



REUTERS/Michaela Rehle

The use of InCites *Next Generation* to support Lithuanian Research Performance Evaluation

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AGENDA

1) Executive summary - open discussion

- **Goals** of Lithuanian Academic e-Library project (eLABa)
- **Benefits** to Lithuanian research community if these goals are met
- **Solution** – Journal and Highly Cited Data (**Journal Citation Reports**, JCR metrics and **Essential Science Indicators**) as part of InCites Next Generation

2) Benchmarking and Analytics – InCites

- **What is InCites?**
- **Web of Science data** as global standard for research evaluation
- **Web of Science data** + normalization = InCites
- **InCites**– the idea of Normalised Metrics
- **InCites** - live demo of the platform based on the example of **Vilnius University**



Goals of Lithuanian and Academic e-Library project

BIG PICTURE

- Focus on **further development** of Lithuanian research and Higher Education
- Producing **high quality papers** that reflect emerging worldwide trends within the scientific community
- Publishing in **high impact content** that ensure having articles recognized and cited by peers as well
- Creating compelling **grant proposals**

e-LABa level

- **Evaluation and generation research output reports based on objective world standards** through eLABa [Lithuanian Academic e-Library collection of library catalogues, information services, e-repository and publication databases of Lithuanian research institutions (PDB)]
- **Development of PDB** in order to meet new Lithuanian Research Council **requirements for research output reports** to the Ministry of Science and Higher Education in Lithuania
- Implementation of a special internal tool in the information system which requires access to **Journal Citation Reports** and needs to use the its indicators e.g: ISSN; Impact Factor; Aggregate Impact factor; Total Cites; Cited Journal Data; Year of JCR to ensure that the research output reports are using the trustful source of data

Main Benefits to Lithuanian research community if these goals are met

- **Lithuanian Higher Education Institutions** will be able to evaluate themselves based on the best world practises
- World recognised research evaluation standards can be used in the research evaluation in Lithuania, which will make the **research evaluation results more objective and easier to compare to abroad** (also more visible, use of InCites)
- **Financial resources** will be used in the best possible way – purchase of journals, allotment of funds to organisations and researchers etc. will be done based on intelligent information
- meet Lithuanian Research Council **requirements for research output reports** to the Ministry of Science and Higher Education in Lithuania



Solution – Incites Journal and Highly Cited Data

- *InCites Next Generation Journal and Highly Cited Data License for all elABa institutions including the Journal Citation Reports , JCR Metrics and Essential Science Indicators*
- This license will allow **Lithuanian Institutions** experts to start using world recognised citation indicators from **Journal Citation Reports** (Impact Factor; Aggregate Impact factor; Total Cites; Cited Journal Data; Year of JCR, ISSN and many more metrics from JCR Metrics file)
- Highly discounted solution for *Lithuanian Consortium License* – the price charged is many times smaller compared to if the databases were purchased by the Higher Education Institutions directly – this brings major savings
- Free trainings of supporting best usage practices **JCR/ESI** for all sites will be provided by Thomson Reuters -- LIVE DEMO

Solution – Journal Citation Reports

- *InCites Next Generation Journal Citation Reports* :
- An Analytical tool measures the citation performance of journals within the context of subject categories.
- Some of Journal information linked information from the WOS Core Collection: (IF, 5-y-IF, Rank in category, Quartile in category, Open access indicator, publisher information)
- The trusted source of journal metrics used by all of the major publishers, research institutions, and research funders globally
- Supports library collection development with quantitative metrics on journal impact in the scholarly community, including the widely used journal impact factor plus many more
- Offers researchers a rich source of journal metrics for their studies
- Improved usability and connectivity with the JCR data you already know and trust
- With the addition of ESI, go beyond journals to explore high impact authors, institutions, countries, and papers around the globe

