

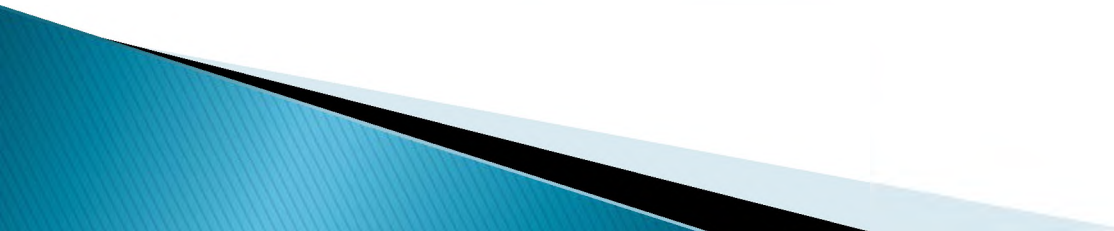
5th International Conference on Scientific Communication
in the Digital Age. Kyiv, March 29–30, 2017

Bibliometric analysis of open access publications of Vilnius Research Centers in Web of Science

Audrė Trumpienė, Eglė Šegždienė

The Wroblewski Library of the Lithuanian
Academy of Sciences



- **Open Access** is the needed modern update for the communication of research.
 - Researchers only benefit from OA. It means more citations, more recognition, more potential collaboration.
 - **What is the publication strategy** of Lithuanian researches and scholars ?
 - **Is OA a main choice** ?
 - In what extent it depends on existing research evaluation system ?
- 

Research assessment in Lithuania (March, 2017)

- Qualitative

- Quantitative

For science (physical and biomedical)–
mainly based on publications indexed in
Web of Science, published in journals with
high Impact Factor, ranked in Q1 and Q2.

Methodology used in research

The Strategy to Survive Primary Malaria Infection: An Experimental Study on Behavioural Changes in Parasitized Birds

By: Mukhin, Andrey; Palinauskas, Vaidas; Platonova, Elena; et al.

PLOS ONE Volume: 11 Issue: 7 Article Number: e0159216 Published: JUL 19 2016



Context Sensitive



Full Text from Publisher

View Abstract

The Genome of Haemoproteus tartakovskyi and Its Relationship to Human Malaria Parasites

By: Bensch, Staffan; Canback, Bjorn; DeBarry, Jeremy D.; et al.

GENOME BIOLOGY AND EVOLUTION Volume: 8 Issue: 5 Pages: 1361-1373 Published: MAY 2016



Context Sensitive



Full Text from Publisher

View Abstract

Mortality and pathology in birds due to Plasmodium (Giovannolaia) homocircumfla infection, with emphasis on the exoerythrocytic development of avian malaria parasites

By: Ilgunas, Mikas; Bukauskaite, Dovile; Palinauskas, Vaidas; et al.

MALARIA JOURNAL Volume: 15 Article Number: 256 Published: MAY 4 2016



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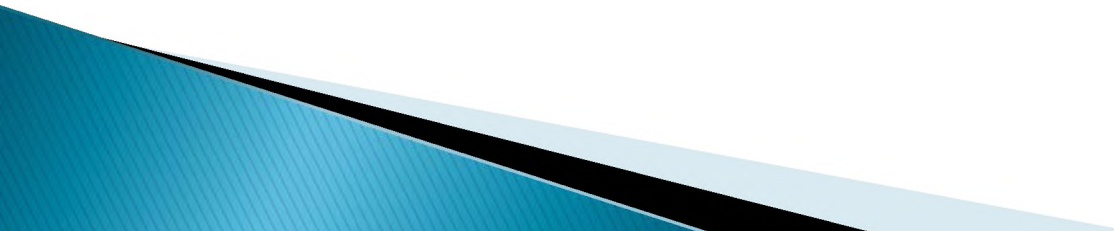


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Aim of research

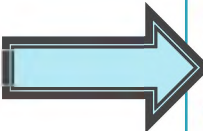
To explore articles of Nature Research Centre (NRC) and Center for Physical Sciences and Technology (CPST) in WoS by:

- ▶ 1. OA articles
 - ▶ 2. Number of articles in highly ranked journals (Q1 and Q2)
 - ▶ 3. Journal distribution by publishers of NRC and CPST article output
 - ▶ 4. International collaboration
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WoS and Open Access

2700 titles in the Web of Science Core Collection

Web of Science Core Collection By Edition:

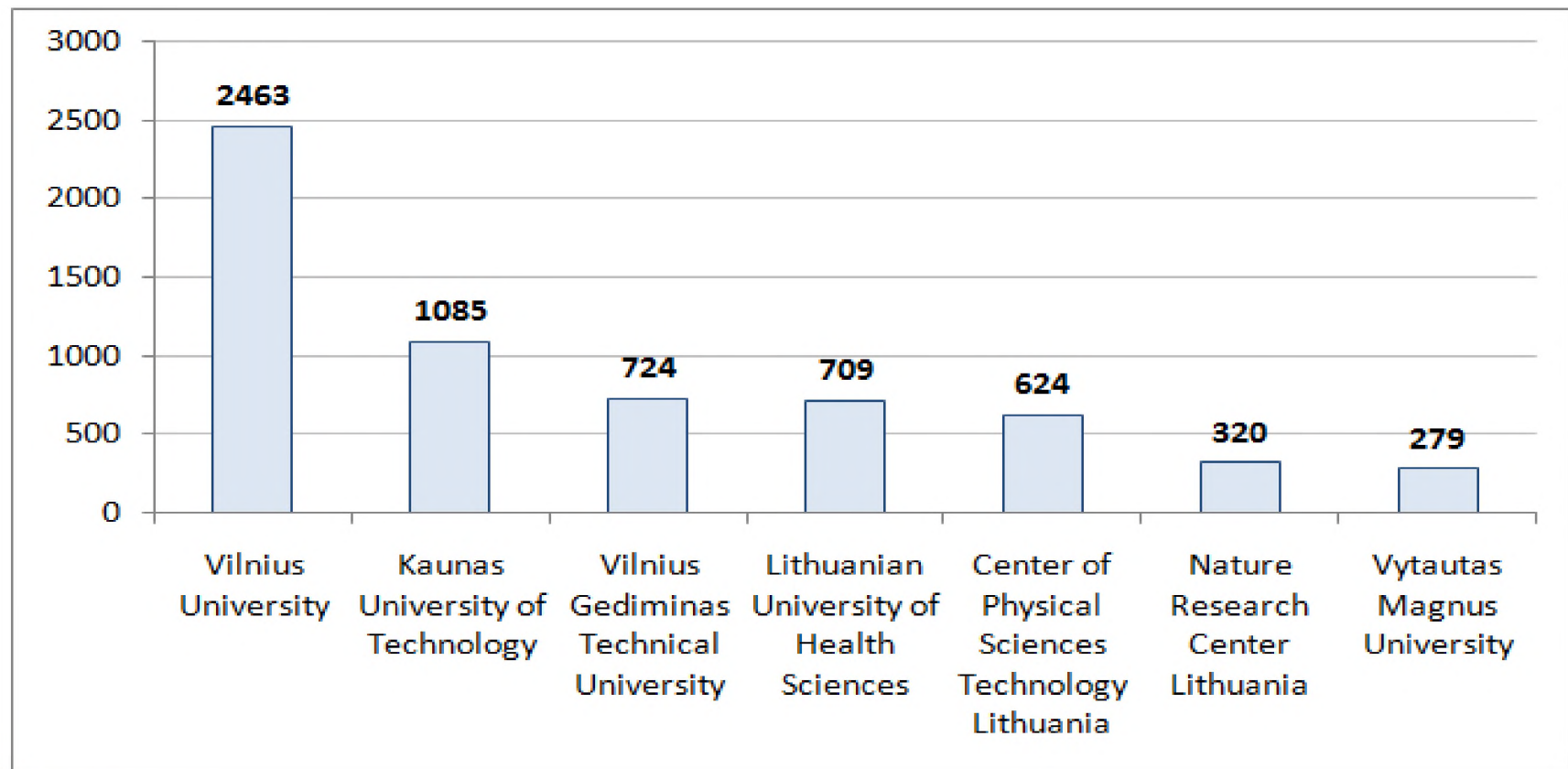


EDITION	# OA Titles	# WoS Edition (Total)	% of Edition
SCIE	930	8,848	11%
SSCI	163	3,242	5%
AHCI	75	1,779	4%
ESCI	1,640	4,460	37%
TOTAL (de-duped*)	2,744	17,284	16%

