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Introduction to Web of Science & Scopus

Eli Blažků, Jan Polášek
April 2022



Outline

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2. [Searching by topic](#)
3. [Searching for journals and journal metrics](#)
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1. Introduction to citation databases

Evaluating research impact

*“Hopefully, your PhD research will make an **impact** by advancing knowledge in your field or by contributing to real-world applications.”¹*

The results of research are usually presented in form of scientific articles, proceedings, and books.

One of the (limited) ways of measuring the impact of a researcher in their field is the **number of citations** for papers published in **quality, peer-reviewed scientific** journals.

1) PhD On Track. (n.d.). Citation impact. <https://www.phdontrack.net/share-and-publish/citation-impact/>

Scientific communication & quality control

- Submitted papers are evaluated via a **rigorous** [peer review process](#) in quality scientific journals.
- Citation databases include resources (usually journals) in them according to selection criteria ([Scopus criteria](#), [Web of Science criteria](#)).
- Citation information is then analyzed within citation databases and **citation metrics** for journals, articles, and authors are calculated.
- **Web of Science** and **Scopus** citation databases are currently used in the Czech academic performance evaluation system.

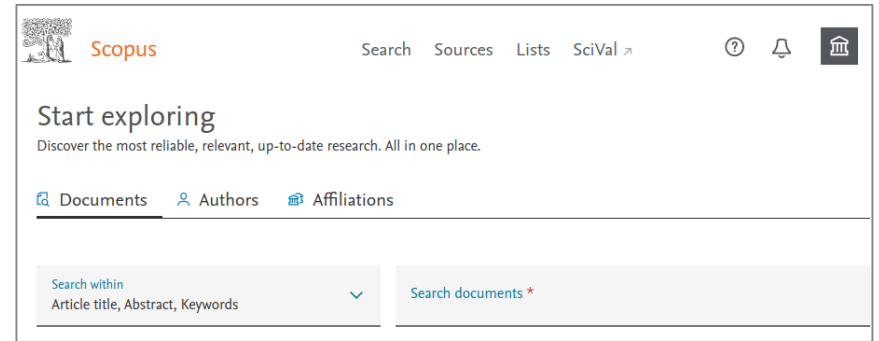
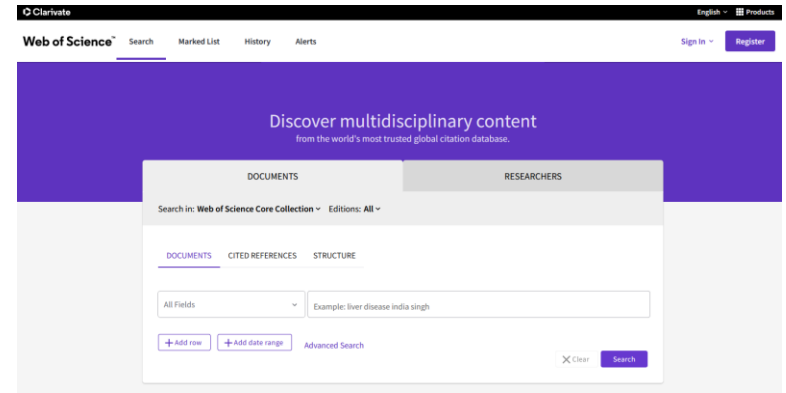
Citation metrics are important if you choose a career in academia, and they are also used to evaluate scientific institutions around the world.

How can citation databases help you?

- In searching for reliable, peer-reviewed resources (better chances of avoiding low-quality/[predatory journals](#))
- In checking journal metrics to make better decisions about where to publish (to build your academic reputation and get RIV points)
- In looking up author metrics (*h*-index counts) for proposals or one's own CV
- In identifying new trends and seminal articles in your field

Web of Science (WoS) and Scopus

- **Peer-reviewed scholarly literature:**
 - Journals, books, and conference proceedings
- **Content policy and selection criteria:**
 - **Evaluation of included literature** by standards, subject/content relevance, and impact
- **Citation information:**
 - Others who cite a work (times cited)
 - Views (usage count) and analysis
- Other citation metrics
- **No full texts, but links to full texts and abstracts**



Comparison of Web of Science (WoS) and Scopus

Features	WoS	Scopus
Developer/Producer	Clarivate Analytics	Elsevier
Coverage	1900 to present	1970 to present (with references)
Author identifier	Assigned automatically and edited manually via Publons	Auto-generated Scopus Author ID
Alerts service	Yes	Yes
Export citations	Yes	Yes
Citation analysis	Yes	Yes
Main journal metrics	Journal Impact Factor	⁸ CiteScore
Author metrics	<i>h</i> -index	<i>h</i> -index

University of Michigan Library (2021). [Comparing Citation Analysis Sources \(UMICH\)](#)

Pranckutė, R. (2021). [Web of Science \(WoS\) and Scopus: The Titans of Bibliographic Information in Today's Academic World](#). *Publications*, 9(1), 12.

Limitations/risks

- Metrics: learning about the different kinds of metrics may be confusing at first
- Delay in indexing (up to 6 months after publication)
- No full texts, but links to full texts (abstracts are available)
- Beware of potential biases
 - Uncritical acceptance of the assumptions, reasoning, conclusions of indexed papers
 - An overly negative attitude (“the paper is not good”) for papers with low numbers of citations or in journals not in WOS or Scopus
- Don’t rely only on citation databases: not enough for a comprehensive literature search; quality research can be found in other places as well

Access to WoS & Scopus

- Subscribed to via NTK and university libraries
- You have direct access within your university network (in your office or classrooms)
- For **off-campus access**, check with your library:
 - [NTK](#), [CTU](#), [UCT & IOCB](#), [Charles Univ.](#), [CZU](#)
- The list of journals (including citation metrics) is open to all
 - [Scopus sources](#)
 - [Web of Science Master Journal List](#) (for access to impact factor information, registration is required)

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17.4 - Would you like to study outside while not leaving the library? Try outdoor atriums on 6th floor.

