OpenAlex – a Gamechanger?

CRAFT-OA Webinar | 15.10.2024

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Bibliometric Databases

Database	Vendor	Start	open	inclusive	GUI
Web of Science	Eugene Garfield ISI / Thomson Reuters / Clarivate	print 1964, magnetic tape 1966, web 1997	✗	✗	✓
Scopus	Elsevier	2004	✗	✗	✓
OpenCitations Corpus	OpenCitations	2010	✓	✓	✗
Dimensions	DigitalScience	2018	(✗)	✓	✓
OpenAlex	OurResearch	2022	✓	✓	✓

STI 2024 - 28th International Conference on Science, Technology and Innovation Indicators
Berlin, 18-20 September 2024

14.00-15.15	S1.12 > Mapping the well hidden *Chair: Stephan Stahlschmidt*		S3.12 > Impact of open science *Chair: Thed van Leeuwen*	S4.12 > Special session	S5.12 > Situating OpenAlex amongst existing databases *Chair: Dimity Stephen*
	Discovering, Identifying and Gauging (DIGging) epistemic properties of research processes and fields *Markus Hoffmann, Jochen Gläser, Grit Laudel and Susanne Wollin-Giering*		Scoping Review of Open Science Impact *Thomas Klebel, Nicki Lisa Cole, Lena Tsipouri and Tony Ross-Hellauer*	In search of open science-aware academic career assessments *Alex, Rushforth, Janne Pölönen, Neil Jacobs, Louise Bezuidenhout, Maria Pietila, Clifford Tatum, Francesca Di Donato*	An analysis of the suitability of OpenAlex for bibliometric analyses *Juan Pabo Alperin, Jason Portenoy, Kyle Demes, Vincent Larivière and Stefanie Haustein*
	Cognitive diversity and the future of crises: an analysis of the topic space of the biological sciences *Pierre Benz, Vincent Larivière, Diego Kozlowski, Natsumi S. Shokida and Carolina Pradier*		Openness of performance-based funding for research and valorisation in Flanders since 2004 *Tim Engels*		Coverage and metadata availability of African publications in OpenAlex: a comparative analysis *Patricia Alonso-Álvarez and Nees Jan van Eck*
	Well-tailored words: Comparing the fit of articles within scholarly journals to their citation rates *Geoff Krause, Rebecca Marjoram and Philippe Mongeon*		Mapping Open Science Scholarly Literature *Isabelle Dorsch, Madelaine Hare, Philippe Mongeon and Isabella Peters*		OpenAlex as a source of national research activity and impact: a comparison with Web of Science *Vincent Larivière, Philippe Mongeon, Juan Pablo Alperin and Stefanie Haustein*
15:15-16.15	**Community Session** **(OpenAlex, Barcelona, GLOBAL)** *Ludo Waltman, Stefanie Haustein, Jason Priem* *Auditorium 201/Humboldt University*				
16.15	**Closing** *Auditorium 201/Humboldt University*				

Opening the black box of university rankings

Today two university rankings were released, one by CWTS and one by Times Higher Education. Ludo Waltman and Nees Jan van Eck, responsible for the CWTS Leiden Ranking, use this occasion to discuss the importance of transparency of rankings.

The Times Higher Education (THE) World University Rankings 2025, published today, includes 12 Dutch universities, of which five are ranked in the top 100 worldwide. One prominent Dutch university, Utrecht University, is not included in the ranking. Last year this university decided to discontinue submitting data to the THE World University Rankings. Henk Kummeling, Rector Magnificus of Utrecht University, pointed out that rankings like those published by THE are not consistent with open science. Instead, Kummeling argued, rankings must be "transparent, verifiable and relevant" to the ambitions of an institution.

At CWTS we also released a ranking today: the CWTS Leiden Ranking Open Edition 2024. Unlike the THE World University Rankings, the Leiden Ranking Open Edition is fully transparent. The data underlying the ranking, obtained from the OpenAlex database, is completely open, and so are the source codes of the algorithms used to calculate the indicators included in the ranking.

