

# Service and Research at the Information Retrieval Service of the CPT Section (IVS-CPT)

Robin Haunschild



SCIENTIFIC FACILITY  
**INFORMATION SERVICE CPT**  
MAX PLANCK INSTITUTE FOR SOLID STATE RESEARCH



07/16/2021

## Main services

- Bibliometric analyses (e.g., reports about persons or MPIs)
- Special literature search (e.g., exhaustive publication set regarding a topic or a compound)
- Patent search (e.g., prior art or FTO searches)
- ...

## Main databases

- Web of Science
- Scopus
- STN (CAS, Inspec, Derwent, ...)
- Microsoft Academic Graph (until December 2021)
- ...

## Main research activities

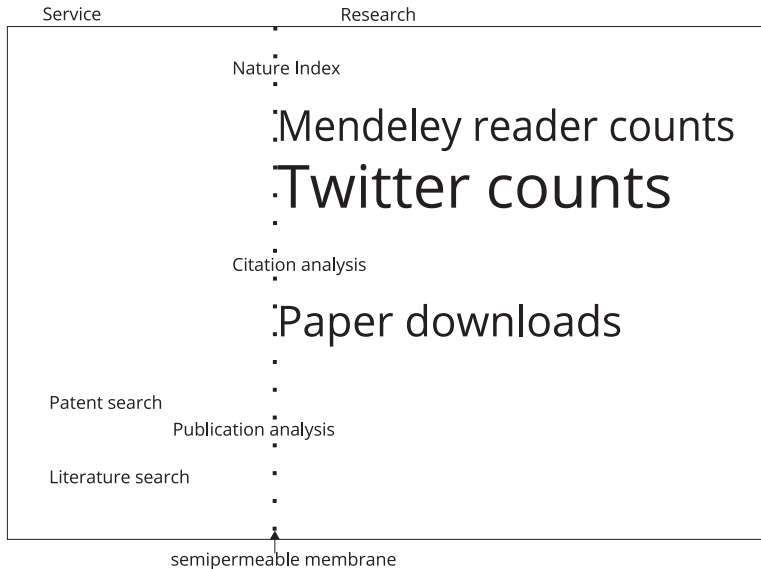
- Scientometrics, bibliometrics (e.g., analysis of research fields and testing/validating or proposing new indicators and methods)
- Chemical bibliometrics (e.g., counting chemical compounds or element occurrences instead of citations)
- Altmetrics (e.g., analysis of data from Twitter or Mendeley)
- ...

## Main databases

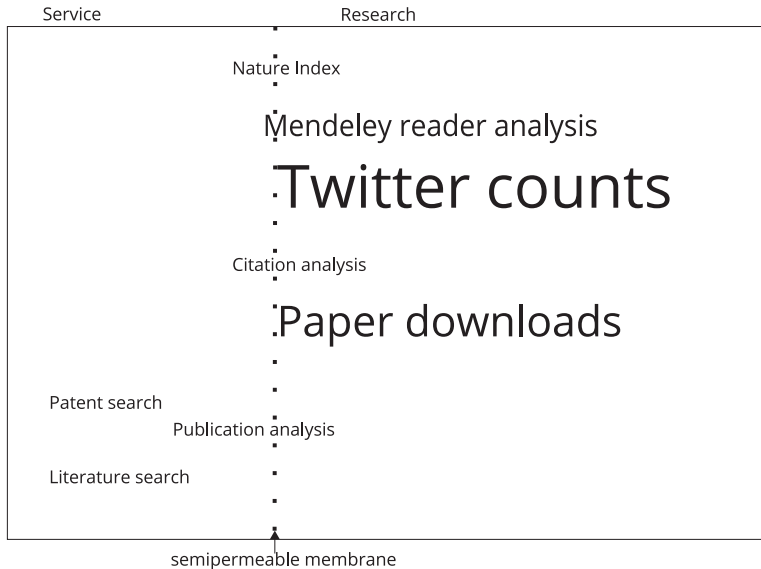
- Web of Science
- Scopus
- STN (CAS, Inspec, Derwent, ...)
- Microsoft Academic Graph (until December 2021)
- Dimensions
- Altmetric.com
- ...