Walk in Consultations
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Selected eResources

- Cambridge Journals
- EBSCOhost
- Emerald Premier
- Encyclopedia Britannica
- IEEE Xplore
- IPScience
- Nature Complete
- Oxford English Dictionary
- Oxford Journals
- ProQuest Central
- ProQuest Ebook Central
- ScienceDirect
- Scopus
- SpringerLink
- Taylor & Francis Online
- Web of Science

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Citations index

Citations index
Citation databases are databases that track quoted responses to published review texts. In the Czech Republic, two of the most significant citation databases, SCOPUS and Web of Science, are used for ISI/Vali review. Specifically, for reviewing articles published in journals and conference proceedings (Web of Science is part of Citation Reports and SCOPUS).

WEB OF SCIENCE JCR SCOPUS INCITES

Web of Science

Direct access Remote access (Shibboleth)

The Web of Science (WoS) is a bibliographic and citation database used for Vali evaluation in the Czech Republic. Together with JCR evaluates the **Impact Factor** (IF) of journals.

WoS Components:

- Science Citation Index Expanded (SCI-Expanded)
- Social Science Citation Index (SSCI)
- Arts & Humanities Citation Index (AHCI)
- Conference Proceedings Citation Index (CPCI)
- Science
- Arts & Humanities

Journals in WoS¹²
Conferences in WoSConferences in WoS¹²

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2. Searching by topic in citation databases

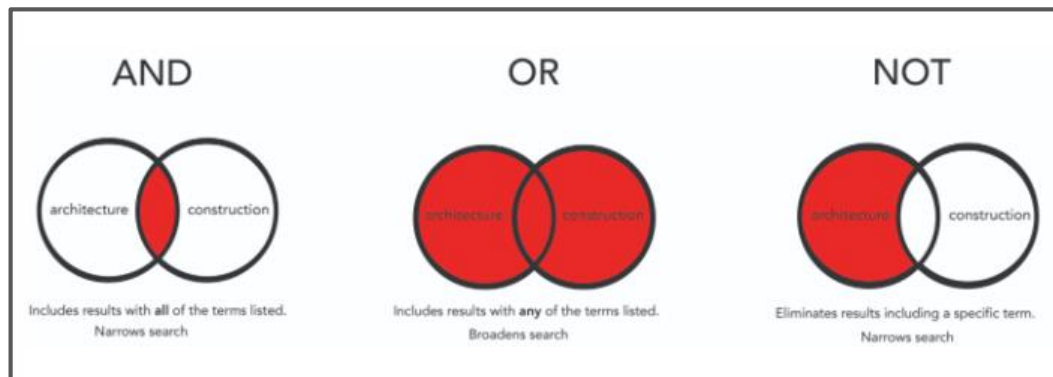
Finding scholarly literature

CASE STUDY #1: I need to find high quality sources for my dissertation about technologies for **carbon capture and utilization**

The screenshot displays the Web of Science search interface. At the top, a black header bar contains the text "Search in: Web of Science Core Collection" (highlighted with a red box) and a dropdown menu set to "Editions: All". Below this, a navigation bar includes tabs for "DOCUMENTS" (selected), "AUTHORS", "CITED REFERENCES", and "STRUCTURE". The main search area features a "Topic" dropdown menu (highlighted with a red box) and a search input field containing the text "carbon capture storage". To the left of the search field is a sidebar with a "Search" input and a list of search fields: "All Fields", "Topic" (highlighted with a red box), "Title", "Author", "Publication Titles", and "Year Published". Below the "Topic" dropdown, a description states: "Searches title, abstract, author keywords, and Keywords Plus." and provides an example: "robot* control* 'input shaping'". At the bottom right of the search area are "Clear" and "Search" buttons.

Database searching tips

Topic	▼	Example: oil spill* mediterranean "carbon capture storage"	×	
⊖ Or ▼	Topic	▼	Example: oil spill* mediterranean "carbon capture utili?ation"	×



*industr**

industry

industrial

industrialism

industrialization

*sul*ur*

sulfur

sulphur

Managing results - Web of Science

Search > Results for "carbon capture..." > Results for "carbon capture storage" (Topic) OR "carbon capture utilization"...

599 results from Web of Science Core Collection for:

Search within results for... [Analyze Results](#) [Citation Report](#) [Create Alert](#)

Copy query link

Publications You may also like...

Refine results

Search within results for...

Quick Filters

- ☐ Highly Cited Papers 9
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Publication Years

Document Types

Web of Science Categories

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- ☐ Review Articles 69
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- ☐ Open Access 216
- ☐ Associated Data 4

Sort by: Citations: highest first

1 of 12

1 **Carbon capture, storage and utilisation technologies: A critical analysis and comparison of their life cycle environmental impacts** 672 Citations 72 References

Cueiller-Franca, RM and Azapagic, A
Mar 2015 | JOURNAL OF CO2 UTILIZATION 9, pp.82-102

This paper presents a first comprehensive comparison of environmental impacts of carbon capture and storage (CCS) and carbon capture and utilisation (CCU) technologies. Life cycle assessment studies found in the literature have been reviewed for these purposes. In total, 27 studies have been found of which 11 focus on CCS and 16 on CCU. The CCS studies suggest that the global warming potential ... Show more

