Evaluation/Ranking of Journals, Researchers, and Institutions

Milan Jirásek and Jan Zeman

Department of Mechanics Faculty of Civil Engineering Czech Technical University in Prague

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Introductory Quiz

H-index

Task 1: Determine the h-index of John Smith, a young researcher, who has the following citation record:

- paper A, cited 7 times
- paper B, cited 3 times
- paper C, not cited yet
- paper D, cited 2 times
- paper E, cited 5 times

Task 2: Estimate (guess) the h-index of the most cited Czech researcher.

Task 3: Estimate (guess) the total number of citations of the most cited Czech researcher.

Introductory Quiz

Impact Factor

Task 4: Determine the most recent impact factor of the fictitious Journal of Good Research, using the tabulated citation data. Based on its impact factor, would you expect this journal to be good or poor?

year	published	citations to these papers in			
	papers	2017	2018	2019	2020
2017	20	5	30	44	35
2018	25	-	4	26	28
2019	15	-	-	10	22
2020	20	-	-	-	12

Task 5: Estimate the impact factor of the most cited international journal. *Can you guess the name of this journal or the research area that it covers?*



Please think about the questions and submit your answers using the form at https://forms.office.com/r/r5b9yJDbz7.

Introductory Quiz

Correct Answers

- Task 1: The h-index of John Smith is equal to 3.
- Task 2: To be discussed later.
- Task 3: To be discussed later.
- Task 4: The most recent impact factor that can be extracted from these data is the so-called 2018 impact factor. Its value is 1.25. The standing of a journal with this impact factor depends on its field, but it is probably neither a top journal, nor a really poor one.
- Task 5: The impact factor of the most cited journal is higher than 200. It is an oncology journal. *Further details will be discussed later.*

Outline

Ranking of Journals

- Web of Science, impact factor
- Scopus, Scopus journal metrics
- Predatory journals and misleading metrics

2 Evaluation of Researchers

- Publications
- Citations, h-index
- 3 Evaluation of Czech Research Organizations
- 4 College and University Rankings

Plan

Ranking of Journals

- Web of Science, impact factor
- Scopus, Scopus journal metrics
- Predatory journals and misleading metrics
- 2 Evaluation of Researchers
 - Publications
 - Citations, h-index
- 3 Evaluation of Czech Research Organizations
- 4 College and University Rankings

Web of Science, impact factor

Web of Science, impact factor

Web of Science

Scientific citation indexing service provided by Clarivate Analytics (formerly by Thomson Reuters), consisting of several collections:

- **()** Web of Science Core Collection
- O Specialist Collection
 - BIOSIS, MEDLINE, Inspec, FSTA, ...
- 8 Regional Collection
 - Chinese, Russian, Korean, SciELO
- Oata Collection
- Patent Collection

 Ranking of Journals
 Evaluation of Researchers
 Evaluation of Czech Research Organizations
 College and University

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Web of Science, impact factor

Web of Science, impact factor

Web of Science Core Collection

- **Science Citation Index Expanded** (from 1900)
- Social Sciences Citation Index (from 1900)
- Arts & Humanities Citation Index (from 1975)
- Emerging Sources Citation Index (from 2015)
- Book Citation Index (from 2005)
- **O Conference Proceedings Citation Index** (from 1990)

Covers over 21,000 journals, over 180,000 conference proceedings, and over 80,000 books.

Provides about 1.5 billion cited reference connections.

Web of Science, impact factor

Impact Factor

Measure of the impact of a certain journal, based on citations to papers published in that journal:

$$IF(J,Y) = rac{c(J,Y)}{p(J,Y)}$$

 $IF(J, Y) \dots$ impact factor of journal J in year Y $p(J, Y) \dots$ number of papers published in J in years Y - 1 and Y - 2 $c(J, Y) \dots$ cites in year Y to papers published in J in Y - 1 and Y - 2Impact Factors can be found in Journal Citation Reports (JCR).

Other Measures

5-year impact factor, immediacy index, cited half-life, citing half-life, eigenfactor score, **article influence score**, ...

Web of Science, impact factor

Examples of Impact Factors

Science:

806 papers published in 2016, 768 papers published in 2017, 64,633 cites to these papers in 2018

$$IF(2018, Science) = \frac{64633}{806 + 768} = 41.063$$

International Journal of Solids and Structures: 434 papers published in 2016, 360 papers published in 2017, 2213 cites to these papers in 2017

$$IF(2018, IJSS) = \frac{2213}{434 + 360} = 2.787$$

Web of Science, impact factor

Ranking of Journals in Mechanics Based on 2018 Impact Factors					
1.	Annual Review of Fluid Mechanics	16.306			
2.	Advances in Applied Mechanics	8.333			
3.	Energy Conversion and Management	8.208			
4.	Applied Mechanics Reviews	6.733			
5.	International Journal of Plasticity	6.490			
30.	 International Journal of Solids and Structures	3.213			
136.	Mechanics of Solids	0.374			

(2019 InCites Journal Citation Reports)

- Quartiles Q1 Q4
- Top 10% (first decile, D1)

Web of Science, impact factor

Ranking	of All Journals Based on 2018 Impact Factors	
1.	CA: A Cancer Journal for Clinicians	292.3
2.	New England Journal of Medicine	74.7
3.	Nature Reviews Materials	71.2
4.	Nature Reviews Drug Discovery	64.8
5.	Lancet	60.4
14.	Nature	42.8
15.	Science	41.8
2916.	International Journal of Solids and Structures	3.2
12846.	Pulp & Paper - Canada	0.000

(2019 InCites Journal Citation Reports)

