

The present and future of Ukrainian Science - unbiased view of Scopus

4th International Conference on Scientific communication in the Digital Age. Kyiv

What content does Scopus include?

61M records from **22,245** serial titles (**55 active Ukrainian titles**)
and over 94,900 books

21.6M pre 1996 records | 36.7M post 1995 records

- Content from > **5,000** publishers
- “Articles in Press” from >5,000 titles
- Titles from **105** different countries in all geographical regions
- **40** “local” languages covered
- More than **3,780** Gold Open Access journals indexed
- Archives up to year **1823** included



Scopus is all-in-one database with no separate licences needed

Scopus has the broadest coverage of global, curated, relevant research, with smart, simple tools to help track, analyze and visualize research.

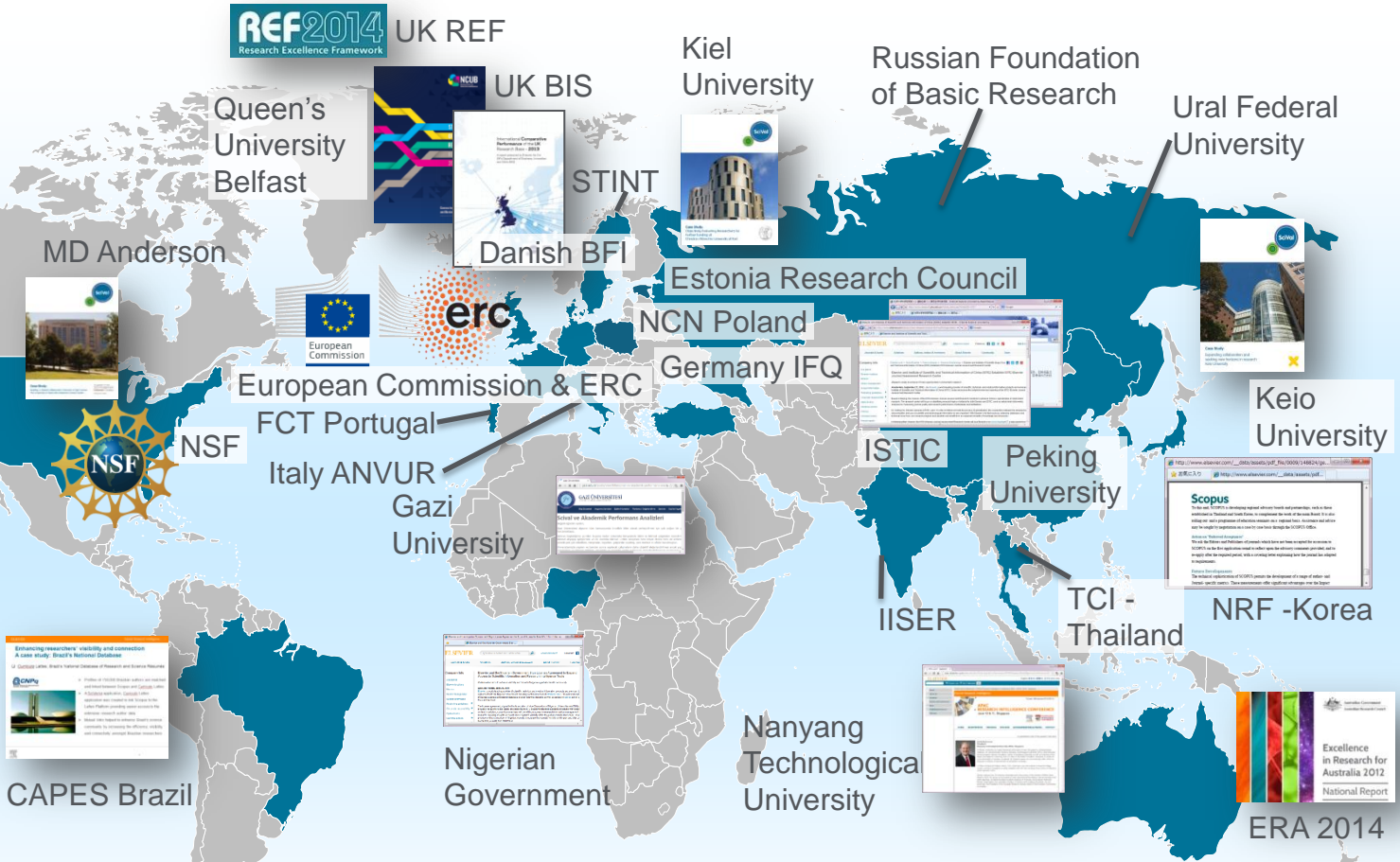
Elsevier Data is the standard for science evaluation



Michigan Corporate Relations Network



ReachNC



Rankings:



High quality journals due to selection by the independent Content Selection & Advisory Board (CSAB)



The CSAB is chosen for their expertise in specific subject areas; many have (journal) Editor experience

Focus on quality through content selection by the independent CSAB, because:

- Provide accurate and relevant search results for users
- No dilution of search results by irrelevant or low quality content
- Support that Scopus is recognized as authoritative
- Support confidence that Scopus “**reflects the truth**”

How is Ukrainian science represented in Scopus?

408

*VI. Apparate zur Erleichterung des Filtrirens
Aus einem Schreiben des Hrn. Haüy an
Hrn. J. J. Berzelius.*

Odessa, 6. Dec. 1829.

- 184 047 publications since 1830
- 8 846 publications in 2015
- 31 247 author profiles
- 281 affiliations
- 55 active titles

Ukrainian Science Overview according to Scopus data

SciVal

Ukraine

Year range: 2012 to 2015

Publications

37,533 ▲

Citations

75,476

Authors

35,931 ▲

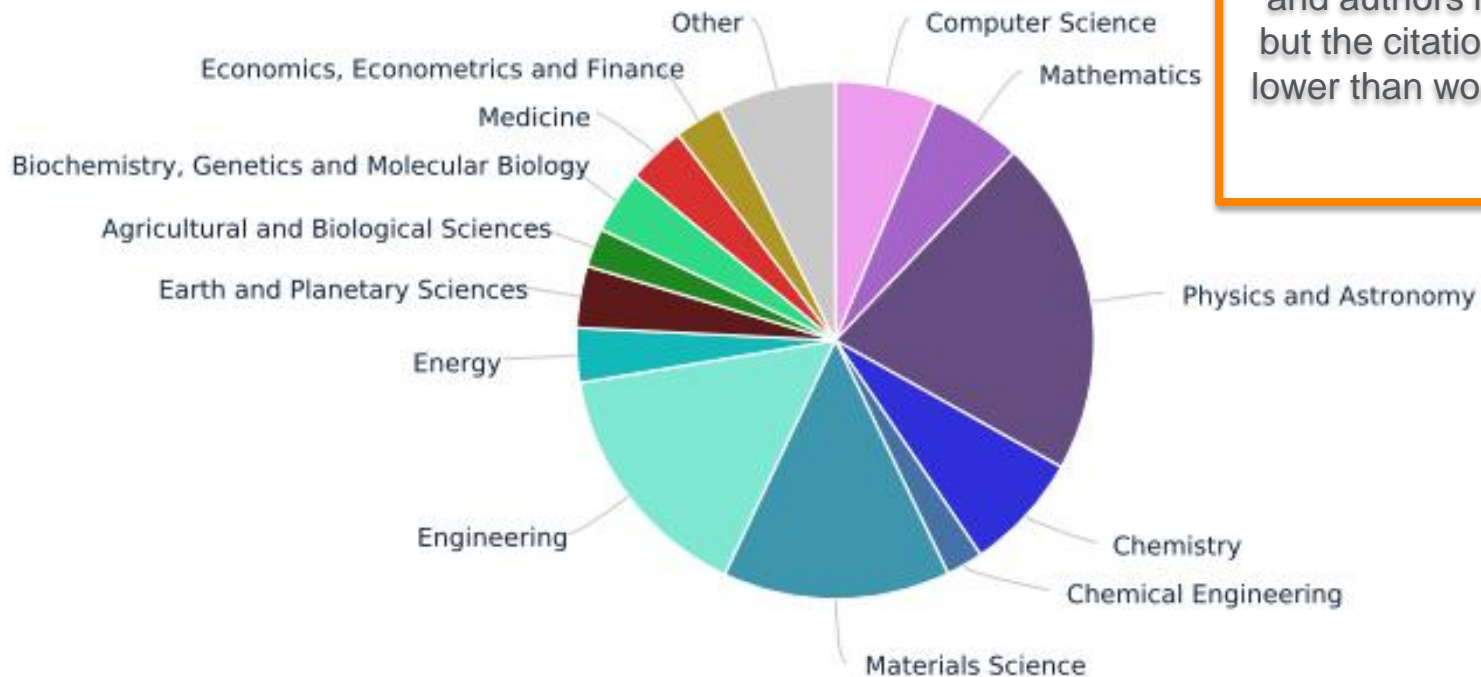
Field-Weighted Citation Impact

0.61

Citations per Publication

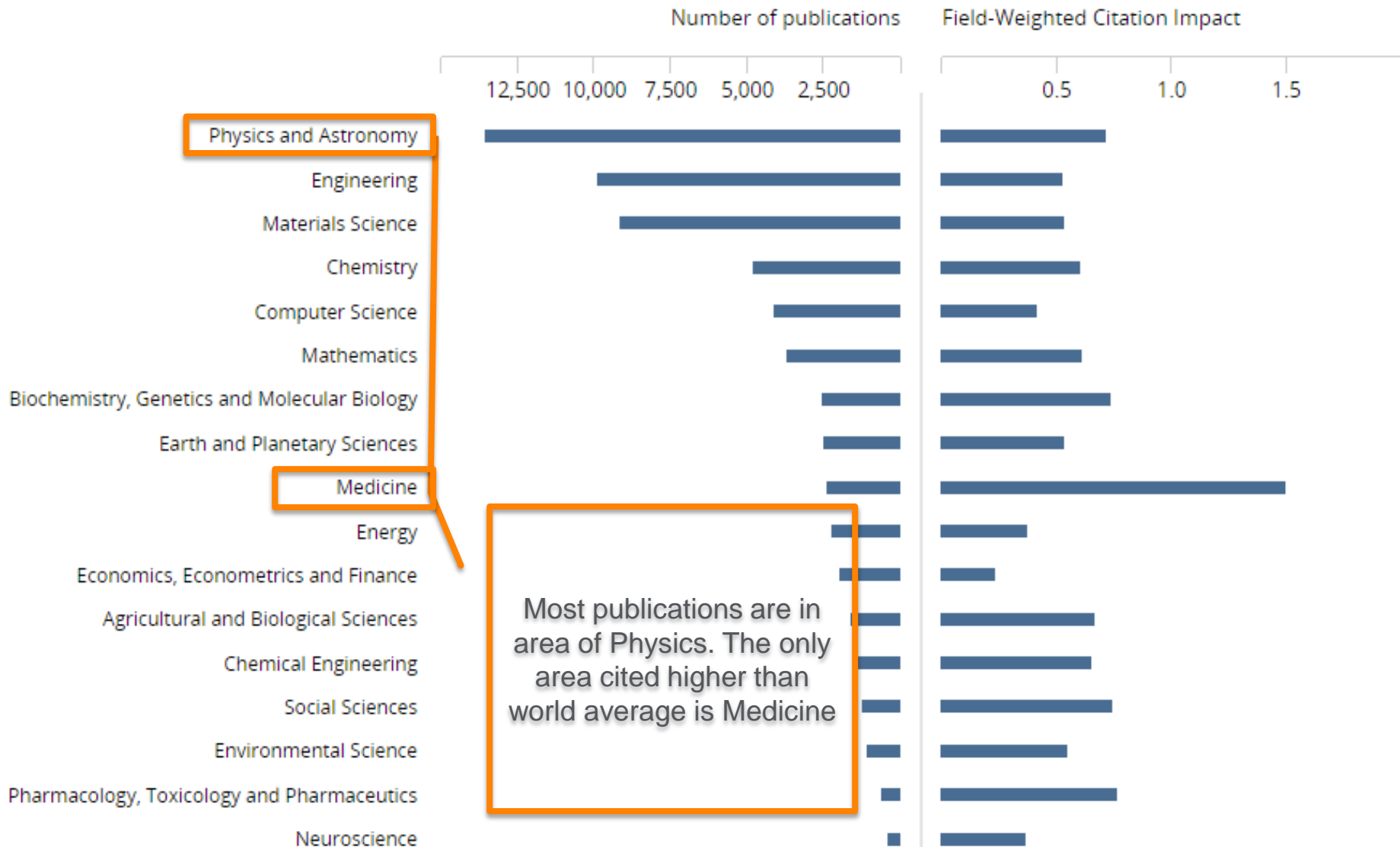
2.0

Publications by Subject Area



















Number of publications and authors is growing, but the citation impact is lower than world average

Ukrainian Publications by Journal Category



Who are publication leaders?