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Vasilev, D
Aug 9 2015 | RENEWABLE & SUSTAINABLE ENERGY REVIEWS 51, pp.100-110

The electrochemical CO2 reduction reaction (CO2RR) can couple carbon-capture storage with renewable energy to convert CO2 into chemical feedstocks. For this process, copper is the only metal known to catalyze the CO2RR to hydrocarbons with adequate efficiency, but it suffers from poor selectivity. Copper bimetallic materials have recently shown an improvement in CO2RR selectivity compared with ... Show more

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3 **The effects of electricity consumption, economic growth, financial development and foreign direct investment on CO2 emissions in Kuwait** 282 Citations 66 References

Saiahuddin, M; Alam, K; ...; Sohaib, K
Jan 2018 | RENEWABLE & SUSTAINABLE ENERGY REVIEWS 81, pp.2002-2010

This study examined the empirical effects of economic growth, electricity consumption, foreign direct investment (FDI), and financial development on carbon dioxide (CO2) emissions in Kuwait using time series data for the period 1980-2013. To achieve this goal, we applied the autoregressive distributed lag (ARDL) bounds testing approach and found that cointegration exists among the series. Findi ... Show more

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4 **A systematic review on CO2 capture with ionic liquids: Current status and future prospects** 182 Citations

Aghaie, M; Rozaei, N and Zendehtabadi, S

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270 document results

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1

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lar-Franca, R.M., Azapagic, A.

2015

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2

Surface and Interface Engineering in Copper-Based Bimetallic Materials for Selective CO2 Electroreduction

Vasileff, A., Xu, C., Jiao, Y., Zheng, Y., Qiao, S.-Z.

2018

Chem 4(8), pp. 1809-1831

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3

Electrocatalytic reduction of CO2 to formate using particulate Sn electrodes: Effect of metal loading and particle size

Del Castillo, A., Alvarez-Guerra, M., Solla-Gullón, J., (...), Montiel, V., Irabien, A.

2015

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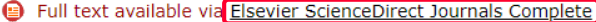
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Article details (WoS)

Carbon capture, storage and utilisation technologies: A critical analysis and comparison of their life cycle environmental impacts

By: Cuellar-Franca, RM and Azapagic, A [1], Azapagic, A [2], Cuellar-Franca, RM [3]

View Web of Science ResearcherID and ORCID (ignored by Clarivate)

JOURNAL OF CO2 UTILIZATION
Volume: 9 Pages: 82-102
DOI: 10.1016/j.jcu.2014.12.001
Published: Mar 2015
Indexed: 2015-03-01
Document Type: Review

Abstract
This paper presents a first comprehensive comparison of environmental impacts of carbon capture and storage (CCS) and carbon capture and utilisation (CCU) technologies. Life cycle assessment studies found in the literature have been reviewed for these purposes. In total, 27 studies have been found of which 11 focus on CCS and 16 on CCU. The CCS studies suggest that the global warming potential (GWP) from power plants can be reduced by 63-82%, with the greatest reductions achieved by oxy-fuel combustion in pulverised coal and integrated gasification combined cycle (IGCC) plants, and the lowest by pre-combustion capture in combined cycle gas turbine (CCGT) plants. However, other environmental impacts such as acidification and human toxicity are higher with than without CCS. For CCU, the GWP values widely depending on the utilisation option. Mineral carbonation can reduce the GWP by 4-8% compared to no CCS. Utilising CO₂ for production of chemicals, specifically dimethyl carbonate (DMC), reduces the GWP by 4-5 times and some other depletion by 13 times compared to the conventional DMC process. Enhanced oil recovery has the GWP 23 times lower compared to discharging CO₂ to the atmosphere but acidification is three times higher. Capturing CO₂ by microalgae to produce bioethanol has 23 times higher GWP than fossil based with other environmental impacts also significantly higher. On average, the GWP of CCS is significantly lower than of the CCU options. However, the other environmental impacts are higher compared to CCS except for DMC production which is the worst CCU option overall. © 2014 The Authors. Published by Elsevier Ltd.

Keywords
Carbon capture and storage; Carbon capture and utilisation; Life cycle assessment; Climate change; Environmental impacts

Author Keywords
FUEL; POWER PLANTS; CO₂ CAPTURE; DIOXIDE CAPTURE; BIOETHANOL PRODUCTION; SWING ADSORPTION; TRANSPORT; GAS RECOVERY; ENERGY COST

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E-mail Address: azapagic@manchester.ac.uk

Categories/Classification
Research Area: Chemistry; Engineering

Funding

Citation Network
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1 **Carbon capture, storage and utilisation technologies: A critical analysis and comparison of their life cycle environmental impacts**

[Cuellar-Franca, RM](#) and [Azapagic, A](#)

Mar 2015 | [JOURNAL OF CO2 UTILIZATION](#) 9, pp.82-102

This paper presents a first comprehensive comparison of environmental impacts of carbon capture and storage (CCS) and carbon capture and utilisation (CCU) technologies. Life cycle assessment studies found in the literature have been reviewed for these purposes. In total, 27 studies have been found of which 11 focus on CCS and 16 on CCU. The CCS studies suggest that the global warming potential

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Carbon capture, storage and utilisation technologies: A critical analysis and comparison of their life cycle environmental impacts

Cuéllar-Franca, Rosa M.; Azapagic, Adisa [ORCID](#)

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* School of Chemical Engineering and Analytical Science, University of Manchester, The Mill, Sackville Street, Manchester, M13 9PL, United Kingdom

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Abstract

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Reaxys Chemistry database information