Home



Go to Journal Profile

Master Search



Select Journals

Select Categories

Select JCR Year

2012

Select Edition

☒ SCIE

☒ SSCI

Clear

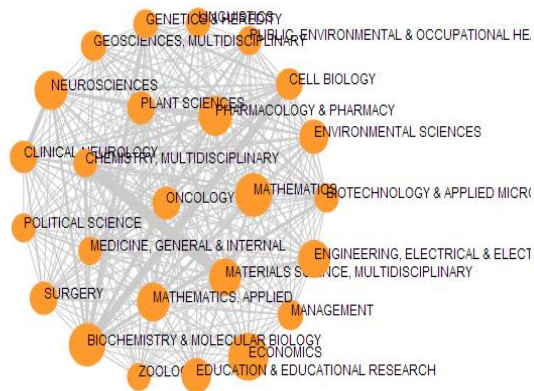
Submit

Journals By Rank

Categories By Rank

All Journal Categories ranked by Number of Journals

Hide Visualization —



1 - 25 of 232

Customize Indicators

	Category	Edition	#Journals	Articles	Total Cites	Aggregate Impact Factor
1	ECONOMICS	SSCI	332	16,299	449,229	1.191
2	MATHEMATICS	SCIE	295	22,715	323,813	0.716
3	BIOCHEMISTRY & MOLECULAR BIOLOGY	SCIE	290	52,612	3,061,830	4.272
4	PHARMACOLOGY & PHARMACY	SCIE	260	34,687	1,156,983	2.959
5	NEUROSCIENCES	SCIE	251	34,433	1,787,978	3.985
6	MATHEMATICS, APPLIED	SCIE	247	23,467	341,263	1.080
7	ENGINEERING, ELECTRICAL & ELECTRONIC	SCIE	242	42,529	808,575	1.631
8	MATERIALS SCIENCE, MULTIDISCIPLINARY	SCIE	239	61,395	1,594,314	3.170
9	EDUCATION & EDUCATIONAL RESEARCH	SSCI	216	8,888	128,217	0.898
10	ENVIRONMENTAL SCIENCES	SCIE	209	32,966	952,162	2.678
11	SURGERY	SCIE	198	31,993	899,953	2.059
12	ONCOLOGY	SCIE	196	32,209	1,363,914	4.469
13	PLANT SCIENCES	SCIE	195	19,105	752,633	2.659
14	CLINICAL NEUROLOGY	SCIE	191	23,670	885,609	3.027

[Home](#)**NATURE**

ISSN: 0028-0836

NATURE PUBLISHING GROUP
 MACMILLAN BUILDING, 4 CRINAN ST, LONDON N1 9XW, ENGLAND
ENGLAND

[Go to Journal Table of Contents](#) [Go to Ulrich's](#)
Titles

ISO: Nature

JCR Abbrev: NATURE

Categories

MULTIDISCIPLINARY SCIENCES - SCIE

Languages

ENGLISH

51 Issues/Year;

Key Indicators

Year ▾	Total Cites Graph	Journal Impact Factor Graph	Impact Factor Without Journal Self Cites Graph	5 Year Impact Factor Graph	Immediacy Index Graph	Citable Items Graph	Cited Half-Life Graph	Citing Half-Life Graph	Eigenfactor Score Graph	Article Influence Score Graph
2012	554,745	38.597	37.957	38.159	9.243	869	9.6	5.2	1.57508	20.844
2011	526,505	36.280	35.707	36.235	9.690	841	9.4	5.1	1.65524	20.373
2010	511,248	36.104	35.527	35.248	8.792	862	9.1	5.2	1.73520	19.306
2009	483,039	34.480	33.855	32.906	8.209	866	8.9	5.1	1.74605	18.062
2008	443,967	31.434	30.865	31.210	8.194	899	8.5	4.9	1.76345	17.279
2007	417,228	28.751	28.263	30.616	7.385	841	8.0	4.8	1.83870	16.996
2006	390,690	26.681	26.060	Not Avail...	6.789	962	7.8	4.6	Not Avail...	Not Avail...
2005	372,784	29.273	28.646	Not Avail...	5.825	1,065	7.5	4.7	Not Avail...	Not Avail...
2004	363,374	32.182	31.535	Not Avail...	6.089	878	7.2	4.6	Not Avail...	Not Avail...
2003	343,528	30.979	30.345	Not Avail...	6.679	859	7.0	4.5	Not Avail...	Not Avail...
2002	326,546	30.432	29.790	Not Avail...	7.504	889	6.9	4.3	Not Avail...	Not Avail...
2001	315,640	27.955	27.300	Not Avail...	7.734	939	6.9	4.5	Not Avail...	Not Avail...
2000	306,184	25.814	25.155	Not Avail...	4.389	1,315	6.8	4.2	Not Avail...	Not Avail...
1999	303,563	29.491	28.841	Not Avail...	4.956	1,016	6.7	4.1	Not Avail...	Not Avail...
1998	288,026	28.833	28.087	Not Avail...	5.947	980	6.6	4.3	Not Avail...	Not Avail...
1997	269,100	27.368	26.581	Not Avail...	6.322	936	6.5	4.0	Not Avail...	Not Avail...