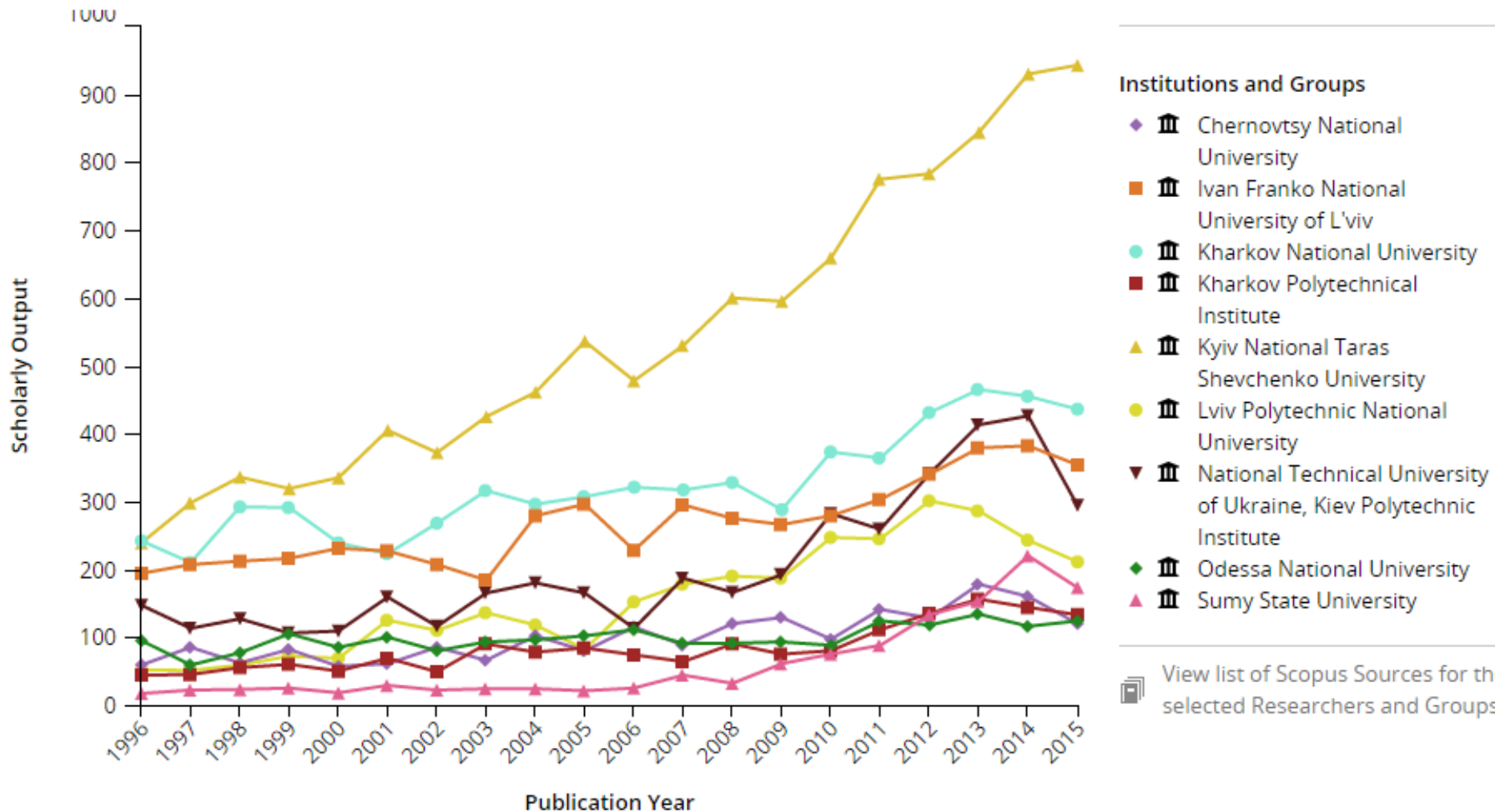
There are 20 Institutions in Ukraine:


Institution	Publications 	Authors	Citations 
1. Ukraine National Academy of Sciences	19,283 	13,037 	66,380
2. Kyiv National Taras Shevchenko University	3,966 	2,627 	10,386
3. Kharkov National University	2,121 	1,389 	4,773
4. National Science Center Kharkov Institute of Physics and Technology	1,993 	1,374 	17,531
5. National Technical University of Ukraine, Kiev Polytechnic Institute	1,703 	1,542 	1,625
6. Ivan Franko National University of L'viv	1,670 	1,273 	3,806
7. Lviv Polytechnic National University	1,316 	1,124 	1,428
8. Chernovtsy National University	702 	469 	1,504
9. Sumy State University	671 	554 	1,743
10. Kharkov National University of Radio Electronics	647 	586 	448
11. Kharkov Polytechnical Institute	619 	560 	1,088
12. Odessa National University	576 	410 	1,758
13. Donetsk National University	450 	379 	436
14. Uzhhorod National University	305 	236 	653

Ukrainian publication leaders among universities - dynamics

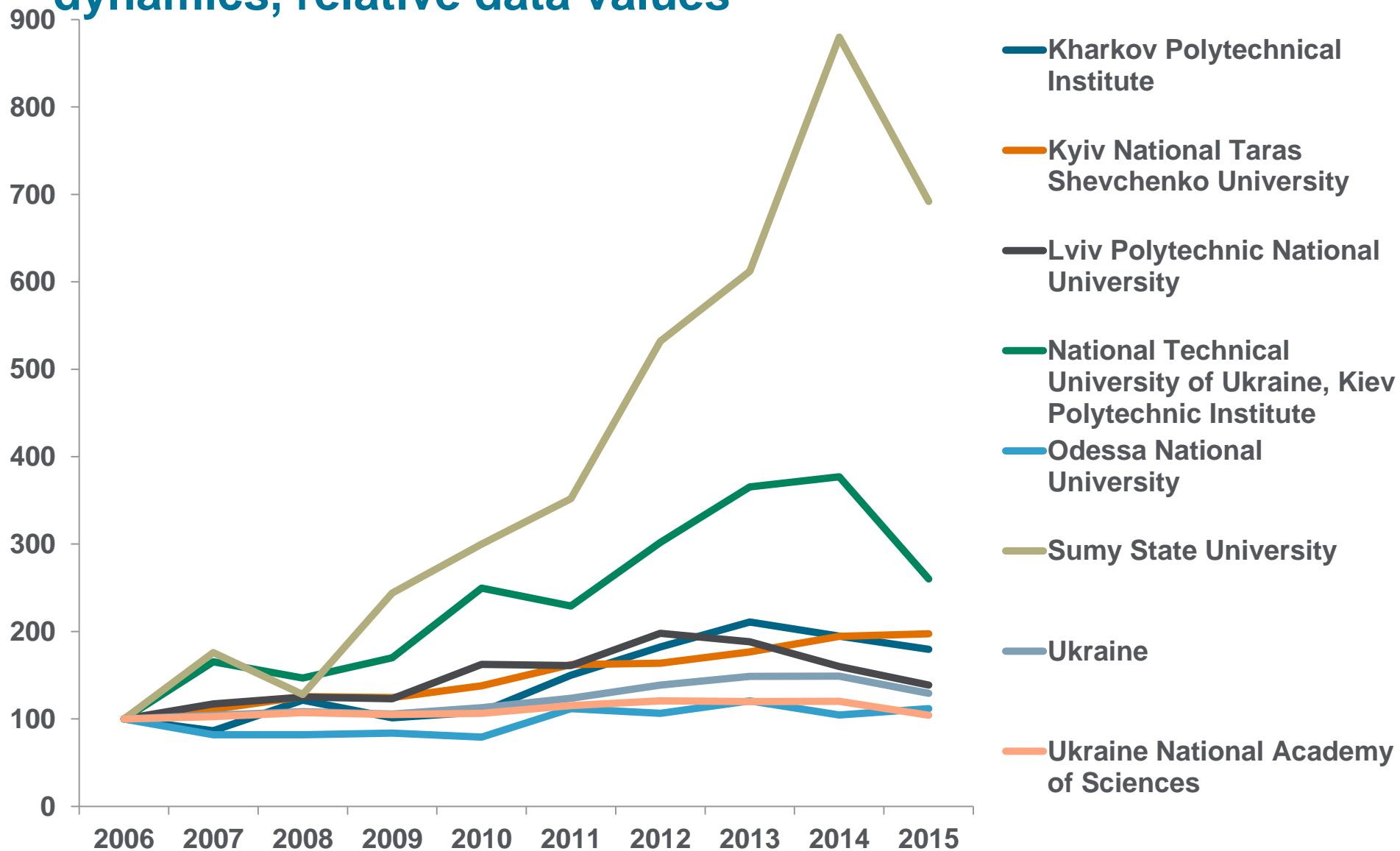
Scholarly Output 

Publication Year



 [View list of Scopus Sources for the selected Researchers and Groups](#)

Ukrainian publication leaders among universities – dynamics, relative data values



Ukrainian publication leaders – correlation of quality and quantity with collaboration impact

y-axis

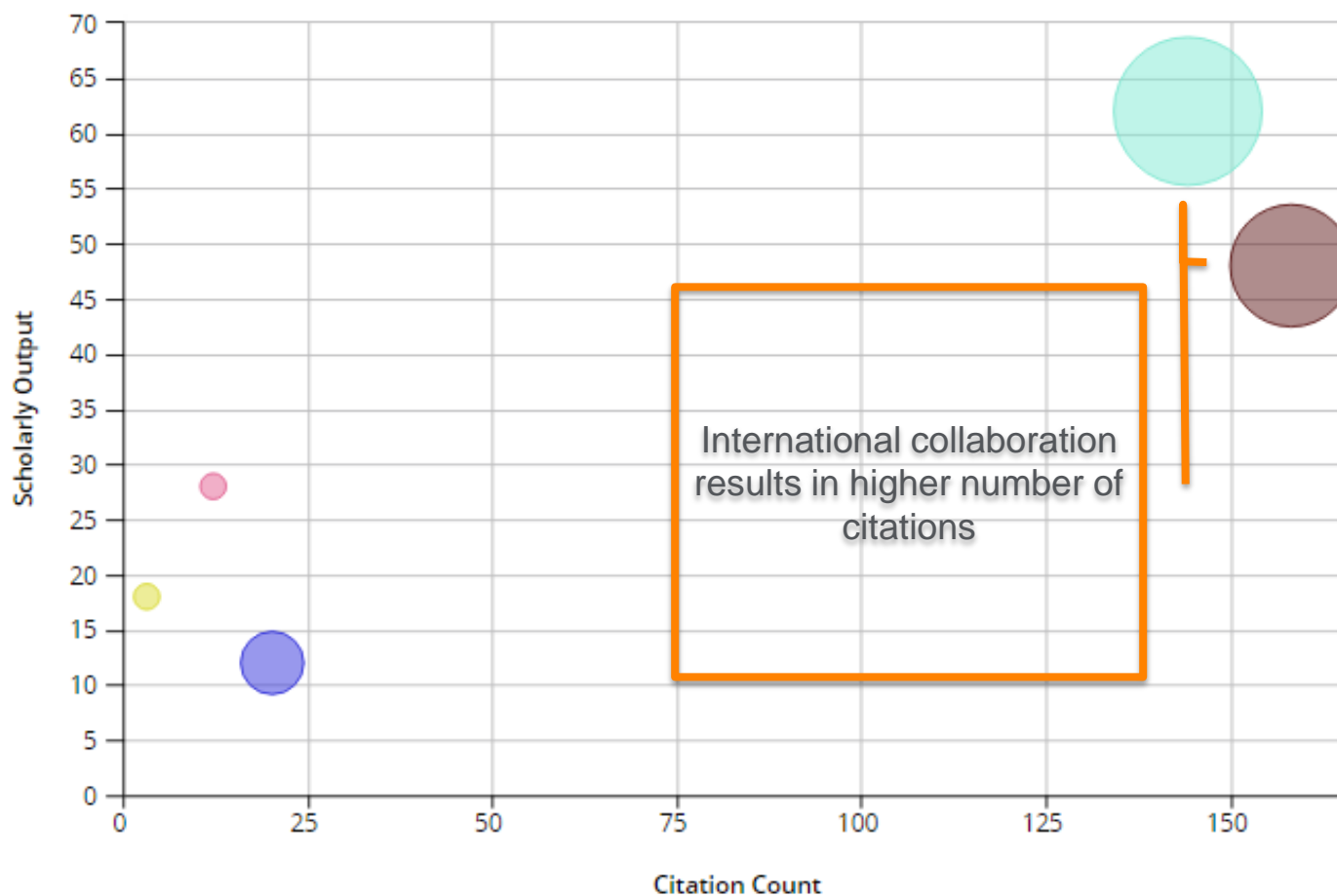
x-axis

Bubble size

Scholarly Output

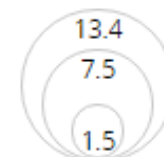
Citation Count

Collaboration Impact



Institutions and Groups

- Chernovtsy National University
- Ivan Franko National University of L'viv
- Kyiv National Taras Shevchenko University
- Odessa National University
- Sumy State University



International collaboration

Ukraine in comparison with neighbouring countries

Quantity...