# IVS-CPT cell until 2020



# IVS-CPT cell since 2021



## Ionic Affinity Program

- Started in January 2021 with MPG as a member.
- Increased access to CAS data beyond SciFinder or STN. For example: Bayer was able to train neural networks using CAS data for finding most promising templates for specific applications.
- Up to 40 hours of assistance by research and IP specialists at CAS per twelve-month-period via the Ionic Affinity Program.

## SciFinder vs. SciFinder<sup>n</sup>

- Free access to SciFinder<sup>n</sup> has been closed since July 1<sup>st</sup>.
- Currently, the MPDL does not plan to switch to SciFinder<sup>n</sup>. This might change if enough researchers present a testimony in favor of SciFinder<sup>n</sup>.



# There is a new large database in town



User ▾ Rankings Articles ▾ Sections ▾ Publishers Reports About ▾

Access the latest research on COVID-19, including preprints, on Scilit.

Search 133,842,240 scientific articles

Title/Abstract

Author

Search all fields



[Advanced search](#)

Explore articles published in [2021](#)

Scilit is updated regularly with the latest publications from major academic publishers.

This week 1,277,445 articles were newly added to Scilit.

Search 133,842,513 scientific articles

ADVANCED SEARCH

	All Main Fields ▾	Partial Match ▾	Enter Keywords ...	+
AND	All Main Fields ▾	Partial Match ▾	Enter Keywords ...	- +

Main fields

All Main Fields

Title

Abstract

Title & Abstract

Authors

Additional fields

Affiliation

Keywords

Journal EISSN/ISSN

Year

Book ISBN

Publisher DOI Prefix

Journal Name

Publisher Name

Conference Name

Show Results

## SCientific LITerature (MDPI)

Scilit aims to be a comprehensive and free database for scientists using crawlers for collecting data and indexing scientific material.

<https://www.scilit.net>



# Example of an author search on Scilit



Q User Rankings Articles Sections Publishers Reports About

Access the latest research on COVID-19, including preprints, on Scilit.

## Refine Search

Search within results...

From

To

Clear Dates

- ☐ Open Access  
☐ Preprints  
☐ Full-Text available

### Authors

### Types

- ☐ Journal article (96)  
☐ Preprint (20)  
☐ Journal contribution (10)  
☐ Dataset (4)  
☐ Text (4)  
☐ Book chapter (3)  
☐ Image (1)  
☐ Preprint content (1)

Remove this facet from search

- Languages  
► Publication year  
► Countries  
► Publishers  
► Source Title  
► Article Status

## Results: 139 (searched for: author\_full:(robin haunschild))

Page 1 of 1

Articles per Page 500

by Newest

Save to Scifield

Show export options

Select all

RIS

Export

### Heat Waves -- a hot topic in climate change research

Werner Marx, **Robin Haunschild**, Lutz Bommann

Published: 25 June 2021 by ArXiv

[Show/hide abstract](#)

Preprint OPEN ACCESS

[Publisher website](#)

[Full-Text](#)

[Google Scholar](#)

### Quantum technology 2.0 -- topics and contributing countries from 1980 to 2018

Thomas Scheidsteger, **Robin Haunschild**, Lutz Bommann, Christoph Ertl

Published: 18 May 2021 by ArXiv

[Show/hide abstract](#)

Preprint OPEN ACCESS

[Publisher website](#)

[Full-Text](#)

[Google Scholar](#)

### Can tweets be used to detect problems early with scientific papers? A case study of three retracted COVID-19/SARS-CoV-2 papers