<http://ipsience.thomsonreuters.com/blog/an-easier-way-to-find-open-access/>

Publications by LT institutions in WoS in 2013–2015

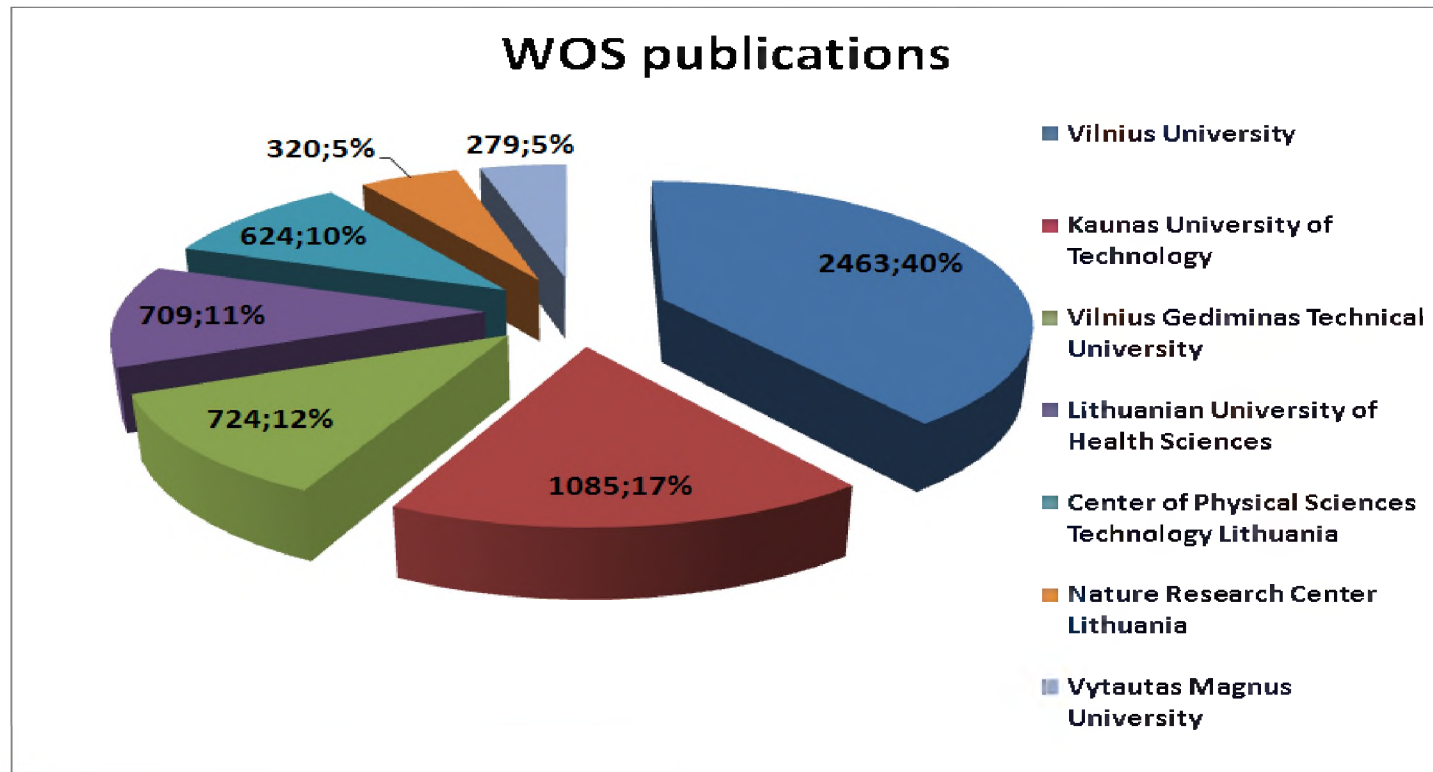
Total amount: 6490 articles



Articles of NRC and CPST among other LT institutions in 2013–2015

Total amount LT: 6490 (2013–2015)

NRC & CPST: 944 (15 %)



Incorrect data in WoS with organization-enhanced names

Two centers Center for Physical Science & Technology and Centre for Innovative Medicine merged together

Author Information

Reprint Address: Girkontaite, I (reprint author)

- [-] State Res Inst, Ctr Innovat Med, Dept Immunol, LT-08409 Vilnius, Lithuania.

Organization-Enhanced Name(s)

Center for Physical Sciences & Technology - Lithuania
State Research Institute Centre for Innovative Medicine

Addresses:

- [-] [1] State Res Inst, Ctr Innovat Med, Dept Immunol, LT-08409 Vilnius, Lithuania

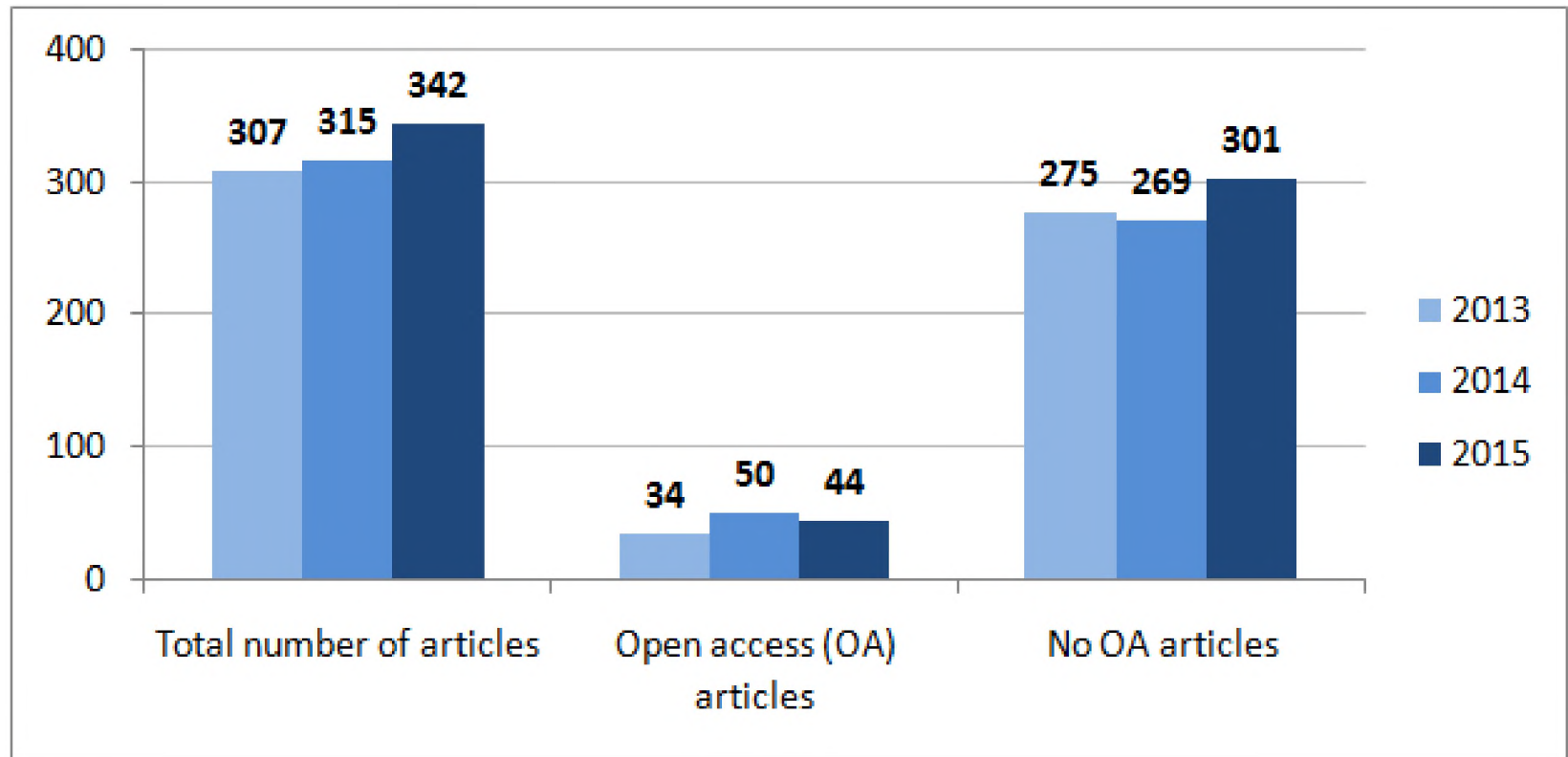
Organization-Enhanced Name(s)