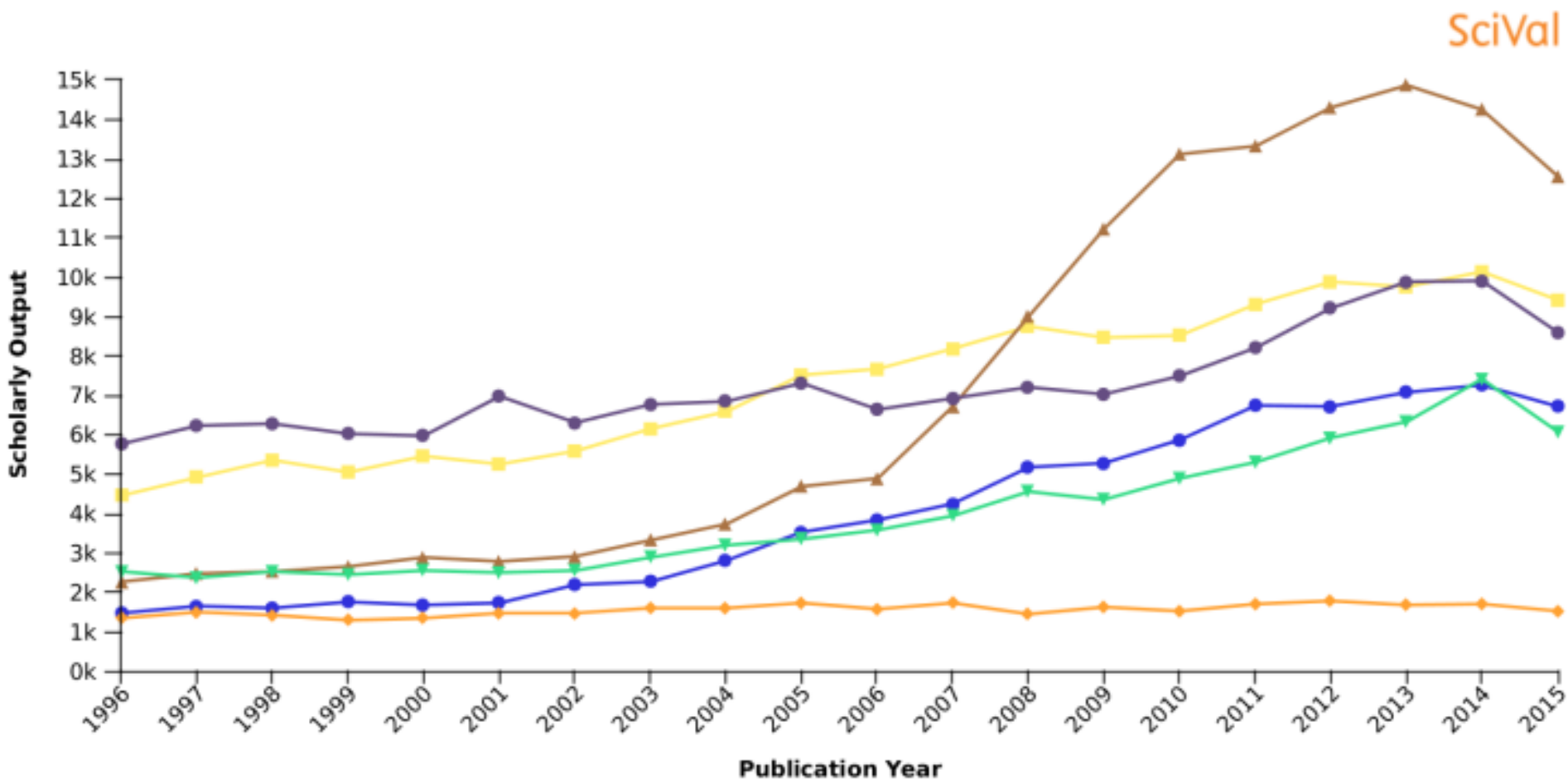


Chart Legend

- Baltic states [Group of Countries]
- Belarus [Country]
- Hungary [Country]
- Romania [Country]
- Slovakia [Country]
- Ukraine [Country]

Ukraine in comparison with neighbouring countries ...and Quality

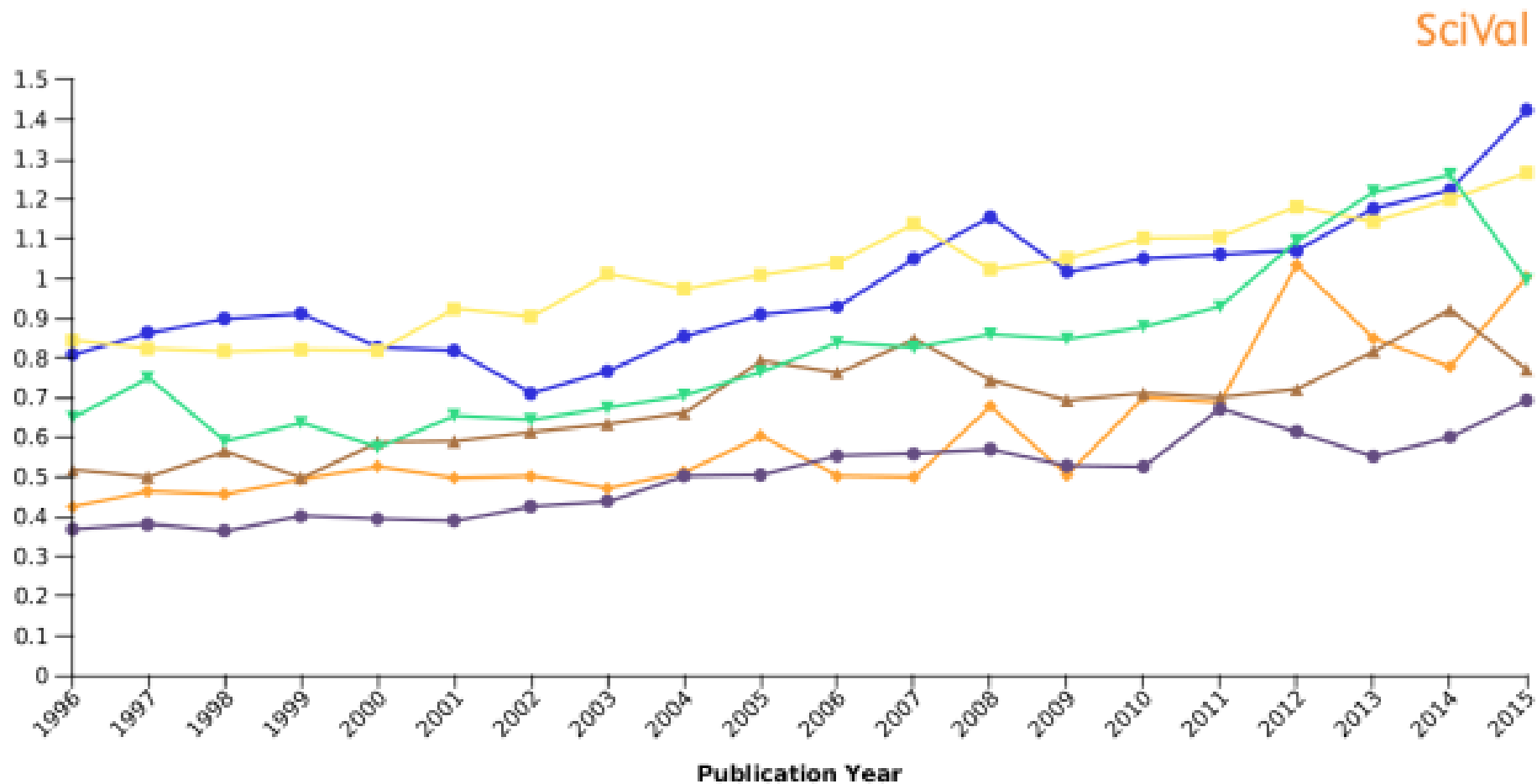


Chart Legend

- Baltic states [Group of Countries]
- Belarus [Country]
- Hungary [Country]
- Romania [Country]
- Slovakia [Country]
- Ukraine [Country]

Ukraine in comparison with neighbouring countries by subject area Electronic, Optical and Magnetic Materials

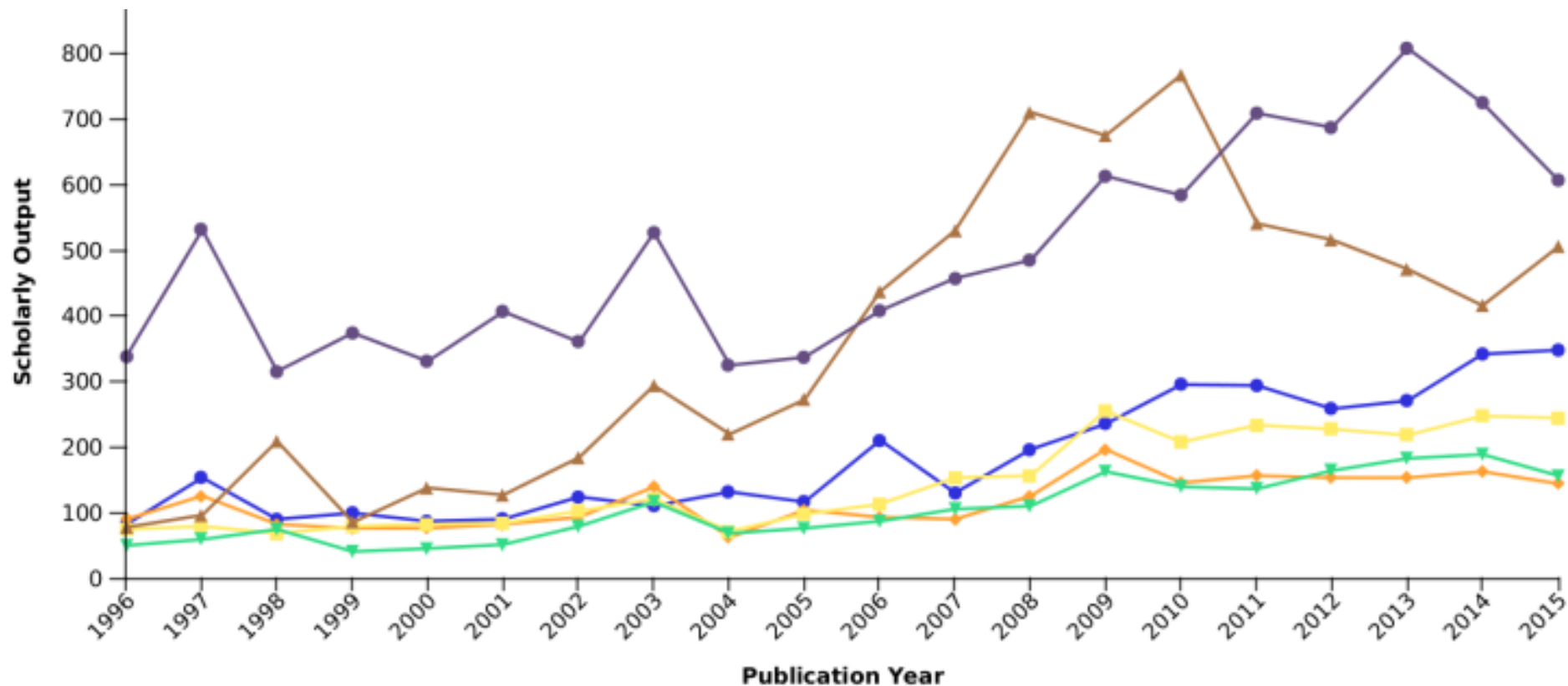


Chart Legend

- Baltic states [Group of Countries]
- Belarus [Country]
- Hungary [Country]
- ▲ Romania [Country]
- ▼ Slovakia [Country]
- Ukraine [Country]

Ukraine in comparison with neighbouring countries by subject area Inorganic Chemistry

