994E-02	4.497E-02	7.000E+01	1.037E-01	5.185E-02	7.500E+01
1.155E-01	5.775E-02	8.000E+01	1.255E-01	6.275E-02	8.500E+01	1.338E-01	6.690E-02
9.000E+01	1.407E-01	7.035E-02	9.500E+01	1.442E-01	7.210E-02	1.000E+02	1.463E-01
7.315E-02	1.100E+02	1.472E-01	7.360E-02	1.200E+02	1.450E-01	7.250E-02	1.300E+02
1.411E-01	7.055E-02	1.400E+02	1.362E-01	6.810E-02	1.500E+02	1.309E-01	6.545E-02
1.600E+02	1.284E-01	6.420E-02	1.700E+02	1.259E-01	6.295E-02	1.800E+02	1.234E-01
6.170E-02	1.900E+02	1.215E-01	6.075E-02	2.000E+02	1.201E-01	6.005E-02	
	1	1	49	113	30		p+In113
9.568E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	4.105E-10
2.052E-10	2.600E+01	3.280E-09	1.640E-09	2.800E+01	4.288E-07	2.144E-07	3.000E+01
6.871E-06	3.435E-06	3.500E+01	6.788E-04	3.394E-04	4.000E+01	4.446E-03	2.223E-03
4.500E+01	9.438E-03	4.719E-03	5.000E+01	1.461E-02	7.305E-03	5.500E+01	1.939E-02
9.695E-03	6.000E+01	2.386E-02	1.193E-02	6.500E+01	2.775E-02	1.388E-02	7.000E+01
3.113E-02	1.557E-02	7.500E+01	3.410E-02	1.705E-02	8.000E+01	3.668E-02	1.834E-02
8.500E+01	3.881E-02	1.940E-02	9.000E+01	4.068E-02	2.034E-02	9.500E+01	4.140E-02

2.070E-02	1.000E+02	4.190E-02	2.095E-02	1.100E+02	4.271E-02	2.135E-02	1.200E+02
4.355E-02	2.177E-02	1.300E+02	4.462E-02	2.231E-02	1.400E+02	4.629E-02	2.314E-02
1.500E+02	4.799E-02	2.399E-02	1.600E+02	5.230E-02	2.615E-02	1.700E+02	5.807E-02
2.903E-02	1.800E+02	6.434E-02	2.847E-02	1.900E+02	7.202E-02	2.736E-02	2.000E+02
7.946E-02	2.633E-02						
1	1	49	115	30			p+In115
1.050E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.196E-10
5.980E-11	2.600E+01	9.804E-10	4.902E-10	2.800E+01	3.555E-08	1.777E-08	3.000E+01
1.884E-06	9.420E-07	3.500E+01	3.259E-04	1.630E-04	4.000E+01	3.022E-03	1.511E-03
4.500E+01	7.082E-03	3.541E-03	5.000E+01	1.139E-02	5.695E-03	5.500E+01	1.526E-02
7.630E-03	6.000E+01	1.898E-02	9.490E-03	6.500E+01	2.221E-02	1.111E-02	7.000E+01
2.556E-02	1.278E-02	7.500E+01	2.809E-02	1.405E-02	8.000E+01	3.022E-02	1.511E-02
8.500E+01	3.203E-02	1.602E-02	9.000E+01	3.356E-02	1.678E-02	9.500E+01	3.417E-02
1.708E-02	1.000E+02	3.460E-02	1.730E-02	1.100E+02	3.497E-02	1.749E-02	1.200E+02
3.502E-02	1.751E-02	1.300E+02	3.517E-02	1.758E-02	1.400E+02	3.560E-02	1.780E-02
1.500E+02	3.523E-02	1.761E-02	1.600E+02	3.764E-02	1.882E-02	1.700E+02	4.061E-02
2.031E-02	1.800E+02	4.422E-02	2.211E-02	1.900E+02	4.884E-02	2.291E-02	2.000E+02
5.414E-02	2.204E-02						
1	1	50	112	31			p+Sn112
1.030E+01	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	3.874E-10
1.557E-10	2.400E+01	2.747E-09	1.320E-09	2.600E+01	2.083E-08	1.041E-08	2.800E+01
1.568E-06	7.840E-07	3.000E+01	3.336E-05	1.668E-05	3.500E+01	4.069E-03	2.034E-03
4.000E+01	3.326E-02	1.663E-02	4.500E+01	7.692E-02	3.846E-02	5.000E+01	1.229E-01
6.145E-02	5.500E+01	1.656E-01	8.280E-02	6.000E+01	2.035E-01	1.017E-01	6.500E+01
2.364E-01	1.182E-01	7.000E+01	2.641E-01	1.321E-01	7.500E+01	2.813E-01	1.406E-01
8.000E+01	2.997E-01	1.499E-01	8.500E+01	3.142E-01	1.571E-01	9.000E+01	3.255E-01
1.628E-01	9.500E+01	3.287E-01	1.643E-01	1.000E+02	3.290E-01	1.645E-01	1.100E+02
3.244E-01	1.622E-01	1.200E+02	3.158E-01	1.579E-01	1.300E+02	3.056E-01	1.528E-01
1.400E+02	2.964E-01	1.482E-01	1.500E+02	2.984E-01	1.492E-01	1.600E+02	2.983E-01
1.492E-01	1.700E+02	2.981E-01	1.490E-01	1.800E+02	3.003E-01	1.502E-01	1.900E+02
3.043E-01	1.522E-01	2.000E+02	3.094E-01	1.547E-01			
1	1	50	114	30			p+Sn114
1.154E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	5.991E-10
2.903E-10	2.600E+01	4.839E-09	2.420E-09	2.800E+01	3.432E-08	1.716E-08	3.000E+01
5.546E-06	2.773E-06	3.500E+01	1.285E-03	6.425E-04	4.000E+01	1.919E-02	9.595E-03
4.500E+01	5.166E-02	2.583E-02	5.000E+01	8.811E-02	4.405E-02	5.500E+01	1.227E-01
6.135E-02	6.000E+01	1.539E-01	7.695E-02	6.500E+01	1.812E-01	9.060E-02	7.000E+01
2.046E-01	1.023E-01	7.500E+01	2.293E-01	1.147E-01	8.000E+01	2.459E-01	1.230E-01
8.500E+01	2.591E-01	1.295E-01	9.000E+01	2.697E-01	1.348E-01	9.500E+01	2.734E-01
1.367E-01	1.000E+02	2.747E-01	1.373E-01	1.100E+02	2.718E-01	1.359E-01	1.200E+02
2.651E-01	1.326E-01	1.300E+02	2.563E-01	1.281E-01	1.400E+02	2.475E-01	1.237E-01
1.500E+02	2.382E-01	1.191E-01	1.600E+02	2.362E-01	1.181E-01	1.700E+02	2.351E-01
1.176E-01	1.800E+02	2.337E-01	1.168E-01	1.900E+02	2.343E-01	1.172E-01	2.000E+02
2.368E-01	1.184E-01						
1	1	50	115	30			p+Sn115
9.880E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	3.839E-10
1.919E-10	2.600E+01	2.730E-09	1.365E-09	2.800E+01	1.031E-07	5.155E-08	3.000E+01
4.437E-06	2.219E-06	3.500E+01	6.715E-04	3.358E-04	4.000E+01	6.119E-03	3.060E-03
4.500E+01	1.397E-02	6.985E-03	5.000E+01	2.223E-02	1.111E-02	5.500E+01	2.985E-02
1.493E-02	6.000E+01	3.696E-02	1.848E-02	6.500E+01	4.287E-02	2.143E-02	7.000E+01
4.792E-02	2.396E-02	7.500E+01	5.101E-02	2.550E-02	8.000E+01	5.438E-02	2.719E-02
8.500E+01	5.708E-02	2.854E-02	9.000E+01	5.942E-02	2.971E-02	9.500E+01	6.010E-02
3.005E-02	1.000E+02	6.042E-02	3.021E-02	1.100E+02	6.010E-02	3.005E-02	1.200E+02
5.955E-02	2.977E-02	1.300E+02	5.910E-02	2.955E-02	1.400E+02	5.916E-02	2.958E-02
1.500E+02	5.928E-02	2.964E-02	1.600E+02	6.221E-02	3.111E-02	1.700E+02	6.671E-02
3.336E-02	1.800E+02	7.079E-02	3.540E-02	1.900E+02	7.682E-02	3.841E-02	2.000E+02
8.159E-02	3.924E-02						
1	1	50	116	30			p+Sn116
1.266E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.419E-10
7.095E-11	2.600E+01	1.163E-09	5.815E-10	2.800E+01	9.333E-09	4.666E-09	3.000E+01
5.122E-07	2.561E-07	3.500E+01	3.773E-04	1.887E-04	4.000E+01	1.099E-02	5.495E-03
4.500E+01	3.590E-02	1.795E-02	5.000E+01	6.529E-02	3.265E-02	5.500E+01	9.389E-02
4.695E-02	6.000E+01	1.207E-01	6.035E-02	6.500E+01	1.438E-01	7.190E-02	7.000E+01
1.641E-01	8.205E-02	7.500E+01	1.812E-01	9.060E-02	8.000E+01	1.953E-01	9.765E-02
8.500E+01	2.069E-01	1.035E-01	9.000E+01	2.163E-01	1.081E-01	9.500E+01	2.202E-01
1.101E-01	1.000E+02	2.220E-01	1.110E-01	1.100E+02	2.210E-01	1.105E-01	1.200E+02

2.162E-01	1.081E-01	1.300E+02	2.092E-01	1.046E-01	1.400E+02	2.015E-01	1.008E-01
1.500E+02	1.934E-01	9.670E-02	1.600E+02	1.904E-01	9.520E-02	1.700E+02	1.882E-01
9.410E-02	1.800E+02	1.860E-01	9.300E-02	1.900E+02	1.852E-01	9.260E-02	2.000E+02
1.852E-01	9.260E-02						
1	1	50	117	30			p+Sn117
1.075E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.210E-10
6.050E-11	2.600E+01	9.240E-10	4.620E-10	2.800E+01	7.361E-09	3.680E-09	3.000E+01
1.275E-06	6.375E-07	3.500E+01	2.610E-04	1.305E-04	4.000E+01	3.967E-03	1.984E-03
4.500E+01	1.020E-02	5.100E-03	5.000E+01	1.688E-02	8.440E-03	5.500E+01	2.316E-02
1.158E-02	6.000E+01	2.915E-02	1.457E-02	6.500E+01	3.408E-02	1.704E-02	7.000E+01
3.837E-02	1.919E-02	7.500E+01	4.192E-02	2.096E-02	8.000E+01	4.483E-02	2.242E-02
8.500E+01	4.719E-02	2.360E-02	9.000E+01	4.913E-02	2.457E-02	9.500E+01	4.976E-02
2.488E-02	1.000E+02	4.996E-02	2.498E-02	1.100E+02	4.962E-02	2.481E-02	1.200E+02
4.886E-02	2.443E-02	1.300E+02	4.800E-02	2.400E-02	1.400E+02	4.728E-02	2.364E-02
1.500E+02	4.474E-02	2.237E-02	1.600E+02	4.615E-02	2.307E-02	1.700E+02	4.811E-02
2.405E-02	1.800E+02	5.069E-02	2.534E-02	1.900E+02	5.375E-02	2.687E-02	2.000E+02
5.741E-02	2.871E-02						
1	1	50	118	29			p+Sn118
1.363E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	3.413E-10
1.707E-10	2.800E+01	2.781E-09	1.390E-09	3.000E+01	2.250E-08	1.125E-08	3.500E+01
1.239E-04	6.195E-05	4.000E+01	6.360E-03	3.180E-03	4.500E+01	2.569E-02	1.285E-02
5.000E+01	4.993E-02	2.497E-02	5.500E+01	7.484E-02	3.742E-02	6.000E+01	9.801E-02
4.900E-02	6.500E+01	1.183E-01	5.915E-02	7.000E+01	1.362E-01	6.810E-02	7.500E+01
1.516E-01	7.580E-02	8.000E+01	1.643E-01	8.215E-02	8.500E+01	1.749E-01	8.745E-02
9.000E+01	1.836E-01	9.180E-02	9.500E+01	1.877E-01	9.385E-02	1.000E+02	1.899E-01
9.495E-02	1.100E+02	1.902E-01	9.510E-02	1.200E+02	1.866E-01	9.330E-02	1.300E+02
1.808E-01	9.040E-02	1.400E+02	1.742E-01	8.710E-02	1.500E+02	1.611E-01	8.055E-02
1.600E+02	1.579E-01	7.895E-02	1.700E+02	1.551E-01	7.755E-02	1.800E+02	1.524E-01
7.620E-02	1.900E+02	1.507E-01	7.535E-02	2.000E+02	1.496E-01	7.480E-02	
1	1	50	119	29			p+Sn119
1.161E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	3.208E-10
1.604E-10	2.800E+01	2.274E-09	1.137E-09	3.000E+01	1.888E-07	9.440E-08	3.500E+01
1.079E-04	5.395E-05	4.000E+01	2.607E-03	1.303E-03	4.500E+01	7.588E-03	3.794E-03
5.000E+01	1.311E-02	6.555E-03	5.500E+01	1.832E-02	9.160E-03	6.000E+01	2.318E-02
1.159E-02	6.500E+01	2.736E-02	1.368E-02	7.000E+01	3.169E-02	1.585E-02	7.500E+01
3.484E-02	1.742E-02	8.000E+01	3.743E-02	1.871E-02	8.500E+01	3.955E-02	1.978E-02
9.000E+01	4.128E-02	2.064E-02	9.500E+01	4.192E-02	2.096E-02	1.000E+02	4.217E-02
2.108E-02	1.100E+02	4.190E-02	2.095E-02	1.200E+02	4.104E-02	2.052E-02	1.300E+02
4.003E-02	2.002E-02	1.400E+02	3.907E-02	1.954E-02	1.500E+02	3.797E-02	1.898E-02
1.600E+02	3.840E-02	1.920E-02	1.700E+02	3.911E-02	1.955E-02	1.800E+02	4.025E-02
2.013E-02	1.900E+02	4.165E-02	2.082E-02	2.000E+02	4.395E-02	2.198E-02	
1	1	50	120	28			p+Sn120
1.476E+01	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	6.598E-10
3.299E-10	3.000E+01	5.389E-09	2.695E-09	3.500E+01	3.491E-05	1.746E-05	4.000E+01
2.992E-03	1.496E-03	4.500E+01	1.711E-02	8.555E-03	5.000E+01	3.658E-02	1.829E-02
5.500E+01	5.648E-02	2.824E-02	6.000E+01	7.569E-02	3.784E-02	6.500E+01	9.277E-02
4.639E-02	7.000E+01	1.081E-01	5.405E-02	7.500E+01	1.212E-01	6.060E-02	8.000E+01
1.323E-01	6.615E-02	8.500E+01	1.416E-01	7.080E-02	9.000E+01	1.493E-01	7.465E-02
9.500E+01	1.534E-01	7.670E-02	1.000E+02	1.559E-01	7.795E-02	1.100E+02	1.572E-01
7.860E-02	1.200E+02	1.551E-01	7.755E-02	1.300E+02	1.509E-01	7.545E-02	1.400E+02
1.457E-01	7.285E-02	1.500E+02	1.450E-01	7.250E-02	1.600E+02	1.417E-01	7.085E-02
1.700E+02	1.385E-01	6.925E-02	1.800E+02	1.355E-01	6.775E-02	1.900E+02	1.329E-01
6.645E-02	2.000E+02	1.307E-01	6.535E-02				
1	1	50	122	28			p+Sn122
1.599E+01	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	1.419E-10
7.095E-11	3.000E+01	1.176E-09	5.880E-10	3.500E+01	6.207E-06	3.104E-06	4.000E+01
1.112E-03	5.560E-04	4.500E+01	1.058E-02	5.290E-03	5.000E+01	2.568E-02	1.284E-02
5.500E+01	4.190E-02	2.095E-02	6.000E+01	5.779E-02	2.890E-02	6.500E+01	7.222E-02
3.611E-02	7.000E+01	8.524E-02	4.262E-02	7.500E+01	9.650E-02	4.825E-02	8.000E+01
1.061E-01	5.305E-02	8.500E+01	1.144E-01	5.720E-02	9.000E+01	1.212E-01	6.060E-02
9.500E+01	1.252E-01	6.260E-02	1.000E+02	1.278E-01	6.390E-02	1.100E+02	1.300E-01
6.500E-02	1.200E+02	1.290E-01	6.450E-02	1.300E+02	1.261E-01	6.305E-02	1.400E+02
1.222E-01	6.110E-02	1.500E+02	1.217E-01	6.085E-02	1.600E+02	1.190E-01	5.950E-02
1.700E+02	1.161E-01	5.805E-02	1.800E+02	1.133E-01	5.665E-02	1.900E+02	1.105E-01
5.525E-02	2.000E+02	1.084E-01	5.420E-02				
1	1	50	124	27			p+Sn124

1.729E+01	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	2.177E-10
1.089E-10	3.500E+01	8.689E-07	4.344E-07	4.000E+01	3.276E-04	1.638E-04	4.500E+01
6.123E-03	3.061E-03	5.000E+01	1.755E-02	8.775E-03	5.500E+01	3.079E-02	1.540E-02
6.000E+01	4.394E-02	2.197E-02	6.500E+01	5.614E-02	2.807E-02	7.000E+01	6.732E-02
3.366E-02	7.500E+01	7.700E-02	3.850E-02	8.000E+01	8.540E-02	4.270E-02	8.500E+01
9.264E-02	4.632E-02	9.000E+01	9.873E-02	4.936E-02	9.500E+01	1.026E-01	5.130E-02
1.000E+02	1.053E-01	5.265E-02	1.100E+02	1.080E-01	5.400E-02	1.200E+02	1.079E-01
5.395E-02	1.300E+02	1.060E-01	5.300E-02	1.400E+02	1.031E-01	5.155E-02	1.500E+02
1.030E-01	5.150E-02	1.600E+02	1.008E-01	5.040E-02	1.700E+02	9.831E-02	4.915E-02
1.800E+02	9.583E-02	4.791E-02	1.900E+02	9.338E-02	4.669E-02	2.000E+02	9.113E-02
4.557E-02							
	1	1	51	121	29		p+Sb121
1.007E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	7.651E-10
3.825E-10	2.800E+01	6.220E-09	3.110E-09	3.000E+01	1.232E-06	6.160E-07	3.500E+01
2.549E-04	1.275E-04	4.000E+01	3.044E-03	1.522E-03	4.500E+01	7.458E-03	3.729E-03
5.000E+01	1.226E-02	6.130E-03	5.500E+01	1.687E-02	8.435E-03	6.000E+01	2.110E-02
1.055E-02	6.500E+01	2.480E-02	1.240E-02	7.000E+01	2.810E-02	1.405E-02	7.500E+01
3.090E-02	1.545E-02	8.000E+01	3.327E-02	1.664E-02	8.500E+01	3.528E-02	1.764E-02
9.000E+01	3.693E-02	1.846E-02	9.500E+01	3.758E-02	1.879E-02	1.000E+02	3.801E-02
1.901E-02	1.100E+02	3.819E-02	1.910E-02	1.200E+02	3.786E-02	1.893E-02	1.300E+02
3.743E-02	1.871E-02	1.400E+02	3.709E-02	1.854E-02	1.500E+02	3.723E-02	1.861E-02
1.600E+02	3.844E-02	1.922E-02	1.700E+02	4.024E-02	2.012E-02	1.800E+02	4.231E-02
2.116E-02	1.900E+02	4.455E-02	2.227E-02	2.000E+02	4.746E-02	2.373E-02	
	1	1	51	123	29		p+Sb123
1.137E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	1.697E-10
8.485E-11	2.800E+01	1.400E-09	7.000E-10	3.000E+01	8.825E-08	4.412E-08	3.500E+01
6.284E-05	3.142E-05	4.000E+01	1.698E-03	8.490E-04	4.500E+01	5.137E-03	2.569E-03
5.000E+01	9.017E-03	4.509E-03	5.500E+01	1.289E-02	6.445E-03	6.000E+01	1.643E-02
8.215E-03	6.500E+01	1.957E-02	9.785E-03	7.000E+01	2.194E-02	1.097E-02	7.500E+01
2.428E-02	1.214E-02	8.000E+01	2.628E-02	1.314E-02	8.500E+01	2.798E-02	1.399E-02
9.000E+01	2.937E-02	1.469E-02	9.500E+01	3.001E-02	1.500E-02	1.000E+02	3.040E-02
1.520E-02	1.100E+02	3.059E-02	1.529E-02	1.200E+02	3.023E-02	1.511E-02	1.300E+02
2.968E-02	1.484E-02	1.400E+02	2.913E-02	1.456E-02	1.500E+02	2.871E-02	1.435E-02
1.600E+02	2.938E-02	1.469E-02	1.700E+02	3.025E-02	1.512E-02	1.800E+02	3.147E-02
1.573E-02	1.900E+02	3.262E-02	1.631E-02	2.000E+02	3.415E-02	1.707E-02	
	1	1	52	120	31		p+Te120
9.392E+00	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	3.633E-10
1.760E-10	2.400E+01	2.563E-09	1.281E-09	2.600E+01	2.056E-08	1.028E-08	2.800E+01
2.119E-06	1.059E-06	3.000E+01	3.273E-05	1.637E-05	3.500E+01	3.858E-03	1.929E-03
4.000E+01	3.045E-02	1.523E-02	4.500E+01	7.017E-02	3.508E-02	5.000E+01	1.123E-01
5.615E-02	5.500E+01	1.519E-01	7.595E-02	6.000E+01	1.865E-01	9.325E-02	6.500E+01
2.170E-01	1.085E-01	7.000E+01	2.437E-01	1.218E-01	7.500E+01	2.659E-01	1.330E-01
8.000E+01	2.841E-01	1.421E-01	8.500E+01	2.988E-01	1.494E-01	9.000E+01	3.104E-01
1.552E-01	9.500E+01	3.138E-01	1.569E-01	1.000E+02	3.146E-01	1.573E-01	1.100E+02
3.104E-01	1.552E-01	1.200E+02	3.016E-01	1.508E-01	1.300E+02	2.909E-01	1.454E-01
1.400E+02	2.797E-01	1.399E-01	1.500E+02	2.783E-01	1.391E-01	1.600E+02	2.745E-01
1.373E-01	1.700E+02	2.714E-01	1.357E-01	1.800E+02	2.694E-01	1.347E-01	1.900E+02
2.672E-01	1.336E-01	2.000E+02	2.676E-01	1.338E-01			
	1	1	52	122	30		p+Te122
1.063E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	5.664E-10
2.832E-10	2.600E+01	4.199E-09	2.100E-09	2.800E+01	3.286E-08	1.643E-08	3.000E+01
5.696E-06	2.848E-06	3.500E+01	1.242E-03	6.210E-04	4.000E+01	1.761E-02	8.805E-03
4.500E+01	4.739E-02	2.370E-02	5.000E+01	8.045E-02	4.022E-02	5.500E+01	1.127E-01
5.635E-02	6.000E+01	1.409E-01	7.045E-02	6.500E+01	1.662E-01	8.310E-02	7.000E+01
1.886E-01	9.430E-02	7.500E+01	2.072E-01	1.036E-01	8.000E+01	2.226E-01	1.113E-01
8.500E+01	2.354E-01	1.177E-01	9.000E+01	2.456E-01	1.228E-01	9.500E+01	2.495E-01
1.247E-01	1.000E+02	2.512E-01	1.256E-01	1.100E+02	2.494E-01	1.247E-01	1.200E+02
2.433E-01	1.216E-01	1.300E+02	2.350E-01	1.175E-01	1.400E+02	2.263E-01	1.132E-01
1.500E+02	2.250E-01	1.125E-01	1.600E+02	2.212E-01	1.106E-01	1.700E+02	2.178E-01
1.089E-01	1.800E+02	2.146E-01	1.073E-01	1.900E+02	2.109E-01	1.055E-01	2.000E+02
2.092E-01	1.046E-01						
	1	1	52	123	30		p+Te123
8.779E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	4.278E-10
2.139E-10	2.600E+01	3.075E-09	1.537E-09	2.800E+01	2.379E-07	1.190E-07	3.000E+01
5.493E-06	2.746E-06	3.500E+01	7.223E-04	3.612E-04	4.000E+01	5.690E-03	2.845E-03
4.500E+01	1.274E-02	6.370E-03	5.000E+01	2.004E-02	1.002E-02	5.500E+01	2.680E-02