Web of Science, impact factor

2017 Impact Fac	tors in Various	Categories ((selected	examples)
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journal category	median IF	aggregate IF
Nanoscience & Nanotechnology	2.934	6.195
Cell Biology	3.325	5.825
Chemistry (Multidisciplinary)	2.199	5.561
Materials Science (Multidisciplinary)	2.008	4.641
Biochemistry & Molecular Biology	2.906	4.281
Computer Science & Cybernetics	1.283	3.162
Biomedical Engineering	1.990	3.158
Electrical & Electronic Engineering	1.820	2.723
Mechanics	1.768	2.663
Mechanical Engineering	1.708	2.479
Civil Engineering	1.448	2.301
Applied Mathematics	0.972	1.299
Mathematics	0.704	0.855
History	0.400	0.465

Ranking of Journals Evaluation of Researchers Evaluation of Czech Research Organizations College and Univ

Web of Science, impact factor

IF Boosted by Unethical Editorial Policies

Journal of the Mechanics and Physics of Solids

Key In	dicators		
Year 🔻	Total Cites <u>Graph</u>	Journal Impact Factor <u>Graph</u>	Impact Factor Without Journal Self Cites
			<u>Graph</u>
2014	13,081	3.598	3.249
2013	12,046	4.289	3.929
2012	10,460	3.406	3.168
2011	9,562	2.806	2.478
2010	9,828	3.705	3.433
2009	9,466	3.317	3.058
2008	9,094	3.467	3.128
2007	7,519	3.542	3.250
2006	6,941	3.609	3.168
2005	5,952	2.764	2.437
2004	6,095	3.443	3.044
2003	5,373	2.885	2.519
2002	4,671	2.364	2.004
2001	4,783	2.521	2.046
2000	4,393	2.068	1.801
1999	3,906	1.773	1.502
1998	3,620	1.905	1.686

International Journal of Plasticity

Year 🔻	Total Cites Graph	Journal Impact Factor <u>Graph</u>	Impact Factor Without Journal Self Cites
2014	7,364	5.567	3.674
2013	6,866	5.971	3.673
2012	5,276	4.356	2.863
2011	4,864	4.603	2.703
2010	4,826	5.082	3.137
2009	4,179	4.791	2.768
2008	3,594	3.875	2.465
2007	3,211	4.516	2.725
2006	2,763	4.113	2.091
2005	2,408	4.029	1.965
2004	2,175	3.819	1.445
2003	1,569	2.768	1.297
2002	1,290	2.464	1.488
2001	965	1.212	0.898
2000	931	1.040	0.712
1999	647	0.741	0.444
1998	636	1.091	0.818

2004: 11.6% of self-citations 2004: 62.2% of self-citations

Scopus, Scopus journal metrics

Scopus, Scopus Journal Metrics

Scopus

Bibliographic database owned by Elsevier, covering journals, proceedings and patents.

Scopus Journal Metrics

• CiteScore:

similar to IF but taken over previous 3 years (instead of 2)

- SCImago Journal Rank (SJR): accounts for number of citations and prestige of the citing sources
- Source Normalized Impact per Paper (SNIP): uses weighting based on the total number of citations in a given field

Scopus, Scopus journal metrics

Comparison of Journal Metrics							
journal	IF	AIS	CS	SJR	SNIP		
Chemical Reviews	52.76	16.48	100.5	20.85	12.83		
Int. J. Solids Structures	3.21	0.87	5.8	1.30	1.58		
J. of Algebraic Geometry	1.59	2.77	2.1	2.49	2.08		
Acta Polytechnica			1.3	0.21	0.59		

(2019 Journal Citation Reports, 2019 Scopus Journal Metrics) IF = Impact Factor, AIS = Article Influence Score, CS = CiteScore, SJR = SCImago Journal Rank, SNIP = Source Normalized Impact per Paper

The number of cites of a given paper is usually higher in Scopus than in Web of Science (WoS).

At CTU, Scopus used to be perceived as less prestigious than WoS, but this is no longer the case.

The national research evaluation system as well as the CTU promotion rules consider Scopus and WoS as equally relevant.

Ranking of Journals Evaluation of Researchers Evaluation of Czech Research Organizations College and Universes Concession Concession

Predatory journals and misleading metrics

Predatory journals and misleading metrics

Predatory journals

Beware of journals that promise an extremely speedy publication process and ask for a fee.

Open access is a meaningful concept, but should not be abused. True recognition of your work by the community is not for sale.

Misleading metrics

Often, predatory journals boast of high "impact factors", but these are not the "true" Impact Factors assigned by Clarivate Analytics. Certain "alternative impact factors" are announced by strange servers that are not respected by the international research community.

Predatory journals and misleading metrics

Example: Statement from an email

IOSR Journals got 10th Ranking by AQCJ (African Quality Center for Journals) – Top 20 Journals Ranking.

Example: Statement from another email

International Journal of New Technology and Research has Impact Factor 1.09 (SIF), 1.387 (PIF), 2.254 (SPARC Factor).

Example: Statement from a web site

International Journal of Engineering and Applied Sciences has Impact Factor 1.227.

Reality

None of these journals is indexed in Web of Science nor in Scopus.