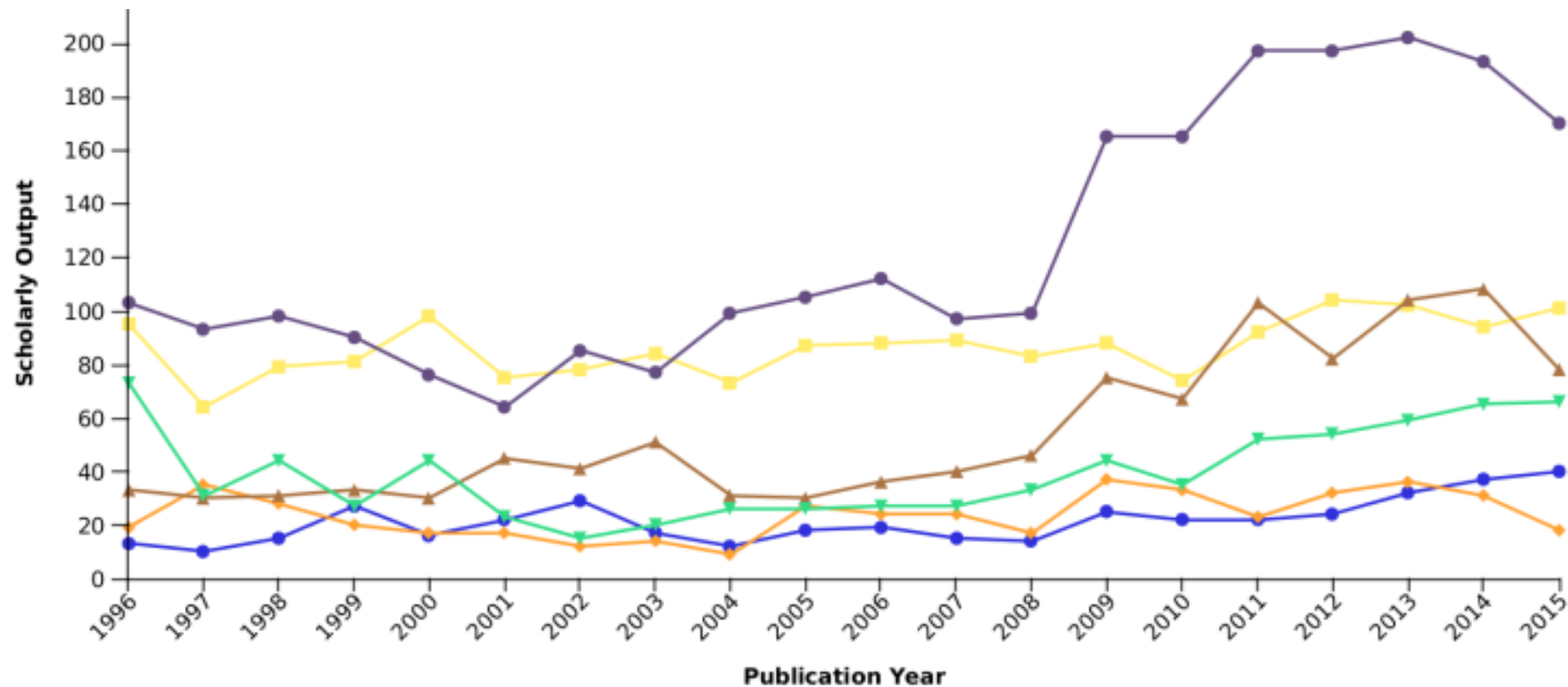


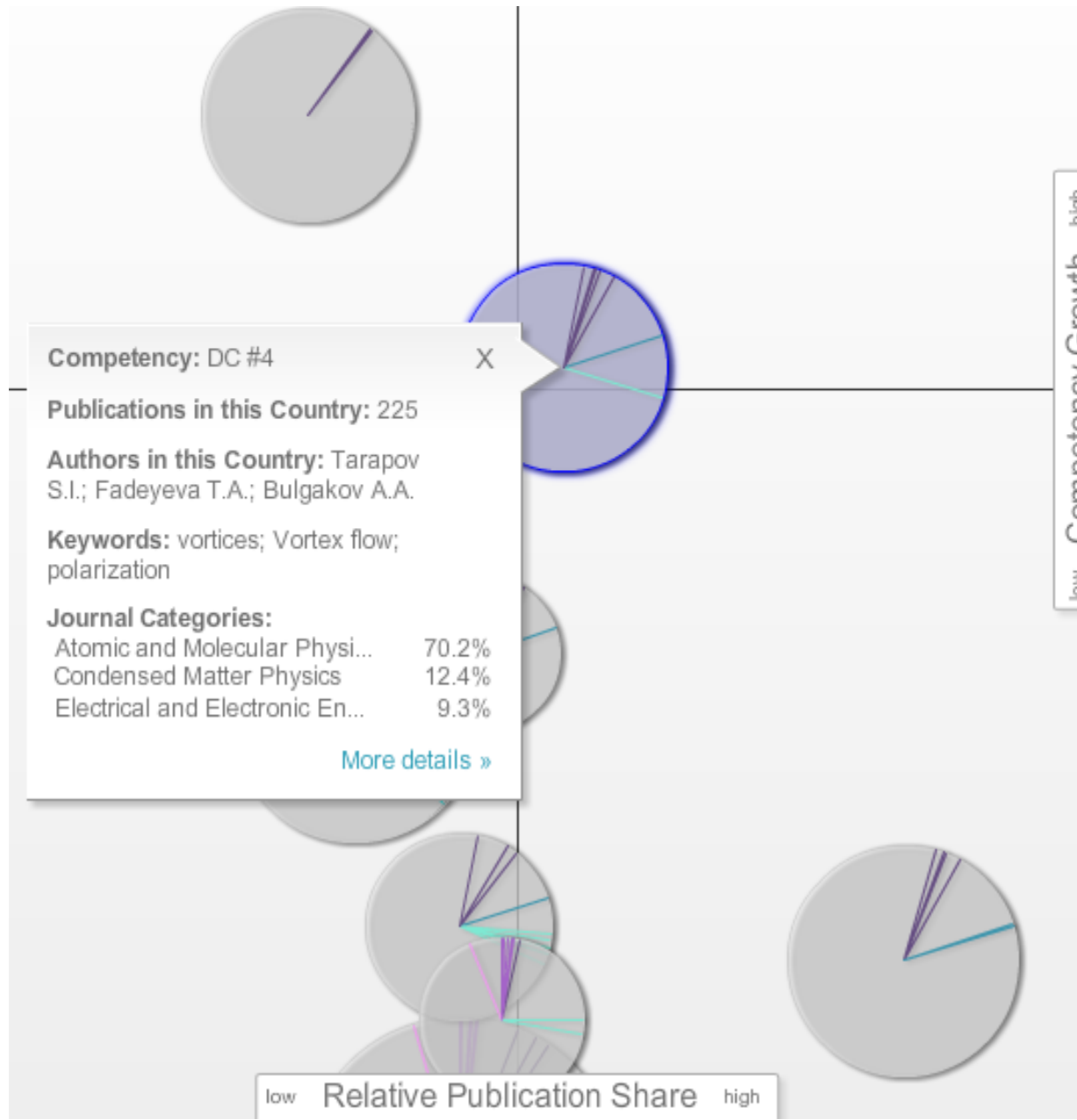
Chart Legend

- Baltic states [Group of Countries]
- Belarus [Country]
- Hungary [Country]
- Romania [Country]
- Slovakia [Country]
- Ukraine [Country]

Unique competencies of Ukrainian science



Which competencies are challenging?



Distinct competency for Ukraine

Competency DC #11

Polarization; coherence; Birefringence

Publications in this field (2010-2014)

	Publications	Annual growth	Citations
Publications worldwide	1,169	-3.5% ▼	5,279
Publications in Ukraine	223	+ 4.4% ▲	828

Institution	Publications in this field
1. Chernovtsy National University	170
2. Australian National University	35
3. Harvard University	39
4. University of Eastern Finland	20
5. University of Duisburg-Essen	21
6. Medical University of Vienna	33

Correlation with world trends (Electronic, Optical and Magnetic Materials)

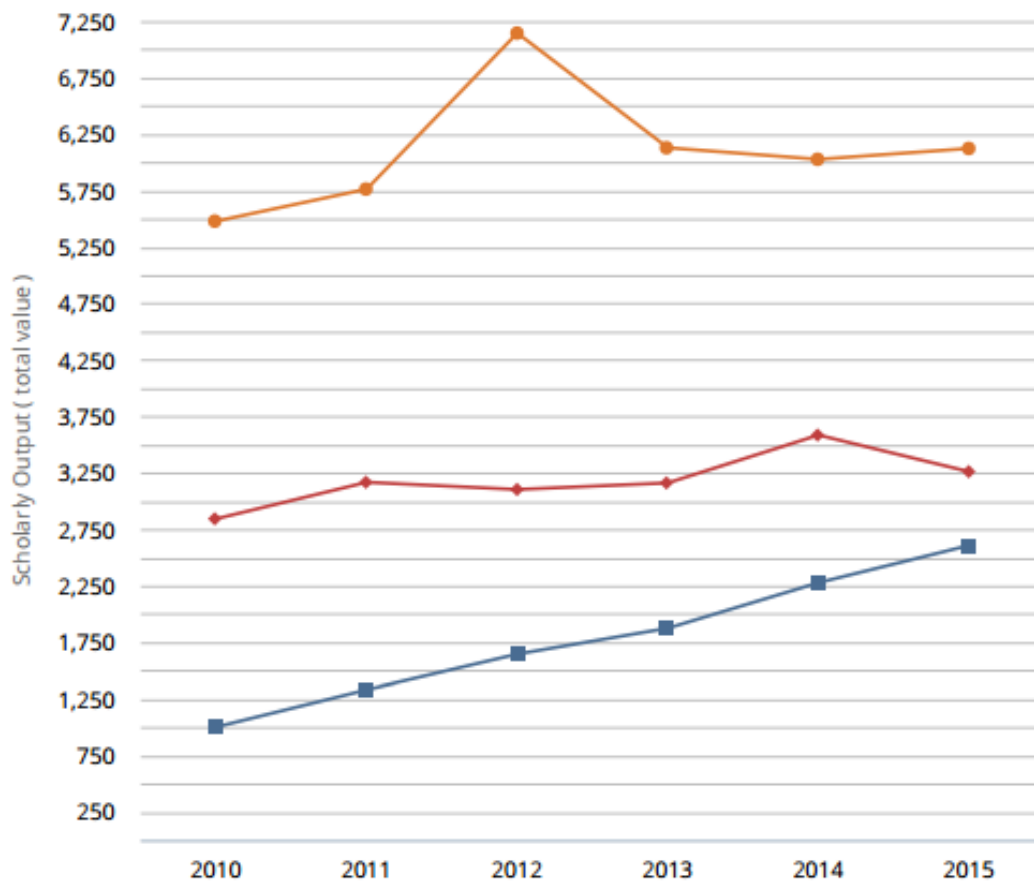
Top 50 keyphrases by relevance, based on 499,351 publications | [Learn about keyphrase calculations](#)

AAA relevance | declining growing (2010-2014)

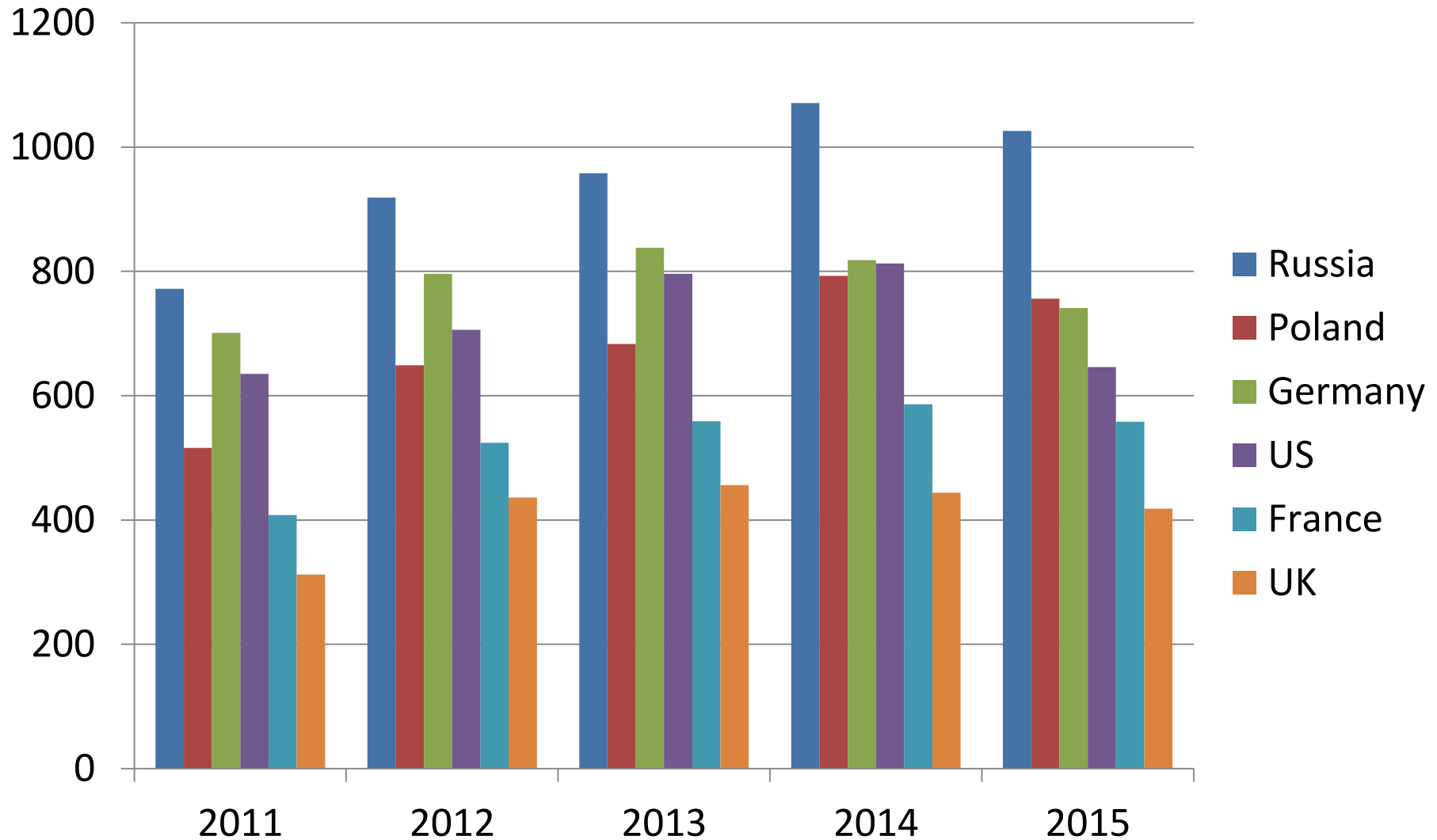
- Graphene
- Lasers
- ◆ Polarization

- Photonics
- Temperature
- Structure (composition)
- Optical fibers
- Models
- Optics
- Solar cells
- Electrons
- Nanoparticles
- Nanowires
- Silicon
- Semiconductor quantum dots
- Imaging techniques