Center for Physical Sciences & Technology - Lithuania
State Research Institute Centre for Innovative Medicine

E-mail Addresses: igirkontaite@yahoo.com

1. Publications of NRC and CPST in WoS

Total number of articles: 964 (data from the Research Centers)
OA articles: 128 (data from NRC and CPST annual reports)



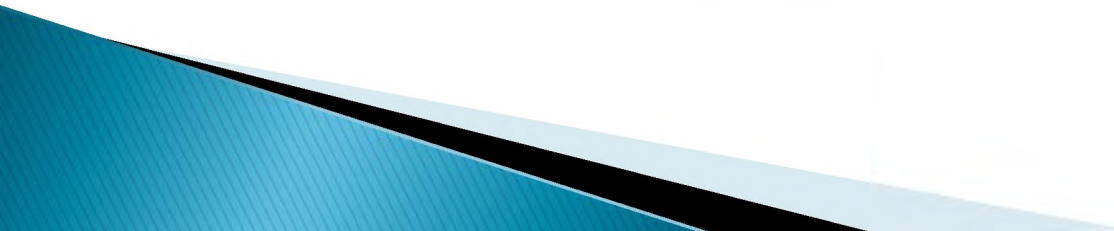
Top choice of OA journals in WoS for NRC and CPST in 2013–2015

Field: Source Titles	Record Count	% of 111	
MATERIALS SCIENCE MEDZIAGOTYRA	23	20.721 %	■
JOURNAL OF LASER MICRO NANOENGINEERING	9	8.108 %	■
ZEMDIRBYSTE AGRICULTURE	8	7.207 %	■
PLOS ONE	7	6.306 %	■
MEDICINA LITHUANIA	4	3.604 %	■
NANOSCALE RESEARCH LETTERS	4	3.604 %	■
ADVANCES IN METEOROLOGY	3	2.703 %	■
BIOMED RESEARCH INTERNATIONAL	3	2.703 %	■
ESTONIAN JOURNAL OF EARTH SCIENCES	3	2.703 %	■

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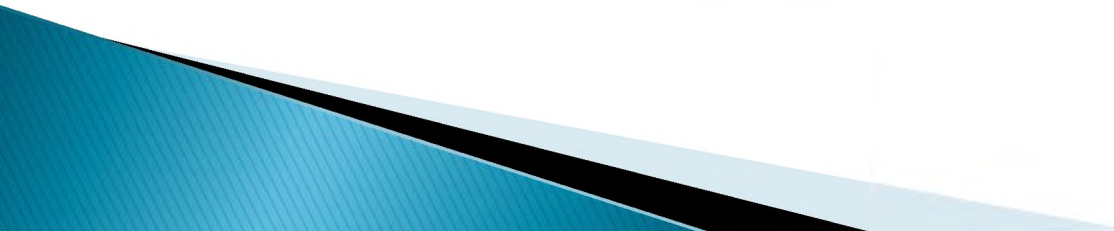
TOP choice of OA journals in WOS for LT researchers in 2013–2015

Field: Source Titles	Record Count	% of 954	
MATERIALS SCIENCE MEDZIAGOTYRA	125	13.103 %	■
ZEMDIRBYSTE AGRICULTURE	101	10.587 %	■
MEDICINA LITHUANIA	75	7.862 %	■
PLOS ONE	54	5.660 %	■
PHYSICS LETTERS B	39	4.088 %	■
BIOMED RESEARCH INTERNATIONAL	22	2.306 %	■
JOURNAL OF LASER MICRO NANOENGINEERING	19	1.992 %	■
SENSORS	15	1.572 %	■
NUCLEIC ACIDS RESEARCH	13	1.363 %	■
BMC PUBLIC HEALTH	11	1.153 %	■
IFOREST BIOGEOSCIENCES AND FORESTRY	10	1.048 %	■

- The same publication trends for Lithuania as for the two Research Centers – NRC and CPST.
 - Most articles are in local OA journals
 - Material Science Medziagotyra
 - Agriculture Zemdirbyste
 - Medicina Lithuania
 - In the megajournal *PLOS ONE*
 - Not all OA journals in WoS are indicated as open access and not all articles have OA icon (technical errors).
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OA journals not indicated by OA status in WoS

- ▶ Baltica
 - ▶ Baltic forestry
 - ▶ Chemija
 - ▶ Elektronika ir elektrotechnika
 - ▶ Lithuanian journal of physics