1.340E-02	6.000E+01	3.296E-02	1.648E-02	6.500E+01	3.826E-02	1.913E-02	7.000E+01
4.379E-02	2.190E-02	7.500E+01	4.769E-02	2.385E-02	8.000E+01	5.090E-02	2.545E-02
8.500E+01	5.352E-02	2.676E-02	9.000E+01	5.564E-02	2.782E-02	9.500E+01	5.627E-02
2.814E-02	1.000E+02	5.649E-02	2.824E-02	1.100E+02	5.603E-02	2.802E-02	1.200E+02
5.497E-02	2.748E-02	1.300E+02	5.400E-02	2.700E-02	1.400E+02	5.316E-02	2.658E-02
1.500E+02	5.263E-02	2.632E-02	1.600E+02	5.414E-02	2.707E-02	1.700E+02	5.630E-02
2.815E-02	1.800E+02	5.889E-02	2.944E-02	1.900E+02	6.050E-02	3.025E-02	2.000E+02
6.305E-02	3.152E-02						
1	1	52	124	30			p+Te124
1.187E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.284E-10
6.420E-11	2.600E+01	9.329E-10	4.664E-10	2.800E+01	7.395E-09	3.698E-09	3.000E+01
5.203E-07	2.602E-07	3.500E+01	3.429E-04	1.714E-04	4.000E+01	9.615E-03	4.808E-03
4.500E+01	3.153E-02	1.577E-02	5.000E+01	5.778E-02	2.889E-02	5.500E+01	8.338E-02
4.169E-02	6.000E+01	1.074E-01	5.370E-02	6.500E+01	1.287E-01	6.435E-02	7.000E+01
1.476E-01	7.380E-02	7.500E+01	1.635E-01	8.175E-02	8.000E+01	1.769E-01	8.845E-02
8.500E+01	1.882E-01	9.410E-02	9.000E+01	1.973E-01	9.865E-02	9.500E+01	2.014E-01
1.007E-01	1.000E+02	2.037E-01	1.018E-01	1.100E+02	2.037E-01	1.018E-01	1.200E+02
1.995E-01	9.975E-02	1.300E+02	1.932E-01	9.660E-02	1.400E+02	1.861E-01	9.305E-02
1.500E+02	1.849E-01	9.245E-02	1.600E+02	1.811E-01	9.055E-02	1.700E+02	1.771E-01
8.855E-02	1.800E+02	1.740E-01	8.700E-02	1.900E+02	1.708E-01	8.540E-02	2.000E+02
1.684E-01	8.420E-02						
1	1	52	125	30			p+Te125
9.878E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.077E-10
5.385E-11	2.600E+01	8.461E-10	4.231E-10	2.800E+01	6.689E-09	3.345E-09	3.000E+01
1.231E-06	6.155E-07	3.500E+01	2.734E-04	1.367E-04	4.000E+01	3.502E-03	1.751E-03
4.500E+01	9.014E-03	4.507E-03	5.000E+01	1.492E-02	7.460E-03	5.500E+01	2.062E-02
1.031E-02	6.000E+01	2.573E-02	1.286E-02	6.500E+01	3.022E-02	1.511E-02	7.000E+01
3.416E-02	1.708E-02	7.500E+01	3.743E-02	1.871E-02	8.000E+01	4.017E-02	2.008E-02
8.500E+01	4.242E-02	2.121E-02	9.000E+01	4.422E-02	2.211E-02	9.500E+01	4.487E-02
2.244E-02	1.000E+02	4.509E-02	2.254E-02	1.100E+02	4.476E-02	2.238E-02	1.200E+02
4.381E-02	2.191E-02	1.300E+02	4.274E-02	2.137E-02	1.400E+02	4.172E-02	2.086E-02
1.500E+02	4.063E-02	2.031E-02	1.600E+02	4.120E-02	2.060E-02	1.700E+02	4.193E-02
2.097E-02	1.800E+02	4.300E-02	2.150E-02	1.900E+02	4.451E-02	2.226E-02	2.000E+02
4.557E-02	2.278E-02						
1	1	52	126	29			p+Te126
1.291E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	2.650E-10
1.325E-10	2.800E+01	2.124E-09	1.062E-09	3.000E+01	1.693E-08	8.465E-09	3.500E+01
1.101E-04	5.505E-05	4.000E+01	5.300E-03	2.650E-03	4.500E+01	2.235E-02	1.117E-02
5.000E+01	4.402E-02	2.201E-02	5.500E+01	6.637E-02	3.318E-02	6.000E+01	8.712E-02
4.356E-02	6.500E+01	1.059E-01	5.295E-02	7.000E+01	1.225E-01	6.125E-02	7.500E+01
1.366E-01	6.830E-02	8.000E+01	1.487E-01	7.435E-02	8.500E+01	1.589E-01	7.945E-02
9.000E+01	1.672E-01	8.360E-02	9.500E+01	1.715E-01	8.575E-02	1.000E+02	1.740E-01
8.700E-02	1.100E+02	1.750E-01	8.750E-02	1.200E+02	1.723E-01	8.615E-02	1.300E+02
1.673E-01	8.365E-02	1.400E+02	1.612E-01	8.060E-02	1.500E+02	1.548E-01	7.740E-02
1.600E+02	1.513E-01	7.565E-02	1.700E+02	1.478E-01	7.390E-02	1.800E+02	1.443E-01
7.215E-02	1.900E+02	1.412E-01	7.060E-02	2.000E+02	1.378E-01	6.890E-02	
1	1	52	128	28			p+Te128
1.401E+01	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	5.278E-10
2.639E-10	3.000E+01	4.255E-09	2.127E-09	3.500E+01	2.856E-05	1.428E-05	4.000E+01
2.676E-03	1.338E-03	4.500E+01	1.539E-02	7.695E-03	5.000E+01	3.317E-02	1.658E-02
5.500E+01	5.152E-02	2.576E-02	6.000E+01	6.916E-02	3.458E-02	6.500E+01	8.536E-02
4.268E-02	7.000E+01	1.017E-01	5.085E-02	7.500E+01	1.143E-01	5.715E-02	8.000E+01
1.252E-01	6.260E-02	8.500E+01	1.344E-01	6.720E-02	9.000E+01	1.420E-01	7.100E-02
9.500E+01	1.463E-01	7.315E-02	1.000E+02	1.490E-01	7.450E-02	1.100E+02	1.509E-01
7.545E-02	1.200E+02	1.493E-01	7.465E-02	1.300E+02	1.456E-01	7.280E-02	1.400E+02
1.406E-01	7.030E-02	1.500E+02	1.303E-01	6.515E-02	1.600E+02	1.272E-01	6.360E-02
1.700E+02	1.240E-01	6.200E-02	1.800E+02	1.209E-01	6.045E-02	1.900E+02	1.178E-01
5.890E-02	2.000E+02	1.147E-01	5.735E-02				
1	1	52	130	28			p+Te130
1.507E+01	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	1.436E-10
7.180E-11	3.000E+01	1.180E-09	5.900E-10	3.500E+01	7.664E-06	3.832E-06	4.000E+01
1.187E-03	5.935E-04	4.500E+01	1.011E-02	5.055E-03	5.000E+01	2.445E-02	1.222E-02
5.500E+01	4.074E-02	2.037E-02	6.000E+01	5.611E-02	2.806E-02	6.500E+01	7.049E-02
3.524E-02	7.000E+01	8.175E-02	4.088E-02	7.500E+01	9.267E-02	4.634E-02	8.000E+01
1.022E-01	5.110E-02	8.500E+01	1.103E-01	5.515E-02	9.000E+01	1.170E-01	5.850E-02
9.500E+01	1.211E-01	6.055E-02	1.000E+02	1.239E-01	6.195E-02	1.100E+02	1.264E-01

6.320E-02	1.200E+02	1.257E-01	6.285E-02	1.300E+02	1.231E-01	6.155E-02	1.400E+02
1.193E-01	5.965E-02	1.500E+02	1.189E-01	5.945E-02	1.600E+02	1.161E-01	5.805E-02
1.700E+02	1.130E-01	5.650E-02	1.800E+02	1.099E-01	5.495E-02	1.900E+02	1.069E-01
5.345E-02	2.000E+02	1.040E-01	5.200E-02				
1	1	53	127	30			p+I127
8.326E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	3.065E-10
1.532E-10	2.600E+01	2.424E-09	1.212E-09	2.800E+01	2.528E-07	1.264E-07	3.000E+01
4.723E-06	2.362E-06	3.500E+01	5.331E-04	2.666E-04	4.000E+01	4.112E-03	2.056E-03
4.500E+01	9.248E-03	4.624E-03	5.000E+01	1.461E-02	7.305E-03	5.500E+01	1.960E-02
9.800E-03	6.000E+01	2.420E-02	1.210E-02	6.500E+01	2.830E-02	1.415E-02	7.000E+01
3.192E-02	1.596E-02	7.500E+01	3.497E-02	1.749E-02	8.000E+01	3.758E-02	1.879E-02
8.500E+01	3.978E-02	1.989E-02	9.000E+01	4.160E-02	2.080E-02	9.500E+01	4.224E-02
2.112E-02	1.000E+02	4.260E-02	2.130E-02	1.100E+02	4.269E-02	2.134E-02	1.200E+02
4.229E-02	2.115E-02	1.300E+02	4.191E-02	2.096E-02	1.400E+02	4.155E-02	2.077E-02
1.500E+02	4.254E-02	2.127E-02	1.600E+02	4.393E-02	2.196E-02	1.700E+02	4.592E-02
2.296E-02	1.800E+02	4.839E-02	2.420E-02	1.900E+02	5.134E-02	2.567E-02	2.000E+02
5.494E-02	2.747E-02						
1	1	54	124	31			p+Xe124
8.208E+00	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	5.962E-10
2.598E-10	2.400E+01	4.206E-09	2.103E-09	2.600E+01	3.264E-08	1.632E-08	2.800E+01
3.576E-06	1.788E-06	3.000E+01	5.164E-05	2.582E-05	3.500E+01	5.048E-03	2.524E-03
4.000E+01	3.538E-02	1.769E-02	4.500E+01	7.966E-02	3.983E-02	5.000E+01	1.261E-01
6.305E-02	5.500E+01	1.702E-01	8.510E-02	6.000E+01	2.107E-01	1.053E-01	6.500E+01
2.448E-01	1.224E-01	7.000E+01	2.747E-01	1.373E-01	7.500E+01	2.928E-01	1.464E-01
8.000E+01	3.125E-01	1.562E-01	8.500E+01	3.287E-01	1.643E-01	9.000E+01	3.414E-01
1.707E-01	9.500E+01	3.449E-01	1.724E-01	1.000E+02	3.463E-01	1.731E-01	1.100E+02
3.426E-01	1.713E-01	1.200E+02	3.340E-01	1.670E-01	1.300E+02	3.244E-01	1.622E-01
1.400E+02	3.151E-01	1.575E-01	1.500E+02	3.039E-01	1.520E-01	1.600E+02	3.052E-01
1.526E-01	1.700E+02	3.087E-01	1.543E-01	1.800E+02	3.126E-01	1.563E-01	1.900E+02
3.178E-01	1.589E-01	2.000E+02	3.266E-01	1.633E-01			
1	1	54	126	31			p+Xe126
9.299E+00	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	1.511E-10
7.416E-11	2.400E+01	1.116E-09	5.580E-10	2.600E+01	8.435E-09	4.218E-09	2.800E+01
3.427E-07	1.714E-07	3.000E+01	1.286E-05	6.430E-06	3.500E+01	2.022E-03	1.011E-03
4.000E+01	2.191E-02	1.095E-02	4.500E+01	5.634E-02	2.817E-02	5.000E+01	9.399E-02
4.700E-02	5.500E+01	1.306E-01	6.530E-02	6.000E+01	1.648E-01	8.240E-02	6.500E+01
1.939E-01	9.695E-02	7.000E+01	2.194E-01	1.097E-01	7.500E+01	2.403E-01	1.202E-01
8.000E+01	2.579E-01	1.290E-01	8.500E+01	2.724E-01	1.362E-01	9.000E+01	2.839E-01
1.419E-01	9.500E+01	2.880E-01	1.440E-01	1.000E+02	2.896E-01	1.448E-01	1.100E+02
2.872E-01	1.436E-01	1.200E+02	2.803E-01	1.401E-01	1.300E+02	2.713E-01	1.356E-01
1.400E+02	2.618E-01	1.309E-01	1.500E+02	2.433E-01	1.216E-01	1.600E+02	2.416E-01
1.208E-01	1.700E+02	2.411E-01	1.206E-01	1.800E+02	2.426E-01	1.213E-01	1.900E+02
2.436E-01	1.218E-01	2.000E+02	2.446E-01	1.223E-01			
1	1	54	128	30			p+Xe128
1.009E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	4.277E-10
2.138E-10	2.600E+01	3.223E-09	1.612E-09	2.800E+01	2.457E-08	1.229E-08	3.000E+01
3.846E-06	1.923E-06	3.500E+01	9.461E-04	4.730E-04	4.000E+01	1.512E-02	7.560E-03
4.500E+01	4.347E-02	2.174E-02	5.000E+01	7.558E-02	3.779E-02	5.500E+01	1.074E-01
5.370E-02	6.000E+01	1.360E-01	6.800E-02	6.500E+01	1.616E-01	8.080E-02	7.000E+01
1.841E-01	9.205E-02	7.500E+01	2.027E-01	1.013E-01	8.000E+01	2.186E-01	1.093E-01
8.500E+01	2.316E-01	1.158E-01	9.000E+01	2.420E-01	1.210E-01	9.500E+01	2.463E-01
1.231E-01	1.000E+02	2.483E-01	1.241E-01	1.100E+02	2.471E-01	1.235E-01	1.200E+02
2.414E-01	1.207E-01	1.300E+02	2.333E-01	1.167E-01	1.400E+02	2.244E-01	1.122E-01
1.500E+02	2.148E-01	1.074E-01	1.600E+02	2.113E-01	1.056E-01	1.700E+02	2.086E-01
1.043E-01	1.800E+02	2.070E-01	1.035E-01	1.900E+02	2.063E-01	1.032E-01	2.000E+02
2.052E-01	1.026E-01						
1	1	54	129	30			p+Xe129
8.017E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	4.379E-10
2.190E-10	2.600E+01	3.106E-09	1.553E-09	2.800E+01	2.344E-07	1.172E-07	3.000E+01
5.358E-06	2.679E-06	3.500E+01	6.983E-04	3.492E-04	4.000E+01	5.559E-03	2.779E-03
4.500E+01	1.261E-02	6.305E-03	5.000E+01	2.000E-02	1.000E-02	5.500E+01	2.683E-02
1.341E-02	6.000E+01	3.302E-02	1.651E-02	6.500E+01	3.852E-02	1.926E-02	7.000E+01
4.322E-02	2.161E-02	7.500E+01	4.712E-02	2.356E-02	8.000E+01	5.038E-02	2.519E-02
8.500E+01	5.303E-02	2.652E-02	9.000E+01	5.512E-02	2.756E-02	9.500E+01	5.575E-02
2.788E-02	1.000E+02	5.594E-02	2.797E-02	1.100E+02	5.533E-02	2.766E-02	1.200E+02
5.425E-02	2.712E-02	1.300E+02	5.299E-02	2.650E-02	1.400E+02	5.209E-02	2.604E-02

1.500E+02	5.326E-02	2.663E-02	1.600E+02	5.462E-02	2.731E-02	1.700E+02	5.661E-02
2.831E-02	1.800E+02	5.950E-02	2.975E-02	1.900E+02	6.318E-02	3.159E-02	2.000E+02
6.631E-02	3.315E-02						
1	1	54	130	30			p+Xe130
1.083E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.711E-10
8.555E-11	2.600E+01	1.290E-09	6.450E-10	2.800E+01	9.899E-09	4.949E-09	3.000E+01
9.786E-07	4.893E-07	3.500E+01	4.364E-04	2.182E-04	4.000E+01	1.072E-02	5.360E-03
4.500E+01	3.429E-02	1.715E-02	5.000E+01	6.228E-02	3.114E-02	5.500E+01	9.004E-02
4.502E-02	6.000E+01	1.155E-01	5.775E-02	6.500E+01	1.386E-01	6.930E-02	7.000E+01
1.619E-01	8.095E-02	7.500E+01	1.792E-01	8.960E-02	8.000E+01	1.939E-01	9.695E-02
8.500E+01	2.061E-01	1.031E-01	9.000E+01	2.159E-01	1.080E-01	9.500E+01	2.204E-01
1.102E-01	1.000E+02	2.228E-01	1.114E-01	1.100E+02	2.227E-01	1.114E-01	1.200E+02
2.180E-01	1.090E-01	1.300E+02	2.109E-01	1.055E-01	1.400E+02	2.027E-01	1.013E-01
1.500E+02	1.945E-01	9.725E-02	1.600E+02	1.903E-01	9.515E-02	1.700E+02	1.864E-01
9.320E-02	1.800E+02	1.830E-01	9.150E-02	1.900E+02	1.804E-01	9.020E-02	2.000E+02
1.776E-01	8.880E-02						
1	1	54	131	30			p+Xe131
8.707E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.853E-10
9.265E-11	2.600E+01	1.423E-09	7.115E-10	2.800E+01	4.326E-08	2.163E-08	3.000E+01
2.295E-06	1.148E-06	3.500E+01	3.594E-04	1.797E-04	4.000E+01	4.108E-03	2.054E-03
4.500E+01	1.017E-02	5.085E-03	5.000E+01	1.661E-02	8.305E-03	5.500E+01	2.255E-02
1.128E-02	6.000E+01	2.800E-02	1.400E-02	6.500E+01	3.290E-02	1.645E-02	7.000E+01
3.792E-02	1.896E-02	7.500E+01	4.150E-02	2.075E-02	8.000E+01	4.452E-02	2.226E-02
8.500E+01	4.698E-02	2.349E-02	9.000E+01	4.892E-02	2.446E-02	9.500E+01	4.959E-02
2.480E-02	1.000E+02	4.982E-02	2.491E-02	1.100E+02	4.934E-02	2.467E-02	1.200E+02
4.817E-02	2.408E-02	1.300E+02	4.673E-02	2.337E-02	1.400E+02	4.544E-02	2.272E-02
1.500E+02	4.258E-02	2.129E-02	1.600E+02	4.315E-02	2.158E-02	1.700E+02	4.399E-02
2.200E-02	1.800E+02	4.499E-02	2.250E-02	1.900E+02	4.721E-02	2.361E-02	2.000E+02
4.932E-02	2.466E-02						
1	1	54	132	29			p+Xe132
1.145E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	5.976E-10
2.988E-10	2.800E+01	4.636E-09	2.318E-09	3.000E+01	2.274E-07	1.137E-07	3.500E+01
2.259E-04	1.129E-04	4.000E+01	7.488E-03	3.744E-03	4.500E+01	2.748E-02	1.374E-02
5.000E+01	5.194E-02	2.597E-02	5.500E+01	7.630E-02	3.815E-02	6.000E+01	9.898E-02
4.949E-02	6.500E+01	1.198E-01	5.990E-02	7.000E+01	1.378E-01	6.890E-02	7.500E+01
1.533E-01	7.665E-02	8.000E+01	1.666E-01	8.330E-02	8.500E+01	1.776E-01	8.880E-02
9.000E+01	1.865E-01	9.325E-02	9.500E+01	1.910E-01	9.550E-02	1.000E+02	1.936E-01
9.680E-02	1.100E+02	1.943E-01	9.715E-02	1.200E+02	1.909E-01	9.545E-02	1.300E+02
1.850E-01	9.250E-02	1.400E+02	1.781E-01	8.905E-02	1.500E+02	1.772E-01	8.860E-02
1.600E+02	1.730E-01	8.650E-02	1.700E+02	1.688E-01	8.440E-02	1.800E+02	1.650E-01
8.250E-02	1.900E+02	1.614E-01	8.070E-02	2.000E+02	1.584E-01	7.920E-02	
1	1	54	134	29			p+Xe134
1.209E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	2.665E-10
1.333E-10	2.800E+01	2.095E-09	1.047E-09	3.000E+01	2.155E-08	1.078E-08	3.500E+01
9.940E-05	4.970E-05	4.000E+01	5.103E-03	2.551E-03	4.500E+01	2.148E-02	1.074E-02
5.000E+01	4.246E-02	2.123E-02	5.500E+01	6.442E-02	3.221E-02	6.000E+01	8.468E-02
4.234E-02	6.500E+01	1.035E-01	5.175E-02	7.000E+01	1.220E-01	6.100E-02	7.500E+01
1.364E-01	6.820E-02	8.000E+01	1.488E-01	7.440E-02	8.500E+01	1.591E-01	7.955E-02
9.000E+01	1.676E-01	8.380E-02	9.500E+01	1.721E-01	8.605E-02	1.000E+02	1.750E-01
8.750E-02	1.100E+02	1.764E-01	8.820E-02	1.200E+02	1.739E-01	8.695E-02	1.300E+02
1.691E-01	8.455E-02	1.400E+02	1.630E-01	8.150E-02	1.500E+02	1.505E-01	7.525E-02
1.600E+02	1.469E-01	7.345E-02	1.700E+02	1.432E-01	7.160E-02	1.800E+02	1.396E-01
6.980E-02	1.900E+02	1.363E-01	6.815E-02	2.000E+02	1.335E-01	6.675E-02	
1	1	54	136	29			p+Xe136
1.271E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	1.217E-10
6.085E-11	2.800E+01	9.697E-10	4.849E-10	3.000E+01	7.058E-09	3.529E-09	3.500E+01
4.907E-05	2.454E-05	4.000E+01	3.457E-03	1.729E-03	4.500E+01	1.703E-02	8.515E-03
5.000E+01	3.532E-02	1.766E-02	5.500E+01	5.455E-02	2.728E-02	6.000E+01	7.267E-02
3.633E-02	6.500E+01	8.950E-02	4.475E-02	7.000E+01	1.041E-01	5.205E-02	7.500E+01
1.170E-01	5.850E-02	8.000E+01	1.280E-01	6.400E-02	8.500E+01	1.373E-01	6.865E-02
9.000E+01	1.450E-01	7.250E-02	9.500E+01	1.494E-01	7.470E-02	1.000E+02	1.523E-01
7.615E-02	1.100E+02	1.543E-01	7.715E-02	1.200E+02	1.527E-01	7.635E-02	1.300E+02
1.489E-01	7.445E-02	1.400E+02	1.439E-01	7.195E-02	1.500E+02	1.382E-01	6.910E-02
1.600E+02	1.348E-01	6.740E-02	1.700E+02	1.312E-01	6.560E-02	1.800E+02	1.278E-01
6.390E-02	1.900E+02	1.243E-01	6.215E-02	2.000E+02	1.211E-01	6.055E-02	
1	1	55	133	30			p+Cs133

8.334E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.254E-10
6.270E-11	2.600E+01	9.700E-10	4.850E-10	2.800E+01	1.255E-08	6.275E-09	3.000E+01
1.325E-06	6.625E-07	3.500E+01	2.531E-04	1.266E-04	4.000E+01	2.999E-03	1.499E-03
4.500E+01	7.549E-03	3.775E-03	5.000E+01	1.246E-02	6.230E-03	5.500E+01	1.711E-02
8.555E-03	6.000E+01	2.140E-02	1.070E-02	6.500E+01	2.533E-02	1.266E-02	7.000E+01
2.870E-02	1.435E-02	7.500E+01	3.161E-02	1.580E-02	8.000E+01	3.411E-02	1.706E-02
8.500E+01	3.619E-02	1.809E-02	9.000E+01	3.789E-02	1.895E-02	9.500E+01	3.861E-02
1.930E-02	1.000E+02	3.899E-02	1.949E-02	1.100E+02	3.904E-02	1.952E-02	1.200E+02
3.855E-02	1.928E-02	1.300E+02	3.778E-02	1.889E-02	1.400E+02	3.720E-02	1.860E-02
1.500E+02	3.825E-02	1.912E-02	1.600E+02	3.912E-02	1.956E-02	1.700E+02	4.031E-02
2.015E-02	1.800E+02	4.235E-02	2.117E-02	1.900E+02	4.481E-02	2.241E-02	2.000E+02
4.783E-02	2.391E-02						
	1	1	56	130	31		p+Ba130
8.443E+00	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	1.783E-10
8.583E-11	2.400E+01	1.268E-09	6.340E-10	2.600E+01	9.740E-09	4.870E-09	2.800E+01
3.546E-07	1.773E-07	3.000E+01	1.317E-05	6.585E-06	3.500E+01	2.019E-03	1.009E-03
4.000E+01	2.278E-02	1.139E-02	4.500E+01	5.967E-02	2.984E-02	5.000E+01	1.002E-01
5.010E-02	5.500E+01	1.398E-01	6.990E-02	6.000E+01	1.743E-01	8.715E-02	6.500E+01
2.057E-01	1.028E-01	7.000E+01	2.330E-01	1.165E-01	7.500E+01	2.609E-01	1.305E-01
8.000E+01	2.803E-01	1.401E-01	8.500E+01	2.962E-01	1.481E-01	9.000E+01	3.086E-01
1.543E-01	9.500E+01	3.130E-01	1.565E-01	1.000E+02	3.147E-01	1.573E-01	1.100E+02
3.116E-01	1.558E-01	1.200E+02	3.031E-01	1.515E-01	1.300E+02	2.922E-01	1.461E-01
1.400E+02	2.811E-01	1.406E-01	1.500E+02	2.696E-01	1.348E-01	1.600E+02	2.664E-01
1.332E-01	1.700E+02	2.634E-01	1.317E-01	1.800E+02	2.624E-01	1.312E-01	1.900E+02
2.629E-01	1.315E-01	2.000E+02	2.628E-01	1.314E-01			
	1	1	56	132	30		p+Ba132
9.074E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	5.916E-10
2.958E-10	2.600E+01	4.394E-09	2.197E-09	2.800E+01	3.226E-08	1.613E-08	3.000E+01
5.292E-06	2.646E-06	3.500E+01	1.035E-03	5.175E-04	4.000E+01	1.689E-02	8.445E-03
4.500E+01	4.818E-02	2.409E-02	5.000E+01	8.356E-02	4.178E-02	5.500E+01	1.186E-01
5.930E-02	6.000E+01	1.519E-01	7.595E-02	6.500E+01	1.807E-01	9.035E-02	7.000E+01
2.056E-01	1.028E-01	7.500E+01	2.216E-01	1.108E-01	8.000E+01	2.390E-01	1.195E-01
8.500E+01	2.532E-01	1.266E-01	9.000E+01	2.645E-01	1.323E-01	9.500E+01	2.690E-01
1.345E-01	1.000E+02	2.711E-01	1.356E-01	1.100E+02	2.694E-01	1.347E-01	1.200E+02
2.627E-01	1.313E-01	1.300E+02	2.534E-01	1.267E-01	1.400E+02	2.436E-01	1.218E-01
1.500E+02	2.421E-01	1.211E-01	1.600E+02	2.376E-01	1.188E-01	1.700E+02	2.336E-01
1.168E-01	1.800E+02	2.305E-01	1.153E-01	1.900E+02	2.285E-01	1.143E-01	2.000E+02
2.270E-01	1.135E-01						
	1	1	56	134	30		p+Ba134
9.766E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	2.527E-10
1.264E-10	2.600E+01	1.817E-09	9.085E-10	2.800E+01	1.343E-08	6.715E-09	3.000E+01
1.465E-06	7.325E-07	3.500E+01	5.363E-04	2.681E-04	4.000E+01	1.207E-02	6.035E-03
4.500E+01	3.824E-02	1.912E-02	5.000E+01	6.884E-02	3.442E-02	5.500E+01	9.972E-02
4.986E-02	6.000E+01	1.261E-01	6.305E-02	6.500E+01	1.514E-01	7.570E-02	7.000E+01
1.732E-01	8.660E-02	7.500E+01	1.956E-01	9.780E-02	8.000E+01	2.118E-01	1.059E-01
8.500E+01	2.250E-01	1.125E-01	9.000E+01	2.358E-01	1.179E-01	9.500E+01	2.407E-01
1.203E-01	1.000E+02	2.432E-01	1.216E-01	1.100E+02	2.427E-01	1.213E-01	1.200E+02
2.374E-01	1.187E-01	1.300E+02	2.294E-01	1.147E-01	1.400E+02	2.204E-01	1.102E-01
1.500E+02	2.027E-01	1.013E-01	1.600E+02	1.982E-01	9.910E-02	1.700E+02	1.942E-01
9.710E-02	1.800E+02	1.906E-01	9.530E-02	1.900E+02	1.878E-01	9.390E-02	2.000E+02
1.857E-01	9.285E-02						
	1	1	56	135	30		p+Ba135
7.887E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	2.075E-10
1.038E-10	2.600E+01	1.510E-09	7.550E-10	2.800E+01	4.318E-08	2.159E-08	3.000E+01
2.275E-06	1.137E-06	3.500E+01	3.466E-04	1.733E-04	4.000E+01	4.155E-03	2.077E-03
4.500E+01	1.050E-02	5.250E-03	5.000E+01	1.730E-02	8.650E-03	5.500E+01	2.420E-02
1.210E-02	6.000E+01	3.014E-02	1.507E-02	6.500E+01	3.553E-02	1.776E-02	7.000E+01
3.919E-02	1.960E-02	7.500E+01	4.298E-02	2.149E-02	8.000E+01	4.617E-02	2.309E-02
8.500E+01	4.875E-02	2.438E-02	9.000E+01	5.079E-02	2.540E-02	9.500E+01	5.152E-02
2.576E-02	1.000E+02	5.177E-02	2.588E-02	1.100E+02	5.130E-02	2.565E-02	1.200E+02
5.009E-02	2.505E-02	1.300E+02	4.862E-02	2.431E-02	1.400E+02	4.747E-02	2.373E-02
1.500E+02	4.800E-02	2.400E-02	1.600E+02	4.861E-02	2.431E-02	1.700E+02	4.948E-02
2.474E-02	1.800E+02	5.089E-02	2.544E-02	1.900E+02	5.276E-02	2.638E-02	2.000E+02
5.556E-02	2.778E-02						
	1	1	56	136	30		p+Ba136
1.051E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.019E-10