Source Data[Rank](#)[Cited Journal Data](#)**Journal Source Data**

	Citable Items			Other
	Articles	Reviews	Combined	
Number in JCR Year 2012 (A)	835	34	869	1,782

Key Indicators

Year ▼	Total Cites Graph	Journal Impact Factor Graph	Impact Factor Without Journal Self Cites Graph	5 Year Impact Factor Graph	Immediacy Index Graph	Citable Items Graph	Cited Half-Life Graph	Citing Half-Life Graph	Eigenfactor Score Graph	Article Influence Score Graph
2012	4,385	0.509	0.430	0.682	0.086	659	>10.0	9.8	0.01582	0.575
2011	3,878	0.447	0.407	0.593	0.045	330	>10.0	9.6	0.01457	0.520
2010	3,693	0.449	0.398	0.627	0.076	330	9.9	9.3	0.01562	0.556
2009	3,609	0.359	0.334	0.582	0.044	250	9.7	9.5	0.01450	0.483
2008	2,888	0.483	0.426	0.648	0.051	409	9.3	9.5	0.01454	0.515
2007	2,147	0.302	0.262	0.467	0.056	249	9.1	9.9	0.01358	0.469
2006	2,029	0.366	0.291	Not Avail...	0.038	289	8.6	9.1	Not Avail...	Not Avail...
2005	1,800	0.381	0.334	Not Avail...	0.036	250	7.9	8.2	Not Avail...	Not Avail...
2004	1,534	0.361	0.314	Not Avail...	0.012	244	7.9	8.4	Not Avail...	Not Avail...
2003	1,378	0.337	0.286	Not Avail...	0.059	222	7.8	8.5	Not Avail...	Not Avail...
2002	1,286	0.240	0.202	Not Avail...	0.009	221	8.6	8.2	Not Avail...	Not Avail...
2001	1,205	0.272	0.220	Not Avail...	0.016	251	8.1	8.6	Not Avail...	Not Avail...
2000	995	0.254	0.210	Not Avail...	0.023	215	8.5	8.1	Not Avail...	Not Avail...
1999	1,012	0.266	0.210	Not Avail...	0.023	222	8.0	8.4	Not Avail...	Not Avail...
1998	930	0.213	0.158	Not Avail...	0.049	226	8.4	8.3	Not Avail...	Not Avail...
1997	828	0.258	0.202	Not Avail...	0.023	222	8.2	8.1	Not Avail...	Not Avail...

Source Data

Rank

Cited Journal Data



Journal Source Data



	Citable Items			Other
	Articles	Reviews	Combined	
Number in JCR Year 2012 (A)	659	0	659	4



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Incites – Essential Science Indicators

- Compilation of science performance statistics and science trends data from Web of Science Core Collection data
- Gives the ability to rank and benchmark the research performance of **authors, institutions, countries and journals** across 22 ESI disciplines
 - ESI DATA = 10 MM items from over 11000 journals (articles, reviews, proceeding papers, notes)
 - 10 years rolling file updated bi-monthly
- Used to conduct analyses of scientific literature:
 - What are the top institutions or researchers in a specific field and where do I rank among them? (+ Citation trend report)
 - What highly cited and hot papers does my institution have in a field?
 - If I'm not in the top 1%, how close am I?
 - How can I evaluate potential employees, collaborators and peers?