 - ▶ Turkish Journal of Zoology
 - ▶ Polish Journal of Environmental Studies
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NRC & CPST: how the amount of OA articles in LT journals would increase if these journals had OA status

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	Source title	record count
1.	<i>Lithuanian Journal of Physics</i>	45
2.	<i>Chemija</i>	40
3.	<i>Baltica</i>	12
	total	97

LT research output: how the amount of OA articles in LT journals would increase if these journals had OA status


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	Source title	record count
1.	<i>Elektronika ir elektrotechnika</i>	135
2.	<i>Chemija</i>	92
3.	<i>Lithuanian Journal of Physics</i>	82
4.	<i>Baltica</i>	37
5.	<i>Baltic Forestry</i>	27
	total	373

Open Access journals in WoS

- ▶ Not all OA journals and articles in them are recognized or indicated as open access in WoS due to lack of publishers, editors and WoS initiatives.

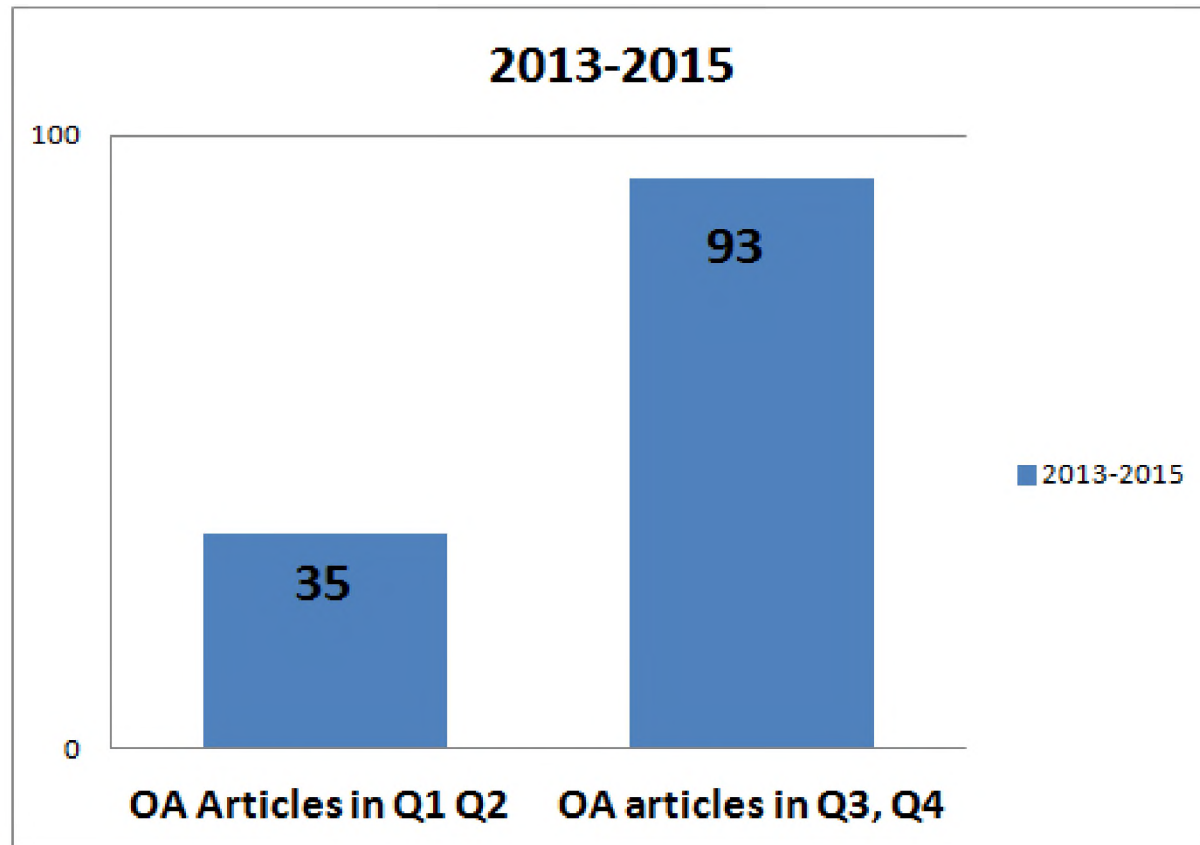
2. Publications of NRC and CPST in quartiles (Q1, Q2)

- Rank information is included in the **Journal Citation Report Impact Factor**. The journals are ranked by Impact Factor.
 - Category ranking is **presented by year** in descending order for each category in which the journal is ranked.
 - Quartile results are considered in research assessment, incentives, promotions etc.
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NRC and CPST articles by Q