5.095E-11	2.600E+01	7.743E-10	3.872E-10	2.800E+01	5.296E-09	2.648E-09	3.000E+01
2.323E-07	1.162E-07	3.500E+01	2.344E-04	1.172E-04	4.000E+01	8.048E-03	4.024E-03
4.500E+01	2.943E-02	1.472E-02	5.000E+01	5.572E-02	2.786E-02	5.500E+01	8.243E-02
4.122E-02	6.000E+01	1.071E-01	5.355E-02	6.500E+01	1.299E-01	6.495E-02	7.000E+01
1.494E-01	7.470E-02	7.500E+01	1.663E-01	8.315E-02	8.000E+01	1.808E-01	9.040E-02
8.500E+01	1.928E-01	9.640E-02	9.000E+01	2.026E-01	1.013E-01	9.500E+01	2.075E-01
1.037E-01	1.000E+02	2.103E-01	1.051E-01	1.100E+02	2.109E-01	1.055E-01	1.200E+02
2.071E-01	1.036E-01	1.300E+02	2.007E-01	1.003E-01	1.400E+02	1.931E-01	9.655E-02
1.500E+02	1.847E-01	9.235E-02	1.600E+02	1.804E-01	9.020E-02	1.700E+02	1.761E-01
8.805E-02	1.800E+02	1.722E-01	8.610E-02	1.900E+02	1.690E-01	8.450E-02	2.000E+02
1.660E-01	8.300E-02						
	1	1	56	137	29		p+Ba137
8.822E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	4.736E-10
2.368E-10	2.800E+01	3.528E-09	1.764E-09	3.000E+01	4.869E-07	2.435E-07	3.500E+01
1.484E-04	7.420E-05	4.000E+01	2.770E-03	1.385E-03	4.500E+01	7.862E-03	3.931E-03
5.000E+01	1.362E-02	6.810E-03	5.500E+01	1.933E-02	9.665E-03	6.000E+01	2.446E-02
1.223E-02	6.500E+01	2.915E-02	1.457E-02	7.000E+01	3.242E-02	1.621E-02	7.500E+01
3.578E-02	1.789E-02	8.000E+01	3.862E-02	1.931E-02	8.500E+01	4.096E-02	2.048E-02
9.000E+01	4.283E-02	2.142E-02	9.500E+01	4.360E-02	2.180E-02	1.000E+02	4.395E-02
2.198E-02	1.100E+02	4.373E-02	2.186E-02	1.200E+02	4.274E-02	2.137E-02	1.300E+02
4.145E-02	2.073E-02	1.400E+02	4.019E-02	2.009E-02	1.500E+02	3.901E-02	1.951E-02
1.600E+02	3.897E-02	1.948E-02	1.700E+02	3.928E-02	1.964E-02	1.800E+02	3.998E-02
1.999E-02	1.900E+02	4.112E-02	2.056E-02	2.000E+02	4.277E-02	2.139E-02	
	1	1	56	138	29		p+Ba138
1.112E+01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	3.225E-10
1.613E-10	2.800E+01	2.440E-09	1.220E-09	3.000E+01	1.877E-08	9.385E-09	3.500E+01
1.172E-04	5.860E-05	4.000E+01	5.520E-03	2.760E-03	4.500E+01	2.299E-02	1.150E-02
5.000E+01	4.546E-02	2.273E-02	5.500E+01	6.947E-02	3.474E-02	6.000E+01	9.144E-02
4.572E-02	6.500E+01	1.118E-01	5.590E-02	7.000E+01	1.267E-01	6.335E-02	7.500E+01
1.418E-01	7.090E-02	8.000E+01	1.547E-01	7.735E-02	8.500E+01	1.655E-01	8.275E-02
9.000E+01	1.743E-01	8.715E-02	9.500E+01	1.791E-01	8.955E-02	1.000E+02	1.820E-01
9.100E-02	1.100E+02	1.835E-01	9.175E-02	1.200E+02	1.809E-01	9.045E-02	1.300E+02
1.758E-01	8.790E-02	1.400E+02	1.695E-01	8.475E-02	1.500E+02	1.684E-01	8.420E-02
1.600E+02	1.643E-01	8.215E-02	1.700E+02	1.600E-01	8.000E-02	1.800E+02	1.560E-01
7.800E-02	1.900E+02	1.521E-01	7.605E-02	2.000E+02	1.491E-01	7.455E-02	
	1	1	57	138	29		p+La138
5.767E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	2.464E-10
1.232E-10	2.800E+01	2.484E-08	1.242E-08	3.000E+01	4.305E-07	2.152E-07	3.500E+01
4.880E-05	2.440E-05	4.000E+01	3.263E-04	1.632E-04	4.500E+01	6.779E-04	3.390E-04
5.000E+01	1.026E-03	5.130E-04	5.500E+01	1.344E-03	6.720E-04	6.000E+01	1.638E-03
8.190E-04	6.500E+01	1.914E-03	9.570E-04	7.000E+01	2.151E-03	1.076E-03	7.500E+01
2.362E-03	1.181E-03	8.000E+01	2.552E-03	1.276E-03	8.500E+01	2.725E-03	1.362E-03
9.000E+01	2.887E-03	1.443E-03	9.500E+01	2.968E-03	1.484E-03	1.000E+02	3.088E-03
1.544E-03	1.100E+02	3.382E-03	1.691E-03	1.200E+02	3.834E-03	1.917E-03	1.300E+02
4.529E-03	2.265E-03	1.400E+02	5.474E-03	2.737E-03	1.500E+02	6.438E-03	2.706E-03
1.600E+02	8.250E-03	2.643E-03	1.700E+02	1.047E-02	2.607E-03	1.800E+02	1.357E-02
2.623E-03	1.900E+02	1.687E-02	2.682E-03	2.000E+02	2.043E-02	2.785E-03	
	1	1	57	139	29		p+La139
8.127E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	4.423E-10
2.212E-10	2.800E+01	3.306E-09	1.653E-09	3.000E+01	5.319E-07	2.660E-07	3.500E+01
1.376E-04	6.880E-05	4.000E+01	2.322E-03	1.161E-03	4.500E+01	6.458E-03	3.229E-03
5.000E+01	1.108E-02	5.540E-03	5.500E+01	1.555E-02	7.775E-03	6.000E+01	1.970E-02
9.850E-03	6.500E+01	2.352E-02	1.176E-02	7.000E+01	2.733E-02	1.367E-02	7.500E+01
3.026E-02	1.513E-02	8.000E+01	3.276E-02	1.638E-02	8.500E+01	3.484E-02	1.742E-02
9.000E+01	3.656E-02	1.828E-02	9.500E+01	3.733E-02	1.867E-02	1.000E+02	3.774E-02
1.887E-02	1.100E+02	3.780E-02	1.890E-02	1.200E+02	3.722E-02	1.861E-02	1.300E+02
3.634E-02	1.817E-02	1.400E+02	3.545E-02	1.773E-02	1.500E+02	3.469E-02	1.734E-02
1.600E+02	3.503E-02	1.751E-02	1.700E+02	3.585E-02	1.792E-02	1.800E+02	3.701E-02
1.851E-02	1.900E+02	3.854E-02	1.927E-02	2.000E+02	4.060E-02	2.030E-02	
	1	1	58	136	31		p+Ce136
8.109E+00	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	1.052E-10
4.956E-11	2.400E+01	7.478E-10	3.739E-10	2.600E+01	5.675E-09	2.838E-09	2.800E+01
3.653E-08	1.826E-08	3.000E+01	5.878E-06	2.939E-06	3.500E+01	1.182E-03	5.910E-04
4.000E+01	1.816E-02	9.080E-03	4.500E+01	5.166E-02	2.583E-02	5.000E+01	8.959E-02
4.480E-02	5.500E+01	1.270E-01	6.350E-02	6.000E+01	1.608E-01	8.040E-02	6.500E+01
1.916E-01	9.580E-02	7.000E+01	2.178E-01	1.089E-01	7.500E+01	2.399E-01	1.200E-01

8.000E+01	2.588E-01	1.294E-01	8.500E+01	2.741E-01	1.371E-01	9.000E+01	2.864E-01
1.432E-01	9.500E+01	2.914E-01	1.457E-01	1.000E+02	2.936E-01	1.468E-01	1.100E+02
2.918E-01	1.459E-01	1.200E+02	2.844E-01	1.422E-01	1.300E+02	2.743E-01	1.371E-01
1.400E+02	2.633E-01	1.316E-01	1.500E+02	2.523E-01	1.262E-01	1.600E+02	2.478E-01
1.239E-01	1.700E+02	2.444E-01	1.222E-01	1.800E+02	2.414E-01	1.207E-01	1.900E+02
2.396E-01	1.198E-01	2.000E+02	2.390E-01	1.195E-01			
1	1	58	138	30			p+Ce138
8.959E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	2.658E-10
1.329E-10	2.600E+01	1.927E-09	9.635E-10	2.800E+01	1.378E-08	6.890E-09	3.000E+01
1.433E-06	7.165E-07	3.500E+01	5.128E-04	2.564E-04	4.000E+01	1.201E-02	6.005E-03
4.500E+01	3.895E-02	1.947E-02	5.000E+01	7.120E-02	3.560E-02	5.500E+01	1.036E-01
5.180E-02	6.000E+01	1.321E-01	6.605E-02	6.500E+01	1.591E-01	7.955E-02	7.000E+01
1.821E-01	9.105E-02	7.500E+01	2.020E-01	1.010E-01	8.000E+01	2.189E-01	1.095E-01
8.500E+01	2.329E-01	1.164E-01	9.000E+01	2.442E-01	1.221E-01	9.500E+01	2.494E-01
1.247E-01	1.000E+02	2.521E-01	1.260E-01	1.100E+02	2.519E-01	1.260E-01	1.200E+02
2.466E-01	1.233E-01	1.300E+02	2.383E-01	1.192E-01	1.400E+02	2.289E-01	1.144E-01
1.500E+02	2.275E-01	1.138E-01	1.600E+02	2.225E-01	1.113E-01	1.700E+02	2.181E-01
1.090E-01	1.800E+02	2.138E-01	1.069E-01	1.900E+02	2.104E-01	1.052E-01	2.000E+02
2.082E-01	1.041E-01						
1	1	58	140	30			p+Ce140
9.743E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.053E-10
5.265E-11	2.600E+01	7.356E-10	3.678E-10	2.800E+01	5.326E-09	2.663E-09	3.000E+01
2.181E-07	1.091E-07	3.500E+01	2.186E-04	1.093E-04	4.000E+01	7.795E-03	3.897E-03
4.500E+01	2.957E-02	1.478E-02	5.000E+01	5.674E-02	2.837E-02	5.500E+01	8.319E-02
4.160E-02	6.000E+01	1.087E-01	5.435E-02	6.500E+01	1.323E-01	6.615E-02	7.000E+01
1.524E-01	7.620E-02	7.500E+01	1.701E-01	8.505E-02	8.000E+01	1.852E-01	9.260E-02
8.500E+01	1.977E-01	9.885E-02	9.000E+01	2.080E-01	1.040E-01	9.500E+01	2.132E-01
1.066E-01	1.000E+02	2.163E-01	1.081E-01	1.100E+02	2.173E-01	1.086E-01	1.200E+02
2.135E-01	1.067E-01	1.300E+02	2.070E-01	1.035E-01	1.400E+02	1.992E-01	9.960E-02
1.500E+02	1.909E-01	9.545E-02	1.600E+02	1.865E-01	9.325E-02	1.700E+02	1.822E-01
9.110E-02	1.800E+02	1.784E-01	8.920E-02	1.900E+02	1.750E-01	8.750E-02	2.000E+02
1.719E-01	8.595E-02						
1	1	58	142	31			p+Ce142
6.728E+00	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	4.125E-10
2.063E-10	2.400E+01	2.954E-09	1.477E-09	2.600E+01	2.181E-08	1.091E-08	2.800E+01
3.025E-06	1.512E-06	3.000E+01	4.044E-05	2.022E-05	3.500E+01	3.992E-03	1.996E-03
4.000E+01	2.742E-02	1.371E-02	4.500E+01	6.284E-02	3.142E-02	5.000E+01	1.008E-01
5.040E-02	5.500E+01	1.381E-01	6.905E-02	6.000E+01	1.711E-01	8.555E-02	6.500E+01
2.005E-01	1.003E-01	7.000E+01	2.248E-01	1.124E-01	7.500E+01	2.460E-01	1.230E-01
8.000E+01	2.635E-01	1.318E-01	8.500E+01	2.775E-01	1.388E-01	9.000E+01	2.887E-01
1.444E-01	9.500E+01	2.928E-01	1.464E-01	1.000E+02	2.941E-01	1.470E-01	1.100E+02
2.908E-01	1.454E-01	1.200E+02	2.822E-01	1.411E-01	1.300E+02	2.708E-01	1.354E-01
1.400E+02	2.584E-01	1.292E-01	1.500E+02	2.360E-01	1.180E-01	1.600E+02	2.288E-01
1.144E-01	1.700E+02	2.218E-01	1.109E-01	1.800E+02	2.153E-01	1.076E-01	1.900E+02
2.095E-01	1.047E-01	2.000E+02	2.040E-01	1.020E-01			
1	1	59	141	30			p+Pr141
6.699E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.528E-10
7.640E-11	2.600E+01	1.095E-09	5.475E-10	2.800E+01	1.295E-08	6.475E-09	3.000E+01
1.331E-06	6.655E-07	3.500E+01	2.380E-04	1.190E-04	4.000E+01	3.092E-03	1.546E-03
4.500E+01	8.102E-03	4.051E-03	5.000E+01	1.361E-02	6.805E-03	5.500E+01	1.907E-02
9.535E-03	6.000E+01	2.401E-02	1.201E-02	6.500E+01	2.856E-02	1.428E-02	7.000E+01
3.177E-02	1.588E-02	7.500E+01	3.513E-02	1.757E-02	8.000E+01	3.798E-02	1.899E-02
8.500E+01	4.036E-02	2.018E-02	9.000E+01	4.234E-02	2.117E-02	9.500E+01	4.318E-02
2.159E-02	1.000E+02	4.359E-02	2.179E-02	1.100E+02	4.366E-02	2.183E-02	1.200E+02
4.306E-02	2.153E-02	1.300E+02	4.231E-02	2.116E-02	1.400E+02	4.155E-02	2.077E-02
1.500E+02	4.096E-02	2.048E-02	1.600E+02	4.198E-02	2.099E-02	1.700E+02	4.353E-02
2.176E-02	1.800E+02	4.577E-02	2.288E-02	1.900E+02	4.870E-02	2.435E-02	2.000E+02
5.265E-02	2.633E-02						
1	1	60	142	30			p+Nd142
8.459E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.999E-10
9.995E-11	2.600E+01	1.472E-09	7.360E-10	2.800E+01	9.466E-09	4.733E-09	3.000E+01
5.736E-07	2.868E-07	3.500E+01	3.345E-04	1.672E-04	4.000E+01	1.001E-02	5.005E-03
4.500E+01	3.593E-02	1.796E-02	5.000E+01	6.779E-02	3.390E-02	5.500E+01	1.000E-01
5.000E-02	6.000E+01	1.283E-01	6.415E-02	6.500E+01	1.555E-01	7.775E-02	7.000E+01
1.787E-01	8.935E-02	7.500E+01	2.031E-01	1.016E-01	8.000E+01	2.207E-01	1.104E-01
8.500E+01	2.353E-01	1.177E-01	9.000E+01	2.472E-01	1.236E-01	9.500E+01	2.530E-01

1.265E-01	1.000E+02	2.562E-01	1.281E-01	1.100E+02	2.566E-01	1.283E-01	1.200E+02
2.516E-01	1.258E+01	1.300E+02	2.434E-01	1.217E-01	1.400E+02	2.339E-01	1.169E-01
1.500E+02	2.154E-01	1.077E-01	1.600E+02	2.110E-01	1.055E-01	1.700E+02	2.070E-01
1.035E-01	1.800E+02	2.033E-01	1.017E-01	1.900E+02	2.008E-01	1.004E-01	2.000E+02
1.990E-01	9.950E-02						
1	1	60	143	30			p+Nd143
5.426E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	6.210E-10
3.105E-10	2.600E+01	4.306E-09	2.153E-09	2.800E+01	4.108E-07	2.054E-07	3.000E+01
6.810E-06	3.405E-06	3.500E+01	7.518E-04	3.759E-04	4.000E+01	5.929E-03	2.965E-03
4.500E+01	1.396E-02	6.980E-03	5.000E+01	2.244E-02	1.122E-02	5.500E+01	3.048E-02
1.524E-02	6.000E+01	3.773E-02	1.886E-02	6.500E+01	4.419E-02	2.210E-02	7.000E+01
4.957E-02	2.479E-02	7.500E+01	5.422E-02	2.711E-02	8.000E+01	5.803E-02	2.901E-02
8.500E+01	6.106E-02	3.053E-02	9.000E+01	6.349E-02	3.175E-02	9.500E+01	6.421E-02
3.211E-02	1.000E+02	6.438E-02	3.219E-02	1.100E+02	6.351E-02	3.175E-02	1.200E+02
6.175E-02	3.087E-02	1.300E+02	5.974E-02	2.987E-02	1.400E+02	5.766E-02	2.883E-02
1.500E+02	5.589E-02	2.795E-02	1.600E+02	5.628E-02	2.814E-02	1.700E+02	5.732E-02
2.866E-02	1.800E+02	5.900E-02	2.950E-02	1.900E+02	6.136E-02	3.068E-02	2.000E+02
6.407E-02	3.204E-02						
1	1	60	144	31			p+Nd144
5.750E+00	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	5.654E-10
2.827E-10	2.400E+01	4.051E-09	2.026E-09	2.600E+01	2.878E-08	1.439E-08	2.800E+01
4.045E-06	2.023E-06	3.000E+01	4.970E-05	2.485E-05	3.500E+01	4.520E-03	2.260E-03
4.000E+01	3.081E-02	1.541E-02	4.500E+01	7.137E-02	3.569E-02	5.000E+01	1.146E-01
5.730E-02	5.500E+01	1.570E-01	7.850E-02	6.000E+01	1.947E-01	9.735E-02	6.500E+01
2.281E-01	1.140E-01	7.000E+01	2.558E-01	1.279E-01	7.500E+01	2.800E-01	1.400E-01
8.000E+01	2.997E-01	1.499E-01	8.500E+01	3.156E-01	1.578E-01	9.000E+01	3.282E-01
1.641E-01	9.500E+01	3.326E-01	1.663E-01	1.000E+02	3.338E-01	1.669E-01	1.100E+02
3.294E-01	1.647E-01	1.200E+02	3.189E-01	1.595E-01	1.300E+02	3.056E-01	1.528E-01
1.400E+02	2.913E-01	1.457E-01	1.500E+02	2.653E-01	1.326E-01	1.600E+02	2.576E-01
1.288E-01	1.700E+02	2.503E-01	1.252E-01	1.800E+02	2.441E-01	1.221E-01	1.900E+02
2.384E-01	1.192E-01	2.000E+02	2.336E-01	1.168E-01			
1	1	60	145	33			p+Nd145
2.706E+00	0.000E+00	0.000E+00	1.800E+01	0.000E+00	0.000E+00	1.900E+01	1.075E-10
5.375E-11	2.000E+01	2.743E-10	1.372E-10	2.200E+01	1.841E-09	9.205E-10	2.400E+01
1.208E-08	6.040E-09	2.600E+01	1.842E-06	9.210E-07	2.800E+01	2.038E-05	1.019E-05
3.000E+01	1.479E-04	7.395E-05	3.500E+01	4.235E-03	2.118E-03	4.000E+01	1.395E-02
6.975E-03	4.500E+01	2.548E-02	1.274E-02	5.000E+01	3.678E-02	1.839E-02	5.500E+01
4.705E-02	2.353E-02	6.000E+01	5.625E-02	2.813E-02	6.500E+01	6.423E-02	3.211E-02
7.000E+01	7.065E-02	3.533E-02	7.500E+01	7.616E-02	3.808E-02	8.000E+01	8.053E-02
4.027E-02	8.500E+01	8.393E-02	4.197E-02	9.000E+01	8.656E-02	4.328E-02	9.500E+01
8.678E-02	4.339E-02	1.000E+02	8.626E-02	4.313E-02	1.100E+02	8.396E-02	4.198E-02
1.200E+02	8.064E-02	4.032E-02	1.300E+02	7.709E-02	3.855E-02	1.400E+02	7.390E-02
3.695E-02	1.500E+02	7.104E-02	3.552E-02	1.600E+02	7.099E-02	3.549E-02	1.700E+02
7.133E-02	3.567E-02	1.800E+02	7.227E-02	3.614E-02	1.900E+02	7.417E-02	3.708E-02
2.000E+02	7.690E-02	3.845E-02					
1	1	60	146	32			p+Nd146
5.126E+00	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	1.469E-10
7.330E-11	2.200E+01	1.077E-09	5.385E-10	2.400E+01	7.932E-09	3.966E-09	2.600E+01
2.008E-07	1.004E-07	2.800E+01	1.087E-05	5.435E-06	3.000E+01	1.057E-04	5.285E-05
3.500E+01	7.048E-03	3.524E-03	4.000E+01	3.738E-02	1.869E-02	4.500E+01	8.050E-02
4.025E-02	5.000E+01	1.256E-01	6.280E-02	5.500E+01	1.663E-01	8.315E-02	6.000E+01
2.044E-01	1.022E-01	6.500E+01	2.379E-01	1.190E-01	7.000E+01	2.659E-01	1.330E-01
7.500E+01	2.902E-01	1.451E-01	8.000E+01	3.100E-01	1.550E-01	8.500E+01	3.259E-01
1.630E-01	9.000E+01	3.386E-01	1.693E-01	9.500E+01	3.427E-01	1.714E-01	1.000E+02
3.437E-01	1.719E-01	1.100E+02	3.389E-01	1.694E-01	1.200E+02	3.281E-01	1.641E-01
1.300E+02	3.145E-01	1.573E-01	1.400E+02	2.997E-01	1.499E-01	1.500E+02	2.968E-01
1.484E-01	1.600E+02	2.883E-01	1.442E-01	1.700E+02	2.802E-01	1.401E-01	1.800E+02
2.727E-01	1.363E-01	1.900E+02	2.659E-01	1.330E-01	2.000E+02	2.601E-01	1.300E-01
1	1	60	148	31			p+Nd148
5.900E+00	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	4.232E-10
2.116E-10	2.400E+01	3.109E-09	1.554E-09	2.600E+01	2.243E-08	1.121E-08	2.800E+01
3.270E-06	1.635E-06	3.000E+01	4.154E-05	2.077E-05	3.500E+01	3.934E-03	1.967E-03
4.000E+01	2.736E-02	1.368E-02	4.500E+01	6.298E-02	3.149E-02	5.000E+01	1.015E-01
5.075E-02	5.500E+01	1.386E-01	6.930E-02	6.000E+01	1.726E-01	8.630E-02	6.500E+01
2.022E-01	1.011E-01	7.000E+01	2.227E-01	1.114E-01	7.500E+01	2.442E-01	1.221E-01
8.000E+01	2.617E-01	1.308E-01	8.500E+01	2.761E-01	1.381E-01	9.000E+01	2.877E-01