Predatory journals and misleading metrics

				_	
INTERNATIONAL OF SCIENTIFIC Research	WEL	COME ABOU	JT IOSR	IOSR JOURNALS	CONTACT US
IOSR JOURNALS • FOR AU SUBSCRIBE JOURNALS •	THORS ▼ QUA	LITY REPORT 🗸	SPECIAL	ISSUE 🕶	
Other Useful Journals	Citation Rep	orts			
10SR Journal of Computor Engineering (IOSRJCE) 10SR Journal of Electrical and Electronics Engineering (IOSRJEEE) 10SR Journal of Mechanical and Civil Engineering (IOSRJMCE)	IOSR Journals try its l IOSR Journals publish IOSR Journals paper of report. But approx citation re	best effort for selectin ned paper cited highly citation is increasing o eport is as follows (it n	g good quality r due to open ac day by day. So i nay be vary bec	paper to achieve high imp cess publication era and i is very difficult to calcul ause it depends on citatio	pact factor. its worldwide indexin late exact citation on of papers):
IOSR Journal of Electronics and Communication Engineering (IOSR-JECE)	1. IOSR Journal of 2. IOSR Journal of 3. IOSR Journal of	f Computer Enginee f Electrical and Elec f Mechanical and Ci	ring : 76.5 % tronics Engin vil Engineerir	eering: 61.3 % Ig: 71.2 %	
IOSR Journal of VLSI and Signal Processing (IOSR-JVSP)	4. IOSR Journal of 5. IOSR Journal of	f Electronics and Co f VISI and Signal Pr	mmunication	Engineering: 65.3 %	
IOSR Journal of Mobile Computing & Application (IOSR-JMCA) IOSR Journal of Environmental Science, Toxicology and Food Technology (IESTFT)	6. IOSR Journal of 7. IOSR Journal of 8. IOSR Journal of 9. IOSR Journal of	f Environmental Sci f Humanities and Sci f Pharmacy and Biol f Business and Man	ence, toxicolo ocial Science: logical Scienc agement: 75.8	gy and Food Technology 79.6 % a: 73.5 % %	; : 51.1 %

Predatory journals and misleading metrics

IOSR Journals try its best effort for selecting good quality paper to achieve high impact factor.

IOSR Journals published paper cited highly due to open access publication era and its worldwide indexing.

IOSR Journals paper citation is increasing day by day. So it is very difficult to calculate exact citation report. But approx citation report is as follows (it may be vary because it depends on citation of papers):

- 1. IOSR Journal of Computer Engineering : 76.5 %
- 2. IOSR Journal of Electrical and Electronics Engineering: 61.3 %
- 3. IOSR Journal of Mechanical and Civil Engineering: 71.2 %
- 4. IOSR Journal of Electronics and Communication Engineering: 65.3 %
- 5. IOSR Journal of VLSI and Signal Processing: 61.7 %
- 6. IOSR Journal of Environmental Science, toxicology and Food Technology : 51.1 %
- 7. IOSR Journal of Humanities and Social Science: 79.6 %
- 8. IOSR Journal of Pharmacy and Biological Science: 73.5 %
- 9. IOSR Journal of Business and Management: 75.8 %
- 10. IOSR Journal of Dental and Medical Science: 83.4%

Ranking of Journals Evaluation of Researchers Evaluation of Czech Research Organizations College and Univ Predatory journals and misleading metrics ISSN:2454-4116 International Journal of New Technology and Research Impact Factor 2.254 Besearch Publication (An ISO 9001:2008 Certified Online Journal) India | Germany | France | Japan Paper Title or Author Name Search ABOUT IJNTR CALL FOR PAPER FOR AUTHORS EDITORIAL BOARD SUBMIT ARTICLE CONTACT US HOME Ш About IJNTR News & Updates Call for Paper **Payment Option** Submit Article Call for Paper Impact Factor 4.09 (SIF) Impact Factor 1.387 (PIF) For Authors Payment Option

Predatory journals and misleading metrics



Last Date of Paper Submission October 09, 2019

Review Report (Faster Online Peer Review) Within 3-4 Days after Submission

Publication (online) Within 1-2 Days After Registration

Indexing and Certificate Delivery After 7 Days of Last Date of Publication

Review within 3–4 days after submission?? Can experts really do that on a regular basis?

Predatory journals and misleading metrics

Bad Practices of Predatory Journals

- Falsely claiming to provide peer review and meaningful editorial oversight of submissions
- Lying about affiliations with prestigious scholarly/scientific organizations
- Claiming affiliation with a non-existent organization
- Naming reputable scholars to editorial boards without their permission (and refusing to remove them)
- Falsely claiming to have a high Journal Impact Factor
- Hiding information about article processing charges until after the author has completed submission
- Falsely claiming to be included in prestigious indexes

Predatory journals and misleading metrics

Beall's List

Scholarly Open Access

- Web server devoted to critical analysis of scholarly open access publishing.
- Started in 2008 by Jeffrey Beall, a librarian at the University of Colorado Denver.
- Used to provide a (very long) list of suspicious publishers and another list of suspicious standalone journals.
- In December 2016 closed due to pressure of certain publishers (e.g., OMICS Publishing Group threatened to sue Beall with a \$1 billion lawsuit for defaming the company)

Predatory journals and misleading metrics

Beall's List, December 2016

	Sc	holar Critical analy	Iy Open A	sting
Home	About the Author	Disclaimer	LIST OF PUBLISHERS	LIST OF STANDALONE JOURNALS
Other pa	iges			
EIS Be Po op	ST OF PUBLISHI eall's List: tential, possible, or en-access publishe	ERS probable pree	datory scholarly	Search RECENT POSTS
Thi rec des the a fe pre for	s is a list of questional ommend that scholars criptions provided her y want to submit articl w cases, non-open acc datory publishers have determining predator	Oblics international commens Oblics interconsections or Three Open-Access Publishers from Turky or Hyderabad, nick- CRy of Comption or Unicked or Liskedin or Spanness Triving or Spanness or Spanness		
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o 1088 Email Press

- o 2425 Publishers
- o The 5th Publisher

o article processing charges
o Australia
o Mandates
o Misleading metrics
o Open-access policy
o Open-access sanctions
o Plagiarism