This paper presents a first comprehensive comparison of environmental impacts of carbon capture and storage (CCS) and carbon capture and utilisation (CCU) technologies. Life cycle assessment studies found in the literature have been reviewed for these purposes. In total, 27 studies have been found of which 11 focus on CCS and 16 on CCU. The CCS studies suggest that

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Yan, Y., Wong, R.J., Ma, Z.
(2022) *Applied Catalysis B: Environmental*

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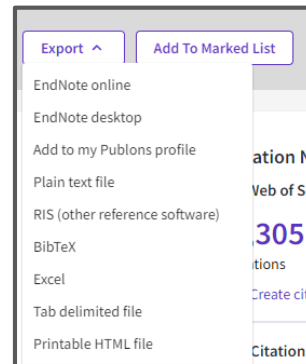
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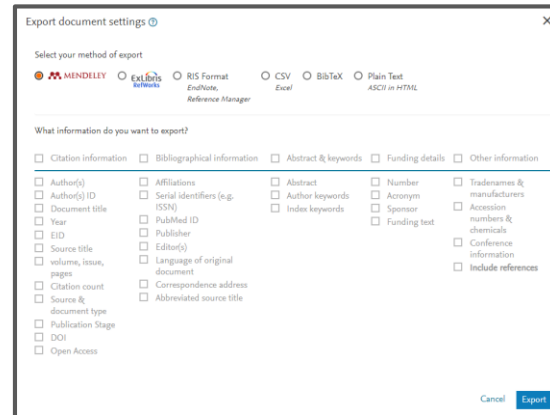
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- **Save** your search history and lists of documents
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Setting search alerts: Scopus



17,537 document results

TITLE-ABS-KEY ("air traffic control")

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Search terms

TITLE-ABS-KEY ("air traffic control") [Edit](#)

* Required fields

Name of alert *

"air traffic control"

Email address(es) *

[E.g., j.smith@mail.com, p.smith@mail.com](#)

Separate multiple email addresses by a semicolon, comma, space or enter.

Frequency

Every week [▼](#) on Monday [▼](#)

Status

☒ Active ☐ Inactive

[Set alert](#)

Setting search alerts: WoS

4,091 results from Web of Science Core Collection for:

Q "air traffic control" (Topic)

∞ Copy query link

Analyze Results Citation Report **Create Alert**



- You can create alerts for any search

Create search alert

Alert Name

Air traffic control

☒ Send me email alerts

CREATE

3. Searching for journals

What are journal metrics?

- Measurements of quality/impact of a journal
- They assist in quantifying the importance of a journal

Journal metrics

Web of Science Journal Citation Reports:

- [Journal Impact Factor](#)

Scopus sources:

- [CiteScore](#)

Impact factor (WoS)

"The impact factor is a measure of the frequency with which the 'average article' in a journal has been cited in a particular year or period."

*"The impact factor of a journal is calculated by dividing the number of current year citations to the source items published in that journal during the **previous two years**."*¹

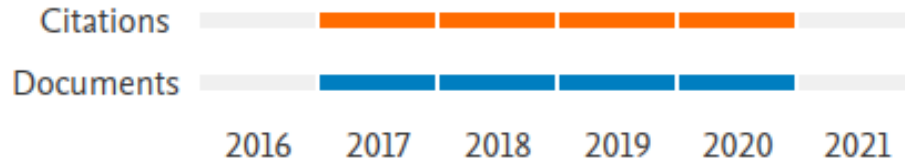
$$\text{IF}_{2017} = \frac{\text{Citations}_{2016} + \text{Citations}_{2015}}{\text{Publications}_{2016} + \text{Publications}_{2015}} = \frac{32389 + 41701}{880 + 902} = 41.577$$

Image source: https://en.wikipedia.org/wiki/Impact_factor

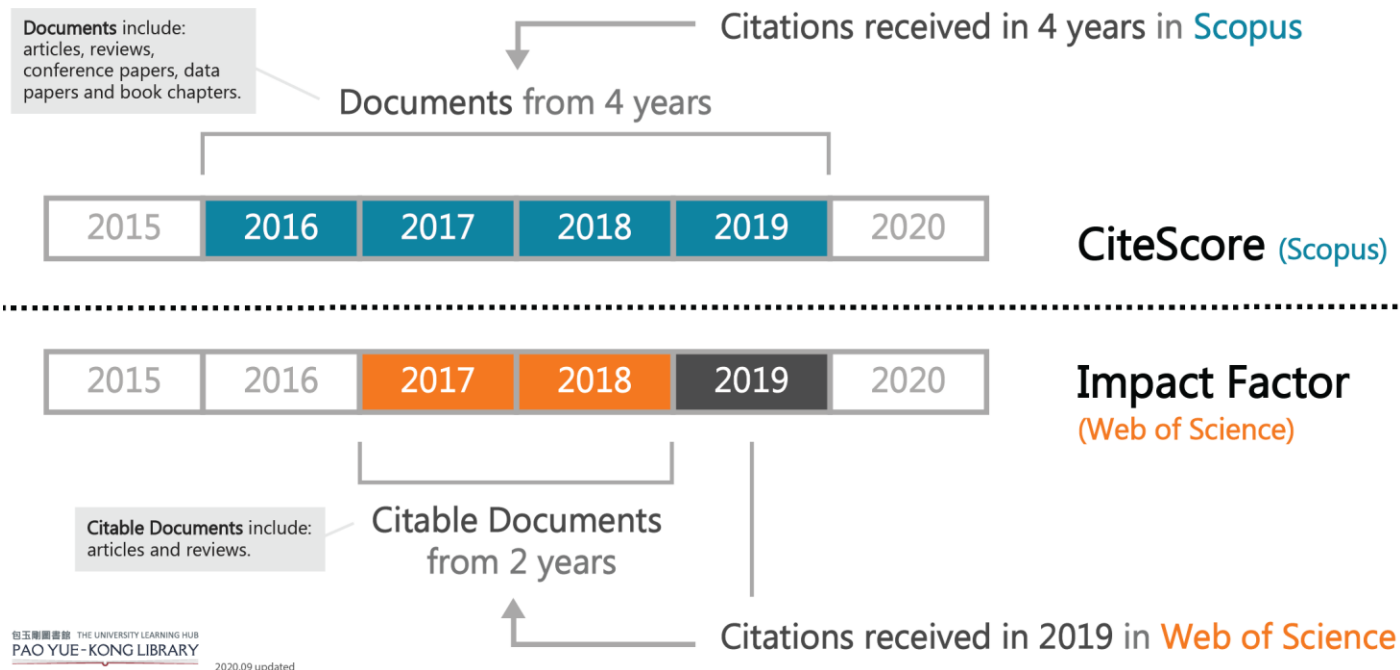
CiteScore (Scopus)