Incites–Essential Science Indicators

➤ Citation Thresholds:

- **TOP Researcher** - total number of citations **must be in 1 %** comparing to number of citations from all researchers in the discipline within 10 years
- **TOP Institution** - total number of citations **must be in 1 %** comparing to number of citations from all institutions publishing in this discipline within last 10 years
- **TOP Country** - total number of citations **must be in 50 %** comparing to number of citations from all countries publishing in this discipline within last 10 years
- **TOP Journal** - total number of citations **must be in 50 %** comparing to number of citations from all journals publishing in this discipline within last 10 years
- **Highly Cited Paper** – total number of citations **must be in 1 %** comparing to the number of citations from all papers published in the same field in the same year
- **Hot Paper** – total number of citations received in the last two months **must be in 1 %** comparing to all citation received in the same discipline within last 2 years



Top Papers by Research Field

Results List

Research Fields 

Filter Results By 

[Add Filter »](#)

Include Results For

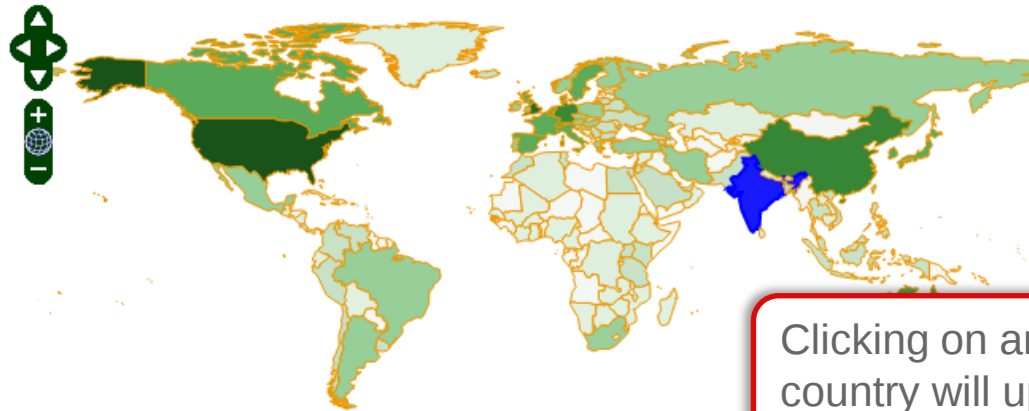
Top Papers 

[Start Over](#)

[Save Criteria](#)

Map View by Top / Hot / Highly Cited Papers

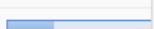
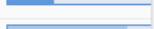
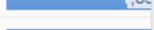
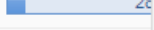
[Hide Visualization](#) 



Clicking on an individual country will update the list of subjects for that country

Report View by Selection

[Customize Indicators](#)

	Research Fields	Web of Science Documents	Cites 	Cites/Paper	Top Papers
1	CHEMISTRY	269,469	2,355,348	8.74	 2,40
2	PHYSICS	175,175	1,259,790	7.19	 1,27
3	MATERIALS SCIENCE	135,046	898,011	6.65	 1,30
4	CLINICAL MEDICINE	115,449	851,629	7.38	 73
5	ENGINEERING	132,613	633,437	4.78	 1,85
6	BIOLOGY & BIOCHEMISTRY	51,020	458,847	8.99	 26
7	GEOSCIENCES	30,855	317,508	7.07	 45

Top Papers by Research Field

Results List

Research Fields

Research Fields

Authors

Institutions

Journals

Countries-Territories

Research Fronts

Start Over

Save Criteria

Map View by Top / Hot / Highly Cited Papers

Hide Visualization —

You can list and rank on a variety of different entities.

Easily navigate between types and instantly update the list without navigating through menus



0 62,782

Report View by Selection

Customize Indicators

	Research Fields	Web of Science Documents	Cites ▾	Cites/Paper	Top Papers
1	CLINICAL MEDICINE	2,253,010	27,521,657	12.22	21,916
2	CHEMISTRY	1,388,528	16,239,387	11.70	13,986
3	PHYSICS	1,090,317	10,752,505	9.86	10,678
4	BIOLOGY & BIOCHEMISTRY	626,042	10,345,542	16.53	6,244
5	MOLECULAR BIOLOGY & GENETICS	355,172	9,074,716	25.55	3,554
6	NEUROSCIENCE & BEHAVIOR	430,478	7,499,141	17.42	4,334



Top Papers by Research Field

Results List

Countries-Territories

Filter Results By ?