Predatory journals and misleading metrics

Beall's List, December 2016

- o InternationalJournals.co.in
- o Internet Scientific Publications
- o Interscience Journals
- o Interscience Open Access Journals
- o Inter-USE (International Union of Scence and Education)
- o Intuition Journals
- o Invention Journals
- o IORE International
- o IOS Publishing (Institute of Science Publishing)
- o IOSR Journals SEE International Organization of Scientific Research
- o iProbe Group
- o Ira Publications
- o IRED International Journals
- o IRO Journals
- o IROSSS (International Research Organization of Sciences and Social Sciences)
- o Isaac Scientific Publishing
- o iSER Publications
- o Ishitv Technologies
- o ISISnet
- o Islamic World Network for Environmental Science and Technology (IWNEST Publisher)
- ISPACS (International Scientific Publications and Consulting Services)

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Predatory journals and misleading metrics

Beall's List, December 2016

Scholarly Open Access Critical analysis of scholarly open-access publishing							
Home	Abo	out the Author	Disclaimer	LIST OF PUBLISHERS	LIST OF STANDALONE JOURNALS		
Other pa	ages						
Pague Organization Dublishes Over 200							

Bogus Organization Publishes Over 300 Open-Access Journals

July 12, 2016



Another bogus organization that wants your money.

The International Organization of Scientific Research and Development (IOSRD) launched recently with 3.94 x 10² journals. It's a bogus organization that only wants to make easy money from scholarly authors. Read the rest of this entry »

You have searched the Scholarly Open Access blog archives for 'IOSR'. If you are unable to find anything in these search results, you can try one of these links.

RECENT POSTS
o OMICS International Continues Violating Canada
o Three Open-Access Publishers from Turkey
o Hyderabad, India — City of Corruption
o Predatory Publishers Thriving on LinkedIn
o Spammers Invite Researchers to Pay to Advertise Their Research

Predatory journals and misleading metrics

Beall's List Today

BEALL'S LIST

OF POTENTIAL PREDATORY JOURNALS AND PUBLISHERS

	PUBLISHERS	STANDALONE JOURNALS VANITY PRESS CONTACT	OTHER
C βearch for publish	ers (name or URL)		
Potential predat	tory schol	arly open-access publishers	Important message
Instructions: first, find the jou "About" section. Then simply have a publisher use the Sta All journals published by a p	urnal's publisher – • enter the publish ndalone Journals I vredatory publishe	it is usually written at the bottom of the journal's webpage or in the er's name or its URL in the search box above. If the journal does not list. r are potentially predatory unless stated otherwise.	We have successfully moved from Weebly to an independent server. Contact form is now working as always.
Original list		GO TO UPDATE	Useful pages
This is an archived version o Beall. We will only update lin	f the Beall's list – nks and add notes	a list of potential predatory publishers created by a librarian Jeffrey to this list.	List of journals falsely claiming to b indexed by DOAJ
• 1088 Email Press			DOAL lournals added and removed

Predatory journals and misleading metrics

Beall's List Today

Copy of Original Beall's List With Updates

 Maintained by an anonymous scholar https://beallslist.net

Disclaimer

I am not Jeffrey Beall. I prefer my identity to be anonymous, largely for the reasons that Beall mentioned in his recent article (see here). However, I can tell you that I am a postdoctoral researcher in one of the European universities and have hands-on experience with predatory journals.

 Some insights available at http://blogs.sciencemag.org/pipeline/archives/ 2018/04/02/predation Ranking of Journals Evaluation of Researchers Evaluation of Czech Research Organizations College and Universes Control Control

Predatory journals and misleading metrics

White (Positive) Lists

Lists of Recommended Journals

- Master Journal List by Clarivate Analytics (all journals indexed by Web of Science) http://mjl.clarivate.com
- Science Citation Index by Clarivate Analytics (highly selective subset of the master list) http://mjl.clarivate.com/cgi-bin/jrnlst/jloptions.cgi?PC=K
- Scopus Sources https://www.scopus.com/sources
- ??? publons.com https://publons.com/journal
- ??? Directory of Open Access Journals (DOAJ) https://doaj.org

Predatory journals and misleading metrics

International Journal of Engineering and Applied Sciences

- https://www.ijeas.org/, ISSN 2394-3661
 Publisher: I.J.E.A.S.
 Editor-in-Chief: Neelam Sharma
 on Beall's list (predatory)
- http://eaas-journal.org/, ISSN 2305-8269
 Publisher: ARF Printing, Islamabad, Pakistan
 Editor-in-Chief: Unknown (55 members of editorial board)
 on Beall's list (predatory)
- http://ijeas.akdeniz.edu.tr, ISSN 1309-0267
 Publisher: Akdeniz University, Turkey
 Editor-in-Chief: Ömer Civalek
 on DOAJ list (meeting some minimum criteria)

Predatory journals and misleading metrics

Final Recommendations

When you select a journal:

- get the opinion of your advisor or senior colleague
- think of journals in which you have found valuable papers related to your topic
- when you aim high, go for the best:
 - journals in SCI (not expanded)
 - Q1 or even Top 10% journals in Scopus
- otherwise at least check that
 - the journal is indexed in WoS or Scopus (at least in Q3)
 - AND the journal is not on Beall's list

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Publications

Publications

Be specific

In many fields, publications are the most important type of research output (of course, in applied research and development, patents, prototypes etc. are extremely important, too). But which type of publications? The total number does say much.

It is essential to distinguish between books, book chapters, journal papers and contributions to conference proceedings, international and national ones. In your CV and in various forms, always specify exactly what you mean.

Publications

Publications

Vague

She published ...

- more than 100 papers;
- 43 scientific papers in journals and proceedings;
- 27 papers in prestigious journals.

Clear

She published ...