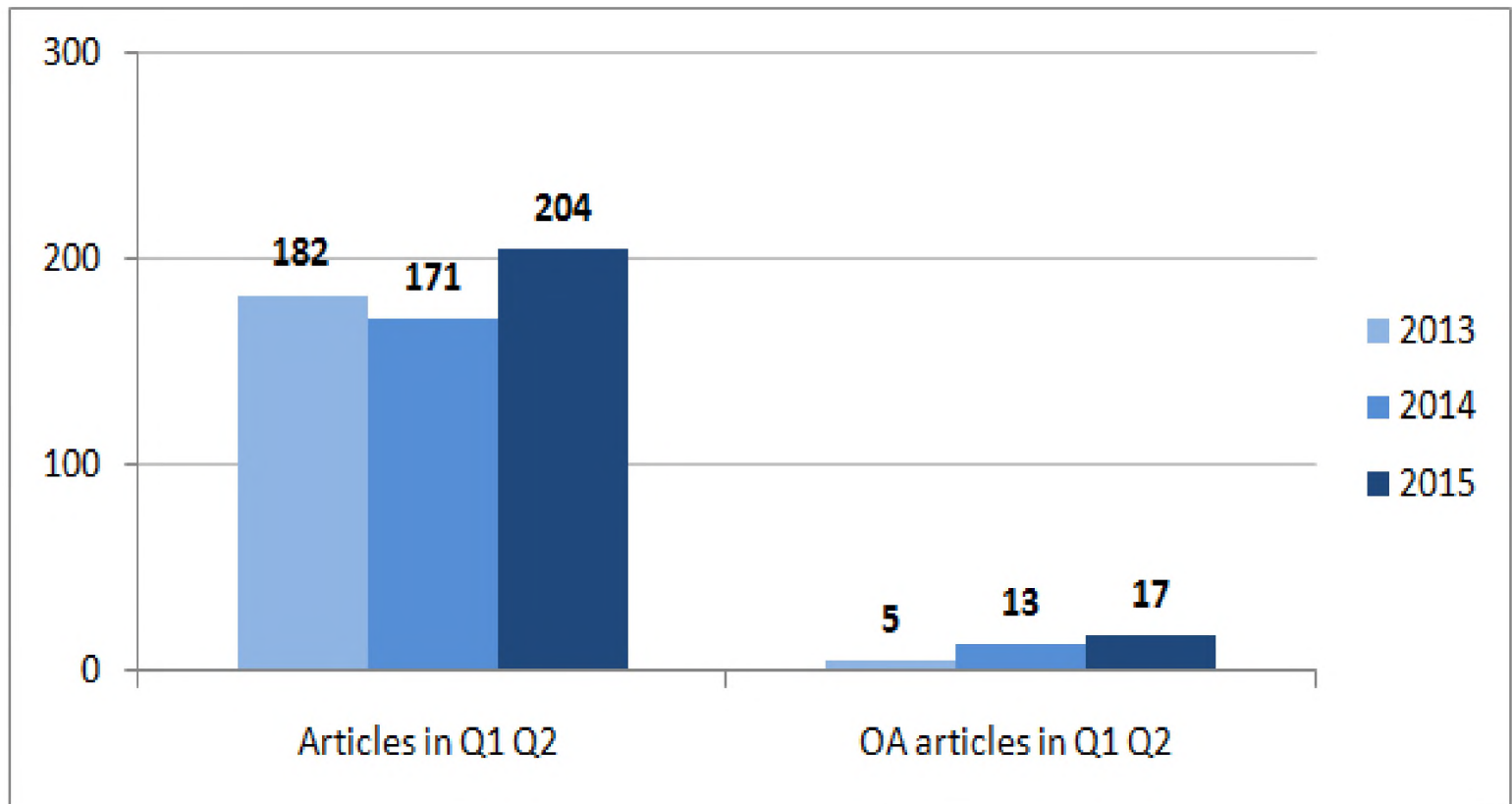
128 NRC and CPST OA articles

58 OA journal titles



NRC and CPST. Articles in Q1, Q2

- No OA articles **557** (total amount 964 articles)
- OA articles **35**



NRC & CPST open access and Q1 Q2 journals by titles or publishers

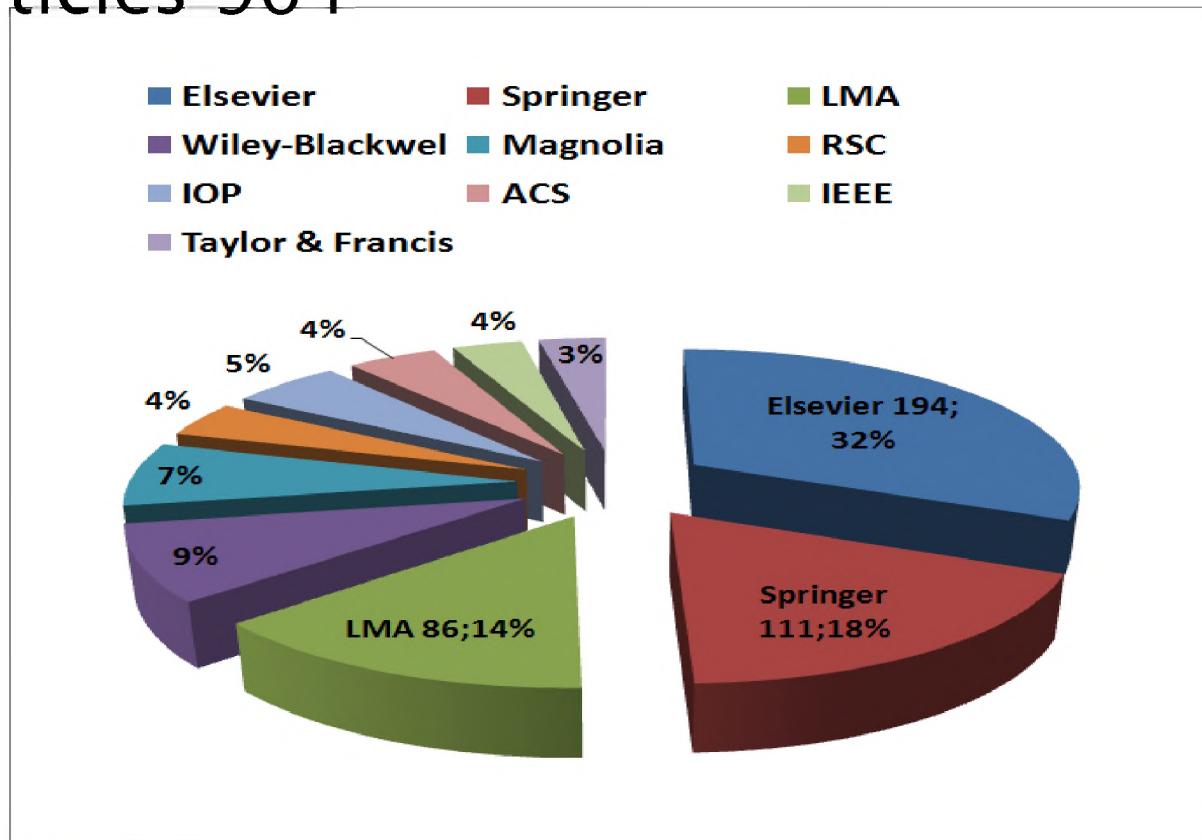
Journal title or publisher	RC article no
Plos One	6
Springer	4
OSA (USA) (Optical Society of America)	3
Nature	2
IOP (Institute of Physics)	2
Elsevier	2
Biomed Central	2
Peer J	1
Oxford	1
Wiley Blackwell	1