1.439E-01	9.500E+01	2.921E-01	1.461E-01	1.000E+02	2.938E-01	1.469E-01	1.100E+02
2.913E-01	1.457E-01	1.200E+02	2.834E-01	1.417E-01	1.300E+02	2.727E-01	1.363E-01
1.400E+02	2.607E-01	1.303E-01	1.500E+02	2.487E-01	1.244E-01	1.600E+02	2.420E-01
1.210E-01	1.700E+02	2.358E-01	1.179E-01	1.800E+02	2.296E-01	1.148E-01	1.900E+02
2.243E-01	1.121E-01	2.000E+02	2.196E-01	1.098E-01			
	1	1	60	150	30		p+Nd150
7.327E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	5.444E-10
2.722E-10	2.600E+01	3.981E-09	1.991E-09	2.800E+01	1.106E-07	5.530E-08	3.000E+01
6.110E-06	3.055E-06	3.500E+01	1.086E-03	5.430E-04	4.000E+01	1.420E-02	7.100E-03
4.500E+01	3.938E-02	1.969E-02	5.000E+01	6.836E-02	3.418E-02	5.500E+01	9.628E-02
4.814E-02	6.000E+01	1.230E-01	6.150E-02	6.500E+01	1.464E-01	7.320E-02	7.000E+01
1.637E-01	8.185E-02	7.500E+01	1.814E-01	9.070E-02	8.000E+01	1.961E-01	9.805E-02
8.500E+01	2.085E-01	1.042E-01	9.000E+01	2.187E-01	1.094E-01	9.500E+01	2.236E-01
1.118E-01	1.000E+02	2.263E-01	1.132E-01	1.100E+02	2.268E-01	1.134E-01	1.200E+02
2.224E-01	1.112E-01	1.300E+02	2.153E-01	1.076E-01	1.400E+02	2.069E-01	1.035E-01
1.500E+02	2.052E-01	1.026E-01	1.600E+02	1.999E-01	9.995E-02	1.700E+02	1.945E-01
9.725E-02	1.800E+02	1.898E-01	9.490E-02	1.900E+02	1.855E-01	9.275E-02	2.000E+02
1.815E-01	9.075E-02						
	1	1	62	144	30		p+Sm144
7.373E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	3.287E-10
1.644E-10	2.600E+01	2.219E-09	1.109E-09	2.800E+01	1.458E-08	7.290E-09	3.000E+01
1.259E-06	6.295E-07	3.500E+01	4.532E-04	2.266E-04	4.000E+01	1.167E-02	5.835E-03
4.500E+01	4.143E-02	2.072E-02	5.000E+01	7.781E-02	3.891E-02	5.500E+01	1.144E-01
5.720E-02	6.000E+01	1.467E-01	7.335E-02	6.500E+01	1.774E-01	8.870E-02	7.000E+01
2.037E-01	1.018E-01	7.500E+01	2.315E-01	1.158E-01	8.000E+01	2.514E-01	1.257E-01
8.500E+01	2.677E-01	1.338E-01	9.000E+01	2.812E-01	1.406E-01	9.500E+01	2.875E-01
1.437E-01	1.000E+02	2.907E-01	1.454E-01	1.100E+02	2.906E-01	1.453E-01	1.200E+02
2.844E-01	1.422E-01	1.300E+02	2.750E-01	1.375E-01	1.400E+02	2.644E-01	1.322E-01
1.500E+02	2.440E-01	1.220E-01	1.600E+02	2.396E-01	1.198E-01	1.700E+02	2.359E-01
1.179E-01	1.800E+02	2.333E-01	1.167E-01	1.900E+02	2.316E-01	1.158E-01	2.000E+02
2.302E-01	1.151E-01						
	1	1	62	147	33		p+Sm147
1.744E+00	0.000E+00	0.000E+00	1.800E+01	0.000E+00	0.000E+00	1.900E+01	1.684E-10
8.420E-11	2.000E+01	4.094E-10	2.047E-10	2.200E+01	2.459E-09	1.229E-09	2.400E+01
1.629E-08	8.145E-09	2.600E+01	2.457E-06	1.228E-06	2.800E+01	2.540E-05	1.270E-05
3.000E+01	1.768E-04	8.840E-05	3.500E+01	4.835E-03	2.417E-03	4.000E+01	1.599E-02
7.995E-03	4.500E+01	2.922E-02	1.461E-02	5.000E+01	4.229E-02	2.115E-02	5.500E+01
5.419E-02	2.710E-02	6.000E+01	6.486E-02	3.243E-02	6.500E+01	7.408E-02	3.704E-02
7.000E+01	8.152E-02	4.076E-02	7.500E+01	8.793E-02	4.396E-02	8.000E+01	9.297E-02
4.648E-02	8.500E+01	9.688E-02	4.844E-02	9.000E+01	9.992E-02	4.996E-02	9.500E+01
1.001E-01	5.005E-02	1.000E+02	9.953E-02	4.976E-02	1.100E+02	9.677E-02	4.838E-02
1.200E+02	9.294E-02	4.647E-02	1.300E+02	8.925E-02	4.462E-02	1.400E+02	8.575E-02
4.288E-02	1.500E+02	8.313E-02	4.156E-02	1.600E+02	8.361E-02	4.181E-02	1.700E+02
8.479E-02	4.240E-02	1.800E+02	8.703E-02	4.351E-02	1.900E+02	9.021E-02	4.510E-02
2.000E+02	9.402E-02	4.701E-02					
	1	1	62	148	32		p+Sm148
4.058E+00	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	2.405E-10
1.158E-10	2.200E+01	1.678E-09	8.390E-10	2.400E+01	1.140E-08	5.700E-09	2.600E+01
3.915E-07	1.957E-07	2.800E+01	1.493E-05	7.465E-06	3.000E+01	1.364E-04	6.820E-05
3.500E+01	8.342E-03	4.171E-03	4.000E+01	4.375E-02	2.187E-02	4.500E+01	9.332E-02
4.666E-02	5.000E+01	1.449E-01	7.245E-02	5.500E+01	1.915E-01	9.575E-02	6.000E+01
2.353E-01	1.177E-01	6.500E+01	2.734E-01	1.367E-01	7.000E+01	3.055E-01	1.527E-01
7.500E+01	3.333E-01	1.666E-01	8.000E+01	3.557E-01	1.779E-01	8.500E+01	3.737E-01
1.868E-01	9.000E+01	3.880E-01	1.940E-01	9.500E+01	3.923E-01	1.961E-01	1.000E+02
3.929E-01	1.965E-01	1.100E+02	3.866E-01	1.933E-01	1.200E+02	3.735E-01	1.867E-01
1.300E+02	3.574E-01	1.787E-01	1.400E+02	3.404E-01	1.702E-01	1.500E+02	3.375E-01
1.688E-01	1.600E+02	3.283E-01	1.641E-01	1.700E+02	3.199E-01	1.600E-01	1.800E+02
3.126E-01	1.563E-01	1.900E+02	3.064E-01	1.532E-01	2.000E+02	3.012E-01	1.506E-01
	1	1	62	149	32		p+Sm149
2.567E+00	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	1.486E-10
7.430E-11	2.200E+01	9.297E-10	4.649E-10	2.400E+01	6.236E-09	3.118E-09	2.600E+01
5.936E-07	2.968E-07	2.800E+01	9.410E-06	4.705E-06	3.000E+01	7.311E-05	3.655E-05
3.500E+01	2.985E-03	1.492E-03	4.000E+01	1.174E-02	5.870E-03	4.500E+01	2.262E-02
1.131E-02	5.000E+01	3.362E-02	1.681E-02	5.500E+01	4.327E-02	2.164E-02	6.000E+01
5.236E-02	2.618E-02	6.500E+01	6.016E-02	3.008E-02	7.000E+01	6.661E-02	3.331E-02
7.500E+01	7.219E-02	3.610E-02	8.000E+01	7.665E-02	3.832E-02	8.500E+01	8.023E-02

4.011E-02	9.000E+01	8.312E-02	4.156E-02	9.500E+01	8.371E-02	4.186E-02	1.000E+02
8.363E-02	4.181E-02	1.100E+02	8.224E-02	4.112E-02	1.200E+02	7.982E-02	3.991E-02
1.300E+02	7.745E-02	3.873E-02	1.400E+02	7.522E-02	3.761E-02	1.500E+02	7.633E-02
3.816E-02	1.600E+02	7.714E-02	3.857E-02	1.700E+02	7.910E-02	3.955E-02	1.800E+02
8.169E-02	4.084E-02	1.900E+02	8.522E-02	4.261E-02	2.000E+02	8.967E-02	4.483E-02
1	1	62	150	31			p+Sm150
4.815E+00	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	6.791E-10
3.395E-10	2.400E+01	4.692E-09	2.346E-09	2.600E+01	3.256E-08	1.628E-08	2.800E+01
4.737E-06	2.368E-06	3.000E+01	5.616E-05	2.808E-05	3.500E+01	4.801E-03	2.400E-03
4.000E+01	3.254E-02	1.627E-02	4.500E+01	7.449E-02	3.725E-02	5.000E+01	1.195E-01
5.975E-02	5.500E+01	1.598E-01	7.990E-02	6.000E+01	1.987E-01	9.935E-02	6.500E+01
2.325E+01	1.163E-01	7.000E+01	2.670E-01	1.335E-01	7.500E+01	2.925E-01	1.462E-01
8.000E+01	3.132E-01	1.566E-01	8.500E+01	3.301E-01	1.651E-01	9.000E+01	3.437E-01
1.719E-01	9.500E+01	3.486E-01	1.743E-01	1.000E+02	3.501E-01	1.751E-01	1.100E+02
3.462E-01	1.731E-01	1.200E+02	3.359E-01	1.679E-01	1.300E+02	3.224E-01	1.612E-01
1.400E+02	3.080E-01	1.540E-01	1.500E+02	2.814E-01	1.407E-01	1.600E+02	2.746E-01
1.373E-01	1.700E+02	2.680E-01	1.340E-01	1.800E+02	2.624E-01	1.312E-01	1.900E+02
2.579E-01	1.290E-01	2.000E+02	2.542E-01	1.271E-01			
1	1	62	152	30			p+Sm152
6.579E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	6.025E-10
3.013E-10	2.600E+01	4.242E-09	2.121E-09	2.800E+01	9.227E-08	4.614E-08	3.000E+01
4.993E-06	2.497E-06	3.500E+01	9.415E-04	4.707E-04	4.000E+01	1.464E-02	7.320E-03
4.500E+01	4.210E-02	2.105E-02	5.000E+01	7.410E-02	3.705E-02	5.500E+01	1.046E-01
5.230E-02	6.000E+01	1.343E-01	6.715E-02	6.500E+01	1.602E-01	8.010E-02	7.000E+01
1.833E-01	9.165E-02	7.500E+01	2.034E-01	1.017E-01	8.000E+01	2.201E-01	1.100E-01
8.500E+01	2.342E-01	1.171E-01	9.000E+01	2.458E-01	1.229E-01	9.500E+01	2.514E-01
1.257E-01	1.000E+02	2.544E-01	1.272E-01	1.100E+02	2.548E-01	1.274E-01	1.200E+02
2.496E-01	1.248E-01	1.300E+02	2.416E-01	1.208E-01	1.400E+02	2.320E-01	1.160E-01
1.500E+02	2.301E-01	1.150E-01	1.600E+02	2.247E-01	1.124E-01	1.700E+02	2.195E-01
1.098E-01	1.800E+02	2.150E-01	1.075E-01	1.900E+02	2.107E-01	1.053E-01	2.000E+02
2.073E-01	1.037E-01						
1	1	62	154	29			p+Sm154
8.467E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	4.479E-10
2.240E-10	2.800E+01	3.221E-09	1.610E-09	3.000E+01	9.119E-08	4.559E-08	3.500E+01
1.319E-04	6.595E-05	4.000E+01	5.567E-03	2.783E-03	4.500E+01	2.302E-02	1.151E-02
5.000E+01	4.592E-02	2.296E-02	5.500E+01	6.965E-02	3.483E-02	6.000E+01	9.271E-02
4.636E-02	6.500E+01	1.133E-01	5.665E-02	7.000E+01	1.319E-01	6.595E-02	7.500E+01
1.481E-01	7.405E-02	8.000E+01	1.619E-01	8.095E-02	8.500E+01	1.738E-01	8.690E-02
9.000E+01	1.837E-01	9.185E-02	9.500E+01	1.892E-01	9.460E-02	1.000E+02	1.928E-01
9.640E-02	1.100E+02	1.953E-01	9.765E-02	1.200E+02	1.932E-01	9.660E-02	1.300E+02
1.882E-01	9.410E-02	1.400E+02	1.817E-01	9.085E-02	1.500E+02	1.745E-01	8.725E-02
1.600E+02	1.703E-01	8.515E-02	1.700E+02	1.663E-01	8.315E-02	1.800E+02	1.624E-01
8.120E-02	1.900E+02	1.589E-01	7.945E-02	2.000E+02	1.560E-01	7.800E-02	
1	1	63	151	32			p+Eu151
1.714E+00	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	1.585E-10
7.925E-11	2.200E+01	9.445E-10	4.722E-10	2.400E+01	6.351E-09	3.176E-09	2.600E+01
8.621E-07	4.310E-07	2.800E+01	1.048E-05	5.240E-06	3.000E+01	7.751E-05	3.875E-05
3.500E+01	2.607E-03	1.303E-03	4.000E+01	9.428E-03	4.714E-03	4.500E+01	1.781E-02
8.905E-03	5.000E+01	2.626E-02	1.313E-02	5.500E+01	3.411E-02	1.706E-02	6.000E+01
4.138E-02	2.069E-02	6.500E+01	4.767E-02	2.383E-02	7.000E+01	5.309E-02	2.654E-02
7.500E+01	5.782E-02	2.891E-02	8.000E+01	6.168E-02	3.084E-02	8.500E+01	6.488E-02
3.244E-02	9.000E+01	6.751E-02	3.376E-02	9.500E+01	6.826E-02	3.413E-02	1.000E+02
6.854E-02	3.427E-02	1.100E+02	6.806E-02	3.403E-02	1.200E+02	6.702E-02	3.351E-02
1.300E+02	6.566E-02	3.283E-02	1.400E+02	6.464E-02	3.232E-02	1.500E+02	6.408E-02
3.204E-02	1.600E+02	6.622E-02	3.311E-02	1.700E+02	6.967E-02	3.483E-02	1.800E+02
7.368E-02	3.684E-02	1.900E+02	7.836E-02	3.918E-02	2.000E+02	8.383E-02	4.192E-02
1	1	63	153	30			p+Eu153
3.727E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	6.713E-10
3.357E-10	2.600E+01	4.621E-09	2.310E-09	2.800E+01	6.749E-07	3.374E-07	3.000E+01
8.263E-06	4.132E-06	3.500E+01	7.302E-04	3.651E-04	4.000E+01	4.838E-03	2.419E-03
4.500E+01	1.080E-02	5.400E-03	5.000E+01	1.715E-02	8.575E-03	5.500E+01	2.351E-02
1.175E-02	6.000E+01	2.930E-02	1.465E-02	6.500E+01	3.433E-02	1.716E-02	7.000E+01
3.796E-02	1.898E-02	7.500E+01	4.175E-02	2.088E-02	8.000E+01	4.491E-02	2.245E-02
8.500E+01	4.759E-02	2.380E-02	9.000E+01	4.980E-02	2.490E-02	9.500E+01	5.067E-02
2.533E-02	1.000E+02	5.111E-02	2.556E-02	1.100E+02	5.104E-02	2.552E-02	1.200E+02
5.025E-02	2.513E-02	1.300E+02	4.921E-02	2.460E-02	1.400E+02	4.828E-02	2.414E-02

1.500E+02	4.943E-02	2.472E-02	1.600E+02	5.055E-02	2.527E-02	1.700E+02	5.237E-02
2.618E-02	1.800E+02	5.500E-02	2.750E-02	1.900E+02	5.843E-02	2.922E-02	2.000E+02
6.185E-02	3.093E-02						
1	1	64	152	32			p+Gd152
3.760E+00	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	2.000E+01	1.818E-10
6.906E-11	2.200E+01	1.901E-09	5.393E-10	2.400E+01	8.174E-09	4.087E-09	2.600E+01
7.299E-08	3.649E-08	2.800E+01	7.659E-06	3.830E-06	3.000E+01	7.326E-05	3.663E-05
3.500E+01	5.704E-03	2.852E-03	4.000E+01	3.784E-02	1.892E-02	4.500E+01	8.613E-02
4.306E-02	5.000E+01	1.378E-01	6.890E-02	5.500E+01	1.840E-01	9.200E-02	6.000E+01
2.286E-01	1.143E-01	6.500E+01	2.672E-01	1.336E-01	7.000E+01	3.071E-01	1.535E-01
7.500E+01	3.363E-01	1.681E-01	8.000E+01	3.600E-01	1.800E-01	8.500E+01	3.794E-01
1.897E-01	9.000E+01	3.949E-01	1.974E-01	9.500E+01	4.001E-01	2.001E-01	1.000E+02
4.015E-01	2.008E-01	1.100E+02	3.962E-01	1.981E-01	1.200E+02	3.838E-01	1.919E-01
1.300E+02	3.682E-01	1.841E-01	1.400E+02	3.516E-01	1.758E-01	1.500E+02	3.206E-01
1.603E-01	1.600E+02	3.136E-01	1.568E-01	1.700E+02	3.076E-01	1.538E-01	1.800E+02
3.022E-01	1.511E-01	1.900E+02	2.989E-01	1.494E-01	2.000E+02	2.961E-01	1.480E-01
1	1	64	154	31			p+Gd154
5.357E+00	0.000E+00	0.000E+00	2.000E+01	0.000E+00	0.000E+00	2.200E+01	1.685E-10
8.425E-11	2.400E+01	1.083E-09	5.415E-10	2.600E+01	7.444E-09	3.722E-09	2.800E+01
2.661E-07	1.330E-07	3.000E+01	8.944E-06	4.472E-06	3.500E+01	1.361E-03	6.805E-04
4.000E+01	1.836E-02	9.180E-03	4.500E+01	5.096E-02	2.548E-02	5.000E+01	8.848E-02
4.424E-02	5.500E+01	1.246E-01	6.230E-02	6.000E+01	1.591E-01	7.955E-02	6.500E+01
1.894E-01	9.470E-02	7.000E+01	2.208E-01	1.104E-01	7.500E+01	2.445E-01	1.222E-01
8.000E+01	2.642E-01	1.321E-01	8.500E+01	2.808E-01	1.404E-01	9.000E+01	2.943E-01
1.472E-01	9.500E+01	3.004E-01	1.502E-01	1.000E+02	3.035E-01	1.517E-01	1.100E+02
3.030E-01	1.515E-01	1.200E+02	2.961E-01	1.480E-01	1.300E+02	2.858E-01	1.429E-01
1.400E+02	2.741E-01	1.371E-01	1.500E+02	2.619E-01	1.310E-01	1.600E+02	2.561E-01
1.280E-01	1.700E+02	2.509E-01	1.255E-01	1.800E+02	2.467E-01	1.234E-01	1.900E+02
2.426E-01	1.213E-01	2.000E+02	2.399E-01	1.200E-01			
1	1	64	155	30			p+Gd155
4.516E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	2.871E-10
1.436E-10	2.600E+01	1.805E-09	9.025E-10	2.800E+01	5.466E-08	2.733E-08	3.000E+01
2.453E-06	1.227E-06	3.500E+01	3.495E-04	1.747E-04	4.000E+01	4.152E-03	2.076E-03
4.500E+01	1.074E-02	5.370E-03	5.000E+01	1.803E-02	9.015E-03	5.500E+01	2.519E-02
1.260E-02	6.000E+01	3.185E-02	1.593E-02	6.500E+01	3.762E-02	1.881E-02	7.000E+01
4.178E-02	2.089E-02	7.500E+01	4.607E-02	2.303E-02	8.000E+01	4.963E-02	2.482E-02
8.500E+01	5.261E-02	2.630E-02	9.000E+01	5.504E-02	2.752E-02	9.500E+01	5.600E-02
2.800E-02	1.000E+02	5.644E-02	2.822E-02	1.100E+02	5.623E-02	2.812E-02	1.200E+02
5.514E-02	2.757E-02	1.300E+02	5.369E-02	2.685E-02	1.400E+02	5.248E-02	2.624E-02
1.500E+02	5.088E-02	2.544E-02	1.600E+02	5.178E-02	2.589E-02	1.700E+02	5.289E-02
2.644E-02	1.800E+02	5.480E-02	2.740E-02	1.900E+02	5.720E-02	2.860E-02	2.000E+02
6.069E-02	3.035E-02						
1	1	64	156	29			p+Gd156
7.468E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	6.437E-10
3.218E-10	2.800E+01	4.447E-09	2.224E-09	3.000E+01	1.660E-07	8.300E-08	3.500E+01
1.598E-04	7.990E-05	4.000E+01	6.354E-03	3.177E-03	4.500E+01	2.604E-02	1.302E-02
5.000E+01	5.218E-02	2.609E-02	5.500E+01	7.911E-02	3.955E-02	6.000E+01	1.052E-01
5.260E-02	6.500E+01	1.285E-01	6.425E-02	7.000E+01	1.496E-01	7.480E-02	7.500E+01
1.679E-01	8.395E-02	8.000E+01	1.835E-01	9.175E-02	8.500E+01	1.969E-01	9.845E-02
9.000E+01	2.080E-01	1.040E-01	9.500E+01	2.141E-01	1.071E-01	1.000E+02	2.179E-01
1.090E-01	1.100E+02	2.203E-01	1.101E-01	1.200E+02	2.175E-01	1.087E-01	1.300E+02
2.116E-01	1.058E-01	1.400E+02	2.041E-01	1.021E-01	1.500E+02	1.957E-01	9.785E-02
1.600E+02	1.914E-01	9.570E-02	1.700E+02	1.873E-01	9.365E-02	1.800E+02	1.834E-01
9.170E-02	1.900E+02	1.800E-01	9.000E-02	2.000E+02	1.772E-01	8.860E-02	
1	1	64	157	29			p+Gd157
5.955E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	3.519E-10
1.759E-10	2.800E+01	2.422E-09	1.211E-09	3.000E+01	2.522E-07	1.261E-07	3.500E+01
8.478E-05	4.239E-05	4.000E+01	2.134E-03	1.067E-03	4.500E+01	6.856E-03	3.428E-03
5.000E+01	1.254E-02	6.270E-03	5.500E+01	1.828E-02	9.140E-03	6.000E+01	2.366E-02
1.183E-02	6.500E+01	2.839E-02	1.419E-02	7.000E+01	3.195E-02	1.597E-02	7.500E+01
3.554E-02	1.777E-02	8.000E+01	3.856E-02	1.928E-02	8.500E+01	4.111E-02	2.056E-02
9.000E+01	4.321E-02	2.160E-02	9.500E+01	4.418E-02	2.209E-02	1.000E+02	4.470E-02
2.235E-02	1.100E+02	4.476E-02	2.238E-02	1.200E+02	4.390E-02	2.195E-02	1.300E+02
4.259E-02	2.130E-02	1.400E+02	4.118E-02	2.059E-02	1.500E+02	3.964E-02	1.982E-02
1.600E+02	3.941E-02	1.971E-02	1.700E+02	3.944E-02	1.972E-02	1.800E+02	4.000E-02
2.000E-02	1.900E+02	4.100E-02	2.050E-02	2.000E+02	4.232E-02	2.116E-02	