Open Research Information

📖 Participating journal: **Scientometrics**

Submissions open on
15 October 2024
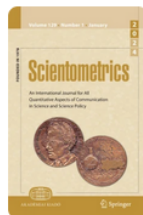
Submission deadline
31 May 2025

Background

Open research information (ORI) is information on scientific research that is freely available to the public to access, use, and reuse. This includes but is not limited to bibliographic data and metadata regarding research publications, software, tools, and information about research processes like funding and project details. Open research information has begun to transform the way research is conducted and its results are published. By being openly accessible, open research information aims to promote transparency, reproducibility, collaboration, and innovation in the research community. ORI not only fosters a culture of reproducibility but also a culture of accountability and public engagement in science. It also fuels innovative research, enabling…

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Participating journal

When this collection opens for submissions, you will be able to submit your manuscript through the participating journal.

Journal
Scientometrics

Scientometrics is an international, peer-reviewed, monthly journal that publishes original research on all quantitative aspects of the production, communication, and use of scientific…

Publishing model	**Hybrid**
Journal Impact Factor	**3.5** (2023)
Downloads	**1.7M** (2023)
Submission to first decision (median)	**31 days**

Submit to this journal →   **Submission guidelines** →

The Competence Network Bibliometrics Kompetenznetzwerk Bibliometrie (KB)

Competence network and data infrastructure for bibliometric research and application in Germany since 2008.

Data basis: proprietary solutions **Web of Science** and **Scopus**.

The network includes 23 partners, more than 200 published research works.

The current funding period (2022-2024) includes a pilot to move from closed to open data practices by integrating **OpenAlex** (KBOPENBIB).
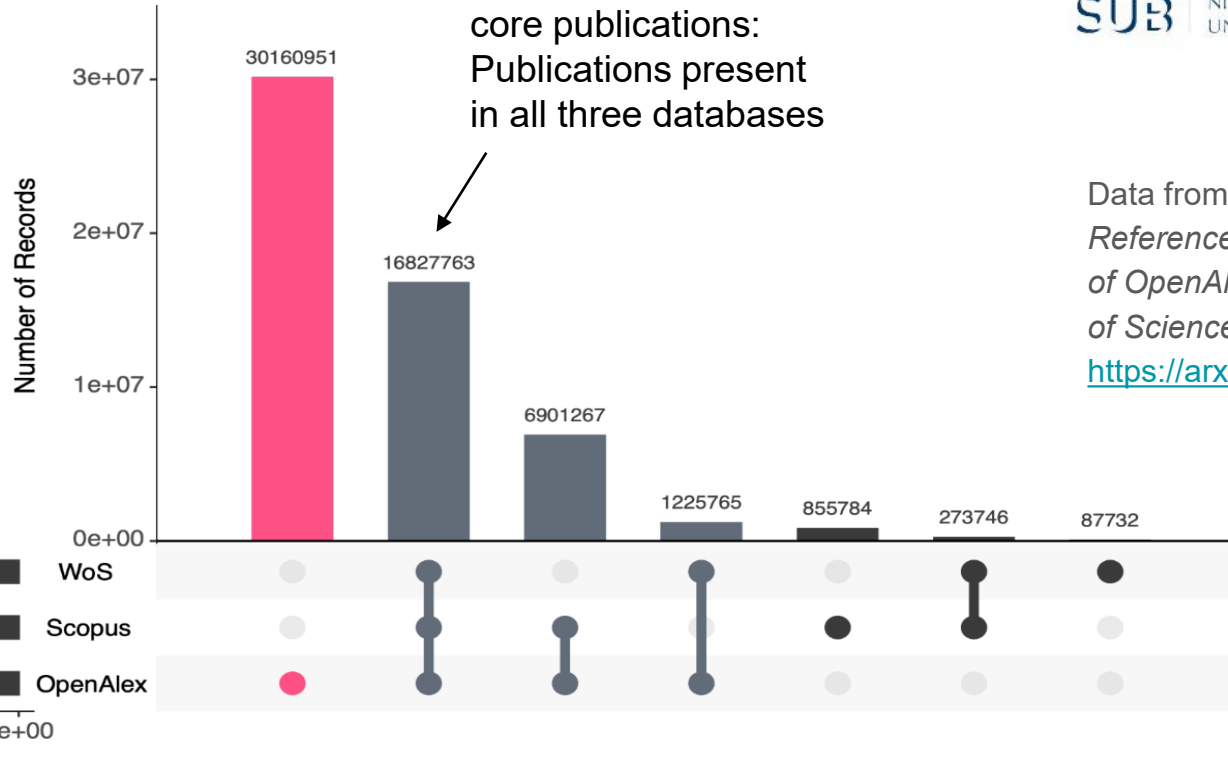
Aims of KBOPENBIB