**Robin Haunschild**, Lutz Bommann

Published: 26 April 2021 by Springer Science and Business Media LLC in Scientometrics

[References: 28](#)

Scientometrics, Volume 126, pp 5181-5199; doi:10.1007/s11192-021-03962-7

[Show/hide abstract](#)

OPEN ACCESS

[Publisher Website](#)

[PMC](#)

[Full-Text](#)

[Google Scholar](#)



INTERNATIONAL VIRTUAL SERVICE FOR CLINICAL PRACTICE (IVS-CPT)  
REAL-PATIENT ORIENTED FOR PATIENT CARE RESEARCH





# Sentiments of citations from <https://scite.ai/>

## Climate Change Research in View of Bibliometrics

By: Haunschild, Robin; Bornmann, Lutz; Marx, Werner

PLOS ONE Volume: 11 Issue: 7 Article Number: e0160393 Published: JUL 29 2016

93 6 72 0

Times Cited: 81

(from Web of Science Core Collection)

Usage Count



Free Full Text from Publisher

View Abstract

OPEN ACCESS

RESEARCH ARTICLE

## Do altmetrics correlate with the quality of papers? A large-scale empirical study based on F1000Prime data

Lutz Bornmann, Robin Haunschild

Published: May 23, 2018 • <https://doi.org/10.1371/journal.pone.0197133>

Article	Authors	Metrics	Comments	Media Coverage
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174  
Save

56  
Citation

4,320  
View

186  
Share

Download PDF

Print

Share

scite\_

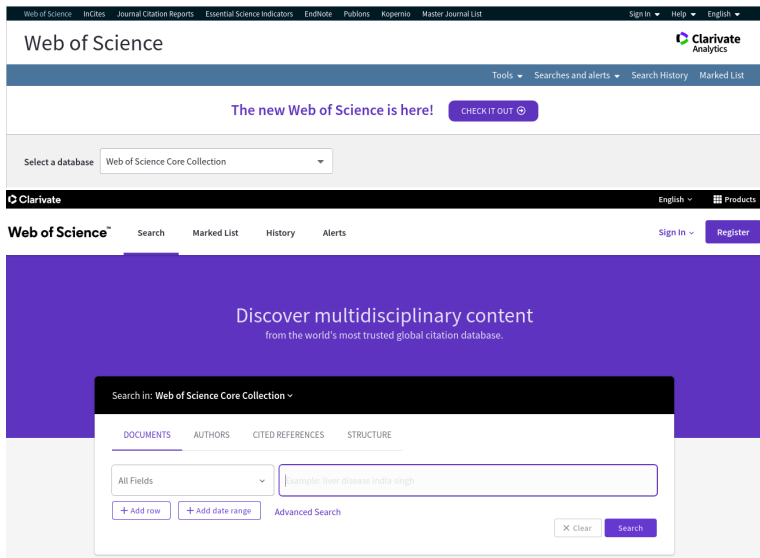
53  
3  
29  
0

## Sentiments of citations from <https://scite.ai/> via browser extension

- 93 Number of citing papers
- 6 Number of supporting statements
- 72 Number of mentioning statements
- 0 Number of contrasting statements