	1	1	64	158	29			p+Gd158
7.966E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	3.658E-10	
1.829E-10	2.800E+01	2.372E-09	1.186E-09	3.000E+01	1.696E-08	8.480E-09	3.500E+01	
8.891E-05	4.446E-05	4.000E+01	4.621E-03	2.311E-03	4.500E+01	2.158E-02	1.079E-02	
5.000E+01	4.478E-02	2.239E-02	5.500E+01	6.907E-02	3.454E-02	6.000E+01	9.278E-02	
4.639E-02	6.500E+01	1.140E-01	5.700E-02	7.000E+01	1.334E-01	6.670E-02	7.500E+01	
1.502E-01	7.510E-02	8.000E+01	1.646E-01	8.230E-02	8.500E+01	1.770E-01	8.850E-02	
9.000E+01	1.873E-01	9.365E-02	9.500E+01	1.932E-01	9.660E-02	1.000E+02	1.971E-01	
9.855E-02	1.100E+02	1.999E-01	9.995E-02	1.200E+02	1.979E-01	9.895E-02	1.300E+02	
1.929E-01	9.645E-02	1.400E+02	1.862E-01	9.310E-02	1.500E+02	1.786E-01	8.930E-02	
1.600E+02	1.742E-01	8.710E-02	1.700E+02	1.695E-01	8.475E-02	1.800E+02	1.649E-01	
8.245E-02	1.900E+02	1.606E-01	8.030E-02	2.000E+02	1.569E-01	7.845E-02		
	1	1	64	160	29			p+Gd160
7.981E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	3.111E-10	
1.555E-10	2.800E+01	2.212E-09	1.106E-09	3.000E+01	1.605E-08	8.025E-09	3.500E+01	
8.693E-05	4.346E-05	4.000E+01	4.427E-03	2.214E-03	4.500E+01	2.025E-02	1.013E-02	
5.000E+01	4.184E-02	2.092E-02	5.500E+01	6.478E-02	3.239E-02	6.000E+01	8.694E-02	
4.347E-02	6.500E+01	1.069E-01	5.345E-02	7.000E+01	1.276E-01	6.380E-02	7.500E+01	
1.436E-01	7.180E-02	8.000E+01	1.575E-01	7.875E-02	8.500E+01	1.694E-01	8.470E-02	
9.000E+01	1.793E-01	8.965E-02	9.500E+01	1.851E-01	9.255E-02	1.000E+02	1.889E-01	
9.445E-02	1.100E+02	1.919E-01	9.595E-02	1.200E+02	1.902E-01	9.510E-02	1.300E+02	
1.856E-01	9.280E-02	1.400E+02	1.793E-01	8.965E-02	1.500E+02	1.655E-01	8.275E-02	
1.600E+02	1.612E-01	8.060E-02	1.700E+02	1.567E-01	7.835E-02	1.800E+02	1.520E-01	
7.600E-02	1.900E+02	1.475E-01	7.375E-02	2.000E+02	1.432E-01	7.160E-02		
	1	1	65	159	29			p+Tb159
5.489E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	2.855E-10	
1.427E-10	2.800E+01	1.970E-09	9.850E-10	3.000E+01	2.088E-07	1.044E-07	3.500E+01	
6.914E-05	3.457E-05	4.000E+01	1.765E-03	8.825E-04	4.500E+01	5.740E-03	2.870E-03	
5.000E+01	1.051E-02	5.255E-03	5.500E+01	1.502E-02	7.510E-03	6.000E+01	1.952E-02	
9.760E-03	6.500E+01	2.351E-02	1.175E-02	7.000E+01	2.715E-02	1.358E-02	7.500E+01	
3.028E-02	1.514E-02	8.000E+01	3.296E-02	1.648E-02	8.500E+01	3.527E-02	1.764E-02	
9.000E+01	3.717E-02	1.859E-02	9.500E+01	3.812E-02	1.906E-02	1.000E+02	3.868E-02	
1.934E-02	1.100E+02	3.891E-02	1.946E-02	1.200E+02	3.830E-02	1.915E-02	1.300E+02	
3.725E-02	1.862E-02	1.400E+02	3.610E-02	1.805E-02	1.500E+02	3.488E-02	1.744E-02	
1.600E+02	3.481E-02	1.741E-02	1.700E+02	3.511E-02	1.756E-02	1.800E+02	3.574E-02	
1.787E-02	1.900E+02	3.667E-02	1.834E-02	2.000E+02	3.814E-02	1.907E-02		
	1	1	66	156	38			p+Dy156
4.241E+00	0.000E+00	0.000E+00	1.300E+01	0.000E+00	0.000E+00	1.400E+01	1.363E-10	
3.635E-12	1.500E+01	2.559E-10	7.181E-12	1.600E+01	1.952E-10	5.047E-12	1.700E+01	
1.521E-10	1.662E-12	1.800E+01	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00	
2.000E+01	0.000E+00	0.000E+00	2.200E+01	3.857E-10	1.507E-10	2.400E+01	3.600E-09	
1.175E-09	2.600E+01	1.412E-08	7.060E-09	2.800E+01	5.438E-07	2.719E-07	3.000E+01	
1.511E-05	7.555E-06	3.500E+01	1.912E-03	9.560E-04	4.000E+01	2.305E-02	1.153E-02	
4.500E+01	6.231E-02	3.115E-02	5.000E+01	1.073E-01	5.365E-02	5.500E+01	1.518E-01	
7.590E-02	6.000E+01	1.933E-01	9.665E-02	6.500E+01	2.294E-01	1.147E-01	7.000E+01	
2.559E-01	1.280E-01	7.500E+01	2.829E-01	1.414E-01	8.000E+01	3.054E-01	1.527E-01	
8.500E+01	3.241E-01	1.620E-01	9.000E+01	3.394E-01	1.697E-01	9.500E+01	3.458E-01	
1.729E-01	1.000E+02	3.487E-01	1.744E-01	1.100E+02	3.471E-01	1.736E-01	1.200E+02	
3.384E-01	1.692E-01	1.300E+02	3.260E-01	1.630E-01	1.400E+02	3.126E-01	1.563E-01	
1.500E+02	2.984E-01	1.492E-01	1.600E+02	2.929E-01	1.464E-01	1.700E+02	2.882E-01	
1.441E-01	1.800E+02	2.846E-01	1.423E-01	1.900E+02	2.818E-01	1.409E-01	2.000E+02	
2.806E-01	1.403E-01							
	1	1	66	158	30			p+Dy158
6.037E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	2.505E-10	
1.253E-10	2.600E+01	1.566E-09	7.830E-10	2.800E+01	1.026E-08	5.130E-09	3.000E+01	
7.249E-07	3.625E-07	3.500E+01	3.173E-04	1.587E-04	4.000E+01	9.563E-03	4.782E-03	
4.500E+01	3.546E-02	1.773E-02	5.000E+01	6.825E-02	3.413E-02	5.500E+01	1.013E-01	
5.065E-02	6.000E+01	1.334E-01	6.670E-02	6.500E+01	1.617E-01	8.085E-02	7.000E+01	
1.912E-01	9.560E-02	7.500E+01	2.138E-01	1.069E-01	8.000E+01	2.328E-01	1.164E-01	
8.500E+01	2.491E-01	1.245E-01	9.000E+01	2.624E-01	1.312E-01	9.500E+01	2.693E-01	
1.346E-01	1.000E+02	2.732E-01	1.366E-01	1.100E+02	2.748E-01	1.374E-01	1.200E+02	
2.700E-01	1.350E-01	1.300E+02	2.616E-01	1.308E-01	1.400E+02	2.515E-01	1.258E-01	
1.500E+02	2.408E-01	1.204E-01	1.600E+02	2.359E-01	1.179E-01	1.700E+02	2.307E-01	
1.153E-01	1.800E+02	2.262E-01	1.131E-01	1.900E+02	2.226E-01	1.113E-01	2.000E+02	
2.199E-01	1.100E-01							
	1	1	66	160	30			p+Dy160

6.455E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.399E-10
6.995E-11	2.600E+01	9.322E-10	4.661E-10	2.800E+01	6.283E-09	3.141E-09	3.000E+01
3.218E-07	1.609E-07	3.500E+01	2.058E-04	1.029E-04	4.000E+01	7.461E-03	3.730E-03
4.500E+01	2.976E-02	1.488E-02	5.000E+01	5.915E-02	2.958E-02	5.500E+01	8.905E-02
4.453E-02	6.000E+01	1.182E-01	5.910E-02	6.500E+01	1.440E-01	7.200E-02	7.000E+01
1.710E-01	8.550E-02	7.500E+01	1.917E-01	9.585E-02	8.000E+01	2.093E-01	1.047E-01
8.500E+01	2.244E-01	1.122E-01	9.000E+01	2.368E-01	1.184E-01	9.500E+01	2.435E-01
1.217E-01	1.000E+02	2.476E-01	1.238E-01	1.100E+02	2.498E-01	1.249E-01	1.200E+02
2.460E-01	1.230E-01	1.300E+02	2.387E-01	1.193E-01	1.400E+02	2.295E-01	1.148E-01
1.500E+02	2.191E-01	1.095E-01	1.600E+02	2.134E-01	1.067E-01	1.700E+02	2.076E-01
1.038E-01	1.800E+02	2.019E-01	1.009E-01	1.900E+02	1.969E-01	9.845E-02	2.000E+02
1.925E-01	9.625E-02						
1	1	66	161	29			p+Dy161
4.747E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	6.212E-10
3.106E-10	2.800E+01	4.158E-09	2.079E-09	3.000E+01	5.699E-07	2.850E-07	3.500E+01
1.303E-04	6.515E-05	4.000E+01	2.680E-03	1.340E-03	4.500E+01	8.131E-03	4.065E-03
5.000E+01	1.460E-02	7.300E-03	5.500E+01	2.100E-02	1.050E-02	6.000E+01	2.705E-02
1.353E-02	6.500E+01	3.236E-02	1.618E-02	7.000E+01	3.713E-02	1.857E-02	7.500E+01
4.119E-02	2.059E-02	8.000E+01	4.463E-02	2.232E-02	8.500E+01	4.754E-02	2.377E-02
9.000E+01	4.989E-02	2.494E-02	9.500E+01	5.093E-02	2.547E-02	1.000E+02	5.145E-02
2.573E-02	1.100E+02	5.134E-02	2.567E-02	1.200E+02	5.016E-02	2.508E-02	1.300E+02
4.846E-02	2.423E-02	1.400E+02	4.658E-02	2.329E-02	1.500E+02	4.459E-02	2.229E-02
1.600E+02	4.388E-02	2.194E-02	1.700E+02	4.345E-02	2.173E-02	1.800E+02	4.330E-02
2.165E-02	1.900E+02	4.381E-02	2.191E-02	2.000E+02	4.450E-02	2.225E-02	
1	1	66	162	30			p+Dy162
6.616E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.075E-10
5.375E-11	2.600E+01	7.254E-10	3.627E-10	2.800E+01	4.957E-09	2.479E-09	3.000E+01
1.954E-07	9.770E-08	3.500E+01	1.699E-04	8.495E-05	4.000E+01	6.588E-03	3.294E-03
4.500E+01	2.704E-02	1.352E-02	5.000E+01	5.394E-02	2.697E-02	5.500E+01	8.200E-02
4.100E-02	6.000E+01	1.090E-01	5.450E-02	6.500E+01	1.333E-01	6.665E-02	7.000E+01
1.553E-01	7.765E-02	7.500E+01	1.742E-01	8.710E-02	8.000E+01	1.906E-01	9.530E-02
8.500E+01	2.045E-01	1.022E-01	9.000E+01	2.161E-01	1.080E-01	9.500E+01	2.225E-01
1.113E-01	1.000E+02	2.265E-01	1.133E-01	1.100E+02	2.290E-01	1.145E-01	1.200E+02
2.261E-01	1.130E-01	1.300E+02	2.197E-01	1.099E-01	1.400E+02	2.115E-01	1.057E-01
1.500E+02	2.024E-01	1.012E-01	1.600E+02	1.968E-01	9.840E-02	1.700E+02	1.911E-01
9.555E-02	1.800E+02	1.854E-01	9.270E-02	1.900E+02	1.802E-01	9.010E-02	2.000E+02
1.751E-01	8.755E-02						
1	1	66	163	29			p+Dy163
5.434E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	2.904E-10
1.452E-10	2.800E+01	1.981E-09	9.905E-10	3.000E+01	1.175E-07	5.875E-08	3.500E+01
6.019E-05	3.009E-05	4.000E+01	1.843E-03	9.215E-04	4.500E+01	6.419E-03	3.210E-03
5.000E+01	1.200E-02	6.000E-03	5.500E+01	1.755E-02	8.775E-03	6.000E+01	2.283E-02
1.141E-02	6.500E+01	2.755E-02	1.378E-02	7.000E+01	3.117E-02	1.558E-02	7.500E+01
3.473E-02	1.736E-02	8.000E+01	3.779E-02	1.889E-02	8.500E+01	4.038E-02	2.019E-02
9.000E+01	4.250E-02	2.125E-02	9.500E+01	4.353E-02	2.176E-02	1.000E+02	4.410E-02
2.205E-02	1.100E+02	4.422E-02	2.211E-02	1.200E+02	4.339E-02	2.169E-02	1.300E+02
4.200E-02	2.100E-02	1.400E+02	4.039E-02	2.020E-02	1.500E+02	4.016E-02	2.008E-02
1.600E+02	3.937E-02	1.969E-02	1.700E+02	3.871E-02	1.936E-02	1.800E+02	3.826E-02
1.913E-02	1.900E+02	3.800E-02	1.900E-02	2.000E+02	3.811E-02	1.905E-02	
1	1	66	164	29			p+Dy164
7.287E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	3.284E-10
1.642E-10	2.800E+01	2.282E-09	1.141E-09	3.000E+01	1.992E-08	9.960E-09	3.500E+01
7.525E-05	3.762E-05	4.000E+01	4.184E-03	2.092E-03	4.500E+01	2.056E-02	1.028E-02
5.000E+01	4.341E-02	2.170E-02	5.500E+01	6.718E-02	3.359E-02	6.000E+01	9.051E-02
4.525E-02	6.500E+01	1.117E-01	5.585E-02	7.000E+01	1.311E-01	6.555E-02	7.500E+01
1.478E-01	7.390E-02	8.000E+01	1.623E-01	8.115E-02	8.500E+01	1.748E-01	8.740E-02
9.000E+01	1.852E-01	9.260E-02	9.500E+01	1.913E-01	9.565E-02	1.000E+02	1.954E-01
9.770E-02	1.100E+02	1.987E-01	9.935E-02	1.200E+02	1.971E-01	9.855E-02	1.300E+02
1.923E-01	9.615E-02	1.400E+02	1.857E-01	9.285E-02	1.500E+02	1.847E-01	9.235E-02
1.600E+02	1.798E-01	8.990E-02	1.700E+02	1.747E-01	8.735E-02	1.800E+02	1.693E-01
8.465E-02	1.900E+02	1.642E-01	8.210E-02	2.000E+02	1.592E-01	7.960E-02	
1	1	67	165	29			p+Ho165
4.847E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	2.518E-10
1.259E-10	2.800E+01	1.718E-09	8.590E-10	3.000E+01	1.507E-07	7.535E-08	3.500E+01
5.829E-05	2.914E-05	4.000E+01	1.629E-03	8.145E-04	4.500E+01	5.511E-03	2.756E-03
5.000E+01	1.024E-02	5.120E-03	5.500E+01	1.497E-02	7.485E-03	6.000E+01	1.951E-02

9.755E-03	6.500E+01	2.359E-02	1.179E-02	7.000E+01	2.786E-02	1.393E-02	7.500E+01
3.110E-02	1.555E-02	8.000E+01	3.392E-02	1.696E-02	8.500E+01	3.632E-02	1.816E-02
9.000E+01	3.831E-02	1.915E-02	9.500E+01	3.933E-02	1.966E-02	1.000E+02	3.994E-02
1.997E-02	1.100E+02	4.022E-02	2.011E-02	1.200E+02	3.959E-02	1.980E-02	1.300E+02
3.845E-02	1.922E-02	1.400E+02	3.708E-02	1.854E-02	1.500E+02	3.564E-02	1.782E-02
1.600E+02	3.507E-02	1.753E-02	1.700E+02	3.472E-02	1.736E-02	1.800E+02	3.449E-02
1.724E-02	1.900E+02	3.459E-02	1.730E-02	2.000E+02	3.500E-02	1.750E-02	
	1	1	68	162	30		p+Er162
4.756E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	4.611E-10
2.305E-10	2.600E+01	2.831E-09	1.415E-09	2.800E+01	1.819E-08	9.095E-09	3.000E+01
1.889E-06	9.445E-07	3.500E+01	5.089E-04	2.544E-04	4.000E+01	1.246E-02	6.230E-03
4.500E+01	4.272E-02	2.136E-02	5.000E+01	8.023E-02	4.011E-02	5.500E+01	1.171E-01
5.855E-02	6.000E+01	1.529E-01	7.645E-02	6.500E+01	1.846E-01	9.230E-02	7.000E+01
2.132E-01	1.066E-01	7.500E+01	2.377E-01	1.188E-01	8.000E+01	2.585E-01	1.293E-01
8.500E+01	2.762E-01	1.381E-01	9.000E+01	2.906E-01	1.453E-01	9.500E+01	2.977E-01
1.489E-01	1.000E+02	3.016E-01	1.508E-01	1.100E+02	3.023E-01	1.512E-01	1.200E+02
2.962E-01	1.481E-01	1.300E+02	2.861E-01	1.431E-01	1.400E+02	2.743E-01	1.371E-01
1.500E+02	2.720E-01	1.360E-01	1.600E+02	2.646E-01	1.323E-01	1.700E+02	2.577E-01
1.288E-01	1.800E+02	2.511E-01	1.255E-01	1.900E+02	2.452E-01	1.226E-01	2.000E+02
2.402E-01	1.201E-01						
	1	1	68	164	30		p+Er164
4.984E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	3.251E-10
1.625E-10	2.600E+01	2.109E-09	1.055E-09	2.800E+01	1.387E-08	6.935E-09	3.000E+01
1.408E-06	7.040E-07	3.500E+01	4.090E-04	2.045E-04	4.000E+01	1.082E-02	5.410E-03
4.500E+01	3.821E-02	1.911E-02	5.000E+01	7.251E-02	3.626E-02	5.500E+01	1.072E-01
5.360E-02	6.000E+01	1.405E-01	7.025E-02	6.500E+01	1.701E-01	8.505E-02	7.000E+01
2.013E-01	1.007E-01	7.500E+01	2.247E-01	1.124E-01	8.000E+01	2.448E-01	1.224E-01
8.500E+01	2.619E-01	1.310E-01	9.000E+01	2.759E-01	1.379E-01	9.500E+01	2.830E-01
1.415E-01	1.000E+02	2.872E-01	1.436E-01	1.100E+02	2.887E-01	1.444E-01	1.200E+02
2.834E-01	1.417E-01	1.300E+02	2.741E-01	1.371E-01	1.400E+02	2.628E-01	1.314E-01
1.500E+02	2.506E-01	1.253E-01	1.600E+02	2.435E-01	1.217E-01	1.700E+02	2.364E-01
1.182E-01	1.800E+02	2.295E-01	1.148E-01	1.900E+02	2.232E-01	1.116E-01	2.000E+02
2.176E-01	1.088E-01						
	1	1	68	166	30		p+Er166
5.604E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.554E-10
7.770E-11	2.600E+01	1.025E-09	5.125E-10	2.800E+01	6.842E-09	3.421E-09	3.000E+01
3.623E-07	1.812E-07	3.500E+01	2.153E-04	1.077E-04	4.000E+01	7.591E-03	3.795E-03
4.500E+01	3.028E-02	1.514E-02	5.000E+01	5.993E-02	2.996E-02	5.500E+01	9.013E-02
4.507E-02	6.000E+01	1.195E-01	5.975E-02	6.500E+01	1.460E-01	7.300E-02	7.000E+01
1.701E-01	8.505E-02	7.500E+01	1.907E-01	9.535E-02	8.000E+01	2.086E-01	1.043E-01
8.500E+01	2.238E-01	1.119E-01	9.000E+01	2.364E-01	1.182E-01	9.500E+01	2.433E-01
1.216E-01	1.000E+02	2.476E-01	1.238E-01	1.100E+02	2.501E-01	1.250E-01	1.200E+02
2.467E-01	1.234E-01	1.300E+02	2.394E-01	1.197E-01	1.400E+02	2.301E-01	1.150E-01
1.500E+02	2.282E-01	1.141E-01	1.600E+02	2.219E-01	1.109E-01	1.700E+02	2.153E-01
1.076E-01	1.800E+02	2.088E-01	1.044E-01	1.900E+02	2.026E-01	1.013E-01	2.000E+02
1.971E-01	9.855E-02						
	1	1	68	167	29		p+Er167
4.336E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	4.299E-10
2.149E-10	2.800E+01	2.848E-09	1.424E-09	3.000E+01	2.902E-07	1.451E-07	3.500E+01
8.813E-05	4.406E-05	4.000E+01	2.224E-03	1.112E-03	4.500E+01	7.294E-03	3.647E-03
5.000E+01	1.348E-02	6.740E-03	5.500E+01	1.991E-02	9.955E-03	6.000E+01	2.580E-02
1.290E-02	6.500E+01	3.110E-02	1.555E-02	7.000E+01	3.584E-02	1.792E-02	7.500E+01
3.987E-02	1.994E-02	8.000E+01	4.336E-02	2.168E-02	8.500E+01	4.630E-02	2.315E-02
9.000E+01	4.868E-02	2.434E-02	9.500E+01	4.982E-02	2.491E-02	1.000E+02	5.044E-02
2.522E-02	1.100E+02	5.050E-02	2.525E-02	1.200E+02	4.947E-02	2.474E-02	1.300E+02
4.783E-02	2.391E-02	1.400E+02	4.596E-02	2.298E-02	1.500E+02	4.231E-02	2.116E-02
1.600E+02	4.156E-02	2.078E-02	1.700E+02	4.089E-02	2.045E-02	1.800E+02	4.048E-02
2.024E-02	1.900E+02	4.029E-02	2.014E-02	2.000E+02	4.043E-02	2.022E-02	
	1	1	68	168	30		p+Er168
5.831E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.124E-10
5.620E-11	2.600E+01	7.505E-10	3.753E-10	2.800E+01	5.083E-09	2.541E-09	3.000E+01
2.298E-07	1.149E-07	3.500E+01	1.683E-04	8.415E-05	4.000E+01	6.271E-03	3.135E-03
4.500E+01	2.643E-02	1.321E-02	5.000E+01	5.324E-02	2.662E-02	5.500E+01	8.239E-02
4.120E-02	6.000E+01	1.095E-01	5.475E-02	6.500E+01	1.344E-01	6.720E-02	7.000E+01
1.537E-01	7.685E-02	7.500E+01	1.726E-01	8.630E-02	8.000E+01	1.892E-01	9.460E-02
8.500E+01	2.033E-01	1.017E-01	9.000E+01	2.149E-01	1.075E-01	9.500E+01	2.215E-01

1.108E-01	1.000E+02	2.258E-01	1.129E-01	1.100E+02	2.287E-01	1.143E-01	1.200E+02
2.261E-01	1.130E-01	1.300E+02	2.199E-01	1.100E-01	1.400E+02	2.118E-01	1.059E-01
1.500E+02	2.105E-01	1.052E-01	1.600E+02	2.047E-01	1.023E-01	1.700E+02	1.986E-01
9.930E-02	1.800E+02	1.924E-01	9.620E-02	1.900E+02	1.863E-01	9.315E-02	2.000E+02
1.805E-01	9.025E-02						
1	1	68	170	29			p+Er170
6.551E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	3.007E-10
1.504E-10	2.800E+01	2.063E-09	1.032E-09	3.000E+01	1.428E-08	7.140E-09	3.500E+01
7.186E-05	3.593E-05	4.000E+01	3.928E-03	1.964E-03	4.500E+01	1.959E-02	9.795E-03
5.000E+01	4.171E-02	2.085E-02	5.500E+01	6.555E-02	3.277E-02	6.000E+01	8.836E-02
4.418E-02	6.500E+01	1.096E-01	5.480E-02	7.000E+01	1.288E-01	6.440E-02	7.500E+01
1.454E-01	7.270E-02	8.000E+01	1.600E-01	8.000E-02	8.500E+01	1.724E-01	8.620E-02
9.000E+01	1.829E-01	9.145E-02	9.500E+01	1.892E-01	9.460E-02	1.000E+02	1.934E-01
9.670E-02	1.100E+02	1.970E-01	9.850E-02	1.200E+02	1.957E-01	9.785E-02	1.300E+02
1.912E-01	9.560E-02	1.400E+02	1.849E-01	9.245E-02	1.500E+02	1.775E-01	8.875E-02
1.600E+02	1.731E-01	8.655E-02	1.700E+02	1.681E-01	8.405E-02	1.800E+02	1.630E-01
8.150E-02	1.900E+02	1.579E-01	7.895E-02	2.000E+02	1.530E-01	7.650E-02	
1	1	69	169	29			p+Tm169
3.395E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	6.197E-10
3.099E-10	2.800E+01	4.138E-09	2.069E-09	3.000E+01	6.451E-07	3.225E-07	3.500E+01
1.122E-04	5.610E-05	4.000E+01	2.271E-03	1.136E-03	4.500E+01	6.925E-03	3.462E-03
5.000E+01	1.243E-02	6.215E-03	5.500E+01	1.792E-02	8.960E-03	6.000E+01	2.309E-02
1.154E-02	6.500E+01	2.777E-02	1.388E-02	7.000E+01	3.266E-02	1.633E-02	7.500E+01
3.634E-02	1.817E-02	8.000E+01	3.955E-02	1.978E-02	8.500E+01	4.225E-02	2.113E-02
9.000E+01	4.448E-02	2.224E-02	9.500E+01	4.558E-02	2.279E-02	1.000E+02	4.620E-02
2.310E-02	1.100E+02	4.636E-02	2.318E-02	1.200E+02	4.551E-02	2.276E-02	1.300E+02
4.408E-02	2.204E-02	1.400E+02	4.246E-02	2.123E-02	1.500E+02	4.074E-02	2.037E-02
1.600E+02	4.004E-02	2.002E-02	1.700E+02	3.959E-02	1.980E-02	1.800E+02	3.948E-02
1.974E-02	1.900E+02	3.957E-02	1.979E-02	2.000E+02	4.004E-02	2.002E-02	
1	1	70	168	30			p+Yb168
4.033E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	4.682E-10
2.341E-10	2.600E+01	2.800E-09	1.400E-09	2.800E+01	1.783E-08	8.915E-09	3.000E+01
2.007E-06	1.004E-06	3.500E+01	4.872E-04	2.436E-04	4.000E+01	1.175E-02	5.875E-03
4.500E+01	4.138E-02	2.069E-02	5.000E+01	7.850E-02	3.925E-02	5.500E+01	1.170E-01
5.850E-02	6.000E+01	1.529E-01	7.645E-02	6.500E+01	1.853E-01	9.265E-02	7.000E+01
2.101E-01	1.051E-01	7.500E+01	2.345E-01	1.172E-01	8.000E+01	2.556E-01	1.278E-01
8.500E+01	2.734E-01	1.367E-01	9.000E+01	2.880E-01	1.440E-01	9.500E+01	2.954E-01
1.477E-01	1.000E+02	2.997E-01	1.499E-01	1.100E+02	3.010E-01	1.505E-01	1.200E+02
2.953E-01	1.477E-01	1.300E+02	2.854E-01	1.427E-01	1.400E+02	2.735E-01	1.368E-01
1.500E+02	2.606E-01	1.303E-01	1.600E+02	2.534E-01	1.267E-01	1.700E+02	2.462E-01
1.231E-01	1.800E+02	2.392E-01	1.196E-01	1.900E+02	2.330E-01	1.165E-01	2.000E+02
2.273E-01	1.137E-01						
1	1	70	170	30			p+Yb170
4.288E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	3.183E-10
1.591E-10	2.600E+01	2.047E-09	1.024E-09	2.800E+01	1.251E-08	6.255E-09	3.000E+01
1.097E-06	5.485E-07	3.500E+01	3.572E-04	1.786E-04	4.000E+01	1.011E-02	5.055E-03
4.500E+01	3.684E-02	1.842E-02	5.000E+01	7.083E-02	3.542E-02	5.500E+01	1.069E-01
5.345E-02	6.000E+01	1.401E-01	7.005E-02	6.500E+01	1.705E-01	8.525E-02	7.000E+01
1.978E-01	9.890E-02	7.500E+01	2.210E-01	1.105E-01	8.000E+01	2.413E-01	1.206E-01
8.500E+01	2.584E-01	1.292E-01	9.000E+01	2.725E-01	1.363E-01	9.500E+01	2.799E-01
1.399E-01	1.000E+02	2.844E-01	1.422E-01	1.100E+02	2.863E-01	1.431E-01	1.200E+02
2.815E-01	1.407E-01	1.300E+02	2.726E-01	1.363E-01	1.400E+02	2.615E-01	1.308E-01
1.500E+02	2.398E-01	1.199E-01	1.600E+02	2.330E-01	1.165E-01	1.700E+02	2.261E-01
1.130E-01	1.800E+02	2.193E-01	1.096E-01	1.900E+02	2.130E-01	1.065E-01	2.000E+02
2.068E-01	1.034E-01						
1	1	70	171	30			p+Yb171
2.906E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.527E-10
7.635E-11	2.600E+01	9.536E-10	4.768E-10	2.800E+01	6.144E-09	3.072E-09	3.000E+01
9.141E-07	4.570E-07	3.500E+01	1.685E-04	8.425E-05	4.000E+01	3.101E-03	1.551E-03
4.500E+01	9.269E-03	4.634E-03	5.000E+01	1.648E-02	8.240E-03	5.500E+01	2.397E-02
1.199E-02	6.000E+01	3.072E-02	1.536E-02	6.500E+01	3.687E-02	1.843E-02	7.000E+01
4.230E-02	2.115E-02	7.500E+01	4.690E-02	2.345E-02	8.000E+01	5.089E-02	2.544E-02
8.500E+01	5.420E-02	2.710E-02	9.000E+01	5.689E-02	2.845E-02	9.500E+01	5.809E-02
2.905E-02	1.000E+02	5.870E-02	2.935E-02	1.100E+02	5.853E-02	2.926E-02	1.200E+02
5.714E-02	2.857E-02	1.300E+02	5.513E-02	2.756E-02	1.400E+02	5.285E-02	2.643E-02
1.500E+02	4.842E-02	2.421E-02	1.600E+02	4.753E-02	2.377E-02	1.700E+02	4.684E-02