✔ Provision of OpenAlex within the KB data infrastructure

✔ Coverage analyses: Comparing OpenAlex with Web of Science and Scopus

➜ Items and References
➜ Authors
➜ Affiliations from German institutions
➜ Document types
➜ Funding
➜ Journals and publishers
➜ Open Access and full-texts

☞ Curation with focus on German research landscape

Overlap of OpenAlex, Scopus and Web of Science
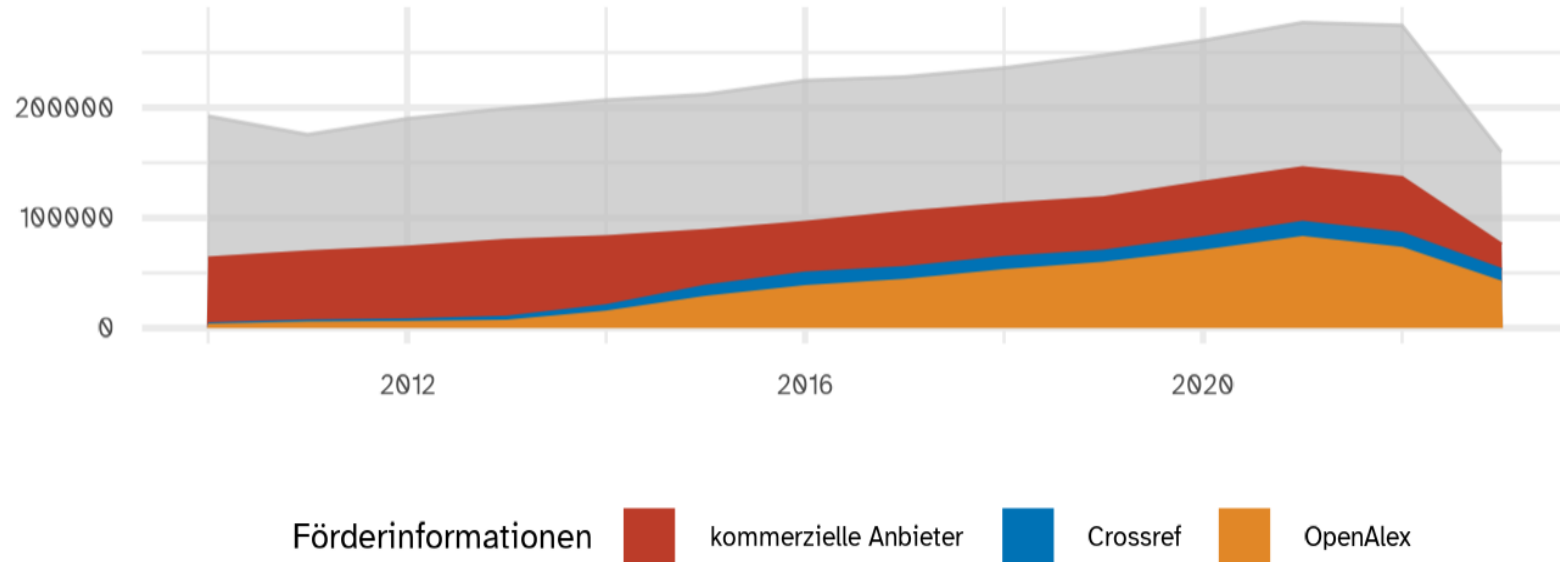