Add Filter »

Include Results For

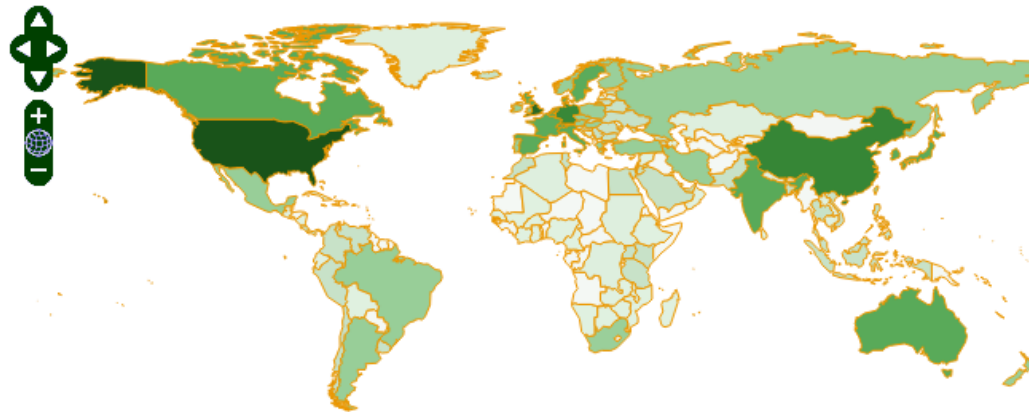
Top Papers

Start Over

Save Criteria

Map View by Top / Hot / Highly Cited Papers

Hide Visualization —



0 62,782

Report View by Selection

Customize Indicators

	Countries-Territories	Web of Science Documents	Cites	Cites/Paper	Top Papers
1	USA	3,480,260	57,292,717	16.46	62,782
2	GERMANY (FED REP GER)	905,226	12,879,469	14.23	14,017
3	ENGLAND	810,290	12,839,835	15.85	15,430
4	JAPAN	828,018	9,081,084	10.97	6,313
5	CHINA MAINLAND	1,247,899	8,932,716	7.16	10,925
6	FRANCE	643,222	8,595,039	13.36	9,106

Top Papers by Research Field

Results List

Countries-Territories

Filter Results By ?

[Add Filter »](#)

Include Results For

Hot Papers

Top Papers

Highly-Cited Papers

Hot Papers

Map View by Top / Hot / Highly Cited Papers

[Hide Visualization](#)

Limit the right hand column of results to:

Highly Cited Papers =
(top 1% in each subject/year)

Hot papers =
(top 0.1% of papers published in last 2 years, based on
citation activity in most recent 2 months per subject)

Top papers =
Both Highly Cited Papers and Hot Papers

The chart and map are updated instantaneously.

1	USA	3,480,260	57,292,717	16.46	62,782
2	GERMANY (FED REP GER)	905,226	12,879,469	14.23	14,017
3	ENGLAND	810,290	12,839,835	15.85	15,430
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5	CHINA MAINLAND	1,247,899	8,932,716	7.16	10,925
6	FRANCE	643,222	8,595,039	13.36	9,106

What is InCites?

- *InCites*[™] is a customized, web-based research evaluation tool that allows you to analyze institutional productivity and benchmark your output against peers worldwide. With customized citation data, global metrics, and multidimensional profiles on the leading research institutions, *InCites* gives comprehensive insight into your institution's performance. And with robust visualization and reporting tools, you can create and share reports quickly and easily.



Key university challenges

- How can we demonstrate ROI for our research activities? What are our centers of excellence?
- How does our research performance compare to other universities and peers institutions in Lithuania and Worldwide?
- How can we identify and promote outstanding or up-and-coming researchers in our University ?
- How can we promote our research accomplishments and encourage research collaborations?
- How can we streamline regular reporting tasks? (e.g. CVs, annual review, accreditation, and grant applications)
- How can we identify funded projects that connect academia with practice/industry and monitor their impact?
- How can we achieve efficient distribution of funds using quantitative research performance evaluation methodologies?
- How can we evaluate research using transparent normalised metrics using quality WoS data?

Who can benefit from InCites?