NRC & CPST open access and Q3, Q4 journals by publishers or countries

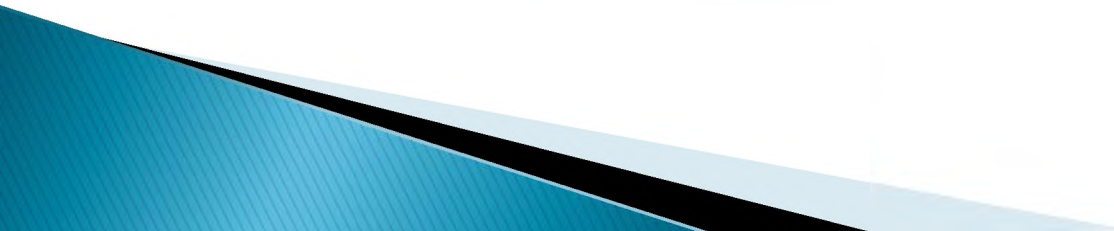
Journal title or publisher	RC article no
LT	32
Poland	10
Hindawi (USA)	7
Japan	2
Intech (Croatia)	1
Bulgaria (Pensoft)	1
Slovakia	1
Brazilia	1
Springer (Taiwan)	1

3. Journal distribution by publishers of NRC and CPST

The Research Centers: total amount of articles 964

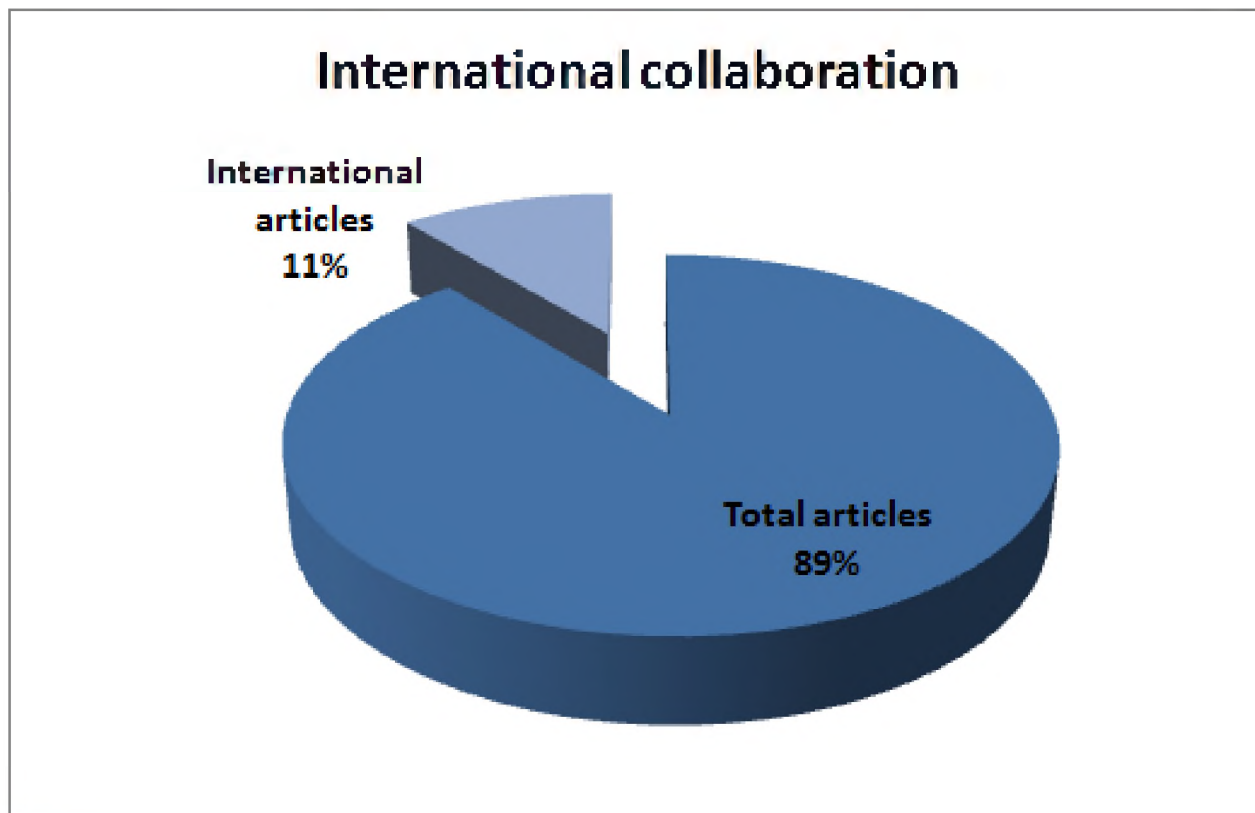


4. International collaboration

- Publications with one or several authors from other countries.
 - In research assessment this is an important factor scientific collaboration and contacts with partners from other countries.
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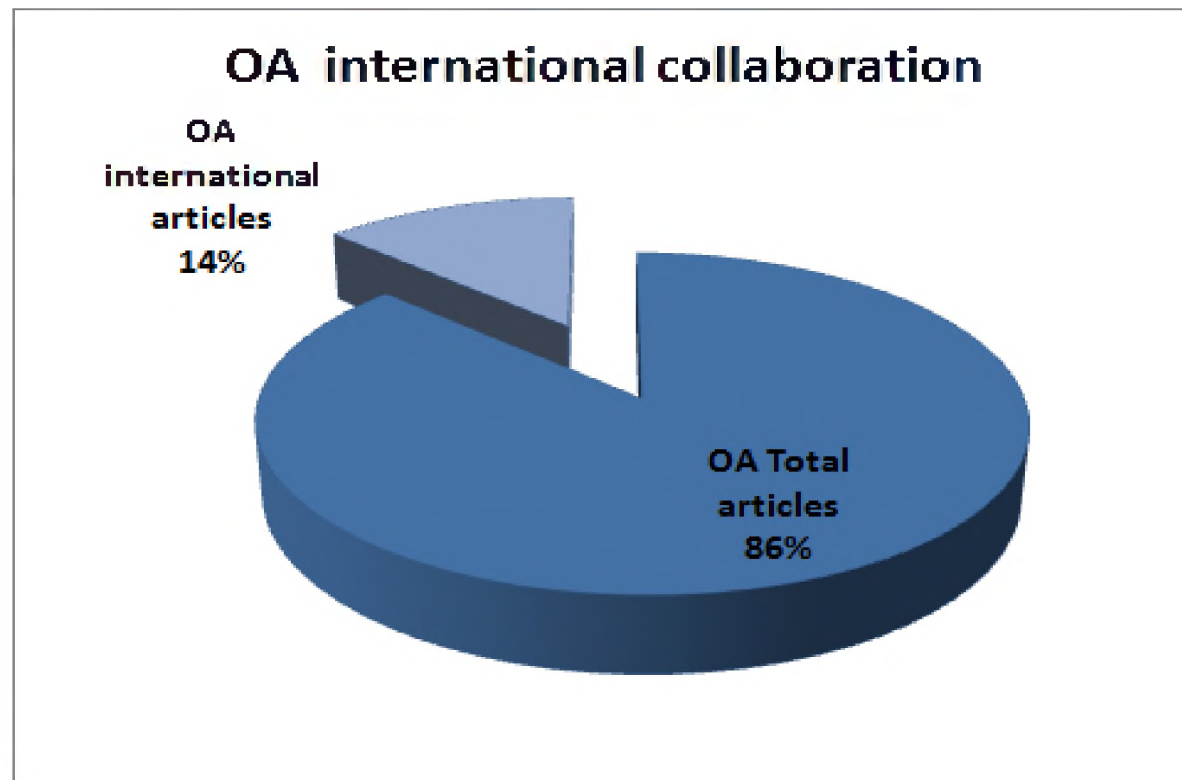