core publications:
Publications present
in all three databases

Data from: Culbert, et al. (2024)
*Reference Coverage Analysis
of OpenAlex compared to Web
of Science and Scopus.*
https://arxiv.org/abs/2401.16359
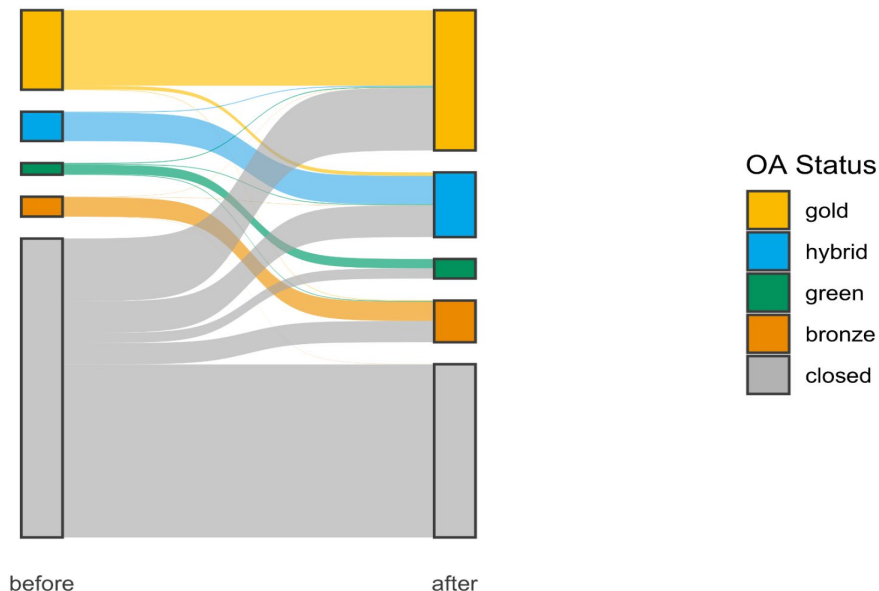
Coverage with respect to grant-supported articles

Deutsche Publikationen

Förderinformationen · kommerzielle Anbieter · Crossref · OpenAlex

Improving open access status classification

OA Status

- gold
- hybrid
- green
- bronze
- closed

before · after

November snapshot available 187 views

ca...@ourresearch.org
to OpenAlex users

Hi All,

The latest OpenAlex snapshot is available to download!

The release notes are:

RELEASE 2023-11-21
- improved affiliation matching for over 2 million works
- added keywords to works
- added cited_by_percentile_year to works
- removed 3.9 million authors with 0 works (merged into deleted profile)
- improved oa status classification, converting 2.1 million closed works to open access statuses (ongoing - credit: https://subugoe.github.io/scholcomm_analytics/posts/oalex_oa_status/)

We need to add cited_by_percentile_year to the docs and will do that soon. Enjoy!

Thanks,
Casey

Jahn, et al. (2023). Analysing and reclassifying open access information in OpenAlex. https://subugoe.github.io/scholcomm_analytics/posts/oalex_oa_status/

Publisher disambiguation (2010-2022)