# The new WoS



The screenshot displays the new Web of Science (WoS) interface. At the top, a dark navigation bar contains links for 'Web of Science', 'InCites', 'Journal Citation Reports', 'Essential Science Indicators', 'EndNote', 'Publons', 'Kopernio', and 'Master Journal List'. On the right of this bar are links for 'Sign In', 'Help', and 'English'. Below this is a white header with the 'Web of Science' logo on the left and the 'Clarivate Analytics' logo on the right. A blue navigation bar follows, featuring 'Tools', 'Searches and alerts', 'Search History', and 'Marked List'. A central purple banner announces 'The new Web of Science is here!' with a 'CHECK IT OUT' button. Below the banner, a 'Select a database' dropdown menu is set to 'Web of Science Core Collection'. A black bar contains the 'Clarivate' logo and 'English' and 'Products' links. The main navigation bar includes 'Web of Science', 'Search', 'Marked List', 'History', and 'Alerts', with 'Sign In' and 'Register' buttons on the right. The main content area has a large purple background with the text 'Discover multidisciplinary content from the world's most trusted global citation database.' A search overlay is visible, showing a search bar with the text 'Search in: Web of Science Core Collection'. Below the search bar are tabs for 'DOCUMENTS', 'AUTHORS', 'CITED REFERENCES', and 'STRUCTURE'. The 'DOCUMENTS' tab is active, showing a dropdown menu for 'All Fields' and a search input field containing 'Example: liver disease India singh'. There are buttons for '+ Add row', '+ Add date range', and 'Advanced Search'. At the bottom of the search overlay are 'X Clear' and 'Search' buttons.

Release notes and plan:

<https://clarivate.com/webofsciencigroup/release-notes/wos>



# Author search in the new WoS

Discover multidisciplinary content  
from the world's most trusted global citation database.

Search in: Web of Science Core Collection ▾

DOCUMENTS **AUTHORS** CITED REFERENCES STRUCTURE

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

haunschild



First Name and Middle Initial(s)

robin



+ Add name variant

✕ Clear

Search



# Author search in the new WoS

## 3 Author Records from the Web of Science Core Collection for:

haunschild,robin (Author Name)

Search

### Refine results

#### Author name

☐ Haunschild, Robin

☐ Haunschild, R.

#### Organizations

☐ Max Planck Society

☐ Karlsruhe Institute of Technology

☐ Philipps University Marburg

☐ Rice University

#### Subject Categories

☐ Computer Science

☐ Information Science & Library Science

☐ Meteorology & Atmospheric Sciences

☐ Physics

☐ Science & Technology - Other Topics

[See all](#)

☐ 0/3

View as combined record

Merge Records

Relevance

1 of 1

☐ 1

**Haunschild, Robin**

Max Planck Society

Informat Serv CPT

STUTTGART, GERMANY

Web of Science ResearcherID: I-9486-2019

Published names: Haunschild, R.

Top Journals: Scientometrics, Journal of Informetrics, Journal of Chemical Physics

[Recent publications](#)

83

Documents

2007-2020

Years

☐ 2

**Haunschild, Robin**

Max Planck Society

Heisenbergstr 1

STUTTGART, GERMANY

Web of Science ResearcherID: A-9925-2010

Published names:

Top Journals: Journal of Informetrics, Scientometrics, Journal of Information Science

[Recent publications](#)

16

Documents

2018-2021

Years

☐ 3

**Haunschild, Robin**

Max Planck Society

Heisenbergstr 1

STUTTGART, GERMANY

1

Documents



# Author search in the new WoS

[< Back](#)[✎ SUBMIT A CORRECTION](#)

## VIEWING 3 COMBINED AUTHOR RECORDS

**Haunschild, Robin** *This is an algorithmically generated author record* ⓘ

Informat Serv CPT  
STUTTGART, GERMANY

## About

Published names	Haunschild, Robin	Haunschild, R.
Organizations ⓘ	2015-2021	Max Planck Society
	2012-2015	Karlsruhe Institute of Technology
	2009-2013	Rice University
	2008-2009	Philipps University Marburg

Web of Science ResearcherID: [A-9925-2010](#) ⓘ

[PUBLICATIONS](#)[AUTHOR IMPACT BEAMPLOT](#)

100 Publications from the Web of Science Core Collection

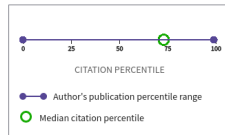
Are you this Author?

Verify your work, and control how your name, title, institution, and profile image appears in your Web of Science Author Record.

[CLAIM MY RECORD](#)

## Author Metrics

### Author Impact Beamplot Summary ⓘ



Percentile range displays for authors from 1980 to 2019. View all publications in full beamplot.