CiteScore 2020 methodology

CiteScore 2020 counts the citations received in 2017-2020 to articles, reviews, conference papers, book chapters and data papers published in 2017-2020, and divides this by the number of publications published in 2017-2020.



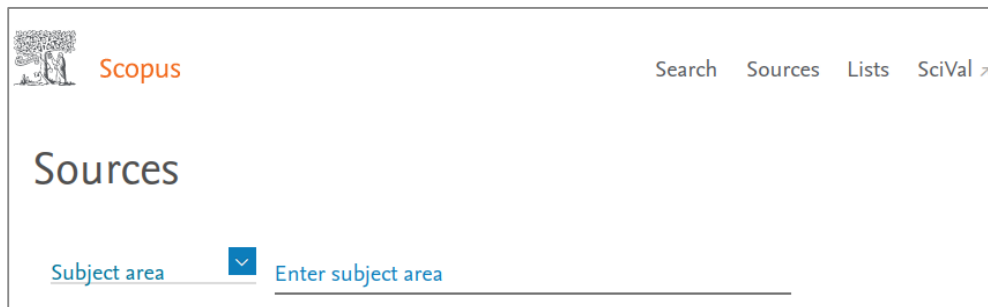
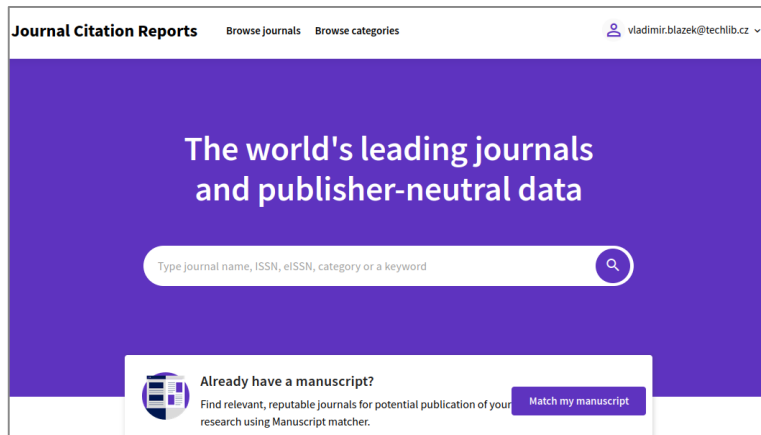
CiteScore (Scopus) vs. Impact factor (WoS)



Checking impact factor/CiteScore

CASE STUDY #2: I need to check the quality and reliability of the *Journal of Modern Power Systems and Clean Energy*

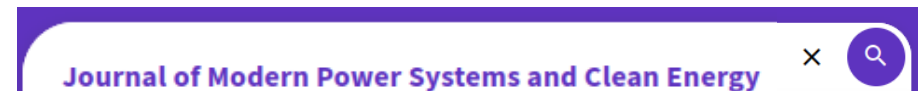
- **Journal Citation Reports** for WoS impact factor
- **Sources** for Scopus CiteScore



Checking impact factor/CiteScore

Journal of Modern Power Systems and Clean Energy

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JCR ABBREVIATION

J MOD POWER SYST CLE

ISO ABBREVIATION

J. Mod. Power Syst. Clean Energy

Journal's performance

Journal Impact Factor

2020 JOURNAL IMPACT FACTOR

3.265

[View calculation](#)

JOURNAL IMPACT FACTOR WITHOUT SELF CITATIONS

2.720

[View calculation](#)

Scopus

Source details

Journal of Modern Power Systems and Clean Energy

[Open Access](#) ⓘ

Scopus coverage years: from 2013 to Present

Publisher: IEEE

ISSN: 2196-5625 E-ISSN: 2196-5420

Subject area: [Energy: Energy Engineering and Power Technology](#) [Energy: Renewable Energy, Sustainability and the Environment](#)

Source type: Journal

[View all documents >](#)

[Set document alert](#)

[Save to source list](#)

CiteScore

[CiteScore rank & trend](#)

[Scopus content coverage](#)

CiteScore 2020

7.8

3 675 Citations 2017 - 2020

475 Documents 2017 - 2020

Calculated on 05 May, 2021

CiteScoreTracker 2021 ⓘ

7.6

3 607 Citations to date

473 Documents to date

Last updated on 05 October, 2021 • Updated monthly

CASE STUDY #3: I need to check the quality and reliability of the *International Journal of Energy Engineering*

International journal of energy

JOURNAL NAME

INTERNATIONAL JOURNAL OF ENERGY RESEARCH

International Journal of Energy Sector Management

International Journal of Energy Optimization and Engineering

International Journal of Energy and Environmental Engineering

ISSN/eISSN

0363-907X / 1099-114X

1750-6220 / 1750-6239

2160-9500 / 2160-9543

2008-9163 / 2251-6832

See all 4 results >

INTERNATIONAL
JOURNAL OF ENERGY
RESEARCH

ISSN
0363-907X

2020 JOURNAL IMPACT FACTOR

5.164

[View calculation](#)

EISSN
1099-114X

JCR ABBREVIATION
INT J ENERG RES

ISO ABBREVIATION
Int. J. Energy Res.