	Distinct publishers in core publications
WoS	3,478
Scopus	3,699
OpenAlex	2,008

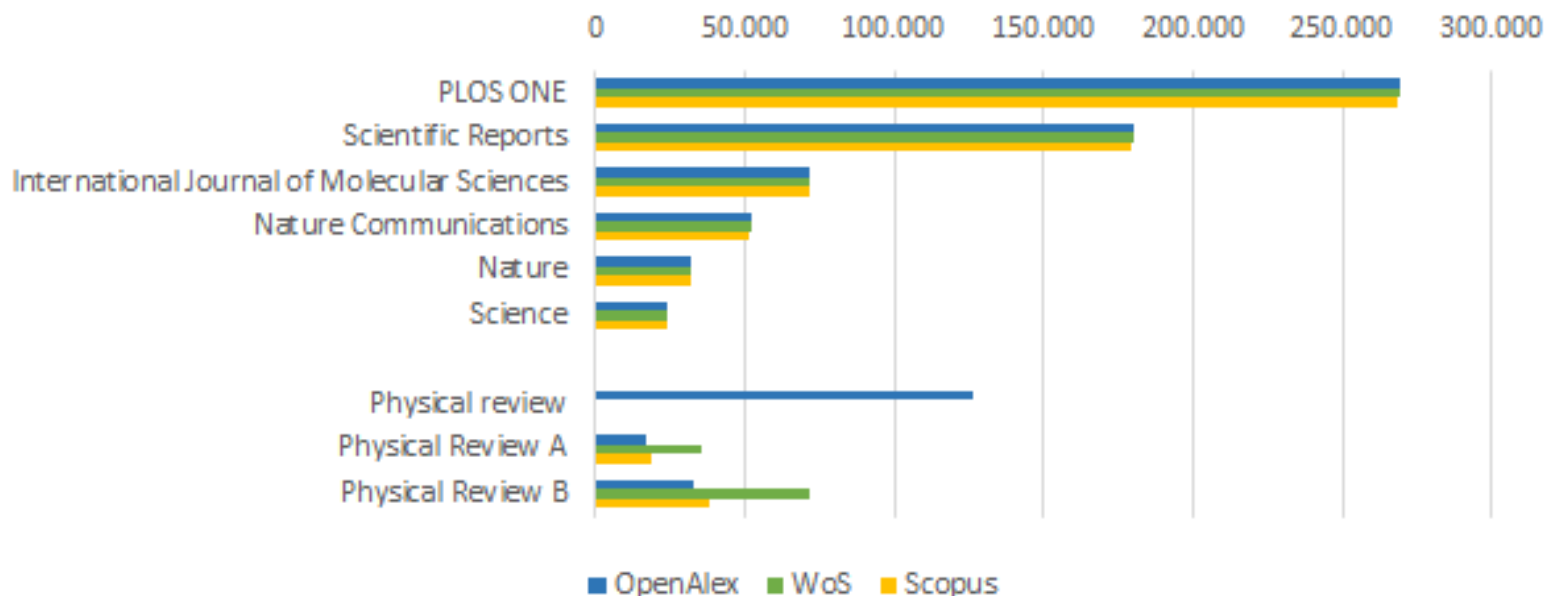core publications: Publications present in each of the databases (16.8 Mio.)

Publisher disambiguation (2010-2022)

	Distinct publishers in core publications	Wiley & Imprints	Elsevier & Imprints	Springer Nature & Imprints
WoS	3,478	26	45	51
Scopus	3,699	30	42	66
OpenAlex	2,008	4	2	8

core publications: Publications present in each of the databases (16.8 Mio.)

Journal disambiguation

Number of documents for a selection of the top journals of the core publications in OpenAlex, WoS, and Scopus 2010-2022

Affiliation disambiguation

	Web of Science	Scopus	OpenAlex
Distinct address strings	2,269,047	3,449,043	3,955,516
Matching addresses	85.6 %	84.7%	89.9 %
Distinct address-item-combinations	7,393,265	6,973,092	7,495,858
Matching addresses	93.2 %	88.5 %	89.5 %

Taubert (2024): OpenAlex im Kompetenznetzwerk Bibliometrie
https://biecoll.ub.uni-bielefeld.de/index.php/kwi/article/view/1149/1161

Author-name disambiguation

Search and analyze the world's research.

🔍 Bernhard Mittermaier| ✕

👤 **Bernhard Mittermaier**   ⓘ
   Author at Forschungszentrum Jülich, Germany

👤 **Bernhard Mittermaier**   ⓘ
   Author

🔍 Search for **"Bernhard Mittermaier"** in work fulltext   press Enter

Bernhard Mittermaier

👤 Author

View works · API · 💬

Alternate name Bernhard Mittermaier

H-index:

I10-index:

Works count: 1

Citations count:

📄 **Top works**   View all

Datentracking und DEAL – Zu den Verhandlungen 2022/2023 und den Folgen für die wissenschaftlichen Bibliotheken –

2024 · Robert Altschaffel, Michael Beurskens, et al. · *RuZ - Recht und Zugang*

Cited by 0

WoS

	Information Science Library Science	4	☐	Computer Science Interdisciplinary Applications	1	☐ Environmental Sciences	1
☐	Business	1	☐	Engineering Civil	1	☐ Management	1
☐	Chemistry Analytical	1	☐	Engineering Environmental	1	☐ Respiratory System	1