[VIEW FULL BEAMPLOT](#)

Citation Network ⓘ



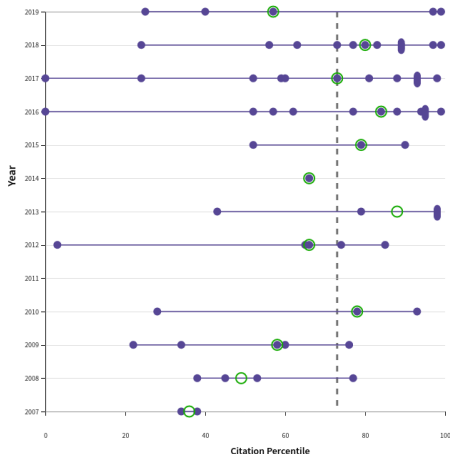
# Beamplots in the new WoS

PUBLICATIONS

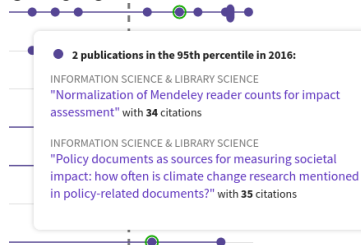
AUTHOR IMPACT BEAMPLOT

Range: Full Career

EXPORT



Zoom into a part of 2016:



Citation counts are from Web of Science Core Collection; citation percentile data are from InCites.



# Beamplots were proposed by IVS-CPT and GV

## Web of Science Author Impact Beamplots

You can access beamplots from an Author Record. Lutz Bornmann and Werner Marx of the Max Planck Society first introduced and developed the use of beamplots for scientometric data in 2014 (Bornmann & Marx 2014a, 2014b; also, Bornmann & Haunschild, 2018, Haunschild et al, 2019). The [Institute for Scientific Information](#) (ISI) has promoted beamplots as an alternative to the h-index in *Profiles not metrics* (2019). The following are benefits of beamplots:

- Contextualizes a researcher's articles to make them suitable for comparison
- You can see performance change over the course of a researcher's career
- Evaluators can see performance change over the course of a career
- Discourages reliance on a single-point metric that lacks context and nuance

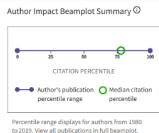
**Important:** In Publons, beamplots are only visible on a researcher's private dashboard.

## Author Impact Beamplot Summary

The Author Impact Beamplot Summary displays three points:

- Minimum publication percentile
- Overall median publication percentile (indicated by a green circle)
- Maximum publication percentile

The maximum and minimum percentiles are connected by a beam, showing the percentile range. Click **View Full Beamplot** to open the full beamplot.



From:

<http://webofscience.help.clarivate.com/Content/author-record.html>

See also: <https://discover.clarivate.com/beamplots-whitepaper>



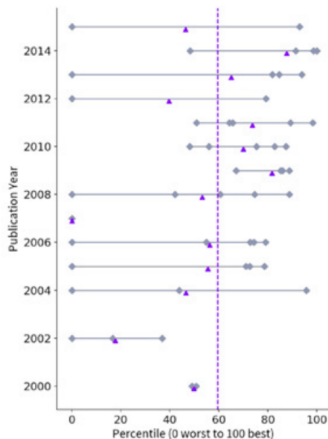
# Profiles, not metrics

An alternative approach proposed by Lutz Bornmann and Robin Haunschild, Max Planck Institute (Bornmann and Haunschild, 2018), puts a researcher's articles into a context suitable for comparison. Each paper's citation count is 'normalized' by the average for journals in their same category and publication year, and that value is converted to a percentile. This provides a better measure of central tendency than an average because citation distributions are so skewed. A percentile of 90 means that a paper is among the 10% most cited and the other 90% have achieved less citation impact. The median score is 50: the average impact among publications ranged within a common scale between 0 and 100.