- 27 papers in peer reviewed (refereed) international journals;
- 63 contributions in proceedings of international conferences;
- 12 papers in journals with impact factor;
- 21 papers in journals indexed in Scopus;
- 43 publications indexed in Web of Science.

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Publications

RIV/RVVI publication types

RVVI (rada pro výzkum, vývoj a inovace)

is the R&D Council of the Czech government.

RIV (rejstřík informací o výsledcích)

is the Czech national information register of R&D results, covering publications, but also patents, software, prototypes, certified procedures, technologies and many other types of results. Citations are not registered in RIV.

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Publications

RIV/RVVI publication types (continued)

Puh	lication	codes	in	RI/	/.
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publication type	RIV code
book	В
book chapter	С
proceedings paper	D
journal paper	J
in Web of Science	J_{imp}
in Scopus	J_{SC}
other	J_{ost}

Publications

RIV/RVVI publication types (continued)

Precise definitions used by RIV

- $J_{\rm imp}$: paper in Web of Science with attributes Article, Review or Letter (NOT a Proceedings Paper)
- $J_{\rm SC}:$ paper in Scopus with attributes Article, Review or Letter (NOT a Conference Paper)
- D: paper in WoS with attribute Proceedings Paper, or in Scopus with attributes Conference Paper or Conference Review; in any case, the paper must have at least 2 pages

The same classification is used by the Czech Science Foundation (GAČR) for evaluation of project results. If you prepare a grant proposal, be careful. Not everything indexed in Scopus is $J_{\rm SC}.$

Publications

Habilitation and Promotion to Full Professor

The habilitation procedure at CTU includes a quantitative evaluation of the applicant's activities in five categories (publications, recognition by scientific community, teaching, grants, community service)

Scoring of publications and citations	
publication/citation type	points
books (international/national)	18/8
book chapters (international/national)	6/3
journal papers (WoS, Scopus, MathSci)	10
papers in int. conf. proceedings (A*/other)	4/2
papers in Czech journals	0 [†]
papers in Czech conference proceedings	0
citations in WoS, Scopus, MathSci, ERIH	3†
Czech citations	0†
† special rules apply to architects	

Citations, h-index

Citations, h-index

Be specific

In many fields, citations are the most important measure of impact of a given paper, researcher, or group of researchers. **But which type of citations?**

It is important to distinguish between self-citations and citations by others (heterocitations, external citations), and to specify in which database the cited and citing works were searched for. The same applies to the h-index.

Citations, h-index

Vague

His publications have been cited ...

- many times;
- all around the world;
- about 900 times;
- 921 times.

Clear

His publications have 921 citations (including self-citations) in Web of Science and 1431 citations (including self-citations) in Google Scholar.

Citations, h-index

Definition of self-citation (wide sense)

"Self-citations refer to cited references that contain an author name which matches the name of one of the authors of the citing article."

This definition is also used by the V3S web tool used at CTU (https://v3s.cvut.cz).

Example

- Cited paper: P. Grassl and M. Jirásek: Meso-scale approach ...
- Citing paper: V. Lefort, G. Pijaudier-Cabot, D. Grégoire and P. Grassl: Correlation in the mesoscale ...

This is a self-citation, even for M. Jirásek who did not co-author the citing paper.

Citations, h-index

Hirsch index (h-index)

h = largest integer for which the following is true:

At least h papers of the given researcher have been cited at least h times (each).

Originally it was perceived as the h-index evaluated from all citations in Web of Science.

However, an *h*-index can be evaluated from any other collection of citations, provided that the precise conditions are specified. For instance, V3S calculates the following values:

- Citations in WoS, without self-citations, no restrictions on cited work (can be a proceedings paper, book, report, ...)
- Same as above, including self-citations
- Citations in WoS, cited paper must be in SCIE/SSCI journals

Ranking of Journals Evaluation of Researchers Evaluation of Czech Research Organizations College and University Control Contro

Citations, h-index

	2016	2017	2018	2019	2020 ►	Total	Average Citations per Year
Use the checkboxes to remove individual items from this Citation Report or restrict to items published between 1545 • and 2020 • Go	274	307	265	215	0	4502	195.74
Meshless methods: An overview and recent developments By: Belytickko, T; Kronguz, T; Organ, D; et al. COMPUTER METHODS IN APPLED MEGNANCE AND ENGINEERING. Volume: 139. Issue: 1.4. Pages 3.47. Published: DEC 15 1996	115	113	96	87	0	2104	87.67
Analysis of thin shells by the element-free Galerkin method By Knyll, PB Bityczkia, T INTERNATIONAL JOURNUL OF SOLDS AND STRUCTURES. Volume 33. Issue: 20-22. Pages 3657-3078. Published: AUS 1996	3	11	15	10	0	212	8.83
Analysis of thin plates by the element-free Galerkin method By: Krysl. P; Belyschio, T COMPUTATIONAL MEGANICS: Volume: 17 Issue: 1-2 Pages: 26-35 Published: DEC 1995	9	10	10	7	0	194	7.76
23. Fin Whale Sound Reception Mechanisms: Skull Vibration Enables Low-Frequency Hearing By:Camford, Ted W.; Krysl, Net PLOS DNE: Volume: 10 Insue 1. Article Number: UNSP e0116222 Published: JAN 22 2015	6	6	6	4	0	25	5.00
24. Assumed-deformation gradient finite elements with nodal integration for nearly incompressible large deformation analysis By: Bioccardo, NJ, Michéloni, MJ, Kryd, P. Integration of the second se	0	3	2	2	0	23	2.09
h = 23 (Web of Science, with self-	cit	ati	on	s)			