International Journal
of Energy Sector
Management

ISSN
1750-6220

EISSN
1750-6239

JCR ABBREVIATION
INT J ENERGY SECT MA

ISO ABBREVIATION
Int. J. Energy Sect. Manag.

Emerging
journal

International Journal
of Energy
Optimization and
Engineering

ISSN
2160-9500

EISSN
2160-9543

JCR ABBREVIATION
INT J ENERGY OPTIM E

ISO ABBREVIATION
Int. J. Energy Optim. Eng.

Emerging
journal

International Journal
of Energy and
Environmental
Engineering

ISSN
2008-9163

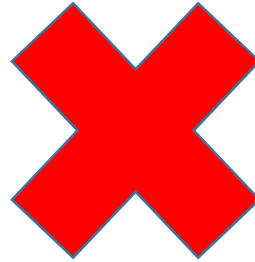
EISSN
2251-6832

JCR ABBREVIATION
INT J ENERGY ENVIR E

ISO ABBREVIATION
Int. J. Energy Environ. Eng.

Emerging
journal

CASE STUDY #3: I need to check the quality and reliability of the *International Journal of Energy Engineering*



**INTERNATIONAL
JOURNAL OF ENERGY
RESEARCH**

ISSN
0363-907X

EISSN
1099-114X

JCR ABBREVIATION
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ISO ABBREVIATION
Int. J. Energy Res.

**International Journal
of Energy Sector
Management**

ISSN
1750-6220

EISSN
1750-6239

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INT J ENERGY SECT MA

ISO ABBREVIATION
Int. J. Energy Sect. Manag.

**International Journal
of Energy
Optimization and
Engineering**

ISSN
2160-9500

EISSN
2160-9543

JCR ABBREVIATION
INT J ENERGY OPTIM E

ISO ABBREVIATION
Int. J. Energy Optim. Eng.

**International Journal
of Energy and
Environmental
Engineering**

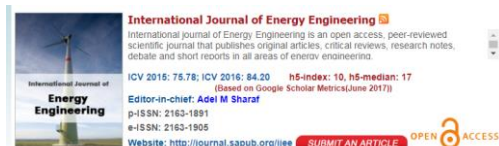
ISSN
2008-9163

EISSN
2251-6832

JCR ABBREVIATION
INT J ENERGY ENVIR E

ISO ABBREVIATION
Int. J. Energy Environ. Eng.

International Journal of Energy Engineering



Link:

<http://www.sapub.org/journal/aimsandscope.aspx?journalid=1005>

Publisher: Scientific & Academic Publishing (SAP)

ISSN: 2163-1905

WoS JCR: NO

Scopus Sources: NO

Beall's archive: YES

International Journal of Energy Research



Link:

<https://onlinelibrary.wiley.com/journal/1099114x>

Publisher: John Wiley & Sons Ltd.

ISSN: 1099-114X

WoS JCR: YES (2017-IF 3.009)

Scopus Sources: YES (2017-CS 2.72)

Beall's archive: NO

Tracking a specific journal

- Be careful: one word or one letter can make a great difference
- [Ulrichsweb](#): check journal details and ISSNs
- [Beall's archive](#) of potential predatory publishers and journals
 - Beware! The original list has not been updated since 2016
 - There are successors to Jeffrey Beall, but they prefer to remain anonymous

4. Searching for authors & h -index counts

Why use author identifiers?

- Names are sometimes confusing; there are different ways to write/transliterate them
- Names are not unique
- People can change their names
- Author identifiers give you the ability to reliably distinguish two authors with the same name or to track one author across multiple databases

Author identifiers

Features	ResearcherID (still Publons)	Scopus Author Identifier	ORCID (Open Research & Contributor ID)
How to get author identifier?	Author identifier will be created automatically with your first publication in WoS. You can then claim the profile with Publons and manage it similarly to ORCID.	Author identifier will be generated automatically if you have at least one publication in Scopus. You can edit author profiles (Edit profile tool) or use Author Feedback Wizard or Support. Merging profiles is possible on the results page.	Create your profile at orcid.org . You can join all your author IDs in ORCID.
How to link your publication with your ID?	Manage via Publons: You can import your citations from Web of Science, ORCID, via DOI or add them manually.	Imported automatically from Scopus, add manually in Edit profile.	You can import from many platforms (WoS, Scopus, arXiv) or add manually.
Supporting platforms	Web of Science	Scopus	Open non-profit initiative

- Link all papers published under different variants of your name
- Distinguish papers written by other authors with the same name
- Create your author profiles

h-index

“The h-index is based on a list of publications ranked in descending order by the Times Cited. The value of h is equal to the number of papers (N) in the list that have N or more citations. (...)