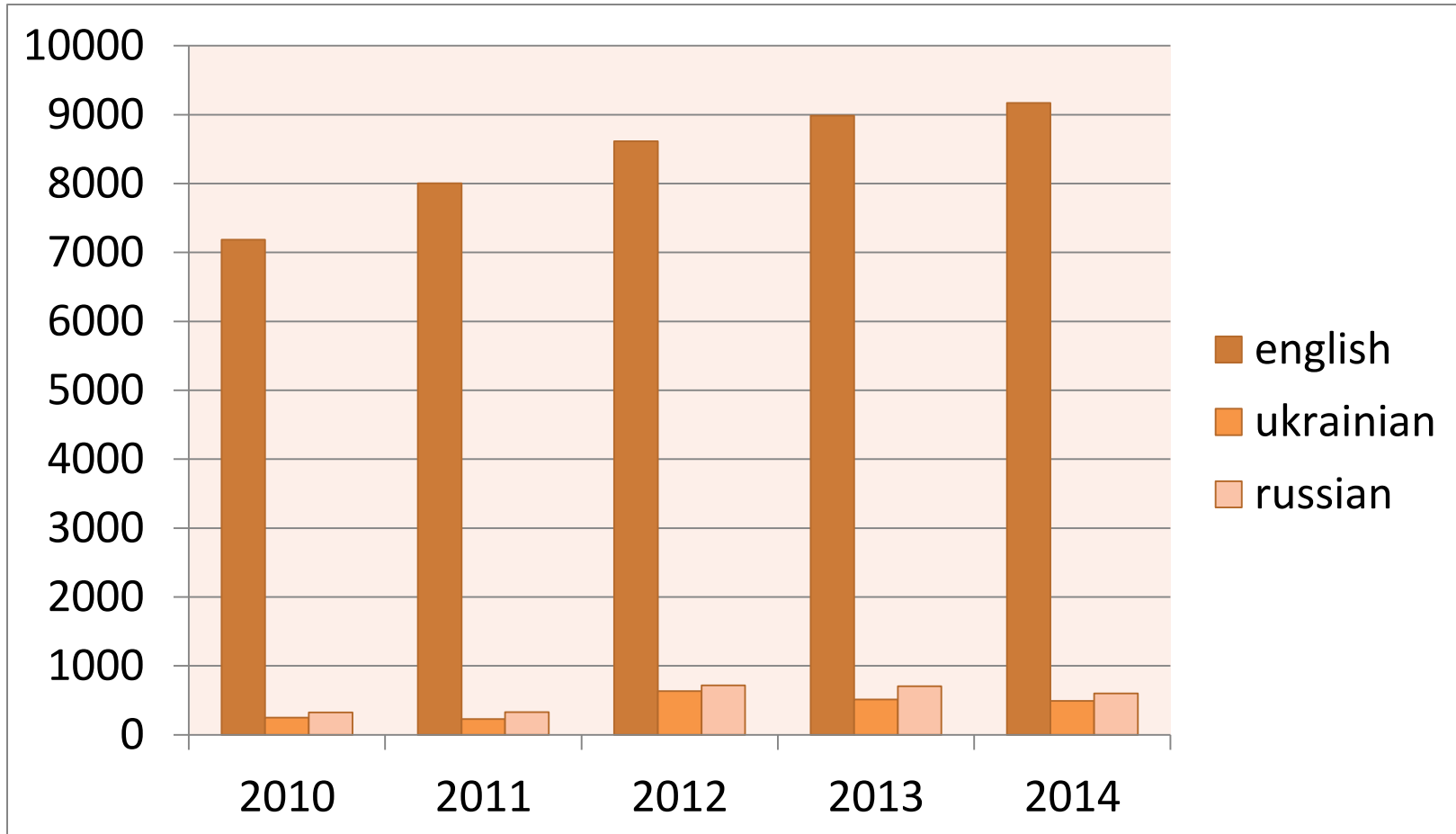
View: Scholarly Output by year



Collaboration pattern of Ukrainian research

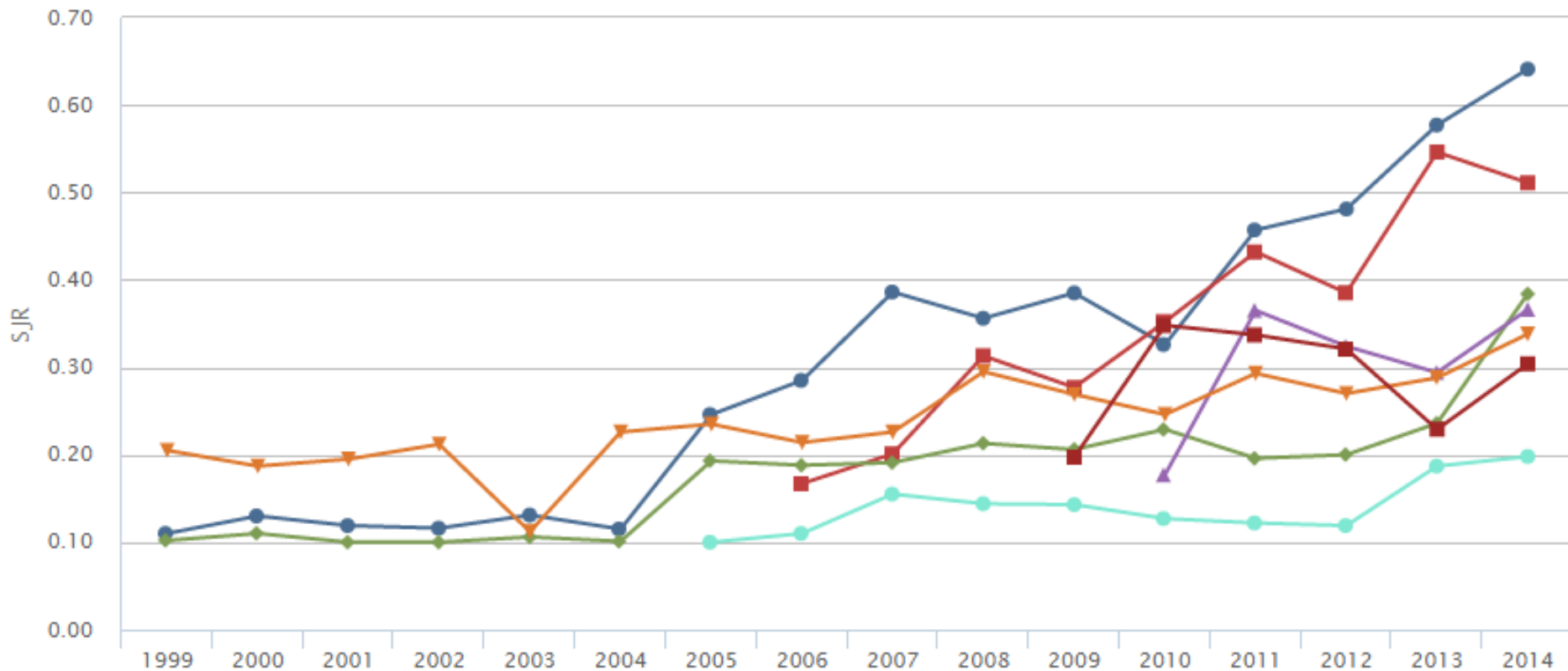


Language of Ukrainian publications in Scopus



Progress of Ukrainian journals in Scopus

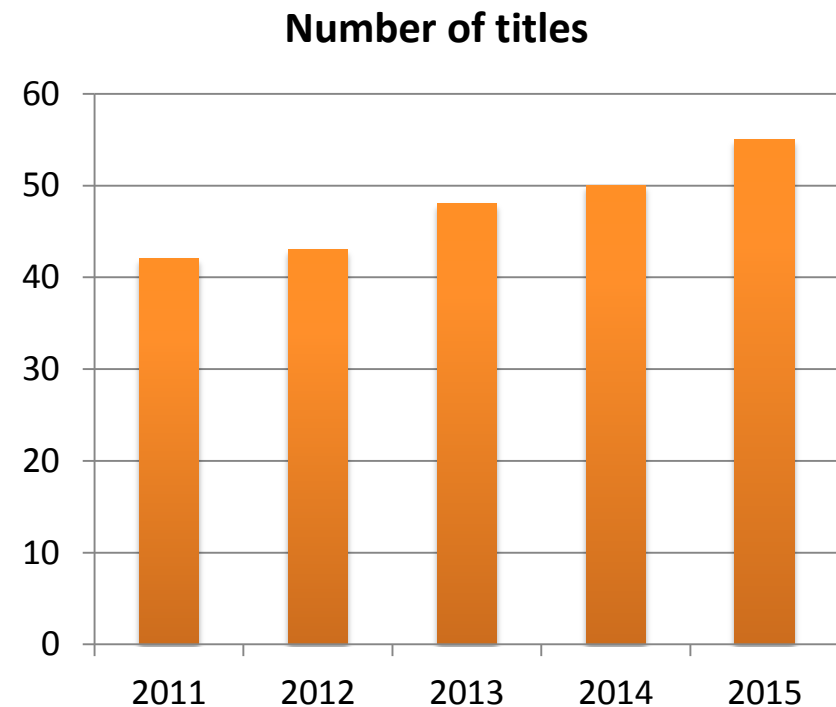
SCImago journal rank by year ?



- Eksperimentalnaya Onkologiya
- Symmetry, Integrability and Geometry: Methods and Applications (SIGMA)
- Cybernetics and Systems Analysis
- Journal of Superhard Materials
- Ukrainian Mathematical Journal
- Investment Management and Financial Innovations
- Ukrainian Journal of Physical Optics

New Journals in Scopus 2015-2016

- Journal of International Studies
- Nanosistemi, Nanomateriali, Nanotehnologii
- Eastern-European Journal of Enterprise Technologies
- Problemy Radiatsiinoi Medytsyny ta Radiobiolohii
- Banks and Bank Systems
- Sententiae



Strategic partnership with Elsevier

We recognize the commitment of the Ukrainian government to further enhance Ukraine competitiveness by supporting the development of the ecosystem of research, technology, and innovation among academics, government, and industry.

Joint initiatives include:

- Publishing in Elsevier Journals
- Advisory service for journals on Scopus title evaluation process
- Providing free reference manager and academic social network
- Trainings and author workshops
- Scopus Award Ukraine

Elsevier has a long history in scientific publishing



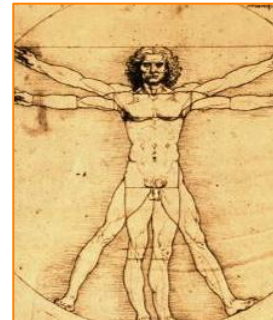
The Publishing House of Elsevier was first established in 1580 by Lowys (Louis) Elzevir at the University of Leiden, Holland



Galileo published his "*Discorsi e dimostrazioni matematiche, intoro a due nuoue scienze*" - his last work – with Elsevier despite being banned by the Inquisition and is recognized as the first important work of modern physics



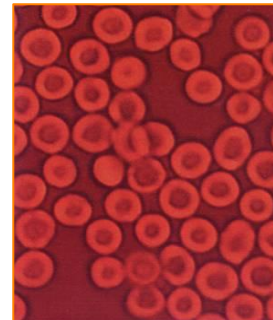
Keeping to the tradition of publishing established by Lowys Elzevir, Jacobus George Robbers established the modern Elsevier Company in 1880



The publication of "*Gray's Anatomy*" in 1858 was a landmark for the study of the human anatomy and in many ways for the whole of medicine



Among those authors who published with Elsevier are, Galileo, Erasmus, Descartes, Alexander Fleming, Julius Verne



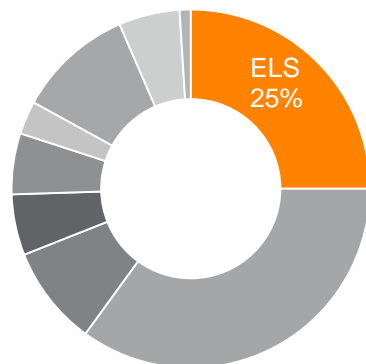
The publication of the book, edited by Sir Alexander Fleming, about a revolutionary new antibiotic, "*Penicillin: Its Practical Application*" in 1946

Elsevier is the top scientific content provider of vital interdisciplinary information essential across industries and disciplines

Scientific Research Articles Published

#1 Global Provider

- Publish 25% of world's journal articles
- 2,200 active journals
- 22,000 book titles
- 900 serials
- 12 million full-text articles

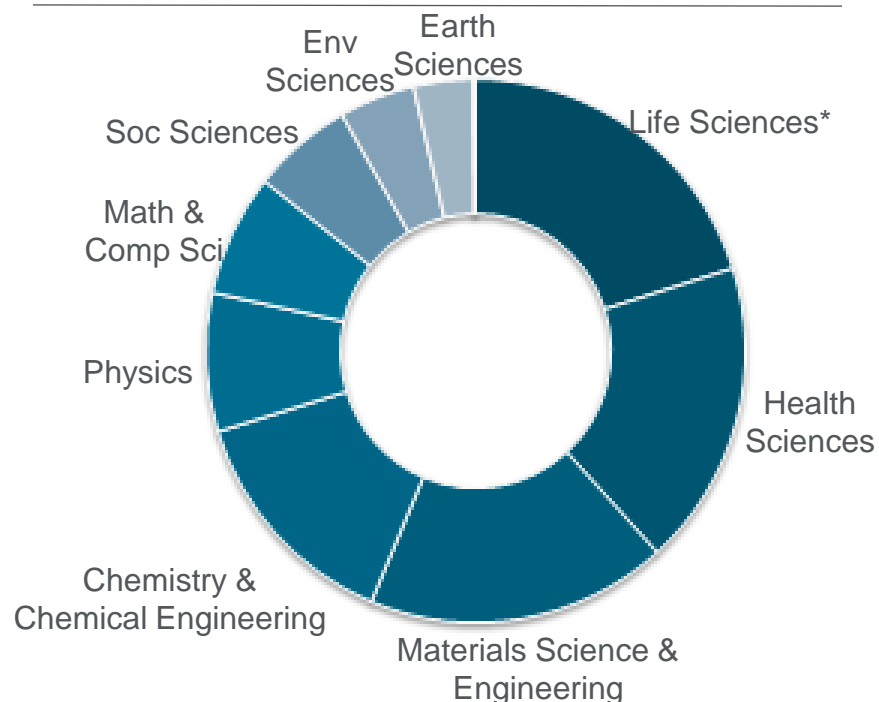


Global team

- 74 offices in 24 countries
- 7,000 Journal Editors
- 70,000 Editorial Board Members
- 600,000 authors