Citations, h-index



Citations, h-index

Example: Petr Krysl, University of California at San Diego



Citations, h-index

E>	Example: Petr Krysl, University of California at San Diego								
	database	total citations	<i>h</i> -index						
	Web of Science	4941	25						
	Web of Science, w/o self (narrow)	4749							
	Scopus	5901	27						
	Scopus, w/o self (narrow)	5725							
	Scopus, w/o self (wide)	5573							
	Google Scholar	9161	31						



(updated on 6 April 2021)

Citations, h-index

Examples of highly cited Czech researchers (Scopus, 6 April 2021)

- Jiří Bártek, medicine/biochemistry, Karolinska Inst., Sweden h = 120; 59,399 citations (Scopus, including self-citations)
- Pavel Hobza, chemistry, IOCB Czech Academy of Sciences h = 106; 44,152 citations
- Petr Widimský, medicine, Charles University h = 64; 46,659 citations
- Petr Pyšek, biology, Stellenbosch University, South Africa h = 93; 36,142 citations
- Zdeněk P. Bažant, engineering, Northwestern University, USA h = 97; 39,430 citations
- Ivo Babuška, math & engineering, U. of Texas at Austin, USA h = 77; 27,246 citations



Citations, h-index

Top values of h-index at CTU (based on V3S records)

	Person	rson		Without self-citations		Incl. self-citations		SCIE/SSC		
Rank	Name	Number	Department	H-index	Citations in WoS	H-index	Citations in WoS	H-index	Citations in WoS	Articles in WoS
1	Šimák Vladislav prof. RNDr. DrSc.	40848	14101	87	44977	118	66985	82	38942	1073
2	Vokáč Petr Ing. 🔞	252509	14101	86	43905	114	65326	80	38332	1239
3	Smolek Karel Ing. Ph.D. 📵	101670	35201	80	37583	110	58159	74	32422	998
4	Pospíšil Stanislav Ing. DrSc. 💿	101650	35201	80	37170	109	57827	74	32089	1128
5	Augsten Kamil Ing. Ph.D. 🔞	329060	14116	80	36707	107	54785	74	32486	1086
6	Vacek Václav doc. Ing. CSc. 🙆	20216	12102	79	35764	104	54795	72	30833	972
7	Solar Michael RNDr. CSc. 🔞	24306	35201	78	35207	105	54482	72	30530	846
8	Slavíček Tomáš Mgr. 😰	308923	35201	78	35155	104	54313	72	30492	858
9	Sopko Vít Ing. Ph.D. 😗	250318	14112	77	32142	104	49691	71	27632	618
10	Jakübek Jan Ing. Ph.D.	101644	35201	76	31067	103	47738	71	26447	647
11	Tureček Daniel Ing.	339573	35201	76	30561	103	45923	71	26807	601
12	Sopko Bruno prof. RNDr. DrSc. 🔞	21975	14111	75	30315	102	46599	70	25808	547
13	Kohout Zdeněk RNDr. Ph.D. 🔞	23224	12102	75	30015	102	45947	69	25597	514
14	Šuta Michal Ing.	340712	14102	74	29486	102	44554	69	25989	582
15	Šolc Jaroslav Ing. Ph.D.	319016	14116	74	28249	102	41983	69	24660	506

Citations, h-index

Most cited papers of a top researcher at CTU (V3S records)

Rank	Result ID	Result kind Result year	Result reference	Matching citation
1	202645	CLA 2012	Aad, G.; Abaiyan, T.; Abbott, B.; Abdallah, J.; Khalek, S. Abdel; Augsten, K.; Hoiy, T.; Hubäček, Z. et al. Observation of a new particle in the search for the Standard Model Higgs boson with the ATLAS detector at the LHC Physics Letters B. 2012, 716(1), 1-29. ISSN 0370-2693.	4,926 -
2	149770	CLA 2008	Aad, G; Abat, E; Abdallah, J; Abdelalim, A.A; Abdesselam, A; Chren, D; Horažđovský, T; Kohout, Z. et al. The ATLAS Experiment at the CERN Large Hadron Collider Journal of Instrumentation. 2008, 3(508003), ISSN 1748-0221.	1,341 -
3	177380	CLA 2010	Aad, G.; Abbott, B.; Abdallah, J.; Abdelalim, A. A.; Abdesselam, A.; Holý, T.; Jakúbek, J.; Král, V. et al. The ATLA 55 imulation Infrastructure: European Physical Journal C. 2010, 70(3), 823-874, ISSN 1434-6044.	734 -
4	202149	CLA 2012	Aad, G; Abbott, B; Abdallah, J; Abdelalim, A.A; Abdesselam, A; Hubáček, Z; Vlasák, M; Augsten, K. et al. Combined search for the Standard Model Higgs boson using up to 4.9 fb(-1) of pp collision data at root s=7 TeV with ber ATLs detector at the LHC Physics Letters B. 2012, 710(1), 49-66. ISSN 0370-2693.	488 -
5	201965	CLA 2012	Aad, G; Abbott, B; Abdallah, J; Khalek, SA; Abdelalim, AA; Hubáček, Z; Vlasák, M; Augsten, K. et al. Search for the Standard Model Higgs Boson in the Diphoton Decay Channel with 4.9 fb(-1) of pp Collision Data at root sear 71 eW with ATLAS Physical Review Letters. 2012, 108(11), 1-19. ISSN 0031-9007.	483 -

Ranking of Journals Evaluation of Researchers Evaluation of Czech Research Organizations College and Unive

Citations, h-index

Collaborative papers



Physics Letters B Volume 716, Issue 1, 17 September 2012, Pages 1–29



Observation of a new particle in the search for the Standard Model Higgs boson with the ATLAS detector at the LHC \star

This paper is dedicated to the memory of our ATLAS colleagues who did not live to see the full impact and significance of their contributions to the experiment. ATLAS Collearation*,