2.342E-02	1.800E+02	4.649E-02	2.324E-02	1.900E+02	4.645E-02	2.322E-02	2.000E+02	
4.688E-02	2.344E-02							
1	1	70	172	30				p+Yb172
4.692E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.930E-10	
9.650E-11	2.600E+01	1.185E-09	5.925E-10	2.800E+01	7.812E-09	3.906E-09	3.000E+01	
4.713E-07	2.356E-07	3.500E+01	2.355E-04	1.178E-04	4.000E+01	7.934E-03	3.967E-03	
4.500E+01	3.120E-02	1.560E-02	5.000E+01	6.156E-02	3.078E-02	5.500E+01	9.410E-02	
4.705E-02	6.000E+01	1.243E-01	6.215E-02	6.500E+01	1.522E-01	7.610E-02	7.000E+01	
1.770E-01	8.850E-02	7.500E+01	1.984E-01	9.920E-02	8.000E+01	2.172E-01	1.086E-01	
8.500E+01	2.330E-01	1.165E-01	9.000E+01	2.461E-01	1.231E-01	9.500E+01	2.534E-01	
1.267E-01	1.000E+02	2.580E-01	1.290E-01	1.100E+02	2.606E-01	1.303E-01	1.200E+02	
2.570E-01	1.285E-01	1.300E+02	2.494E-01	1.247E-01	1.400E+02	2.398E-01	1.199E-01	
1.500E+02	2.204E-01	1.102E-01	1.600E+02	2.143E-01	1.071E-01	1.700E+02	2.078E-01	
1.039E-01	1.800E+02	2.015E-01	1.008E-01	1.900E+02	1.952E-01	9.760E-02	2.000E+02	
1.894E-01	9.470E-02							
1	1	70	173	29				p+Yb173
3.773E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	3.661E-10	
1.831E-10	2.800E+01	2.400E-09	1.200E-09	3.000E+01	2.255E-07	1.128E-07	3.500E+01	
6.510E-05	3.255E-05	4.000E+01	1.945E-03	9.725E-04	4.500E+01	6.885E-03	3.442E-03	
5.000E+01	1.296E-02	6.480E-03	5.500E+01	1.918E-02	9.590E-03	6.000E+01	2.496E-02	
1.248E-02	6.500E+01	3.029E-02	1.515E-02	7.000E+01	3.498E-02	1.749E-02	7.500E+01	
3.902E-02	1.951E-02	8.000E+01	4.255E-02	2.127E-02	8.500E+01	4.550E-02	2.275E-02	
9.000E+01	4.792E-02	2.396E-02	9.500E+01	4.913E-02	2.457E-02	1.000E+02	4.983E-02	
2.491E-02	1.100E+02	4.998E-02	2.499E-02	1.200E+02	4.902E-02	2.451E-02	1.300E+02	
4.741E-02	2.371E-02	1.400E+02	4.554E-02	2.277E-02	1.500E+02	4.354E-02	2.177E-02	
1.600E+02	4.263E-02	2.132E-02	1.700E+02	4.182E-02	2.091E-02	1.800E+02	4.121E-02	
2.060E-02	1.900E+02	4.061E-02	2.031E-02	2.000E+02	4.037E-02	2.019E-02		
1	1	70	174	29				p+Yb174
5.395E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	5.485E-10	
2.743E-10	2.800E+01	3.666E-09	1.833E-09	3.000E+01	7.445E-08	3.722E-08	3.500E+01	
1.172E-04	5.860E-05	4.000E+01	5.282E-03	2.641E-03	4.500E+01	2.410E-02	1.205E-02	
5.000E+01	5.024E-02	2.512E-02	5.500E+01	7.852E-02	3.926E-02	6.000E+02	1.052E-01	
5.260E-02	6.500E+01	1.301E-01	6.505E-02	7.000E+01	1.493E-01	7.465E-02	7.500E+01	
1.682E-01	8.410E-02	8.000E+01	1.849E-01	9.245E-02	8.500E+01	1.990E-01	9.950E-02	
9.000E+01	2.108E-01	1.054E-01	9.500E+01	2.177E-01	1.089E-01	1.000E+02	2.223E-01	
1.111E-01	1.100E+02	2.257E-01	1.129E-01	1.200E+02	2.236E-01	1.118E-01	1.300E+02	
2.180E-01	1.090E-01	1.400E+02	2.102E-01	1.051E-01	1.500E+02	2.011E-01	1.006E-01	
1.600E+02	1.957E-01	9.785E-02	1.700E+02	1.899E-01	9.495E-02	1.800E+02	1.841E-01	
9.205E-02	1.900E+02	1.783E-01	8.915E-02	2.000E+02	1.726E-01	8.630E-02		
1	1	70	176	29				p+Yb176
5.763E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	3.353E-10	
1.677E-10	2.800E+01	2.268E-09	1.134E-09	3.000E+01	1.537E-08	7.685E-09	3.500E+01	
7.574E-05	3.787E-05	4.000E+01	4.017E-03	2.008E-03	4.500E+01	2.016E-02	1.008E-02	
5.000E+01	4.298E-02	2.149E-02	5.500E+01	6.788E-02	3.394E-02	6.000E+01	9.153E-02	
4.577E-02	6.500E+01	1.139E-01	5.695E-02	7.000E+01	1.338E-01	6.690E-02	7.500E+01	
1.512E-01	7.560E-02	8.000E+01	1.666E-01	8.330E-02	8.500E+01	1.796E-01	8.980E-02	
9.000E+01	1.906E-01	9.530E-02	9.500E+01	1.972E-01	9.860E-02	1.000E+02	2.017E-01	
1.008E-01	1.100E+02	2.055E-01	1.027E-01	1.200E+02	2.042E-01	1.021E-01	1.300E+02	
1.996E-01	9.980E-02	1.400E+02	1.930E-01	9.650E-02	1.500E+02	1.854E-01	9.270E-02	
1.600E+02	1.806E-01	9.030E-02	1.700E+02	1.753E-01	8.765E-02	1.800E+02	1.699E-01	
8.495E-02	1.900E+02	1.643E-01	8.215E-02	2.000E+02	1.589E-01	7.945E-02		
1	1	71	175	29				p+Lu175
2.739E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	5.666E-10	
2.833E-10	2.800E+01	3.730E-09	1.865E-09	3.000E+01	5.582E-07	2.791E-07	3.500E+01	
1.096E-04	5.480E-05	4.000E+01	2.155E-03	1.077E-03	4.500E+01	6.802E-03	3.401E-03	
5.000E+01	1.236E-02	6.180E-03	5.500E+01	1.786E-02	8.930E-03	6.000E+01	2.307E-02	
1.154E-02	6.500E+01	2.790E-02	1.395E-02	7.000E+01	3.216E-02	1.608E-02	7.500E+01	
3.586E-02	1.793E-02	8.000E+01	3.910E-02	1.955E-02	8.500E+01	4.181E-02	2.090E-02	
9.000E+01	4.407E-02	2.203E-02	9.500E+01	4.522E-02	2.261E-02	1.000E+02	4.589E-02	
2.295E-02	1.100E+02	4.611E-02	2.305E-02	1.200E+02	4.529E-02	2.264E-02	1.300E+02	
4.387E-02	2.193E-02	1.400E+02	4.220E-02	2.110E-02	1.500E+02	4.211E-02	2.106E-02	
1.600E+02	4.130E-02	2.065E-02	1.700E+02	4.065E-02	2.032E-02	1.800E+02	4.022E-02	
2.011E-02	1.900E+02	3.978E-02	1.989E-02	2.000E+02	3.985E-02	1.992E-02		
1	1	71	176	28				p+Lu176
1.764E+00	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	3.932E-10	
1.966E-10	3.000E+01	6.384E-08	3.192E-08	3.500E+01	1.078E-05	5.390E-06	4.000E+01	

1.781E-04	8.905E-05	4.500E+01	4.744E-04	2.372E-04	5.000E+01	7.951E-04	3.975E-04
5.500E+01	1.121E-03	5.605E-04	6.000E+01	1.411E-03	7.055E-04	6.500E+01	1.680E-03
8.400E-04	7.000E+01	1.913E-03	9.565E-04	7.500E+01	2.116E-03	1.058E-03	8.000E+01
2.294E-03	1.147E-03	8.500E+01	2.442E-03	1.221E-03	9.000E+01	2.564E-03	1.282E-03
9.500E+01	2.615E-03	1.308E-03	1.000E+02	2.642E-03	1.321E-03	1.100E+02	2.656E-03
1.328E-03	1.200E+02	2.653E-03	1.326E-03	1.300E+02	2.686E-03	1.343E-03	1.400E+02
2.763E-03	1.381E-03	1.500E+02	2.842E-03	1.421E-03	1.600E+02	3.243E-03	1.621E-03
1.700E+02	3.721E-03	1.860E-03	1.800E+02	4.468E-03	2.234E-03	1.900E+02	5.445E-03
2.723E-03	2.000E+02	6.629E-03	3.315E-03				
	1	1	72	174	30		p+Hf174
3.027E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	6.231E-10
3.116E-10	2.600E+01	3.701E-09	1.850E-09	2.800E+01	2.347E-08	1.174E-08	3.000E+01
3.024E-06	1.512E-06	3.500E+01	5.705E-04	2.853E-04	4.000E+01	1.310E-02	6.550E-03
4.500E+01	4.432E-02	2.216E-02	5.000E+01	8.303E-02	4.152E-02	5.500E+01	1.232E-01
6.160E-02	6.000E+01	1.604E-01	8.020E-02	6.500E+01	1.946E-01	9.730E-02	7.000E+01
2.202E-01	1.101E-01	7.500E+01	2.455E-01	1.227E-01	8.000E+01	2.677E-01	1.338E-01
8.500E+01	2.862E-01	1.431E-01	9.000E+01	3.014E-01	1.507E-01	9.500E+01	3.092E-01
1.546E-01	1.000E+02	3.137E-01	1.568E-01	1.100E+02	3.150E-01	1.575E-01	1.200E+02
3.089E-01	1.545E-01	1.300E+02	2.985E-01	1.492E-01	1.400E+02	2.860E-01	1.430E-01
1.500E+02	2.719E-01	1.359E-01	1.600E+02	2.640E-01	1.320E-01	1.700E+02	2.560E-01
1.280E-01	1.800E+02	2.482E-01	1.241E-01	1.900E+02	2.406E-01	1.203E-01	2.000E+02
2.341E-01	1.171E-01						
	1	1	72	176	30		p+Hf176
3.277E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	4.056E-10
2.028E-10	2.600E+01	2.577E-09	1.289E-09	2.800E+01	1.660E-08	8.300E-09	3.000E+01
1.922E-06	9.610E-07	3.500E+01	4.549E-04	2.274E-04	4.000E+01	1.128E-02	5.640E-03
4.500E+01	3.948E-02	1.974E-02	5.000E+01	7.491E-02	3.746E-02	5.500E+01	1.101E-01
5.505E-02	6.000E+01	1.439E-01	7.195E-02	6.500E+01	1.752E-01	8.760E-02	7.000E+01
2.070E-01	1.035E-01	7.500E+01	2.314E-01	1.157E-01	8.000E+01	2.527E-01	1.263E-01
8.500E+01	2.704E-01	1.352E-01	9.000E+01	2.852E-01	1.426E-01	9.500E+01	2.930E-01
1.465E-01	1.000E+02	2.977E-01	1.489E-01	1.100E+02	2.997E-01	1.499E-01	1.200E+02
2.946E-01	1.473E-01	1.300E+02	2.852E-01	1.426E-01	1.400E+02	2.736E-01	1.368E-01
1.500E+02	2.509E-01	1.255E-01	1.600E+02	2.436E-01	1.218E-01	1.700E+02	2.361E-01
1.181E-01	1.800E+02	2.289E-01	1.144E-01	1.900E+02	2.217E-01	1.109E-01	2.000E+02
2.150E-01	1.075E-01						
	1	1	72	177	30		p+Hf177
2.167E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.554E-10
7.770E-11	2.600E+01	9.622E-10	4.811E-10	2.800E+01	6.148E-09	3.074E-09	3.000E+01
9.700E-07	4.850E-07	3.500E+01	1.494E-04	7.470E-05	4.000E+01	2.929E-03	1.465E-03
4.500E+01	8.979E-03	4.489E-03	5.000E+01	1.612E-02	8.060E-03	5.500E+01	2.335E-02
1.167E-02	6.000E+01	2.997E-02	1.499E-02	6.500E+01	3.613E-02	1.807E-02	7.000E+01
4.146E-02	2.073E-02	7.500E+01	4.608E-02	2.304E-02	8.000E+01	5.008E-02	2.504E-02
8.500E+01	5.340E-02	2.670E-02	9.000E+01	5.613E-02	2.806E-02	9.500E+01	5.740E-02
2.870E-02	1.000E+02	5.808E-02	2.904E-02	1.100E+02	5.803E-02	2.901E-02	1.200E+02
5.673E-02	2.837E-02	1.300E+02	5.474E-02	2.737E-02	1.400E+02	5.252E-02	2.626E-02
1.500E+02	5.007E-02	2.504E-02	1.600E+02	4.905E-02	2.453E-02	1.700E+02	4.812E-02
2.406E-02	1.800E+02	4.755E-02	2.378E-02	1.900E+02	4.725E-02	2.363E-02	2.000E+02
4.698E-02	2.349E-02						
	1	1	72	178	30		p+Hf178
3.565E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	2.741E-10
1.371E-10	2.600E+01	1.773E-09	8.865E-10	2.800E+01	1.159E-08	5.795E-09	3.000E+01
1.158E-06	5.790E-07	3.500E+01	3.381E-04	1.690E-04	4.000E+01	9.172E-03	4.586E-03
4.500E+01	3.332E-02	1.666E-02	5.000E+01	6.441E-02	3.220E-02	5.500E+01	9.728E-02
4.864E-02	6.000E+01	1.278E-01	6.390E-02	6.500E+01	1.564E-01	7.820E-02	7.000E+01
1.777E-01	8.885E-02	7.500E+01	1.992E-01	9.960E-02	8.000E+01	2.180E-01	1.090E-01
8.500E+01	2.337E-01	1.168E-01	9.000E+01	2.469E-01	1.235E-01	9.500E+01	2.543E-01
1.272E-01	1.000E+02	2.589E-01	1.295E-01	1.100E+02	2.616E-01	1.308E-01	1.200E+02
2.580E-01	1.290E-01	1.300E+02	2.506E-01	1.253E-01	1.400E+02	2.410E-01	1.205E-01
1.500E+02	2.300E-01	1.150E-01	1.600E+02	2.235E-01	1.118E-01	1.700E+02	2.166E-01
1.083E-01	1.800E+02	2.098E-01	1.049E-01	1.900E+02	2.030E-01	1.015E-01	2.000E+02
1.966E-01	9.830E-02						
	1	1	72	179	29		p+Hf179
2.709E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	4.738E-10
2.369E-10	2.800E+01	3.076E-09	1.538E-09	3.000E+01	3.555E-07	1.777E-07	3.500E+01
8.971E-05	4.486E-05	4.000E+01	2.142E-03	1.071E-03	4.500E+01	7.059E-03	3.530E-03
5.000E+01	1.310E-02	6.550E-03	5.500E+01	1.911E-02	9.555E-03	6.000E+01	2.480E-02

1.240E-02	6.500E+01	3.011E-02	1.506E-02	7.000E+01	3.474E-02	1.737E-02	7.500E+01
3.878E-02	1.939E-02	8.000E+01	4.231E-02	2.116E-02	8.500E+01	4.524E-02	2.262E-02
9.000E+01	4.770E-02	2.385E-02	9.500E+01	4.894E-02	2.447E-02	1.000E+02	4.966E-02
2.483E-02	1.100E+02	4.987E-02	2.493E-02	1.200E+02	4.895E-02	2.448E-02	1.300E+02
4.737E-02	2.369E-02	1.400E+02	4.551E-02	2.276E-02	1.500E+02	4.514E-02	2.257E-02
1.600E+02	4.408E-02	2.204E-02	1.700E+02	4.314E-02	2.157E-02	1.800E+02	4.228E-02
2.114E-02	1.900E+02	4.167E-02	2.083E-02	2.000E+02	4.132E-02	2.066E-02	
1	1	72	180	30			p+Hf180
4.425E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.012E-10
5.060E-11	2.600E+01	6.633E-10	3.316E-10	2.800E+01	4.392E-09	2.196E-09	3.000E+01
1.764E-07	8.820E-08	3.500E+01	1.270E-04	6.350E-05	4.000E+01	5.380E-03	2.690E-03
4.500E+01	2.408E-02	1.204E-02	5.000E+01	4.959E-02	2.480E-02	5.500E+01	7.786E-02
3.893E-02	6.000E+01	1.041E-01	5.205E-02	6.500E+01	1.290E-01	6.450E-02	7.000E+01
1.478E-01	7.390E-02	7.500E+01	1.668E-01	8.340E-02	8.000E+01	1.835E-01	9.175E-02
8.500E+01	1.975E-01	9.875E-02	9.000E+01	2.095E-01	1.047E-01	9.500E+01	2.165E-01
1.082E-01	1.000E+02	2.212E-01	1.106E-01	1.100E+02	2.251E-01	1.125E-01	1.200E+02
2.233E-01	1.116E-01	1.300E+02	2.178E-01	1.089E-01	1.400E+02	2.103E-01	1.051E-01
1.500E+02	2.090E-01	1.045E-01	1.600E+02	2.035E-01	1.017E-01	1.700E+02	1.975E-01
9.875E-02	1.800E+02	1.912E-01	9.560E-02	1.900E+02	1.850E-01	9.250E-02	2.000E+02
1.790E-01	8.950E-02						
1	1	73	180	29			p+Ta180
4.703E-01	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	1.191E-10
5.955E-11	2.800E+01	3.575E-09	1.788E-09	3.000E+01	1.513E-07	7.565E-08	3.500E+01
1.830E-05	9.150E-06	4.000E+01	2.221E-04	1.111E-04	4.500E+01	5.481E-04	2.741E-04
5.000E+01	9.036E-04	4.518E-04	5.500E+01	1.253E-03	6.265E-04	6.000E+01	1.570E-03
7.850E-04	6.500E+01	1.867E-03	9.335E-04	7.000E+01	2.124E-03	1.062E-03	7.500E+01
2.352E-03	1.176E-03	8.000E+01	2.550E-03	1.275E-03	8.500E+01	2.714E-03	1.357E-03
9.000E+01	2.855E-03	1.427E-03	9.500E+01	2.910E-03	1.455E-03	1.000E+02	2.943E-03
1.471E-03	1.100E+02	2.969E-03	1.484E-03	1.200E+02	2.986E-03	1.493E-03	1.300E+02
3.043E-03	1.522E-03	1.400E+02	3.152E-03	1.576E-03	1.500E+02	3.399E-03	1.700E-03
1.600E+02	3.953E-03	1.976E-03	1.700E+02	4.725E-03	2.363E-03	1.800E+02	5.755E-03
2.877E-03	1.900E+02	6.962E-03	3.481E-03	2.000E+02	8.416E-03	4.208E-03	
1	1	73	181	30			p+Ta181
2.234E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	2.765E-10
1.382E-10	2.600E+01	1.810E-09	9.050E-10	2.800E+01	1.192E-08	5.960E-09	3.000E+01
1.244E-06	6.220E-07	3.500E+01	3.537E-04	1.768E-04	4.000E+01	9.471E-03	4.736E-03
4.500E+01	3.459E-02	1.730E-02	5.000E+01	6.691E-02	3.345E-02	5.500E+01	1.021E-01
5.105E-02	6.000E+01	1.346E-01	6.730E-02	6.500E+01	1.652E-01	8.260E-02	7.000E+01
1.881E-01	9.405E-02	7.500E+01	2.116E-01	1.058E-01	8.000E+01	2.321E-01	1.161E-01
8.500E+01	2.494E-01	1.247E-01	9.000E+01	2.642E-01	1.321E-01	9.500E+01	2.728E-01
1.364E-01	1.000E+02	2.786E-01	1.393E-01	1.100E+02	2.832E-01	1.416E-01	1.200E+02
2.807E-01	1.404E-01	1.300E+02	2.739E-01	1.369E-01	1.400E+02	2.644E-01	1.322E-01
1.500E+02	2.634E-01	1.317E-01	1.600E+02	2.563E-01	1.281E-01	1.700E+02	2.488E-01
1.244E-01	1.800E+02	2.410E-01	1.205E-01	1.900E+02	2.334E-01	1.167E-01	2.000E+02
2.260E-01	1.130E-01						
1	1	74	180	30			p+W180
2.565E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	4.554E-10
2.277E-10	2.600E+01	2.567E-09	1.283E-09	2.800E+01	1.601E-08	8.005E-09	3.000E+01
1.741E-06	8.705E-07	3.500E+01	4.177E-04	2.089E-04	4.000E+01	1.049E-02	5.245E-03
4.500E+01	3.839E-02	1.920E-02	5.000E+01	7.393E-02	3.696E-02	5.500E+01	1.114E-01
5.570E-02	6.000E+01	1.462E-01	7.310E-02	6.500E+01	1.788E-01	8.940E-02	7.000E+01
2.117E-01	1.058E-01	7.500E+01	2.372E-01	1.186E-01	8.000E+01	2.595E-01	1.298E-01
8.500E+01	2.780E-01	1.390E-01	9.000E+01	2.936E-01	1.468E-01	9.500E+01	3.020E-01
1.510E-01	1.000E+02	3.071E-01	1.535E-01	1.100E+02	3.096E-01	1.548E-01	1.200E+02
3.047E-01	1.524E-01	1.300E+02	2.951E-01	1.475E-01	1.400E+02	2.832E-01	1.416E-01
1.500E+02	2.593E-01	1.296E-01	1.600E+02	2.519E-01	1.260E-01	1.700E+02	2.444E-01
1.222E-01	1.800E+02	2.367E-01	1.183E-01	1.900E+02	2.296E-01	1.148E-01	2.000E+02
2.230E-01	1.115E-01						
1	1	74	182	30			p+W182
3.360E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	2.286E-10
1.143E-10	2.600E+01	1.504E-09	7.520E-10	2.800E+01	9.936E-09	4.968E-09	3.000E+01
4.490E-07	2.245E-07	3.500E+01	2.887E-04	1.444E-04	4.000E+01	1.075E-02	5.375E-03
4.500E+01	4.828E-02	2.414E-02	5.000E+01	9.978E-02	4.989E-02	5.500E+01	1.543E-01
7.715E-02	6.000E+01	2.065E-01	1.032E-01	6.500E+01	2.559E-01	1.280E-01	7.000E+01
3.052E-01	1.526E-01	7.500E+01	3.446E-01	1.723E-01	8.000E+01	3.789E-01	1.895E-01
8.500E+01	4.078E-01	2.039E-01	9.000E+01	4.324E-01	2.162E-01	9.500E+01	4.469E-01