Multi-disciplinary content



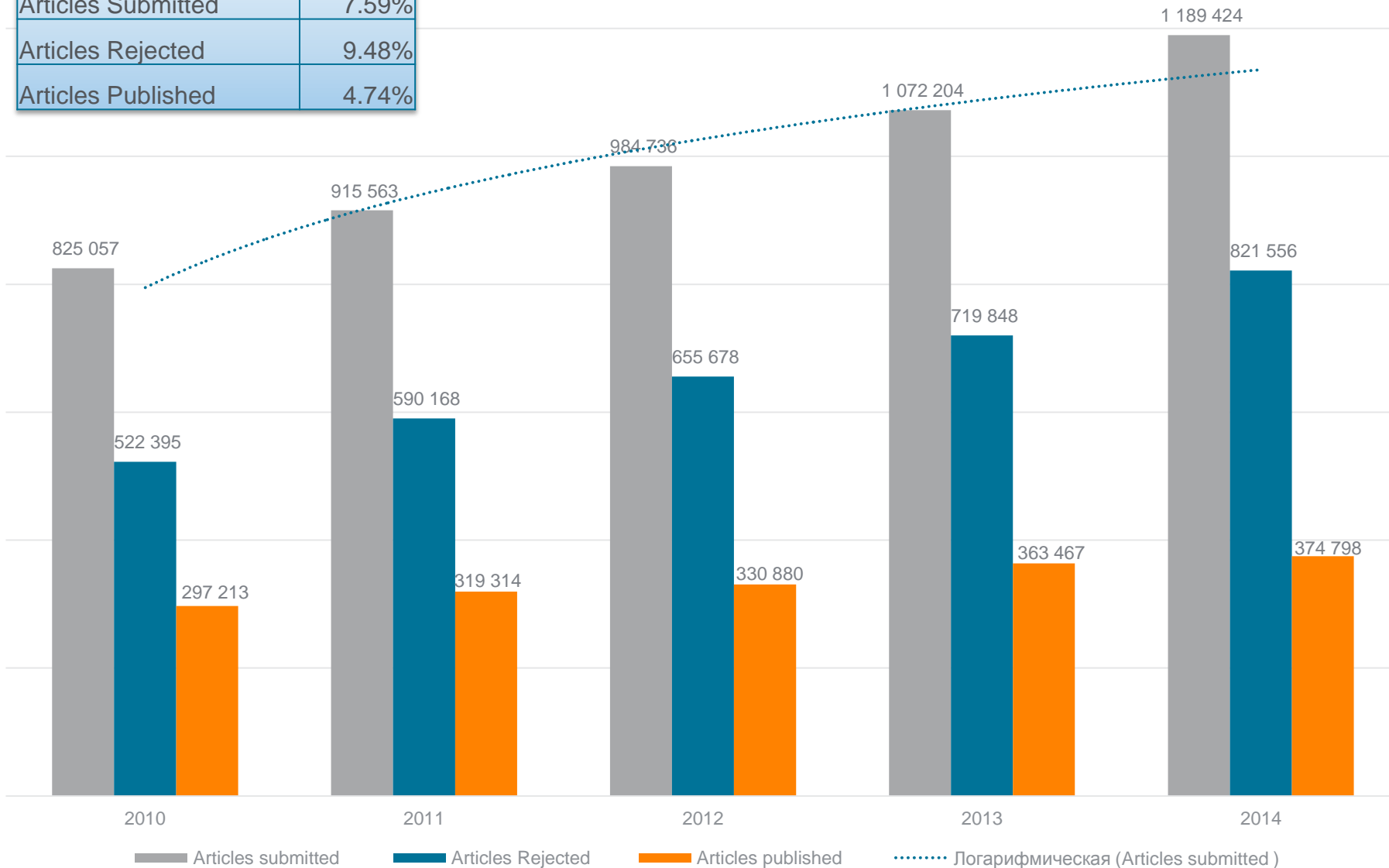
* Includes biological and biotechnology-related fields, neuroscience, pharmacology, toxicology



ScienceDirect is a full-text database offering scientific, technical and medical (STM) journal articles and book chapters. Elsevier meets the information needs of various scientific disciplines and industries, across Government, Academic and Corporate research.

The work of a publisher: Submissions, Rejections and Publications

5 Year CAGR: 2010-2014	
Articles Submitted	7.59%
Articles Rejected	9.48%
Articles Published	4.74%

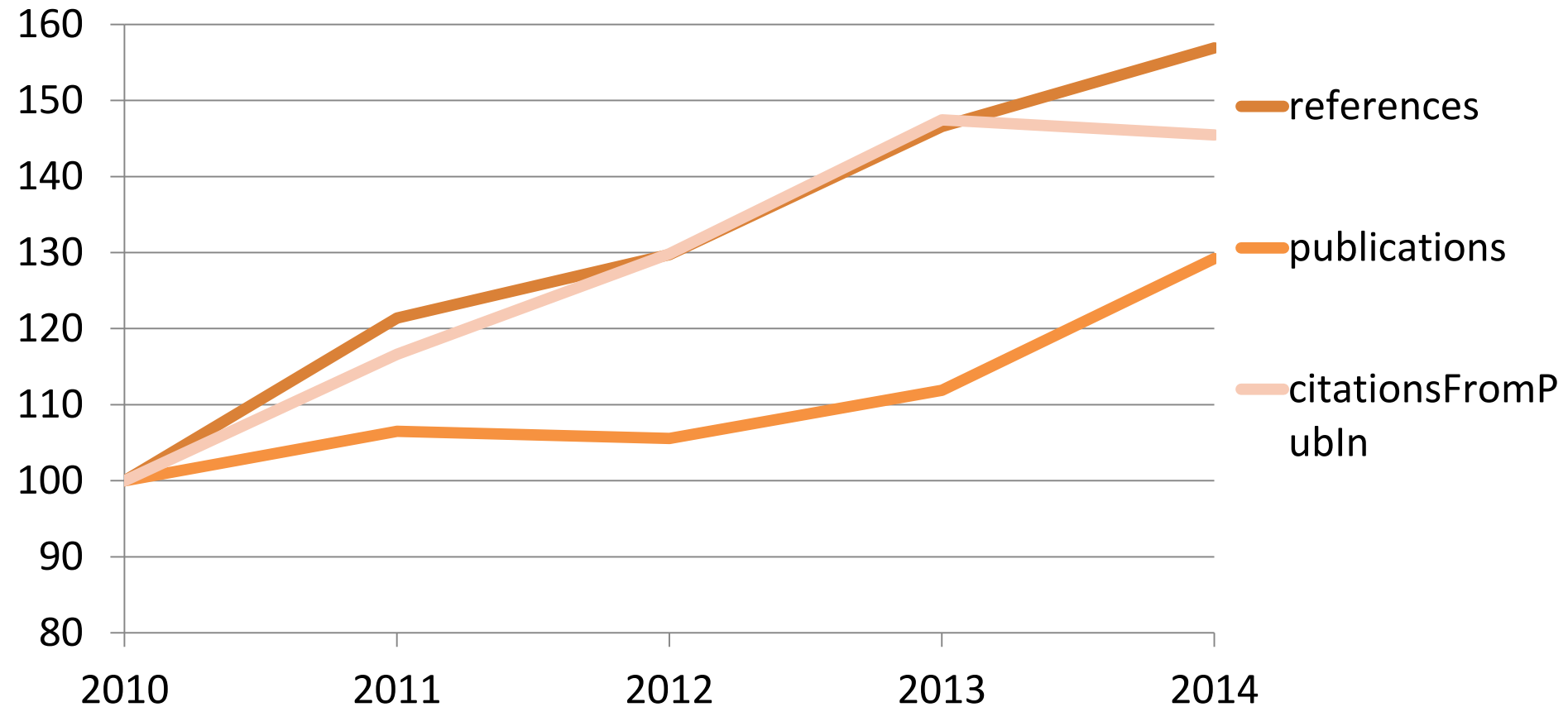


Elsevier journals that rank No.1 in subject categories (2014)

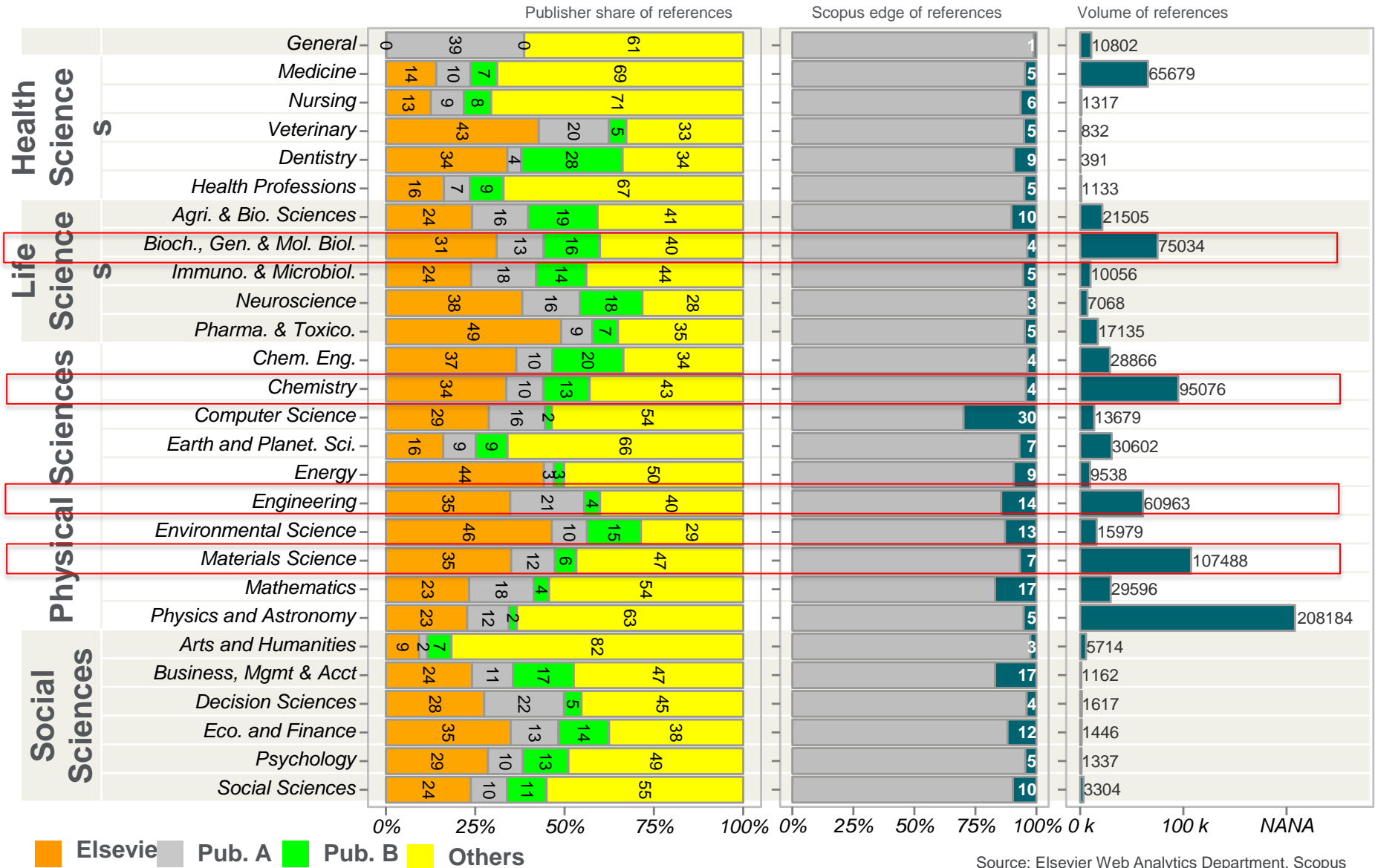


No.1 in 62 categories
(out of 232 categories)