G. Aad⁴⁸, T. Abajyan²¹, B. Abbott¹¹¹, J. Abdallah¹², S. Abdel Khalek¹¹⁵, A.A. Abdelalim⁴⁹, O. Abdinov¹¹, R. Aben¹⁰⁵, B. Abi¹¹², M. Abolins⁵⁸, O.S. AbouZeid¹⁵⁸, H. Abramowicz¹⁵³, H. Abreu¹³⁶, B.S. Acharya¹⁶⁴, 164b, L. Adamczyk²⁰, D.L. Adams²⁵, T.N. Addy⁵⁶, J. Adelman¹⁷⁶, S. Adomeit⁹⁰, P. Adragna⁷⁵, T. Adye¹²⁹, S. Aefsky²³, J.A. Aguilar-Saavedra^{124b, a}, M. Agustoni¹⁷, M. Aharrouche⁸¹, S.P. Ahlen²², F. Ahles⁴⁸, A. Ahmad¹⁴⁵, M. Ahsan⁴¹, G. Aletli^{1338, 133b}, T. Akdogan¹⁹⁸, T.P.A. Åkesson⁷⁹, G. Akimoto¹⁵⁵, A.V. Akimov⁹⁴, M.S. Alam², M.A. Alam⁷⁶, J. Albert¹⁰⁰, S. Albrand⁵⁵, M. Aleksa³⁰, I.N. Aleksandrov⁶⁴, F. Alessandria^{89a} C. Alexa^{26a}, G. Alexander¹⁵³, G. Alexandre⁴⁹, T. Alexopoulos¹⁰, M. Alhroob^{164a, 164c}, M. Allev¹⁶, G. Alimont/998 J Alison¹²⁰ B M M Albrooke¹⁵ P.P. Alboot⁷⁵ S F. Albood-Spiers⁵³ J Almond⁶² A Aloisio^{102a, 102b}, R. Alon¹⁷², A. Alonso⁷⁹, F. Alonso⁷⁰, A. Altheimer³⁵, B. Alvarez Gonzalez⁶⁸, M.G. Alviogi102a, 102b, K. Amako⁶⁵, C. Amelung²³, V.V. Ammosov¹²⁸, -, S.P. Amor Dos Santos^{124a}, A. Amorim^{124a, b}, N. Amram¹⁵⁵, C. Anastopoulos³⁰, L.S. Ancu¹⁷, N. Andari¹¹⁵, T. Andeen³⁵, C.F. Anders^{58b}, G. Anders^{55a}, K.J. Anderson³¹, A. Andreazza^{55a}, ^{55b}, V. Andrei^{55a}, M.-L. Andrieux⁵⁵, X.S. Anduaga⁷⁰, S. Angelidakis⁹, P. Anger⁴⁴, A. Angerami³⁵, F. Anghinotfi³⁰, A. Anisenkov¹⁰⁷, N. Anios¹²⁴, A. Annovi⁴⁷, A. Antonaki⁹, M. Antonelli⁴⁷, A. Antonov⁹⁶, J. Antos¹⁴⁴b, F. Anulli^{132a}, M. Aoki¹⁰¹, S. Aoun⁸³, L. Aperio Bella⁵, R. Apolle^{118, c}, G. Arabidze⁶⁰, I. Aracena¹⁴³, Y. Arai⁶⁵, A.T.H. Arce⁴⁵, S. Arfaoui¹⁴⁶, J.-F. Arguin⁶⁵, E. Arik^{19a, -}, M. Arik^{19a}, A.J. Armbruster⁸⁷, O. Amaez⁸¹, V. Arnal⁸⁰, C. Arnault¹¹⁵, A. Artamonov⁹⁵, G. Artoni^{1328, 1326}, D. Arutinov²¹, S. Asai¹⁵⁵, S. Ask²⁶, B. Åsman^{1468, 1466}, L. Asouith⁶, K. Assamagan³⁵, A. Astbury¹⁶⁹, M. Atkinson¹⁶⁵, B. Aubert⁵, E. Auge¹¹⁸, K. Augsten¹²⁷, M. Aurousseau¹⁴⁵⁸, G. Avolio¹⁶³, R. Avramidou¹⁰, D. Axen¹⁶⁸, G. Azuelos^{93, d}, Y. Azuma¹⁵⁵, M.A. Baak³⁰, G. Baccaglioni^{89a}, C. Bacci^{154a, 154b}, A.M. Bach¹⁵, H. Bachacou¹³⁶, K. Bachas³⁰, M. Backes⁴⁹, M. Backhaus²¹, J. Backus Mayes¹⁴³, E. Badescu²⁶⁶, P. Bagnaia¹³²⁸, ¹³²⁰, S. Bahinipati³, Y. Bai³³⁶, D.C. Bailey¹⁵⁸, T. Bain¹⁵⁸, J.T. Baines¹²⁹, O.K. Baker¹⁷⁶, M.D. Baker²⁵, S. Baker⁷⁷, P. Balek¹²⁶, E. Banas³⁹, P. Banerjee⁵⁵, Sw. Banerjee¹⁷⁵, D. Banfi³⁰, A. Bangert¹⁵⁰, V. Bansal¹⁶⁹, H.S. Bansil¹⁸, L. Barak¹⁷², S.P. Baranov⁵⁴, A. Barbaro Galtieri¹⁵, T. Barber⁴⁵, E.L. Barberio⁸⁶, D. Barberis^{500, 500}, M. Barbero²¹, D.Y. Bardin⁶⁴, T. Barillan⁹⁹, M. Barisonzi¹⁷⁶, T.

... in total about 2,600 authors.