NRC and CPST : international collaboration in 2013–2015

- Total amount: 964 WoS articles
- Out of them, 154 with authors from other countries

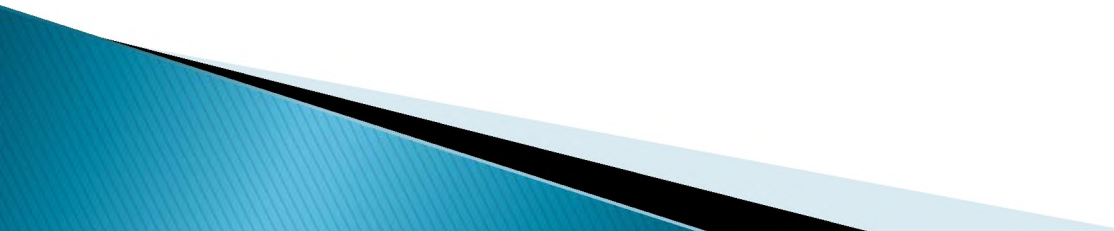


NRC and CPST : international collaboration. OA articles

- Total amount of OA articles: 128
- Out of them, 19 have authors from other countries



Conclusions and trends

- Increase in the amount of OA articles.
 - In physical and biomedical sciences the choice of a journal for publication is more based on research assessment requirements than on its OA status.
 - The more OA journals are accessible through WoS, the better it is for the users.
 - WoS is an excellent analytic tool, but only if institutional data are correct.
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Thank you!