A researcher (or a set of papers) has an h-index of N if he/she has published N papers that have N or more citations each. The h-index is based on Times Cited data from the database. It will not include citations from non-indexed resources.”¹

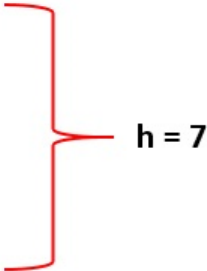
Paper	Number of citations	
Paper 1	101	 h = 7
Paper 2	86	
Paper 3	77	
Paper 4	56	
Paper 5	16	
Paper 6	12	
Paper 7	8	
Paper 8	4	
Paper 9	4	
Paper 10	1	

Image source: <https://toptipbio.com/h-index-how-to-calculate-yours/>

1) Clarivate Analytics (2019, February 5), *Web of Science: h-index information*. Available at: https://support.clarivate.com/ScientificandAcademicResearch/s/article/Web-of-Science-h-index-information?language=en_US

***h*-index: potential traps**

- The source or records for analysis:
 - Web of Science **vs.** Scopus **vs.** Google Scholar
- The number and accuracy of records in a dataset:
 - Basic search **vs.** ORCID search **vs.** author profile
- Exclude self-citations of selected author **vs.** exclude self-citations of all co-authors

Tracking an author in WoS

PROF. ING. TOMÁŠ POLCAR, PH.D.



Full Professors

E-mail:

polcatom@fel.cvut.cz

Phone:

+420224357598

Room:

Praha, Jugoslávských partyzánů , B-162
Praha, Resslova 9, E-s134

Oddělení:

[Advanced Materials Group](#)

ORCID:

<http://orcid.org/0000-0002-0863-6287>

CASE STUDY #4:
I want to find papers by
Prof. Tomáš Polcar
(and check his *h*-index)

<https://usermap.cvut.cz/profile/795f78c3-fa72-446c-a953-4c02c7de9283>

Author search: WoS

DOCUMENTS CITED REFERENCES STRUCTURE

Author

203 results

Including all articles authored by people with the name "Polcar T", regardless of field

DOCUMENTS RESEARCHERS

Search for an author to see their author record. An author record is a set of Web of Science Core Collection documents likely authored by the same person. You can claim and verify your author record from your author record page.

Name Search

Last Name

First Name and Middle Initial(s)

[+ Add name variant](#)

[Clear](#) [Search](#)

1 ☐ Polcar, Tomas 

University of Southampton
Engn & Phys Sci
SOUTHAMPTON, HANTS, ENGLAND
Web of Science ResearcherID: G-5742-2013
Published names: Polcar, T. Polcar, T
Top Journals: Surface & Coatings Technology, Applied Surface Science, Tribology International
[Recent publications](#)

2005-2022
Years
Documents: 192

2 ☐ Polcar, Tomas

University of Southampton
Engn & Phys Sci
SOUTHAMPTON, HANTS, ENGLAND
Published names: Polcar, T. Polcar, T
Top Journals: Lecture Notes in Computer Science, Surface & Coatings Technology, Implementation and Application of Automata
[Recent publications](#)

2003-2022
Years
Documents: 11

DOCUMENTS RESEARCHERS

Search for an author to see their author record. An author record is a set of Web of Science Core Collection documents likely authored by the same person. You can claim and verify your author record from your author record page.

Author Identifiers

[Clear](#) [Search](#)

192 records

Including all articles connected to Prof. Polcar via his ResearcherID

192 records

Author profile
based on analysis of records (name, field, affiliation, and so on)

Author search: WoS



Polcar, Tomas 
University of Southampton

 Web of Science ResearcherID: [G-5742-2013](#) 

[View public profile](#)

See a complete view of this researcher's scholarly contributions, including peer review and editorial work.

Verify your Author Record

Get your own verified author record. Enter your name in Author Search, then click "Claim My Record" on your author record page.

[Go to author search](#)

Published names 

Polcar, T. Polcar, Tomas Polcar, T

Organizations 

2013-2022 University of Southampton
2005-2022 Czech Technical University Prague
2007-2011 Universidade de Coimbra

Other Identifiers 

 <https://orcid.org/0000-0002-0863-6287>

PUBLICATIONS

PEER REVIEW

192 Publications from the Web of Science Core Collection

☐ Include publications not indexed in Core Collection (2) 

Date: Newest first  < 1 of 4 >

[A new protocol for the identification of singlet fission sensitizers through computational screening](#)
Lopez-Carballeira, Diego and Polcar, Tomas
Published Dec 2021 | Journal of Computational Chemistry

0
Times
Cited

Metrics

[Dashboard](#)

33
H-Index

192
Publications in
Web of Science

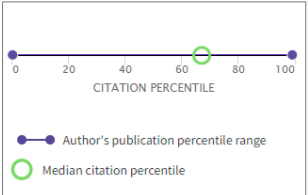
3,575
Sum of Times Cited

2,371
Citing Articles

0
Verified Peer
Reviews

0
Verified Editor
Records

Author Impact Beamplot Summary



0 20 40 60 80 100
CITATION PERCENTILE

● Author's publication percentile range
○ Median citation percentile

Author search: Scopus

Documents **Authors** Affiliations [Search tips](#)

Search using: [Author name](#)

Enter last name *
polcar

Enter first name
tomas

[+ Add affiliation](#) [Search](#)

Author	Documents	<i>h-index</i>	Affiliation	City	Country/Territory
☐ 1 Polcar, Tomas Polcar, Tomáš Polcar, Tomas Polcar, Tomáš View last title	203	35	Czech Technical University in Prague	Prague	Czech Republic
☐ 2 Polcar, Tomáš View last title	2	2	České vysoké učení technické v Praze	Prague	Czech Republic

This author profile is generated by Scopus [Learn more](#)

Polcar, Tomas

[Czech Technical University in Prague, Prague, Czech Republic](#) [Show all author info](#)
[55881689000](#) [Connect to ORCID](#)

[Edit profile](#) [Set alert](#) [Potential author matches](#) [Export to SciVal](#)