Ranking of Journals Evaluation of Researchers Evaluation of Czech Research Organizations College and University Construction College and University Construction Constructico

Citations, h-index

r	of. Jiří Ma	atas, F	aculty	of E	ectr	ical Ei	ngine	eering			
23	Petráček Vojtěch doc. RND	r. CSc. 📀	251869	14102	60	11922	69	16268	51	8953	348
24	Günther Jaroslav Ing. Ph.D		329049	329049 14102 59 12889 78 20169 54 11125							
25	Matas Jiří prof. Ing. Ph.D.	D	32913	13162	58	21509	59	22805	20	4357	42
26	Sodomka Jaromír doc. Ing	. CSc.	60695	16121	58	20866	78	31908	55	17960	311
27	Sopczak André doc. Dr. 🔞)	408477	35201	58	14835	76	23271	53	13060	635
1	1 57875 CLA Kittler, J: Hatef, M: Duin, RP.W.: Matas, J. 2835 > 1998 On Combining Classifiers IEEE Transactions on Dettern Analysis and Machine Intelligence. 1998, 20(3), 226-239. ISSN 0162-8828. 2835 >										
2	103426	CLA Matas, J.; Chum, O.; Urban, M.; Pajdla, T. 2004 Robust Wide-baseline stereo from maximally stable extremal regions Image and Vision Computing. 2000, 22(10), 761-767. ISSN 0262-8856.									
3	200439	CLA 2012	Kálal, Z.; Mikolajczyk, K.; Matas, J. Tracking-Learning-Detection IEEE Transactions on Pattern Analysis and Machine Intelligence. 2012, 34(7), 1409-1422, ISSN 0162-8828.								
4	117032	CLA 2005	Mikolajczyk, K A Compariso International	; Tuytelaars, T n of Affine R Iournal of Cor	.; Schmid, C. igion Detec iputer Visior	Zisserman, A.; M tors 2005, 65(7), 43-	atas, J.; Scha 72. ISSN 092	ffalitzky, F.; Kadir, D-5691.	, T.; Van Goo	ι, ι.	1928 ►
5	5 76764 STV Matas, J.; Chum, O.; Urban, M.; Pajdla, T. 2002 Robust Wide baseline Stereor from Maximally Stable Extremal Regions Irc Proceedings of the British Machine Vision Conference. London: British Machine Vision Association, 2002. p. 384-393. ISBN 1-90172-19-7.										
6	175503	STA 2010	Kálal, Z.; Mata P-N Learning In: CVPR 2010 Recognition. N	s, J.; Mikolajcz : Bootstrapp : Proceedings Madison: Omr	yk, K. ng Binary C of the 2010 ipress, 2010.	lassifiers by Stru IEEE Computer Sc pp. 49-56. ISSN 1	ctural Const ociety Confer 1063-6919. IS	t raints ence on Computi BN 978-1-4244-1	er Vision and 6984-0.	l Pattern	824 ▶

Scopus: h = 64; 25,824 citations (6 April 2021)

Plan

Ranking of Journals

- Web of Science, impact factor
- Scopus, Scopus journal metrics
- Predatory journals and misleading metrics

2 Evaluation of Researchers

- Publications
- Citations, h-index

3 Evaluation of Czech Research Organizations

4 College and University Rankings

Evaluation of Czech Research Organizations

Before 2016

- Quantitative evaluation based on points attributed to various types of research output - papers, books, patents, software, ...
- Known as the "coffee grinder", strongly criticized

Methodology 2017+ (M17+)

- Approved by the Czech government on 8 February 2017
- Gradual implementation of 5 modules
- National and international expert panels
- Documents: [English], [Czech]
- Results (in Czech): https://hodnoceni.rvvi.cz

Methodology 2017+

Modules

- Quality of selected results
 - Basic research
 - 2 Applied research [link]
- 2 Research performance
 - National bibliographic results [link], WoS (AIS)
 - Institutions [link]
- 8 Relevance to society
- Viability
- Overlaps Development strategy (including self-evaluation)

Methodology 2017+

Original roadmap

- 2017–2019: warm-up evaluations of modules
- 2020+: 1 full-module evaluation per 5 years

Current state

- Modules 1 and 2 evaluated for 2017, 2018, 2019
- Modules 3-5: reports by international panels being processed
- Indicative ranking of institutions [link]
- Public universities, Rank A (tentative) [link]
 Czech Technical University in Prague, University of South Bohemia, Masaryk University, Charles University, Palacký University, University of Chemistry and Technology

Ranking of Journals Evaluation of Researchers Evaluation of Czech Research Organizations College and University Construction College and University Construction College and University Construction Con

Module 1 — Quality of selected results

- Peer review by panels composed of Czech experts
- Criteria: contribution to knowledge or social relevance
- Grading: world-leading (1), excellent (2), very good (3), average (4), and below average (5)
- (Detailed) comments available

	\sum					
		1	2	3	4	5
Number of results	437	11	58	136	160	72
	100%	3%	13%	31%	37%	16%

Evaluation 2019 - Engineering and Technology

- Grade 1: CTU 6/11
- Grade 2: CTU 22/58

Ranking of Journals Evaluation of Researchers Evaluation of Czech Research Organizations College and University Construction College and University Construction Construction

Module 2 — Research performance

- Based on Web of Science and Article Influence Score
- Supplemented with comments by expert panels
- Example:



Plan

Ranking of Journals

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College and University Rankings

Prestigious University Rankings

- Times Higher Education (THE) [link]
- QS World University Rankings [link]
- Academic Ranking of World Universities (ARWU) [link]

Examples of most recent rankings

	THE (2021)	QS (2021)	ARWU (2019)
Charles Univ.	401–500	260	201-300
CTU	1,001+	432	701-800

Controversies?