2.235E-01	1.000E+02	4.565E-01	2.283E-01	1.100E+02	4.639E-01	2.319E-01	1.200E+02
4.597E-01	2.298E-01	1.300E+02	4.482E-01	2.241E-01	1.400E+02	4.322E-01	2.161E-01
1.500E+02	4.135E-01	2.067E-01	1.600E+02	4.021E-01	2.011E-01	1.700E+02	3.898E-01
1.949E-01	1.800E+02	3.770E-01	1.885E-01	1.900E+02	3.644E-01	1.822E-01	2.000E+02
3.521E-01	1.761E-01						
1	1	74	183	30			p+W183
2.473E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	2.473E-10
1.237E-10	2.600E+01	1.657E-09	8.285E-10	2.800E+01	1.103E-08	5.515E-09	3.000E+01
5.123E-07	2.561E-07	3.500E+01	3.239E-04	1.620E-04	4.000E+01	1.195E-02	5.975E-03
4.500E+01	5.182E-02	2.591E-02	5.000E+01	1.059E-01	5.295E-02	5.500E+01	1.650E-01
8.250E-02	6.000E+01	2.202E-01	1.101E-01	6.500E+01	2.722E-01	1.361E-01	7.000E+01
3.174E+01	1.587E-01	7.500E+01	3.578E-01	1.789E-01	8.000E+01	3.928E-01	1.964E-01
8.500E+01	4.222E-01	2.111E-01	9.000E+01	4.472E-01	2.236E-01	9.500E+01	4.618E-01
2.309E-01	1.000E+02	4.714E-01	2.357E-01	1.100E+02	4.789E-01	2.394E-01	1.200E+02
4.745E-01	2.372E-01	1.300E+02	4.628E-01	2.314E-01	1.400E+02	4.467E-01	2.233E-01
1.500E+02	4.119E-01	2.059E-01	1.600E+02	4.007E-01	2.004E-01	1.700E+02	3.886E-01
1.943E-01	1.800E+02	3.758E-01	1.879E-01	1.900E+02	3.632E-01	1.816E-01	2.000E+02
3.508E-01	1.754E-01						
1	1	74	184	30			p+W184
3.866E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	1.241E-10
6.205E-11	2.600E+01	8.298E-10	4.149E-10	2.800E+01	5.514E-09	2.757E-09	3.000E+01
7.593E-08	3.797E-08	3.500E+01	1.652E-04	8.260E-05	4.000E+01	7.899E-03	3.949E-03
4.500E+01	3.976E-02	1.988E-02	5.000E+01	8.538E-02	4.269E-02	5.500E+01	1.343E-01
6.715E-02	6.000E+01	1.818E-01	9.090E-02	6.500E+01	2.268E-01	1.134E-01	7.000E+01
2.717E-01	1.358E-01	7.500E+01	3.079E-01	1.540E-01	8.000E+01	3.394E-01	1.697E-01
8.500E+01	3.661E-01	1.830E-01	9.000E+01	3.890E-01	1.945E-01	9.500E+01	4.029E-01
2.014E-01	1.000E+02	4.124E-01	2.062E-01	1.100E+02	4.207E-01	2.104E-01	1.200E+02
4.183E-01	2.092E-01	1.300E+02	4.090E-01	2.045E-01	1.400E+02	3.955E-01	1.978E-01
1.500E+02	3.791E-01	1.895E-01	1.600E+02	3.691E-01	1.845E-01	1.700E+02	3.582E-01
1.791E-01	1.800E+02	3.466E-01	1.733E-01	1.900E+02	3.350E-01	1.675E-01	2.000E+02
3.235E-01	1.618E-01						
1	1	74	186	29			p+W186
4.329E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	4.884E-10
2.442E-10	2.800E+01	3.265E-09	1.633E-09	3.000E+01	2.152E-08	1.076E-08	3.500E+01
1.014E-04	5.070E-05	4.000E+01	5.732E-03	2.866E-03	4.500E+01	3.223E-02	1.612E-02
5.000E+01	7.212E-02	3.606E-02	5.500E+01	1.175E-01	5.875E-02	6.000E+01	1.608E-01
8.040E-02	6.500E+01	2.019E-01	1.009E-01	7.000E+01	2.335E-01	1.168E-01	7.500E+01
2.658E-01	1.329E-01	8.000E+01	2.937E-01	1.469E-01	8.500E+01	3.177E-01	1.588E-01
9.000E+01	3.383E-01	1.691E-01	9.500E+01	3.512E-01	1.756E-01	1.000E+02	3.602E-01
1.801E-01	1.100E+02	3.690E-01	1.845E-01	1.200E+02	3.682E-01	1.841E-01	1.300E+02
3.612E-01	1.806E-01	1.400E+02	3.502E-01	1.751E-01	1.500E+02	3.494E-01	1.747E-01
1.600E+02	3.406E-01	1.703E-01	1.700E+02	3.308E-01	1.654E-01	1.800E+02	3.202E-01
1.601E-01	1.900E+02	3.096E-01	1.548E-01	2.000E+02	2.989E-01	1.494E-01	
1	1	75	185	29			p+Re185
1.841E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	2.971E-10
1.485E-10	2.800E+01	1.880E-09	9.400E-10	3.000E+01	1.423E-07	7.115E-08	3.500E+01
5.242E-05	2.621E-05	4.000E+01	1.551E-03	7.755E-04	4.500E+01	5.716E-03	2.858E-03
5.000E+01	1.097E-02	5.485E-03	5.500E+01	1.636E-02	8.180E-03	6.000E+01	2.150E-02
1.075E-02	6.500E+01	2.635E-02	1.317E-02	7.000E+01	2.992E-02	1.496E-02	7.500E+01
3.364E-02	1.682E-02	8.000E+01	3.686E-02	1.843E-02	8.500E+01	3.959E-02	1.980E-02
9.000E+01	4.191E-02	2.096E-02	9.500E+01	4.317E-02	2.159E-02	1.000E+02	4.395E-02
2.198E-02	1.100E+02	4.442E-02	2.221E-02	1.200E+02	4.379E-02	2.190E-02	1.300E+02
4.253E-02	2.126E-02	1.400E+02	4.098E-02	2.049E-02	1.500E+02	4.084E-02	2.042E-02
1.600E+02	4.001E-02	2.000E-02	1.700E+02	3.921E-02	1.961E-02	1.800E+02	3.862E-02
1.931E-02	1.900E+02	3.825E-02	1.912E-02	2.000E+02	3.812E-02	1.906E-02	
1	1	75	187	29			p+Re187
2.297E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	1.739E-10
8.695E-11	2.800E+01	1.117E-09	5.585E-10	3.000E+01	6.177E-08	3.089E-08	3.500E+01
3.315E-05	1.657E-05	4.000E+01	1.169E-03	5.845E-04	4.500E+01	4.653E-03	2.327E-03
5.000E+01	9.228E-03	4.614E-03	5.500E+01	1.392E-02	6.960E-03	6.000E+01	1.847E-02
2.935E-03	6.500E+01	2.276E-02	1.138E-02	7.000E+01	2.650E-02	1.325E-02	7.500E+01
2.990E-02	1.495E-02	8.000E+01	3.284E-02	1.642E-02	8.500E+01	3.535E-02	1.767E-02
9.000E+01	3.749E-02	1.875E-02	9.500E+01	3.871E-02	1.936E-02	1.000E+02	3.950E-02
1.975E-02	1.100E+02	4.008E-02	2.004E-02	1.200E+02	3.965E-02	1.982E-02	1.300E+02
3.860E-02	1.930E-02	1.400E+02	3.724E-02	1.862E-02	1.500E+02	3.705E-02	1.852E-02
1.600E+02	3.621E-02	1.810E-02	1.700E+02	3.538E-02	1.769E-02	1.800E+02	3.465E-02

1.733E-02	1.900E+02	3.409E-02	1.705E-02	2.000E+02	3.366E-02	1.683E-02		
1	1	76	184	30				p+Os184
2.242E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	6.243E-10	
1.645E-10	2.600E+01	2.061E-09	1.030E-09	2.800E+01	1.089E-08	5.445E-09	3.000E+01	
6.312E-07	3.156E-07	3.500E+01	2.641E-04	1.321E-04	4.000E+01	8.803E-03	4.402E-03	
4.500E+01	3.641E-02	1.820E-02	5.000E+01	7.308E-02	3.654E-02	5.500E+01	1.127E-01	
5.635E-02	6.000E+01	1.496E-01	7.480E-02	6.500E+01	1.843E-01	9.215E-02	7.000E+01	
2.144E-01	1.072E-01	7.500E+01	2.412E-01	1.206E-01	8.000E+01	2.644E-01	1.322E-01	
8.500E+01	2.839E-01	1.419E-01	9.000E+01	3.002E-01	1.501E-01	9.500E+01	3.092E-01	
1.546E-01	1.000E+02	3.147E-01	1.573E-01	1.100E+02	3.178E-01	1.589E-01	1.200E+02	
3.130E-01	1.565E-01	1.300E+02	3.034E-01	1.517E-01	1.400E+02	2.912E-01	1.456E-01	
1.500E+02	2.667E-01	1.333E-01	1.600E+02	2.591E-01	1.295E-01	1.700E+02	2.513E-01	
1.257E-01	1.800E+02	2.434E-01	1.217E-01	1.900E+02	2.361E-01	1.181E-01	2.000E+02	
2.289E-01	1.144E-01							
1	1	76	186	30				p+Os186
2.558E+00	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	2.158E-10	
1.079E-10	2.600E+01	1.223E-09	6.115E-10	2.800E+01	7.570E-09	3.785E-09	3.000E+01	
3.334E-07	1.667E-07	3.500E+01	1.962E-04	9.810E-05	4.000E+01	7.000E-03	3.500E-03	
4.500E+01	3.111E-02	1.555E-02	5.000E+01	6.390E-02	3.195E-02	5.500E+01	9.965E-02	
4.983E-02	6.000E+01	1.332E-01	6.660E-02	6.500E+01	1.648E-01	8.240E-02	7.000E+01	
1.924E-01	9.620E-02	7.500E+01	2.172E-01	1.086E-01	8.000E+01	2.386E-01	1.193E-01	
8.500E+01	2.567E-01	1.283E-01	9.000E+01	2.720E-01	1.360E-01	9.500E+01	2.808E-01	
1.404E-01	1.000E+02	2.864E-01	1.432E-01	1.100E+02	2.902E-01	1.451E-01	1.200E+02	
2.867E-01	1.434E-01	1.300E+02	2.786E-01	1.393E-01	1.400E+02	2.679E-01	1.340E-01	
1.500E+02	2.458E-01	1.229E-01	1.600E+02	2.388E-01	1.194E-01	1.700E+02	2.315E-01	
1.158E-01	1.800E+02	2.240E-01	1.120E-01	1.900E+02	2.168E-01	1.084E-01	2.000E+02	
2.097E-01	1.048E-01							
1	1	76	187	29				p+Os187
1.264E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	5.352E-10	
2.676E-10	2.800E+01	3.266E-09	1.633E-09	3.000E+01	3.082E-07	1.541E-07	3.500E+01	
8.308E-05	4.154E-05	4.000E+01	2.196E-03	1.098E-03	4.500E+01	7.800E-03	3.900E-03	
5.000E+01	1.472E-02	7.360E-03	5.500E+01	2.160E-02	1.080E-02	6.000E+01	2.823E-02	
1.412E-02	6.500E+01	3.441E-02	1.721E-02	7.000E+01	4.060E-02	2.030E-02	7.500E+01	
4.548E-02	2.274E-02	8.000E+01	4.963E-02	2.482E-02	8.500E+01	5.311E-02	2.655E-02	
9.000E+01	5.602E-02	2.801E-02	9.500E+01	5.748E-02	2.874E-02	1.000E+02	5.829E-02	
2.915E-02	1.100E+02	5.851E-02	2.925E-02	1.200E+02	5.735E-02	2.867E-02	1.300E+02	
5.544E-02	2.772E-02	1.400E+02	5.317E-02	2.659E-02	1.500E+02	4.861E-02	2.431E-02	
1.600E+02	4.747E-02	2.373E-02	1.700E+02	4.638E-02	2.319E-02	1.800E+02	4.544E-02	
2.272E-02	1.900E+02	4.478E-02	2.239E-02	2.000E+02	4.437E-02	2.218E-02		
1	1	76	188	29				p+Os188
3.201E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	5.916E-10	
2.958E-10	2.800E+01	3.503E-09	1.752E-09	3.000E+01	2.667E-08	1.333E-08	3.500E+01	
9.389E-05	4.694E-05	4.000E+01	4.644E-03	2.322E-03	4.500E+01	2.424E-02	1.212E-02	
5.000E+01	5.243E-02	2.621E-02	5.500E+01	8.337E-02	4.168E-02	6.000E+01	1.130E-01	
5.650E-02	6.500E+01	1.410E-01	7.050E-02	7.000E+01	1.623E-01	8.115E-02	7.500E+01	
1.842E-01	9.210E-02	8.000E+01	2.031E-01	1.016E-01	8.500E+01	2.192E-01	1.096E-01	
9.000E+01	2.330E-01	1.165E-01	9.500E+01	2.412E-01	1.206E-01	1.000E+02	2.467E-01	
1.234E-01	1.100E+02	2.513E-01	1.257E-01	1.200E+02	2.494E-01	1.247E-01	1.300E+02	
2.434E-01	1.217E-01	1.400E+02	2.348E-01	1.174E-01	1.500E+02	2.246E-01	1.123E-01	
1.600E+02	2.186E-01	1.093E-01	1.700E+02	2.120E-01	1.060E-01	1.800E+02	2.052E-01	
1.026E-01	1.900E+02	1.984E-01	9.920E-02	2.000E+02	1.918E-01	9.590E-02		
1	1	76	189	29				p+Os189
2.182E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	1.967E-10	
9.835E-11	2.800E+01	1.118E-09	5.590E-10	3.000E+01	2.448E-08	1.224E-08	3.500E+01	
3.026E-05	1.513E-05	4.000E+01	1.253E-03	6.265E-04	4.500E+01	5.535E-03	2.767E-03	
5.000E+01	1.120E-02	5.600E-03	5.500E+01	1.708E-02	8.540E-03	6.000E+01	2.274E-02	
1.137E-02	6.500E+01	2.803E-02	1.401E-02	7.000E+01	3.334E-02	1.667E-02	7.500E+01	
3.758E-02	1.879E-02	8.000E+01	4.120E-02	2.060E-02	8.500E+01	4.427E-02	2.213E-02	
9.000E+01	4.687E-02	2.344E-02	9.500E+01	4.828E-02	2.414E-02	1.000E+02	4.915E-02	
2.457E-02	1.100E+02	4.966E-02	2.483E-02	1.200E+02	4.895E-02	2.448E-02	1.300E+02	
4.753E-02	2.377E-02	1.400E+02	4.572E-02	2.286E-02	1.500E+02	4.375E-02	2.187E-02	
1.600E+02	4.270E-02	2.135E-02	1.700E+02	4.164E-02	2.082E-02	1.800E+02	4.065E-02	
2.032E-02	1.900E+02	3.979E-02	1.989E-02	2.000E+02	3.910E-02	1.955E-02		
1	1	76	190	29				p+Os190
4.369E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	1.587E-10	
7.935E-11	2.800E+01	1.008E-09	5.040E-10	3.000E+01	6.380E-09	3.190E-09	3.500E+01	

2.498E-05	1.249E-05	4.000E+01	1.974E-03	9.870E-04	4.500E+01	1.535E-02	7.675E-03
5.000E+01	3.738E-02	1.869E-02	5.500E+01	6.154E-02	3.077E-02	6.000E+01	8.596E-02
4.298E-02	6.500E+01	1.092E-01	5.460E-02	7.000E+01	1.324E-01	6.620E-02	7.500E+01
1.517E-01	7.585E-02	8.000E+01	1.684E-01	8.420E-02	8.500E+01	1.828E-01	9.140E-02
9.000E+01	1.952E-01	9.760E-02	9.500E+01	2.031E-01	1.016E-01	1.000E+02	2.087E-01
1.043E-01	1.100E+02	2.144E-01	1.072E-01	1.200E+02	2.142E-01	1.071E-01	1.300E+02
2.102E-01	1.051E-01	1.400E+02	2.038E-01	1.019E-01	1.500E+02	1.888E-01	9.440E-02
1.600E+02	1.842E-01	9.210E-02	1.700E+02	1.789E-01	8.945E-02	1.800E+02	1.734E-01
8.670E-02	1.900E+02	1.679E-01	8.395E-02	2.000E+02	1.623E-01	8.115E-02	
1	1	76	192	28			p+Os192
5.783E+00	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	2.122E-10
1.061E-10	3.000E+01	1.357E-09	6.785E-10	3.500E+01	4.394E-06	2.197E-06	4.000E+01
5.868E-04	2.934E-04	4.500E+01	8.473E-03	4.236E-03	5.000E+01	2.482E-02	1.241E-02
5.500E+01	4.399E-02	2.200E-02	6.000E+01	6.399E-02	3.200E-02	6.500E+01	8.317E-02
4.158E-02	7.000E+01	1.025E-01	5.125E-02	7.500E+01	1.188E-01	5.940E-02	8.000E+01
1.330E-01	6.650E-02	8.500E+01	1.454E-01	7.270E-02	9.000E+01	1.562E-01	7.810E-02
9.500E+01	1.635E-01	8.175E-02	1.000E+02	1.689E-01	8.445E-02	1.100E+02	1.751E-01
8.755E-02	1.200E+02	1.763E-01	8.815E-02	1.300E+02	1.741E-01	8.705E-02	1.400E+02
1.697E-01	8.485E-02	1.500E+02	1.579E-01	7.895E-02	1.600E+02	1.546E-01	7.730E-02
1.700E+02	1.505E-01	7.525E-02	1.800E+02	1.462E-01	7.310E-02	1.900E+02	1.417E-01
7.085E-02	2.000E+02	1.371E-01	6.855E-02				
1	1	77	191	29			p+Ir191
1.807E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	1.329E-10
6.645E-11	2.800E+01	8.307E-10	4.154E-10	3.000E+01	1.840E-08	9.200E-09	3.500E+01
2.298E-05	1.149E-05	4.000E+01	9.660E-04	4.830E-04	4.500E+01	4.335E-03	2.168E-03
5.000E+01	8.858E-03	4.429E-03	5.500E+01	1.349E-02	6.745E-03	6.000E+01	1.809E-02
9.045E-03	6.500E+01	2.241E-02	1.120E-02	7.000E+01	2.677E-02	1.338E-02	7.500E+01
3.033E-02	1.516E-02	8.000E+01	3.340E-02	1.670E-02	8.500E+01	3.605E-02	1.802E-02
9.000E+01	3.833E-02	1.917E-02	9.500E+01	3.966E-02	1.983E-02	1.000E+02	4.054E-02
2.027E-02	1.100E+02	4.126E-02	2.063E-02	1.200E+02	4.090E-02	2.045E-02	1.300E+02
3.988E-02	1.994E-02	1.400E+02	3.850E-02	1.925E-02	1.500E+02	3.545E-02	1.773E-02
1.600E+02	3.475E-02	1.738E-02	1.700E+02	3.406E-02	1.703E-02	1.800E+02	3.347E-02
1.673E-02	1.900E+02	3.304E-02	1.652E-02	2.000E+02	3.288E-02	1.644E-02	
1	1	77	193	28			p+Ir193
3.126E+00	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	2.037E-10
1.019E-10	3.000E+01	1.295E-09	6.475E-10	3.500E+01	5.816E-06	2.908E-06	4.000E+01
3.820E-04	1.910E-04	4.500E+01	2.654E-03	1.327E-03	5.000E+01	6.130E-03	3.065E-03
5.500E+01	9.854E-03	4.927E-03	6.000E+01	1.361E-02	6.805E-03	6.500E+01	1.715E-02
8.575E-03	7.000E+01	2.075E-02	1.038E-02	7.500E+01	2.373E-02	1.187E-02	8.000E+01
2.631E-02	1.316E-02	8.500E+01	2.857E-02	1.429E-02	9.000E+01	3.052E-02	1.526E-02
9.500E+01	3.174E-02	1.587E-02	1.000E+02	3.260E-02	1.630E-02	1.100E+02	3.346E-02
1.673E-02	1.200E+02	3.341E-02	1.671E-02	1.300E+02	3.275E-02	1.638E-02	1.400E+02
3.173E-02	1.587E-02	1.500E+02	2.937E-02	1.469E-02	1.600E+02	2.877E-02	1.439E-02
1.700E+02	2.810E-02	1.405E-02	1.800E+02	2.751E-02	1.375E-02	1.900E+02	2.696E-02
1.348E-02	2.000E+02	2.655E-02	1.328E-02				
1	1	78	190	38			p+Pt190
1.586E+00	0.000E+00	0.000E+00	1.300E+01	0.000E+00	0.000E+00	1.400E+01	2.317E-10
1.235E-11	1.500E+01	1.772E-10	1.317E-11	1.600E+01	1.117E-10	7.743E-12	1.700E+01
0.000E+00	0.000E+00	1.800E+01	0.000E+00	0.000E+00	1.900E+01	0.000E+00	0.000E+00
2.000E+01	0.000E+00	0.000E+00	2.200E+01	0.000E+00	0.000E+00	2.400E+01	7.337E-10
1.558E-10	2.600E+01	2.084E-09	1.042E-09	2.800E+01	9.339E-09	4.670E-09	3.000E+01
4.107E-07	2.053E-07	3.500E+01	2.201E-04	1.101E-04	4.000E+01	7.716E-03	3.858E-03
4.500E+01	3.329E-02	1.665E-02	5.000E+01	6.783E-02	3.392E-02	5.500E+01	1.059E-01
5.295E-02	6.000E+01	1.414E-01	7.070E-02	6.500E+01	1.748E-01	8.740E-02	7.000E+01
1.997E-01	9.985E-02	7.500E+01	2.257E-01	1.129E-01	8.000E+01	2.478E-01	1.239E-01
8.500E+01	2.667E-01	1.333E-01	9.000E+01	2.828E-01	1.414E-01	9.500E+01	2.919E-01
1.459E-01	1.000E+02	2.977E-01	1.489E-01	1.100E+02	3.018E-01	1.509E-01	1.200E+02
2.981E-01	1.490E-01	1.300E+02	2.896E-01	1.448E-01	1.400E+02	2.784E-01	1.392E-01
1.500E+02	2.761E-01	1.381E-01	1.600E+02	2.683E-01	1.341E-01	1.700E+02	2.600E-01
1.300E-01	1.800E+02	2.517E-01	1.258E-01	1.900E+02	2.436E-01	1.218E-01	2.000E+02
2.360E-01	1.180E-01						
1	1	78	192	29			p+Pt192
2.859E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	3.922E-10
1.961E-10	2.800E+01	2.348E-09	1.174E-09	3.000E+01	1.438E-08	7.190E-09	3.500E+01
5.873E-05	2.937E-05	4.000E+01	3.418E-03	1.709E-03	4.500E+01	2.100E-02	1.050E-02
5.000E+01	4.789E-02	2.395E-02	5.500E+01	7.726E-02	3.863E-02	6.000E+01	1.064E-01