Metrics overview

203
Documents by author

3949
Citations by 2595 documents

35
h-index [View h-graph](#)

Document & citation trends

Analyze author output [Citation overview](#)

Most contributed Topics 2016–2020

Grain Boundaries; Radiation Injuries; Copper
[10 documents](#)

Solid Lubricants; Tribometers; Friction
[7 documents](#)

Mechanical Properties; Hard Coatings; Physical Vapor Deposition
[6 documents](#)

[View all Topics](#)

Google Scholar metrics



Milan Jirásek

[Czech Technical University in Prague](#)
Verified email at fsv.cvut.cz - [Homepage](#)

[Fracture](#) [Failure](#) [Plasticity](#) [Damage](#) [Creep](#)

[FOLLOW](#)

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TITLE

CITED BY

YEAR

[Nonlocal integral formulations of plasticity and damage: survey of progress](#)

1362

2002

ZP Bažant, M Jirásek
Journal of engineering mechanics 128 (11), 1119-1149

[Inelastic Analysis of Structures](#)

1029

2002

M Jirasek, ZP Bazant
Wiley

[Comparative study on finite elements with embedded discontinuities](#)

582

2000

M Jirásek
Computer methods in applied mechanics and engineering 188 (1-3), 307-330

[Damage-plastic model for concrete failure](#)

571

2006

P Grassl, M Jirásek
International journal of solids and structures 43 (22-23), 7166-7196

[Nonlocal models for damage and fracture: comparison of approaches](#)

469

1998

M Jirasek
International Journal of Solids and Structures 35 (31-32), 4133-4145

[Comparison of integral-type nonlocal plasticity models for strain-softening materials](#)

278

2003

M Jirásek, S Rolshoven
International journal of engineering science 41 (13-14), 1553-1602

[Meso-scale approach to modelling the fracture process zone of concrete subjected to uniaxial tension](#)

249

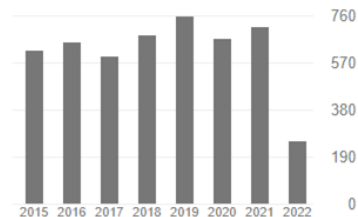
2010

P Grassl, M Jirásek
International Journal of Solids and Structures 47 (7-8), 957-968

Cited by

[VIEW ALL](#)

	All	Since 2017
Citations	9694	3673
h-index	44	29
i10-index	82	56



45
Public access

[VIEW ALL](#)

2 articles

5 articles

not available

available

Based on funding mandates

Co-authors

5. Summary

What you learned today:

- What citation databases are and how you can use them to support my research activities
- How you can identify seminal and/or review articles in my field quickly and easily
- How you can get PDFs and stay organized while working with citation databases
- Evaluating what journals are important in my field
- How you can find various journal metrics (e.g. Impact factor and CiteScore)
- What an h-index is, how you can find mine/that of others, and what an h-index is used for

Summary of advantages

- **Contain high-quality, peer-reviewed articles**
- You can use the number of citations to identify seminal articles
- Searching for authors and evaluating them
- Searching for journals and their metrics
- Creating alerts to track new trends

Keep in mind

- **Access to full texts** can be problematic 
- To make your research more comprehensive, also **use other search tools** (e.g., Google Scholar, an academic library discovery system)
- **Delay** in indexing sometimes (up to 6 months after publication for some journals)

6. Getting assistance

STEMskiller

<https://www.techlib.cz/en/84109-stemskiller>

SKILL SET MAP FOR MENTORS OF EARLY CAREER RESEARCHERS

Definitions, annotations, and links to high-quality open educational resources in English useful in guiding students towards excellence. [\[Read more...\]](#)

Competencies are grouped into four areas, with subsections:

1. [Research and scholarship](#)
2. [Learning, teaching, and supervising](#)
3. [Career management](#)
4. [Engagement, involvement, collaboration, transdisciplinarity, and inquisitiveness](#)

You can also [browse topics A-Z](#)

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- [Provide peer review for annotations](#)
- [Propose high-quality open resources in English](#)

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- Learning more about scholarly communications
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Bibliometrics can assist you in evaluating published research results, assessing the impact of basic and applied research, or in making decisions about funding (scientometrics).

What we offer

Consultations

- Learn to effectively search citation databases.
- Quickly find your publications and h-index variants.
- Manage your published output with author identifiers (ORCID, ResearcherID, Scopus Author ID).
- Evaluate journal impact factor or other citation metrics.

The service is **free**.

Publication Overview with Citation Counts

We can prepare a customized citation report for you based on information you provide to us such as an author's name or particular research field. For these reports, we primarily use **citation databases and resources** such as [Scopus](#), [Web of Science](#), [Journal Citation Reports](#), [Google Scholar](#).

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Your contact



Eli Blažek
✉ [eli.blazek](mailto:eli.blazek@techlib.cz)
☎ 232 002 562

Subjects
[Bibliometrics and Scientometrics](#),
[Programming Languages](#)

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Original Author: Jakub Szarzec

<https://www.techlib.cz/en/83534-bibliometric-services>

Scheduled Consultations

If you wish to meet and discuss your research topic in detail, please fill out the form and we will confirm our appointment within one business day.

We suggest to bring a tablet or laptop to your confirmed appointment.

I would like to discuss . . .

Question -

Preferred time and date -

First and last name -

Email -

Phone -

<https://www.techlib.cz/en/83401-scheduled-consultations>

Contacts

Jan Polášek

jan.polasek@techlib.cz

tel + 420 771 230 915

Eli Blažků

eli.blazku@techlib.cz

tel +420 775 883 511

Thank you

Questions?