Researcher



Individual
research

Scientific
Information
Departments
Libraries



Support for
researchers,
students

Institution



Building
institutional
strategy for
management

Ministry/
Governments



Creation of policy
Funds allocation

Over 50 Years of Experience in Citation Indexing, Analysis, and Metrics

- In 1955, Dr. Eugene Garfield revolutionized research with his concept of citation indexing and searching, giving birth to the *Science Citation Index*[®]
- Thomson Reuters introduced the first ever research evaluation tool on the Web
- *Web of Science Core Collection* is the largest citation database with over 800 million cited references from 1900 to 2010

1961



1961 Science Citation Index[®] revolutionizes scientific research

1974 Derwent World Patents Index[®] provides searchable access to patents from all technologies



1997 Web of Science[™] provides seamless access to information from worldwide research journals



2001 Web of Knowledge[™] provides a single research platform for journal literature, patents, chemical compounds, genetic sequencing and more



2006 ScholarOne Manuscripts Management[®] enables authors to create manuscripts in EndNote and seamlessly submit them for review



2007 ResearcherID provides an invaluable index to accurate author identification and information



2009 Thomson Reuters launches InCites, the first ever tool to provide comprehensive, customized citation-based research evaluation on the Web

2010 Thomson Reuters undertakes massive data collection exercise, partnering with hundreds of universities worldwide in the Global Institutional Profiles Project

2011



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Why WEB OF SCIENCE CORE COLLECTION– A TRURLY UNIQUE CITATION RESOURCE?

- **Selection process and control of content:** consistent, transparent standards – “Bradford’s law”
- **Content:** 12,500 journals, 12,000 annual conferences and 800 million Cited References
- **Multidisciplinary:** 251 subject categories
- **Consistent and reliable data:**
 - Cover-to-cover indexing
 - Cited references for *all years* of coverage from 1900
 - Indexing of *all* author names and addresses
- **Funding acknowledgments:** link funding source to outputs



For decades, Thomson Reuters has carefully evaluated journals for potential inclusion in the database

Authority

Selected content (neutral)

Diversity

Depth and consistency

Reliability

100 %

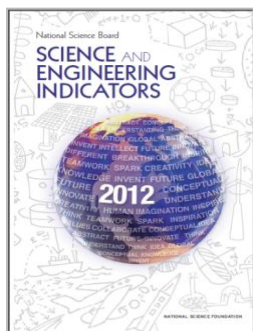
of the top 100 universities
have Web of Science



GOLD STANDARD

used by 6,000+ institutions in 100+ countries

Thomson Reuters data: the global standard for research evaluation and management



US National Science Foundation
Science & Engineering Indicators



US National Research Council
Assessment of Research-Doctorate Programs



European Commission
European Union
Science & Technology Indicators



NOBEL PREDICTIONS HOME

2011 PREDICTIONS

ESSAYS & INTERVIEWS

Process Essay

Looking Back Essay

Interviews

Podcasts

WHO WILL WIN THE NEXT NOBEL PRIZE?

Can the winners of the Nobel Prize be correctly predicted? Since 1989, Thomson Reuters has developed a list of likely winners in medicine, chemistry, physics, and economics. Those chosen are named Thomson Reuters Citation Laureates — researchers likely to be in contention for Nobel honors based on the citation impact of their published research.

SEE HOW THE CITATION LAUREATES ARE CHOSEN! 



WHO WILL WIN THE NEXT NOBEL PRIZE?



JOIN THE CONVERSATION 

Web of Science data provide the foundation for research analytics solutions

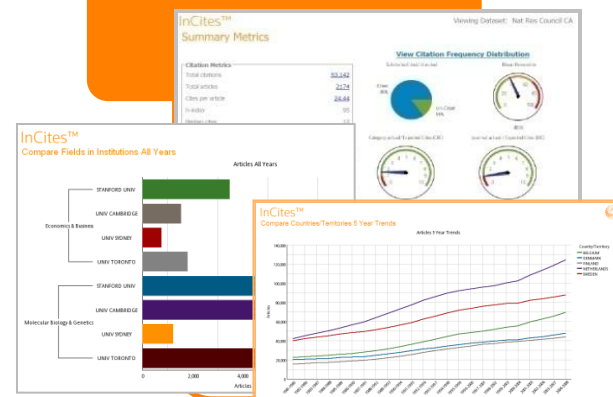
Data

- *Web of Science Core Collection*

Thomson Reuters
Expertise &
Processing

- Address unification
- Data cleansing & standardization
- Normalization & baselines

InCites NEXT
GENERATION



- For more than five decades **Thomson Reuters** has provided a wide range of tools and services supporting research evaluation.
- Our specialist work with **Web of Science Core Collection** data and ensure maximum standardization and unification before delivery to customers.
- Not just simple counts and averages, but real metrics founded on baselines for comparison and normalized statistics.

