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journal or publication title	Science reports of the Research Institutes, Tohoku University. Ser. A, Physics, chemistry and metallurgy
volume	22
page range	133-133
year	1970
URL	http://hdl.handle.net/10097/27536

Contribution of s - d Interaction to the Internal Magnetic Field in Heusler Alloys*

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Abstract

Spin echoes and their external magnetic field effects have been observed on Heusler alloys, Cu_2MnAl , Cu_2MnIn and Cu_2MnSn at 4.2°K. The sign of the internal magnetic field at nuclei of the constituent elements has been determined to be negative, and on the basis of the R-K-K-Y interaction semiquantitative agreement between calculated and observed internal magnetic fields has been obtained in Cu_2MnAl , Cu_2MnIn and Cu_2MnSn . The spectra for Cu, Mn and Sn in Cu_2MnSn , In in Cu_2MnIn and Al in Cu_2MnAl have been observed for the first time.

* The 1472nd report of the Research Institute for Iron, Steel and Other Metals. Published in the Journal of the Physical Society of Japan, **27** (1969), 1127.