The beam-plot can be used for a fair and meaningful evaluation. It quickly conveys information that the h-index never suggested. This researcher's average percentile is significantly better than 50, the central impact in the fields where they published. Their median annual impact was below that benchmark in early years but can be seen to move above the average over time.

From: J. Adams, M. McVeigh,  
D. Pendlebury, and M. Szomszor,  
"Profiles, not metrics" (2019)

<https://clarivate.com/webofsciencegroup/campaigns/profiles-not-metrics>

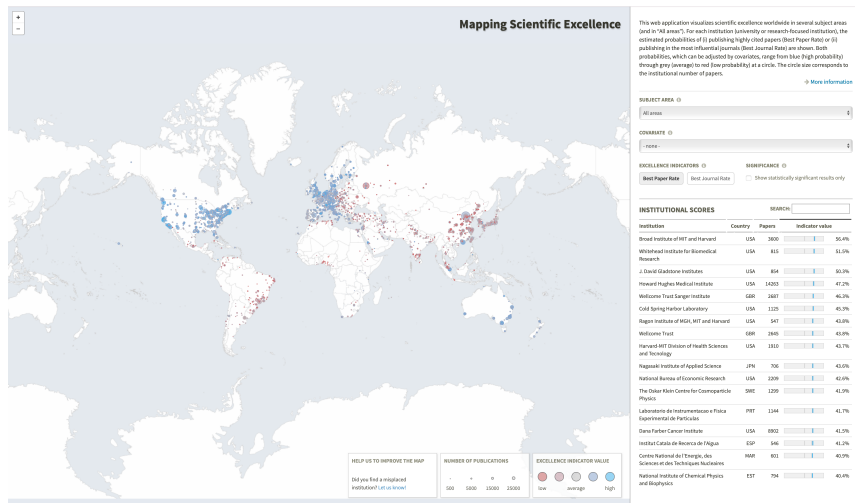


**Figure 2.** A beam-plot of the data in Figure 1. Each article is compared to its own reference set but all use a common 0-100 percentile scale. The ranges of each year's article percentiles are shown (grey marks, across the beam) with their annual median (purple mark, a pivot). The benchmark line is the researcher's overall average: the 59<sup>th</sup> percentile.