ScienceDirect contributes to Ukrainian research process



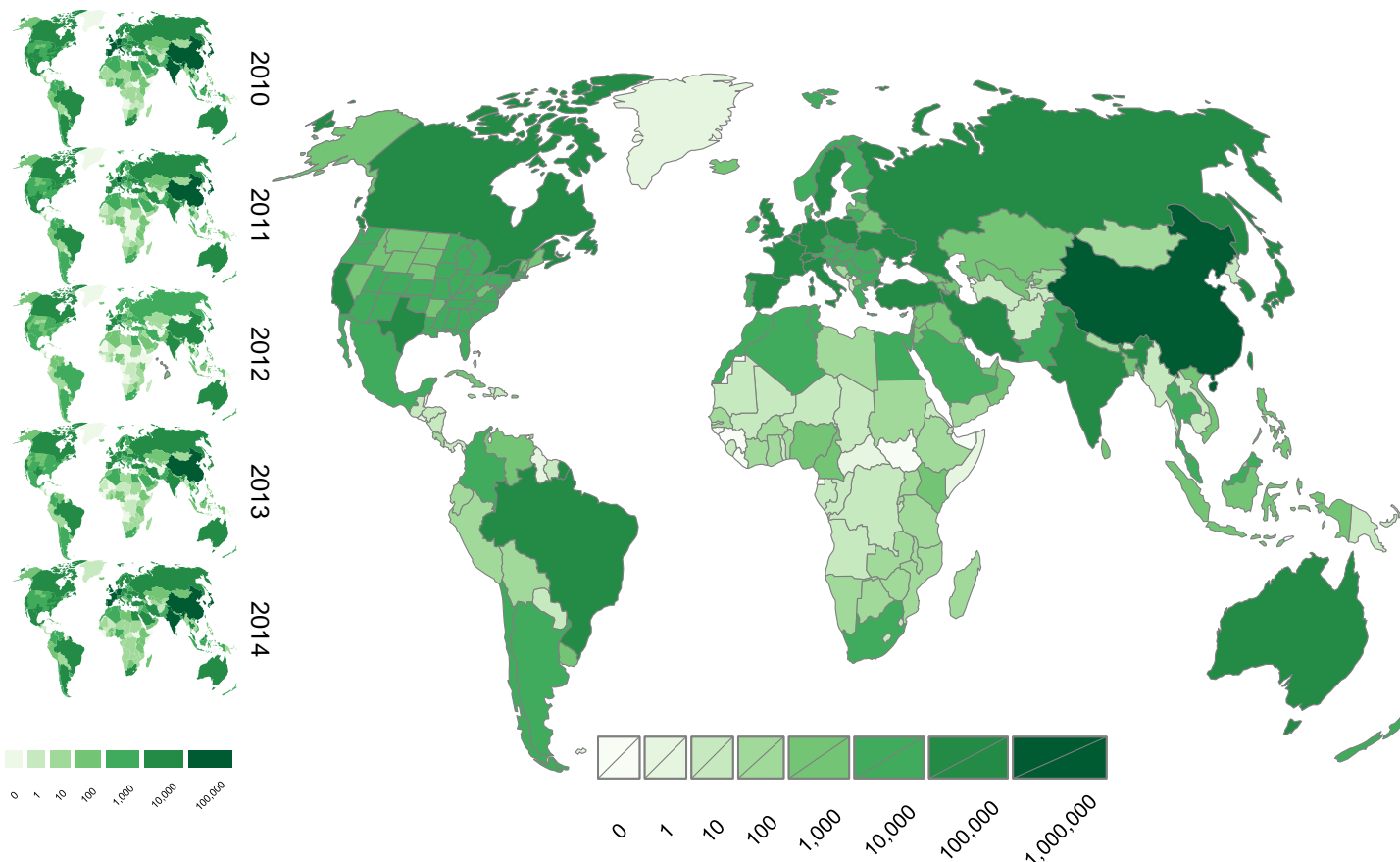
Subjects of documents referenced by your researchers: Ukraine



Source: Elsevier Web Analytics Department, Scopus Usage Data 2010–2014

ScienceDirect brings research from all over the world to Ukraine

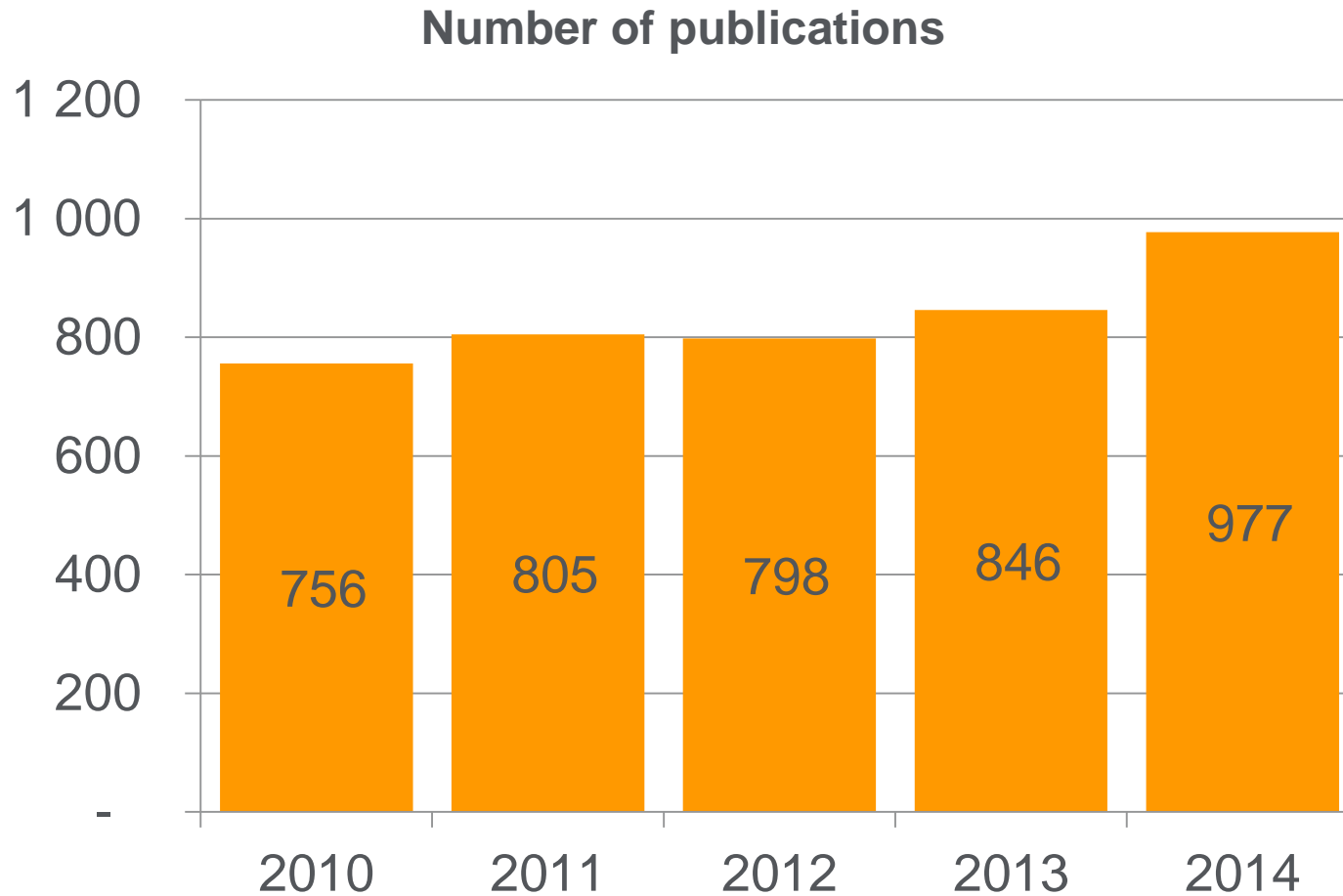
Where in the world do the articles downloaded by Ukrainian researchers via ScienceDirect come from?



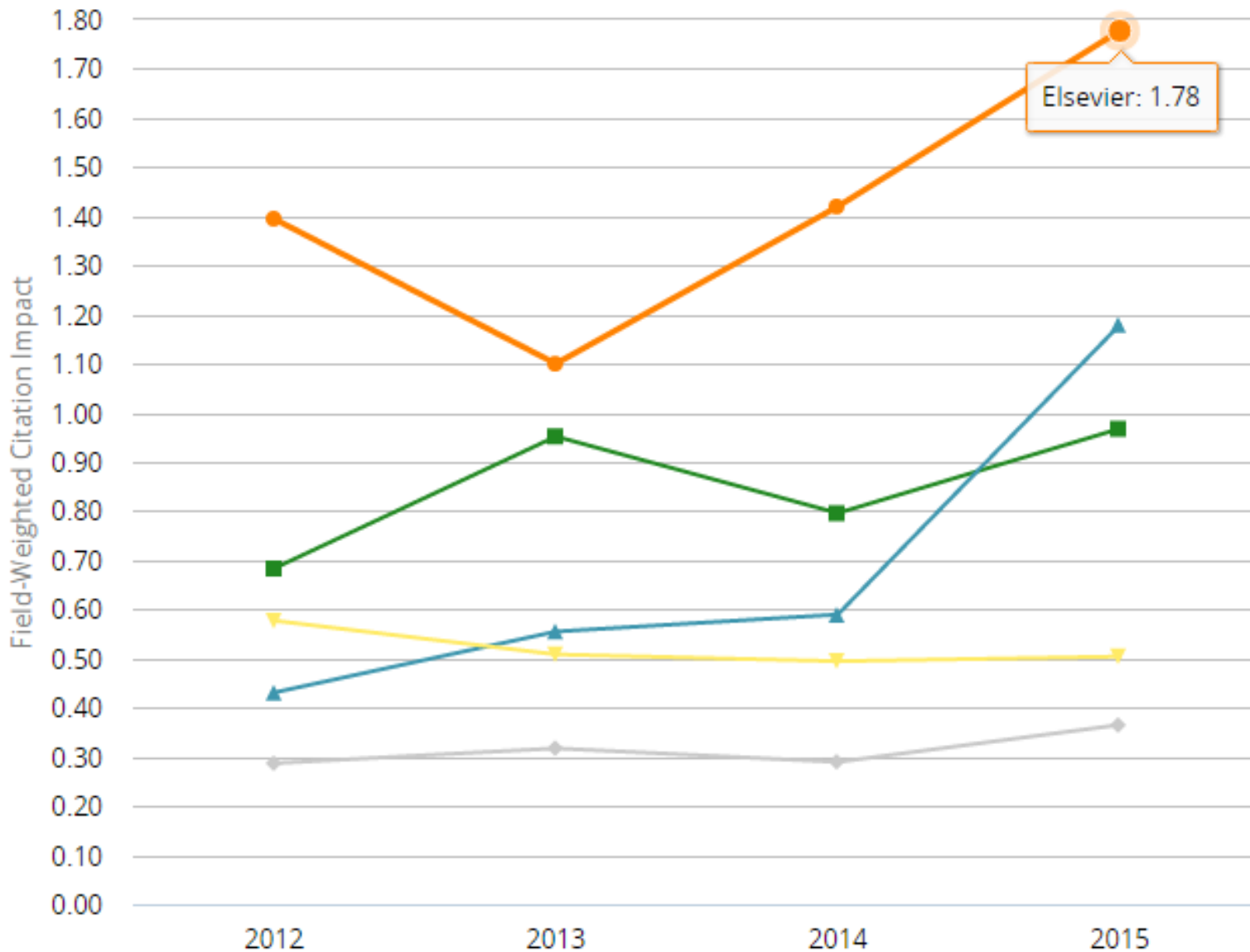
Top 20 Downloaded Countries	
United States	16.49 %
China	15.86 %
Japan	5.46 %
France	5.08 %
Germany	4.90 %
India	4.46 %
United Kingdom	4.36 %
Korea	3.57 %
Spain	3.30 %
Italy	3.29 %
Taiwan	2.61 %
Canada	2.57 %
Australia	2.03 %
Iran	1.79 %
Brazil	1.61 %
Poland	1.59 %
Russia	1.50 %
Turkey	1.42 %
Ukraine	1.36 %
Netherlands	1.28 %

In the last 5 years, researchers from Ukraine have downloaded on ScienceDirect 1,071,431 documents written in 211 countries.

Ukrainian Publications in Elsevier Journals



Most cited articles of Ukrainian researchers are published in Elsevier journals



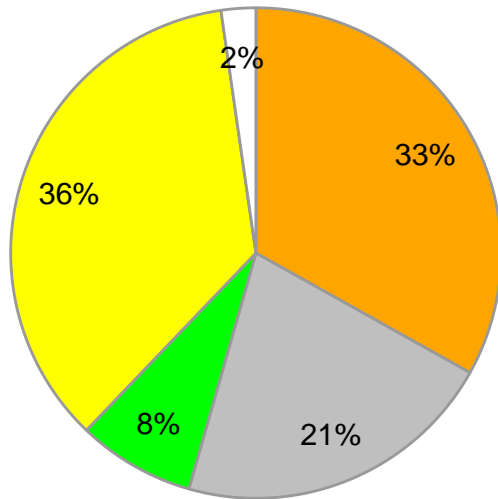
ScienceDirect helps innovators benefit from research done in Ukraine

Since 1996, your publications with Elsevier have been cited in the patents documents of 651 inventions.

1,667 articles published by Ukraine affiliated researchers have been cited in 3,190 unique inventions.