InCites provides real Metrics

Citation rates vary among fields and scientific communities.

What is good or average in mathematics is very different from what is good or average in biochemistry.



23.3 cites/paper
H-index: 13



14.5 cites/paper
H-index: 7



9.8 cites/paper
H-index: 7



4.2 cites/paper
H-index: 3

How “good” is this? What is the context?

**Additional metrics are needed to
understand research performance.**

Evaluating Individual Researchers

AUTHOR RANKING

Sort By: Category Actual/Expected

Rank	Author	Times Cited	Web of Science Documents	Average Cites per Document	h-index	Journal Actual/Expected Citations	Category Actual/Expected Citations
1	Smith, David	1,520	19	80.00	13	2.99	11.32
2	Chen, Wei-Min	1,787	27	66.19	10	3.61	8.41
3	Chen, Sheng-Yuan	676	9	75.11	5	2.02	8.04
4	Chen, Jui	5,711	55		32	3.20	7.63
5	Chen, Hsiao	734	9		5	1.88	7.55
6	Chen, Hsiao	576	9		8	3.50	6.66
7	Chen, Hsiao	1,609	28		15	3.28	6.41
8	Chen, Hsiao	671	10	67.10	6	1.98	6.13
9	Chen, Hsiao	275	6	45.83	5	4.01	5.48
10	Chen, Hsiao	652	18	36.22	9	1.75	5.20
11	Chen, Hsiao	338	16	21.12	7	3.14	4.73
12	Chen, Hsiao	807	16	50.44	11	2.27	4.62
13	Chen, Hsiao	1,332	26	51.23	12	2.03	4.61
14	Chen, Hsiao	135	7	19.29	5	2.54	4.55
15	Chen, Hsiao	121	6	20.17	3	2.12	4.50
16	Chen, Hsiao	542	23	23.61	10	2.50	4.49
17	Chen, Hsiao	5,881	355	16.57	40	4.10	4.46
18	Chen, Hsiao	457	12	45.70	8	2.92	4.43
19	Chen, Hsiao	1,385	32	28.27	15	2.85	4.36
20	Chen, Hsiao	1,925	35	55.00	16	1.88	4.30

Computer Science

Medicine



Research Performance Profiles

Contextualization of citation counts, benchmarking

Times Cited	Journal Expected Citations	Category Expected Citations	Journal Actual/Expected Citations	Category Actual/Expected Citations	Percentile in Subject Area	Publication Year	Subject Area View Ranking	Document Type View Ranking	First Author View Ranking	All Authors	Journal View Ranking
<u>26</u>	<u>16.12</u>	<u>15.91</u>	4.71	4.78	2.62	2004	BEHAVIORAL SCIENCES	ARTICLE	ULLSPERGER, M et al.	ULLSPERGER, M; VON CRAMON, DY	CORTEX

Compare a citation count to journal and category expected counts.

This paper ranks in the top 2.62% of all Behavioral Sciences articles of 2004.

Author	Times Cited	Web of Science Documents	Average Cites per Document	h-index	Journal Actual/Expected Citations	Category Actual/Expected Citations
KIPPENBERG, HG	<u>10</u>	<u>11</u>	<u>0.91</u>	<u>2</u>	<u>3.34</u>	<u>4.73</u>

The Citation performance of these 11 documents is almost 5 times above expected

Country/Territory	Web of Science Documents	Journal Actual/Expected Citations	Category Actual/Expected Citations
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CZECH REPUBLIC	<u>22</u>	<u>1.87</u>	<u>1.94</u>
PORTUGAL	<u>19</u>	<u>5.43</u>	<u>22.41</u>

Identify areas for growth and investment



Thank you!

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