# The Excellence Mapping V1

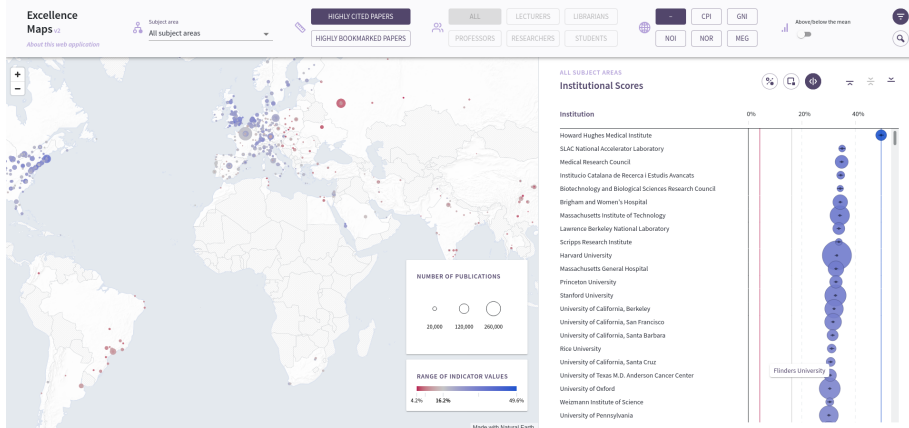


L. Bornmann, M. Stefaner, F. de Moya-Anegón, and R. Mutz,  
*Online Information Review* **38**(1), 43-58 (2014)



# The Excellence Mapping V2

<https://www.excellencemapping.net>

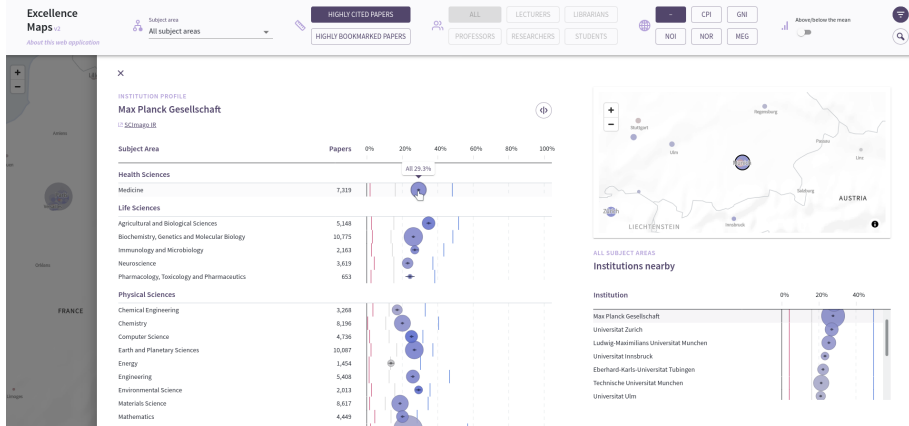


L. Bornmann, R. Mutz, R. Haunschild, F. de Moya-Anegón,  
M. de Almeida Madeira Clemente, and M. Stefaner,  
arXiv:2103.10225



# The Excellence Mapping V2

<https://www.excellencemapping.net>

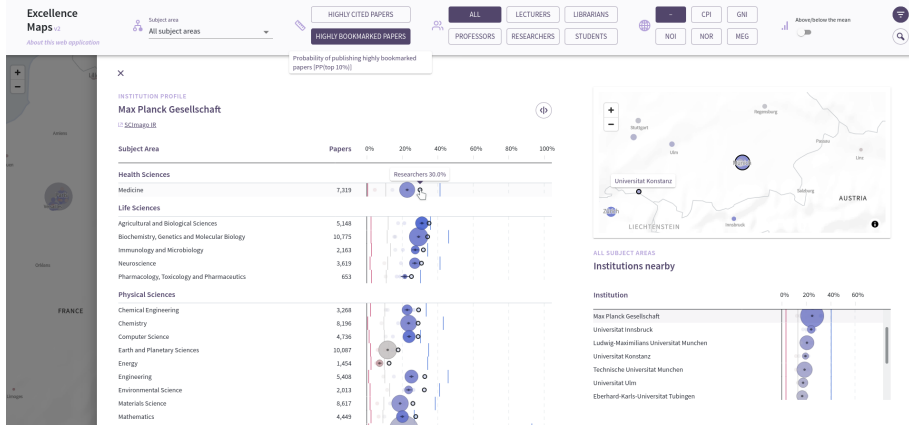


L. Bornmann, R. Mutz, R. Haunschild, F. de Moya-Anegón,  
M. de Almeida Madeira Clemente, and M. Stefaner,  
arXiv:2103.10225



# The Excellence Mapping V2

<https://www.excellencemapping.net>



L. Bornmann, R. Mutz, R. Haunschild, F. de Moya-Anegón, M. de Almeida Madeira Clemente, and M. Stefaner, arXiv:2103.10225



## Take-home messages

- IVS-CPT offers a broad range of services and performs research with the aim of improving services.
- MPG is member of the Ionic Affinity Program by CAS.
- Access to SciFinder<sup>n</sup> has been discontinued but access to SciFinder continues.
- Scilit: A new large scientific database is available.
- Citation sentiments are available from <https://scite.ai/>.
- The new WoS author profiles contain beamplots that were proposed by IVS-CPT and GV.
- There is a new release of the Excellence Mapping with face-lift and highly bookmarked papers.





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<https://www.fkf.mpg.de/ivs>