33% were published with Elsevier

Cited Articles share by publisher



Elsevier Pub. A Pub. B Others Not an article

Source: LexisNexis Univentio and Scopus. Documents published since 1996



Download PDF

Export

Search ScienceDirect



Advanced search



ELSEVIER

Aquatic Toxicology

Volume 101, Issue 1, 17 January 2011, Pages 13–30



Review

Environmentally induced oxidative stress in aquatic animals

Volodymyr I. Lushchak

Department of Biochemistry and Biotechnology, Precarpathian National University named after Vassyl Stefanyk, Ivano-Frankivsk 76025, Ukraine

Received 13 May 2010, Revised 4 October 2010, Accepted 11 October 2010, Available online 23 October 2010

 Show less

doi:10.1016/j.aquatox.2010.10.006

Get rights and content

Abstract

Reactive oxygen species (ROS) are an unenviable part of aerobic life. Their steady-state concentration is a balance between production and elimination providing certain steady-

[▶ Recommended articles](#)[▼ Citing articles \(391\)](#)[Quercetin in the diet o](#)2016, Aquaculture [more](#)[Sub-lethal effects of w](#)

2016, Environmental Pollutio

[Antioxidative respons](#)

2016, Ecotoxicology and Env

[View more articles »](#)[▶ Related book content](#)



Download PDF

Export ▾

Search ScienceDirect



Advanced search



Biosensors and Bioelectronics

Volume 54, 15 April 2014, Pages 393–407



Current trends in the development of the electrochemiluminescent immunosensors

Kateryna Muzyka

Kharkiv National University of RadioElectronics, Lenin Avenue 14, Kharkiv 61166, Ukraine

Received 27 September 2013, Revised 5 October 2013, Accepted 1 November 2013, Available online 13 November 2013

CrossMark

 Show less

doi:10.1016/j.bios.2013.11.011

Get rights and content

Highlights

- Current trends in the development of the electrochemiluminescent immunosensors

▶ Recommended articles

▼ Citing articles (40)

Electrochemiluminescence

2016, Biosensors and Bioelectronics

An electrochemiluminescent

2016, Sensors (Switzerland)

Wash-free magnetic immunosensors

2016, Lab on a Chip - Miniaturized

[View more articles »](#)

▶ Related book content



Download PDF



Export

Search ScienceDirect



Advanced search



ELSEVIER

Coordination Chemistry Reviews

Volume 268, 1 June 2014, Pages 41–58



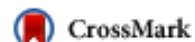
Review

Spin crossover in soft matter

Dedicated to Prof. Philipp Gütlich on the occasion of his 80th birthday.

Ana B. Gaspar^a, , Maksym Seredyuk^{a, b}, ^a Institut de Ciència Molecular (ICMOL), Departament de Química Inorgànica, Universitat de València, Edifici de Instituts de Paterna, Apartat de Correus 22085, 46071 València, Spain^b Department of Physical Chemistry, National Taras Shevchenko University, Volodymyrska Street 64, Kiev 01601, Ukraine

Received 5 November 2013, Accepted 16 January 2014, Available online 25 January 2014



CrossMark

Show less

doi:10.1016/j.ccr.2014.01.018

Get rights and content

► Recommended articles

▼ [Citing articles \(29\)](#)**New complexation be**2016, Polyhedron [more](#)**Different Spin-State E**

2016, Chemistry - A Europe

Spin State As a Prob

2016, Journal of the Americ

[View more articles »](#)

► Related book content



Download PDF



Export

Search ScienceDirect



Advanced search



Communist and Post-Communist Studies

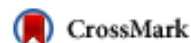
Volume 46, Issue 4, December 2013, Pages 419–431



Informal payments for health care services – Corruption or gratitude? A study on public attitudes, perceptions and opinions in six Central and Eastern European countries

Tetiana Stepurko^{a, b, *}, Milena Pavlova^b, Irena Gryga^a, Wim Groot^{b, c}^a School of Public Health, National University of Kyiv-Mohyla Academy, Skovorody Street 2, 04655 Kiev, Ukraine^b Department of Health Services Research, CAPHRI, Maastricht University Medical Center, Faculty of Health, Medicine and Life Sciences, P.O. Box 616, 6200 MD Maastricht, The Netherlands^c Topinstitute Evidence-Based Education Research (TIER), Maastricht University P.O. Box 616, 6200 MD Maastricht, The Netherlands

Available online 19 September 2013



CrossMark

Show less

doi:10.1016/j.postcomstud.2013.08.004

Get rights and content

▶ Recommended articles

▼ Citing articles (9)

Preferences for physician

2015, International Journal of

To pay or not to pay? A

2015, Health Expectations

Introduction: My name is

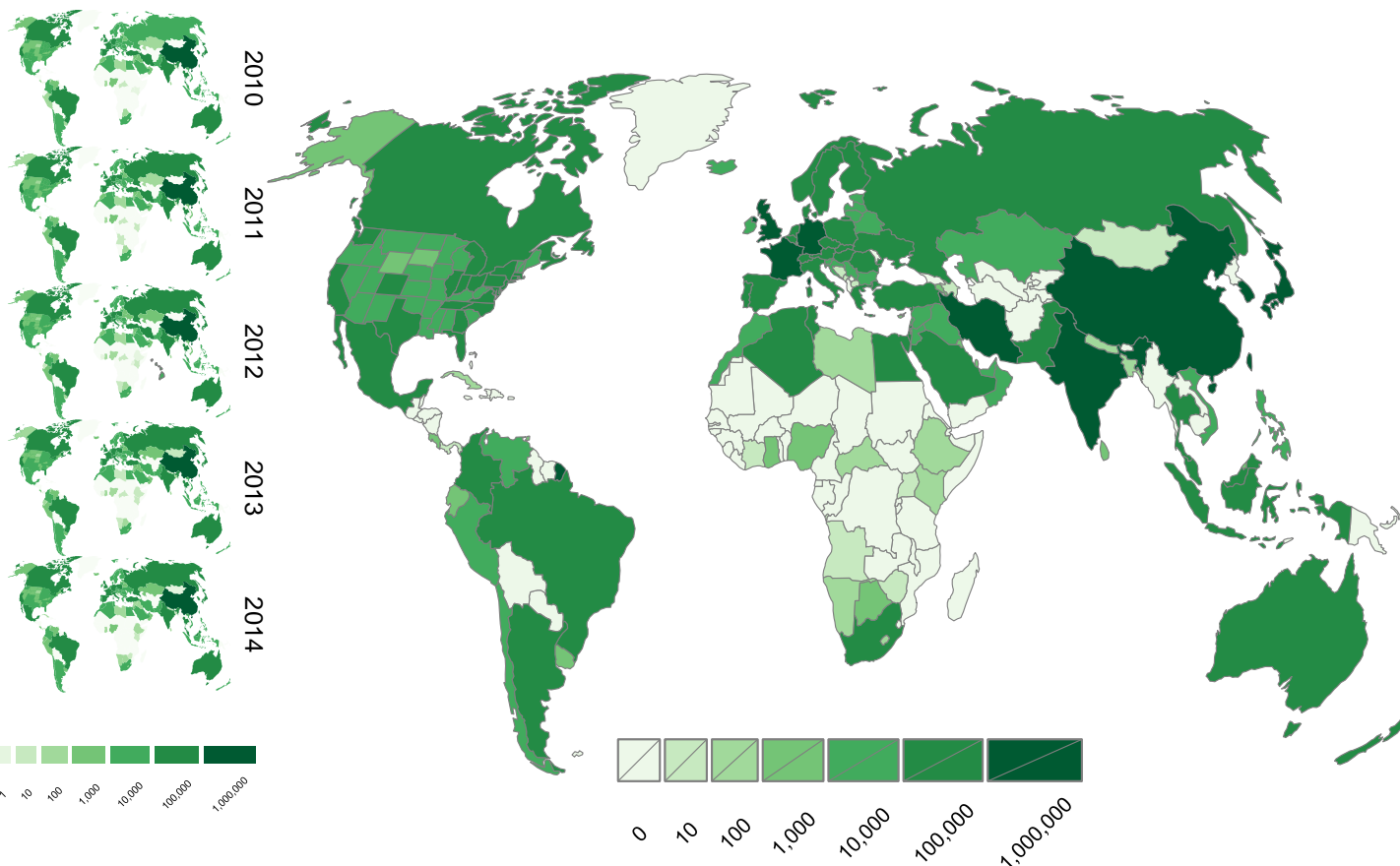
2015, Informal Economies in F

View more articles »

▶ Related book content

ScienceDirect ensures research from Ukraine is seen all over the world

Where in the world have the articles authored by Ukraine affiliated researchers been downloaded?



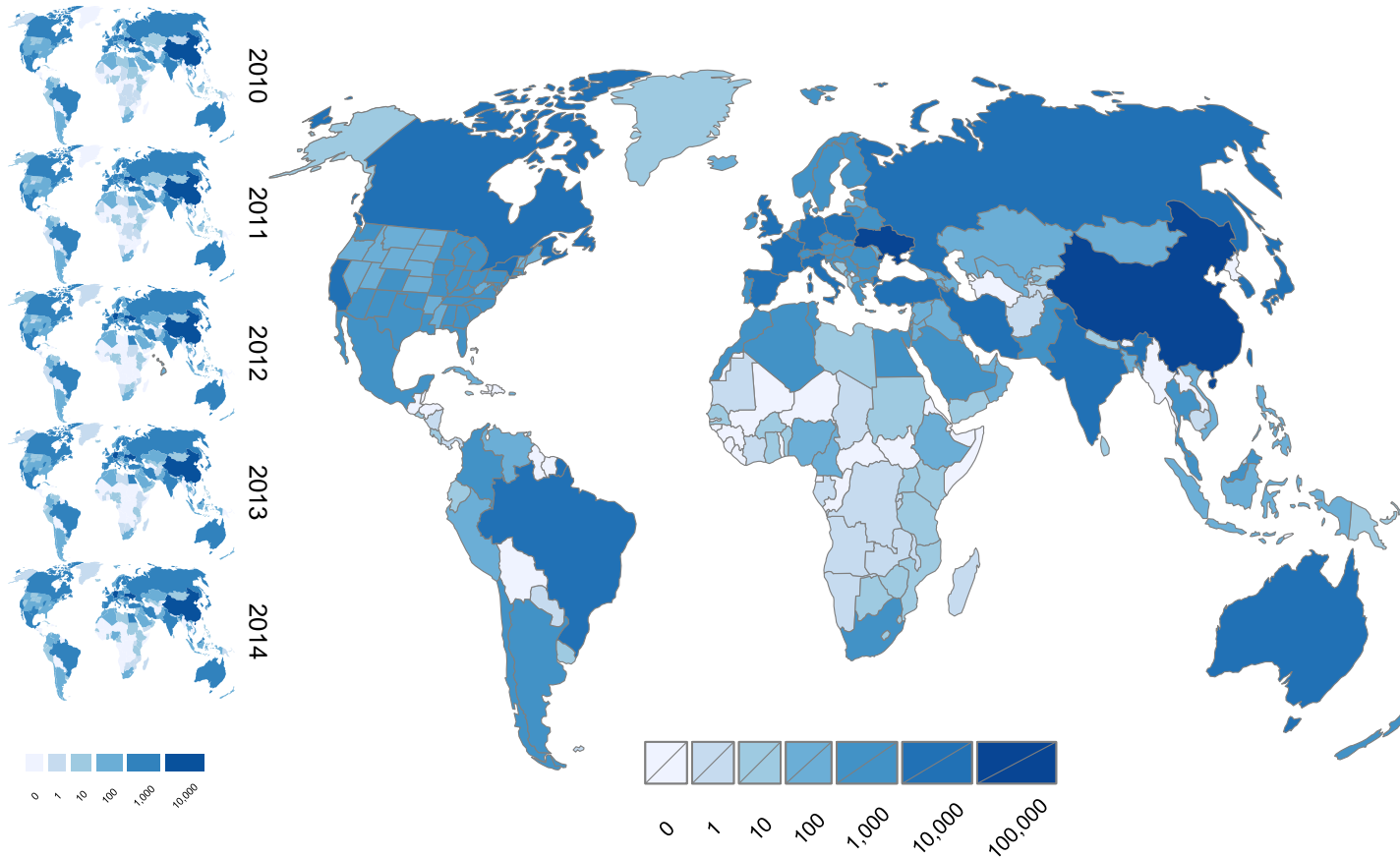
Top 20 Downloading Countries	
China	19.12 %
United States	14.66 %
Japan	5.19 %
India	5.13 %
Germany	4.49 %
United Kingdom	4.32 %
France	3.69 %
Korea	3.17 %
Iran	2.72 %
Taiwan	2.52 %
Italy	2.20 %
Brazil	2.12 %
Turkey	1.98 %
Canada	1.92 %
Spain	1.89 %
Thailand	1.65 %
Switzerland	1.60 %
Australia	1.59 %
Poland	1.58 %
Russia	1.49 %

In the last 5 years, articles from Ukraine affiliated authors and published on ScienceDirect, have been Downloaded 4,123,208 times by researchers from 117 countries (excluding: countries part of the "Research4Life" program.)

Source: Elsevier Web Analytics Department, ScienceDirect Usage Data 2010–2014

ScienceDirect ensures research from Ukraine is used and recognised all over the world

Where articles authored by Ukraine affiliated researchers and published on ScienceDirect have been cited in the world?



Top 20 Citing Countries	
China	13.60 %
Ukraine	12.78 %
United States	12.25 %
Germany	5.63 %
France	4.28 %
India	3.95 %
Italy	3.83 %
Russia	3.74 %
Poland	3.46 %
Japan	3.32 %
United Kingdom	3.31 %
Spain	2.79 %
Iran	1.84 %
Korea	1.81 %
Canada	1.70 %
Brazil	1.50 %
Turkey	1.40 %
Australia	1.25 %
Taiwan	1.07 %
Switzerland	1.01 %

In the last 5 years, articles from Ukraine affiliated authors and published on ScienceDirect, have been cited 97,651 times by authors from 169 countries.

Elsevier in Ukraine

- Elsevier provides full range of leading information solutions for scientists for over 135 years
- Long-term strategic partnership of Elsevier and Ukraine for more than 10 years contributes to Ukrainian Science
- Besides subscription, Elsevier supports wide range of scientific initiatives in Ukraine, including trainings and author workshops, providing analytical data for science evaluation.

Thank you