Scopus

Subject areas

Social Sciences • Computer Science • Engineering • Arts and Humanities • Business, Management and Accounting • Medicine • Biochemistry, Genetics and Molecular Biology • Environmental Science

Bernhard Mittermaier

👤 Author

View works API 💬 ⚠

Alternate names B. Mittermaier, Bernhard Mittermaier

Institution Forschungszentrum Jülich

Past institutions Forschungszentrum Jülich, ORCID, Los Alamos National Labora

ORCID: Yes ↗

H-index: 6

I10-index: 4

Works count: 121

Citations count: 315

Document title	Authors	Source	Year	Citations
Article				
Capillary gas chromatography of polychlorinated benzonitriles (PCBN)	Mittermaier, B., Ballschmiter, K.	Fresenius' Journal of Analytical Chemistry, 359(7-8), pp. 561–564	1997	4

🔓 open access   ⋮ ✕

◕ **12,4%**
15

Top works   View all

Volatile organic compounds in the exhaled breath of young patients with cystic fibrosis
2006 · Michael Barker, Meike Hengst, et al. · *European Respiratory Journal*
Cited by 170   PDF

Creation of journal-based publication profiles of scientific institutions — A methodology for the interdisciplinary comparison of scientific research based on the J-factor
2009 · Rafael Ball, Bernhard Mittermaier, et al. · *Scientometrics*
Cited by 20   PDF

Praxishandbuch Open Access
2017 · Konstanze Söllner, Bernhard Mittermaier, et al. · *De Gruyter eBooks*

🏷 topic   ⋮ ✕

Role of Literature in Museum Exhibitions	54
Name Authority Control in Bibliographic Repositories	6
Estimating Vehicle Fuel Consumption and Emissions	5
Business Management in Information Age	4
Atmospheric Aerosols and their Impacts	2

WoS: 8 documents, 3 Open Access, 54 non-indexed documents
Scopus: 8 documents, 4 Open Access

Bernhard Mittermaier

👤 Author

View works API ⚠

	Document title		Authors	Source	Year	Citations
Alternate names B. Mittermaier, Bernhard Mittermaier						
Institution Forschungszentrum Jülich	Article					
Past institutions Forschungszentrum Jülich, ORCID, Los Alamos National Labora	Capillary gas chromatography of polychlorinated benzonitriles (PCBN)		Mittermaier, B., Ballschmiter, K.	Fresenius' Journal of Analytical Chemistry, 359(7–8), pp. 561–564	1997	4
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Cited by 20   PDF

Praxishandbuch Open Access
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🏷 **topic**

Role of Literature in Museum Exhibitions	54
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An analysis of the suitability of OpenAlex for bibliometric analyses

Juan Pablo Alperin[*], Jason Portenoy[**], Kyle Demes[**], Vincent Larivière[***], and Stefanie Haustein[****]

4. Discussion

This study shows that OpenAlex outperforms Scopus in coverage and provides evidence of the usefulness of OpenAlex for some forms of bibliometric analyses. However, it also indicates a need for further scrutiny of the accuracy and completeness of some important metadata elements, and points to areas that require further investigation before OpenAlex can be confidently used.

Competing interests

Two of the authors of this study (JP & KD) are employees of OurResearch, the organisation that created and maintains OpenAlex.

Conclusions

- OurResearch has developed an alternative to proprietary bibliometric databases in an astonishingly short time.

- OurResearch is very responsive to development contributions from the community.

- OpenAlex will remain permanently open ("Principles of Open Scholarly Infrastructures" (POSI), CC-0 license)

- A comparison with the established databases shows that there is still a need for development in some areas. Nevertheless, OpenAlex is already being used productively, e.g. by Sorbonne and CNRS (France), in the Leiden Open Ranking (The Netherlands), and in the German and Swiss Open Access Monitor.

Outlook for Competence Network Bibliometrics

Until end of 2024
🚀 Open Data release covering German research

Until end of 2025
🔧 Improved automatic data curation routines

Starting from 2026
☢ Selective licensing: One proprietary database + OpenAlex (and friends)

Starting from 2029
🌐 Fully Open Data: Presumably only OpenAlex