5.320E-02	6.500E+01	1.338E-01	6.690E-02	7.000E+01	1.615E-01	8.075E-02	7.500E+01
1.841E-01	9.205E-02	8.000E+01	2.036E-01	1.018E-01	8.500E+01	2.205E-01	1.103E-01
9.000E+01	2.350E-01	1.175E-01	9.500E+01	2.438E-01	1.219E-01	1.000E+02	2.499E-01
1.250E-01	1.100E+02	2.555E-01	1.278E-01	1.200E+02	2.542E-01	1.271E-01	1.300E+02
2.485E-01	1.242E-01	1.400E+02	2.400E-01	1.200E-01	1.500E+02	2.299E-01	1.149E-01
1.600E+02	2.240E-01	1.120E-01	1.700E+02	2.174E-01	1.087E-01	1.800E+02	2.107E-01
1.053E-01	1.900E+02	2.040E-01	1.020E-01	2.000E+02	1.975E-01	9.875E-02	
	1	1	78	194	28		p+Pt194
4.250E+00	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	4.980E-10
2.490E-10	3.000E+01	3.080E-09	1.540E-09	3.500E+01	1.154E-05	5.770E-06	4.000E+01
1.123E-03	5.615E-04	4.500E+01	1.178E-02	5.890E-03	5.000E+01	3.153E-02	1.577E-02
5.500E+01	5.524E-02	2.762E-02	6.000E+01	7.897E-02	3.948E-02	6.500E+01	1.015E-01
5.075E-02	7.000E+01	1.196E-01	5.980E-02	7.500E+01	1.380E-01	6.900E-02	8.000E+01
1.539E-01	7.695E-02	8.500E+01	1.678E-01	8.390E-02	9.000E+01	1.799E-01	8.995E-02
9.500E+01	1.879E-01	9.395E-02	1.000E+02	1.936E-01	9.680E-02	1.100E+02	1.999E-01
9.995E-02	1.200E+02	2.005E-01	1.003E-01	1.300E+02	1.973E-01	9.865E-02	1.400E+02
1.917E-01	9.585E-02	1.500E+02	1.917E-01	9.585E-02	1.600E+02	1.873E-01	9.365E-02
1.700E+02	1.822E-01	9.110E-02	1.800E+02	1.767E-01	8.835E-02	1.900E+02	1.711E-01
8.555E-02	2.000E+02	1.656E-01	8.280E-02				
	1	1	78	195	28		p+Pt195
3.317E+00	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	1.485E-10
7.425E-11	3.000E+01	9.196E-10	4.598E-10	3.500E+01	3.715E-06	1.858E-06	4.000E+01
2.935E-04	1.467E-04	4.500E+01	2.648E-03	1.324E-03	5.000E+01	6.562E-03	3.281E-03
5.500E+01	1.096E-02	5.480E-03	6.000E+01	1.534E-02	7.670E-03	6.500E+01	1.945E-02
9.725E-03	7.000E+01	2.316E-02	1.158E-02	7.500E+01	2.655E-02	1.328E-02	8.000E+01
2.946E-02	1.473E-02	8.500E+01	3.201E-02	1.600E-02	9.000E+01	3.420E-02	1.710E-02
9.500E+01	3.555E-02	1.777E-02	1.000E+02	3.649E-02	1.825E-02	1.100E+02	3.739E-02
1.869E-02	1.200E+02	3.728E-02	1.864E-02	1.300E+02	3.649E-02	1.825E-02	1.400E+02
3.532E-02	1.766E-02	1.500E+02	3.385E-02	1.692E-02	1.600E+02	3.310E-02	1.655E-02
1.700E+02	3.228E-02	1.614E-02	1.800E+02	3.151E-02	1.576E-02	1.900E+02	3.080E-02
1.540E-02	2.000E+02	3.028E-02	1.514E-02				
	1	1	78	196	28		p+Pt196
5.591E+00	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	1.107E-10
5.535E-11	3.000E+01	6.909E-10	3.454E-10	3.500E+01	1.888E-06	9.440E-07	4.000E+01
3.178E-04	1.589E-04	4.500E+01	6.341E-03	3.171E-03	5.000E+01	2.088E-02	1.044E-02
5.500E+01	3.960E-02	1.980E-02	6.000E+01	5.899E-02	2.950E-02	6.500E+01	7.762E-02
3.881E-02	7.000E+01	9.302E-02	4.651E-02	7.500E+01	1.085E-01	5.425E-02	8.000E+01
1.221E-01	6.105E-02	8.500E+01	1.342E-01	6.710E-02	9.000E+01	1.447E-01	7.235E-02
9.500E+01	1.519E-01	7.595E-02	1.000E+02	1.574E-01	7.870E-02	1.100E+02	1.640E-01
8.200E-02	1.200E+02	1.658E-01	8.290E-02	1.300E+02	1.642E-01	8.210E-02	1.400E+02
1.604E-01	8.020E-02	1.500E+02	1.608E-01	8.040E-02	1.600E+02	1.576E-01	7.880E-02
1.700E+02	1.536E-01	7.680E-02	1.800E+02	1.492E-01	7.460E-02	1.900E+02	1.446E-01
7.230E-02	2.000E+02	1.399E-01	6.995E-02				
	1	1	78	198	27		p+Pt198
6.715E+00	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	2.068E-10
1.034E-10	3.500E+01	2.976E-07	1.488E-07	4.000E+01	1.073E-04	5.365E-05	4.500E+01
3.454E-03	1.727E-03	5.000E+01	1.435E-02	7.175E-03	5.500E+01	2.906E-02	1.453E-02
6.000E+01	4.496E-02	2.248E-02	6.500E+01	6.048E-02	3.024E-02	7.000E+01	7.644E-02
3.822E-02	7.500E+01	9.007E-02	4.503E-02	8.000E+01	1.021E-01	5.105E-02	8.500E+01
1.129E-01	5.645E-02	9.000E+01	1.223E-01	6.115E-02	9.500E+01	1.290E-01	6.450E-02
1.000E+02	1.342E-01	6.710E-02	1.100E+02	1.408E-01	7.040E-02	1.200E+02	1.433E-01
7.165E-02	1.300E+02	1.427E-01	7.135E-02	1.400E+02	1.401E-01	7.005E-02	1.500E+02
1.360E-01	6.800E-02	1.600E+02	1.336E-01	6.680E-02	1.700E+02	1.305E-01	6.525E-02
1.800E+02	1.271E-01	6.355E-02	1.900E+02	1.233E-01	6.165E-02	2.000E+02	1.193E-01
5.965E-02							
	1	1	79	197	27		p+Au197
3.245E+00	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	1.713E-10
8.565E-11	3.500E+01	6.752E-07	3.376E-07	4.000E+01	6.243E-05	3.121E-05	4.500E+01
5.863E-04	2.931E-04	5.000E+01	1.439E-03	7.195E-04	5.500E+01	2.412E-03	1.206E-03
6.000E+01	3.374E-03	1.687E-03	6.500E+01	4.277E-03	2.139E-03	7.000E+01	4.996E-03
2.498E-03	7.500E+01	5.736E-03	2.868E-03	8.000E+01	6.380E-03	3.190E-03	8.500E+01
6.949E-03	3.475E-03	9.000E+01	7.440E-03	3.720E-03	9.500E+01	7.744E-03	3.872E-03
1.000E+02	7.955E-03	3.978E-03	1.100E+02	8.159E-03	4.079E-03	1.200E+02	8.133E-03
4.066E-03	1.300E+02	7.965E-03	3.982E-03	1.400E+02	7.721E-03	3.861E-03	1.500E+02
7.739E-03	3.870E-03	1.600E+02	7.638E-03	3.819E-03	1.700E+02	7.579E-03	3.789E-03
1.800E+02	7.576E-03	3.788E-03	1.900E+02	7.675E-03	3.838E-03	2.000E+02	7.900E-03

3.950E-03								
1	1	80	196	29				p+Hg196
3.575E+00	0.000E+00	0.000E+00	2.400E+01	0.000E+00	0.000E+00	2.600E+01	1.047E-10	
5.235E-11	2.800E+01	5.338E-10	2.669E-10	3.000E+01	3.147E-09	1.573E-09	3.500E+01	
1.037E-05	5.185E-06	4.000E+01	1.037E-03	5.185E-04	4.500E+01	1.234E-02	6.170E-03	
5.000E+01	3.435E-02	1.717E-02	5.500E+01	6.111E-02	3.055E-02	6.000E+01	8.792E-02	
4.396E-02	6.500E+01	1.134E-01	5.670E-02	7.000E+01	1.338E-01	6.690E-02	7.500E+01	
1.545E-01	7.725E-02	8.000E+01	1.725E-01	8.625E-02	8.500E+01	1.882E-01	9.410E-02	
9.000E+01	2.018E-01	1.009E-01	9.500E+01	2.106E-01	1.053E-01	1.000E+02	2.170E-01	
1.085E-01	1.100E+02	2.237E-01	1.119E-01	1.200E+02	2.241E-01	1.120E-01	1.300E+02	
2.201E-01	1.100E-01	1.400E+02	2.136E-01	1.068E-01	1.500E+02	2.129E-01	1.065E-01	
1.600E+02	2.078E-01	1.039E-01	1.700E+02	2.020E-01	1.010E-01	1.800E+02	1.960E-01	
9.800E-02	1.900E+02	1.897E-01	9.485E-02	2.000E+02	1.836E-01	9.180E-02		
1	1	80	198	28				p+Hg198
4.626E+00	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	1.697E-10	
8.485E-11	3.000E+01	1.024E-09	5.120E-10	3.500E+01	2.620E-06	1.310E-06	4.000E+01	
4.008E-04	2.004E-04	4.500E+01	7.591E-03	3.795E-03	5.000E+01	2.480E-02	1.240E-02	
5.500E+01	4.631E-02	2.315E-02	6.000E+01	6.884E-02	3.442E-02	6.500E+01	9.041E-02	
4.521E-02	7.000E+01	1.103E-01	5.515E-02	7.500E+01	1.285E-01	6.425E-02	8.000E+01	
1.444E-01	7.220E-02	8.500E+01	1.585E-01	7.925E-02	9.000E+01	1.707E-01	8.535E-02	
9.500E+01	1.790E-01	8.950E-02	1.000E+02	1.852E-01	9.260E-02	1.100E+02	1.924E-01	
9.620E-02	1.200E+02	1.938E-01	9.690E-02	1.300E+02	1.914E-01	9.570E-02	1.400E+02	
1.865E-01	9.325E-02	1.500E+02	1.799E-01	8.995E-02	1.600E+02	1.760E-01	8.800E-02	
1.700E+02	1.713E-01	8.565E-02	1.800E+02	1.663E-01	8.315E-02	1.900E+02	1.611E-01	
8.055E-02	2.000E+02	1.558E-01	7.790E-02					
1	1	80	199	27				p+Hg199
3.512E+00	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	3.833E-10	
1.917E-10	3.500E+01	1.230E-06	6.150E-07	4.000E+01	1.314E-04	6.570E-05	4.500E+01	
1.952E-03	9.760E-04	5.000E+01	5.620E-03	2.810E-03	5.500E+01	9.890E-03	4.945E-03	
6.000E+01	1.428E-02	7.140E-03	6.500E+01	1.840E-02	9.200E-03	7.000E+01	2.175E-02	
1.087E-02	7.500E+01	2.512E-02	1.256E-02	8.000E+01	2.806E-02	1.403E-02	8.500E+01	
3.065E-02	1.533E-02	9.000E+01	3.286E-02	1.643E-02	9.500E+01	3.429E-02	1.715E-02	
1.000E+02	3.531E-02	1.766E-02	1.100E+02	3.635E-02	1.818E-02	1.200E+02	3.635E-02	
1.818E-02	1.300E+02	3.566E-02	1.783E-02	1.400E+02	3.456E-02	1.728E-02	1.500E+02	
3.452E-02	1.726E-02	1.600E+02	3.372E-02	1.686E-02	1.700E+02	3.283E-02	1.641E-02	
1.800E+02	3.194E-02	1.597E-02	1.900E+02	3.105E-02	1.553E-02	2.000E+02	3.027E-02	
1.513E-02								
1	1	80	200	27				p+Hg200
5.483E+00	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	4.086E-10	
2.043E-10	3.500E+01	7.350E-07	3.675E-07	4.000E+01	1.775E-04	8.875E-05	4.500E+01	
4.806E-03	2.403E-03	5.000E+01	1.863E-02	9.315E-03	5.500E+01	3.661E-02	1.830E-02	
6.000E+01	5.607E-02	2.804E-02	6.500E+01	7.482E-02	3.741E-02	7.000E+01	9.240E-02	
4.620E-02	7.500E+01	1.084E-01	5.420E-02	8.000E+01	1.226E-01	6.130E-02	8.500E+01	
1.352E-01	6.760E-02	9.000E+01	1.461E-01	7.305E-02	9.500E+01	1.538E-01	7.690E-02	
1.000E+02	1.596E-01	7.980E-02	1.100E+02	1.668E-01	8.340E-02	1.200E+02	1.689E-01	
8.445E-02	1.300E+02	1.676E-01	8.380E-02	1.400E+02	1.639E-01	8.195E-02	1.500E+02	
1.645E-01	8.225E-02	1.600E+02	1.612E-01	8.060E-02	1.700E+02	1.572E-01	7.860E-02	
1.800E+02	1.527E-01	7.635E-02	1.900E+02	1.479E-01	7.395E-02	2.000E+02	1.430E-01	
7.150E-02								
1	1	80	201	27				p+Hg201
4.477E+00	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	1.262E-10	
6.310E-11	3.500E+01	2.941E-07	1.471E-07	4.000E+01	5.465E-05	2.733E-05	4.500E+01	
1.210E-03	6.050E-04	5.000E+01	4.003E-03	2.001E-03	5.500E+01	7.496E-03	3.748E-03	
6.000E+01	1.115E-02	5.575E-03	6.500E+01	1.461E-02	7.305E-03	7.000E+01	1.784E-02	
8.920E-03	7.500E+01	2.077E-02	1.039E-02	8.000E+01	2.334E-02	1.167E-02	8.500E+01	
2.563E-02	1.282E-02	9.000E+01	2.760E-02	1.380E-02	9.500E+01	2.892E-02	1.446E-02	
1.000E+02	2.990E-02	1.495E-02	1.100E+02	3.101E-02	1.550E-02	1.200E+02	3.120E-02	
1.560E-02	1.300E+02	3.077E-02	1.538E-02	1.400E+02	2.996E-02	1.498E-02	1.500E+02	
2.884E-02	1.442E-02	1.600E+02	2.823E-02	1.412E-02	1.700E+02	2.752E-02	1.376E-02	
1.800E+02	2.677E-02	1.338E-02	1.900E+02	2.600E-02	1.300E-02	2.000E+02	2.525E-02	
1.263E-02								
1	1	80	202	27				p+Hg202
6.420E+00	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	1.405E-10	
7.025E-11	3.500E+01	7.955E-08	3.977E-08	4.000E+01	6.560E-05	3.280E-05	4.500E+01	
2.808E-03	1.404E-03	5.000E+01	1.337E-02	6.685E-03	5.500E+01	2.844E-02	1.422E-02	
6.000E+01	4.508E-02	2.254E-02	6.500E+01	6.127E-02	3.063E-02	7.000E+01	7.672E-02	

3.836E-02	7.500E+01	9.082E-02	4.541E-02	8.000E+01	1.034E-01	5.170E-02	8.500E+01
1.146E-01	5.730E-02	9.000E+01	1.244E-01	6.220E-02	9.500E+01	1.315E-01	6.575E-02
1.000E+02	1.371E-01	6.855E-02	1.100E+02	1.441E-01	7.205E-02	1.200E+02	1.469E-01
7.345E-02	1.300E+02	1.464E-01	7.320E-02	1.400E+02	1.439E-01	7.195E-02	1.500E+02
1.396E-01	6.980E-02	1.600E+02	1.372E-01	6.860E-02	1.700E+02	1.341E-01	6.705E-02
1.800E+02	1.305E-01	6.525E-02	1.900E+02	1.266E-01	6.330E-02	2.000E+02	1.225E-01
6.125E-02							
1	1	80	204	26			p+Hg204
7.387E+00	0.000E+00	0.000E+00	3.000E+01	0.000E+00	0.000E+00	3.500E+01	4.827E-09
2.413E-09	4.000E+01	2.260E-05	1.130E-05	4.500E+01	1.450E-03	7.250E-04	5.000E+01
9.200E-03	4.600E-03	5.500E+01	2.146E-02	1.073E-02	6.000E+01	3.542E-02	1.771E-02
6.500E+01	4.926E-02	2.463E-02	7.000E+01	6.148E-02	3.074E-02	7.500E+01	7.349E-02
3.674E-02	8.000E+01	8.430E-02	4.215E-02	8.500E+01	9.404E-02	4.702E-02	9.000E+01
1.026E-01	5.130E-02	9.500E+01	1.089E-01	5.445E-02	1.000E+02	1.140E-01	5.700E-02
1.100E+02	1.207E-01	6.035E-02	1.200E+02	1.238E-01	6.190E-02	1.300E+02	1.240E-01
6.200E-02	1.400E+02	1.224E-01	6.120E-02	1.500E+02	1.193E-01	5.965E-02	1.600E+02
1.176E-01	5.880E-02	1.700E+02	1.151E-01	5.755E-02	1.800E+02	1.123E-01	5.615E-02
1.900E+02	1.090E-01	5.450E-02	2.000E+02	1.057E-01	5.285E-02		
1	1	81	203	27			p+Tl203
3.839E+00	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	1.382E-10
6.910E-11	3.500E+01	3.594E-07	1.797E-07	4.000E+01	5.874E-05	2.937E-05	4.500E+01
1.175E-03	5.875E-04	5.000E+01	3.778E-03	1.889E-03	5.500E+01	6.917E-03	3.459E-03
6.000E+01	1.024E-02	5.120E-03	6.500E+01	1.340E-02	6.700E-03	7.000E+01	1.636E-02
8.180E-03	7.500E+01	1.904E-02	9.520E-03	8.000E+01	2.142E-02	1.071E-02	8.500E+01
2.354E-02	1.177E-02	9.000E+01	2.537E-02	1.269E-02	9.500E+01	2.662E-02	1.331E-02
1.000E+02	2.756E-02	1.378E-02	1.100E+02	2.864E-02	1.432E-02	1.200E+02	2.887E-02
1.443E-02	1.300E+02	2.852E-02	1.426E-02	1.400E+02	2.779E-02	1.389E-02	1.500E+02
2.785E-02	1.392E-02	1.600E+02	2.728E-02	1.364E-02	1.700E+02	2.660E-02	1.330E-02
1.800E+02	2.588E-02	1.294E-02	1.900E+02	2.514E-02	1.257E-02	2.000E+02	2.442E-02
1.221E-02							
1	1	81	205	26			p+Tl205
4.933E+00	0.000E+00	0.000E+00	3.000E+01	0.000E+00	0.000E+00	3.500E+01	5.656E-08
2.828E-08	4.000E+01	1.846E-05	9.230E-06	4.500E+01	6.473E-04	3.236E-04	5.000E+01
2.620E-03	1.310E-03	5.500E+01	5.191E-03	2.596E-03	6.000E+01	7.978E-03	3.989E-03
6.500E+01	1.065E-02	5.325E-03	7.000E+01	1.345E-02	6.725E-03	7.500E+01	1.580E-02
7.900E-03	8.000E+01	1.790E-02	8.950E-03	8.500E+01	1.979E-02	9.895E-03	9.000E+01
2.143E-02	1.072E-02	9.500E+01	2.259E-02	1.129E-02	1.000E+02	2.348E-02	1.174E-02
1.100E+02	2.457E-02	1.229E-02	1.200E+02	2.493E-02	1.247E-02	1.300E+02	2.475E-02
1.238E-02	1.400E+02	2.423E-02	1.212E-02	1.500E+02	2.349E-02	1.175E-02	1.600E+02
2.305E-02	1.153E-02	1.700E+02	2.251E-02	1.125E-02	1.800E+02	2.191E-02	1.095E-02
1.900E+02	2.128E-02	1.064E-02	2.000E+02	2.063E-02	1.031E-02		
1	1	82	204	28			p+Pb204
4.029E+00	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	1.873E-10
9.365E-11	3.000E+01	1.106E-09	5.530E-10	3.500E+01	2.602E-06	1.301E-06	4.000E+01
4.024E-04	2.012E-04	4.500E+01	8.137E-03	4.069E-03	5.000E+01	2.747E-02	1.374E-02
5.500E+01	5.160E-02	2.580E-02	6.000E+01	7.720E-02	3.860E-02	6.500E+01	1.014E-01
5.070E-02	7.000E+01	1.266E-01	6.330E-02	7.500E+01	1.474E-01	7.370E-02	8.000E+01
1.656E-01	8.280E-02	8.500E+01	1.818E-01	9.090E-02	9.000E+01	1.956E-01	9.780E-02
9.500E+01	2.050E-01	1.025E-01	1.000E+02	2.119E-01	1.060E-01	1.100E+02	2.197E-01
1.099E-01	1.200E+02	2.210E-01	1.105E-01	1.300E+02	2.179E-01	1.090E-01	1.400E+02
2.120E-01	1.060E-01	1.500E+02	2.045E-01	1.022E-01	1.600E+02	1.998E-01	9.990E-02
1.700E+02	1.943E-01	9.715E-02	1.800E+02	1.882E-01	9.410E-02	1.900E+02	1.819E-01
9.095E-02	2.000E+02	1.755E-01	8.775E-02				
1	1	82	206	27			p+Pb206
5.022E+00	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	3.874E-10
1.937E-10	3.500E+01	4.718E-07	2.359E-07	4.000E+01	1.540E-04	7.700E-05	4.500E+01
4.892E-03	2.446E-03	5.000E+01	2.015E-02	1.008E-02	5.500E+01	4.106E-02	2.053E-02
6.000E+01	6.356E-02	3.178E-02	6.500E+01	8.512E-02	4.256E-02	7.000E+01	1.055E-01
5.275E-02	7.500E+01	1.239E-01	6.195E-02	8.000E+01	1.403E-01	7.015E-02	8.500E+01
1.548E-01	7.740E-02	9.000E+01	1.673E-01	8.365E-02	9.500E+01	1.760E-01	8.800E-02
1.000E+02	1.826E-01	9.130E-02	1.100E+02	1.905E-01	9.525E-02	1.200E+02	1.927E-01
9.635E-02	1.300E+02	1.908E-01	9.540E-02	1.400E+02	1.864E-01	9.320E-02	1.500E+02
1.738E-01	8.690E-02	1.600E+02	1.702E-01	8.510E-02	1.700E+02	1.658E-01	8.290E-02
1.800E+02	1.608E-01	8.040E-02	1.900E+02	1.557E-01	7.785E-02	2.000E+02	1.503E-01
7.515E-02							
1	1	82	207	26			p+Pb207

4.554E+00	0.000E+00	0.000E+00	3.000E+01	0.000E+00	0.000E+00	3.500E+01	6.702E-08
3.351E-08	4.000E+01	2.849E-05	1.424E-05	4.500E+01	9.736E-04	4.868E-04	5.000E+01
3.957E-03	1.978E-03	5.500E+01	7.830E-03	3.915E-03	6.000E+01	1.197E-02	5.985E-03
6.500E+01	1.591E-02	7.955E-03	7.000E+01	2.002E-02	1.001E-02	7.500E+01	2.340E-02
1.170E-02	8.000E+01	2.641E-02	1.320E-02	8.500E+01	2.906E-02	1.453E-02	9.000E+01
3.133E-02	1.566E-02	9.500E+01	3.287E-02	1.644E-02	1.000E+02	3.401E-02	1.700E-02
1.100E+02	3.526E-02	1.763E-02	1.200E+02	3.547E-02	1.774E-02	1.300E+02	3.497E-02
1.749E-02	1.400E+02	3.402E-02	1.701E-02	1.500E+02	3.272E-02	1.636E-02	1.600E+02
3.199E-02	1.599E-02	1.700E+02	3.114E-02	1.557E-02	1.800E+02	3.023E-02	1.511E-02
1.900E+02	2.928E-02	1.464E-02	2.000E+02	2.833E-02	1.417E-02		
	1	1	82	208	27		p+Pb208
5.858E+00	0.000E+00	0.000E+00	2.800E+01	0.000E+00	0.000E+00	3.000E+01	1.661E-10
8.305E-11	3.500E+01	6.280E-08	3.140E-08	4.000E+01	6.942E-05	3.471E-05	4.500E+01
3.108E-03	1.554E-03	5.000E+01	1.554E-02	7.770E-03	5.500E+01	3.337E-02	1.668E-02
6.000E+01	5.327E-02	2.663E-02	6.500E+01	7.256E-02	3.628E-02	7.000E+01	9.274E-02
4.637E-02	7.500E+01	1.096E-01	5.480E-02	8.000E+01	1.248E-01	6.240E-02	8.500E+01
1.382E-01	6.910E-02	9.000E+01	1.498E-01	7.490E-02	9.500E+01	1.581E-01	7.905E-02
1.000E+02	1.645E-01	8.225E-02	1.100E+02	1.723E-01	8.615E-02	1.200E+02	1.750E-01
8.750E-02	1.300E+02	1.740E-01	8.700E-02	1.400E+02	1.705E-01	8.525E-02	1.500E+02
1.595E-01	7.975E-02	1.600E+02	1.565E-01	7.825E-02	1.700E+02	1.527E-01	7.635E-02
1.800E+02	1.484E-01	7.420E-02	1.900E+02	1.437E-01	7.185E-02	2.000E+02	1.388E-01
6.940E-02							
	1	1	83	209	28		p+Bi209
1.478E+00	0.000E+00	0.000E+00	2.600E+01	0.000E+00	0.000E+00	2.800E+01	1.758E-10
8.790E-11	3.000E+01	1.041E-09	5.205E-10	3.500E+01	3.911E-06	1.956E-06	4.000E+01
3.160E-04	1.580E-04	4.500E+01	2.779E-03	1.389E-03	5.000E+01	6.993E-03	3.497E-03
5.500E+01	1.179E-02	5.895E-03	6.000E+01	1.665E-02	8.325E-03	6.500E+01	2.113E-02
1.056E-02	7.000E+01	2.533E-02	1.266E-02	7.500E+01	2.902E-02	1.451E-02	8.000E+01
3.228E-02	1.614E-02	8.500E+01	3.514E-02	1.757E-02	9.000E+01	3.756E-02	1.878E-02
9.500E+01	3.908E-02	1.954E-02	1.000E+02	4.015E-02	2.007E-02	1.100E+02	4.116E-02
2.058E-02	1.200E+02	4.104E-02	2.052E-02	1.300E+02	4.017E-02	2.008E-02	1.400E+02
4.032E-02	2.016E-02	1.500E+02	3.872E-02	1.936E-02	1.600E+02	3.777E-02	1.888E-02
1.700E+02	3.672E-02	1.836E-02	1.800E+02	3.560E-02	1.780E-02	1.900E+02	3.448E-02
1.724E-02	2.000E+02	3.341E-02	1.671E-02				

Appendix C: Sample Fortran routine to read calculated cross-sections

```

      program reading data
      parameter (M=2014)
      Character CR*10
      Dimension E(M),XS(M),dXS(M)
c
c Input data file with calculated 7Be production cross-sections
      open(1,file='be7data',status='old',err=7)
c
      Print 1
      Read *,zp,ap,zt,at
              izp=ifix(zp+0.001);iap=ifix(ap+0.001)
              izt=ifix(zt+0.001);iat=ifix(at+0.001)
      Do while (.not.eof(1))
          Read(1,2)jzp,jap,jzt,jat,N,CR
          Read(1,3)(E(i),XS(i),dXS(i),i=1,N)
      If(izp.eq.jzp.and.iap.eq.jap.and.izt.eq.jzt.and.iat.eq.jat)then
          open(2,file='output')
          Write(2,4)CR
          do i=1,N; Write(2,5)E(i),XS(i),dXS(i); enddo
          close(2)
          stop
                                                    endif
      Enddo
      Print 6,izp,iap,izt,iat
      Stop
c
1 Format(' ZP, AP, ZT, AT (atomic and mass numbers for projectile'
c,' and target)')
2 Format(5i10,t71,a10)
3 Format(8e10.0)
4 Format('Reaction',a10,' --> Be7'/' E(MeV) XS(mb) ',
c'dXS(mb)')
5 Format(1pe10.3,2e11.3)
6 Format('Data for reaction',i3,i3,'+',i3,i4,' are not found')
7 Print *,' Input file with calculated cross-sections is not found'
      Stop
      End
```



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