Publications, Citations, and Mentions

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Value of Citations

Citations

- Citations measure impact. This is one part of quality; the other parts are accuracy and importance.
  Studies have shown that assessments by peers and citations correlate positively, e. g.:
  Bornmann, L. (2011). Scientific peer review. Annual Review of Information Science and Technology, 45, 199-245.

Citation cultures

- Citation cultures are different even within disciplines, such as physics and even more so on a broader aggregation level:
  Adler, R., Ewing, J., and Taylor, P. (2008) Citation statistics. A report from the International Mathematical Union. www.mathunion.org/publications/report/citationstatistics0

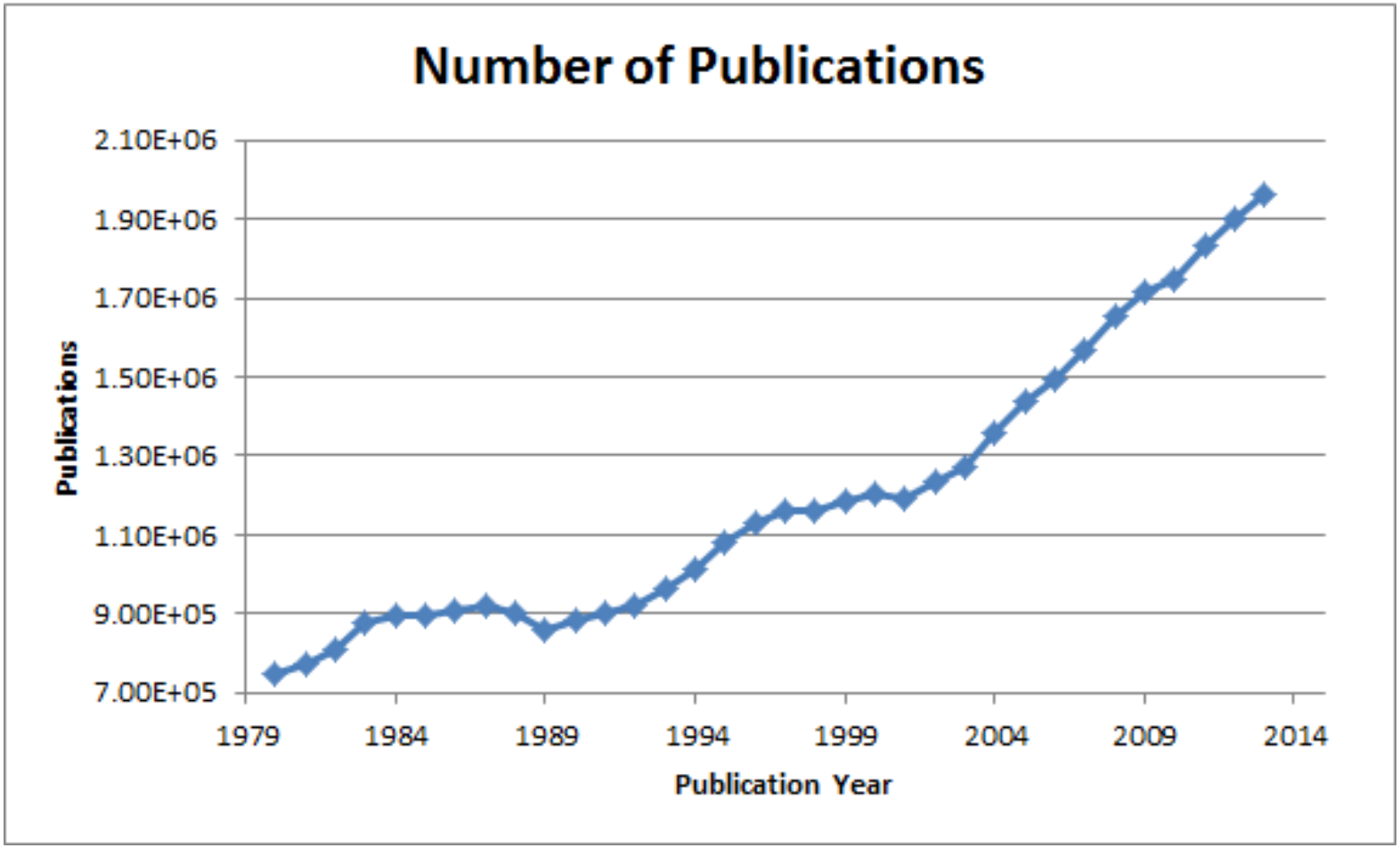
Reasons for Citations

Possible reasons

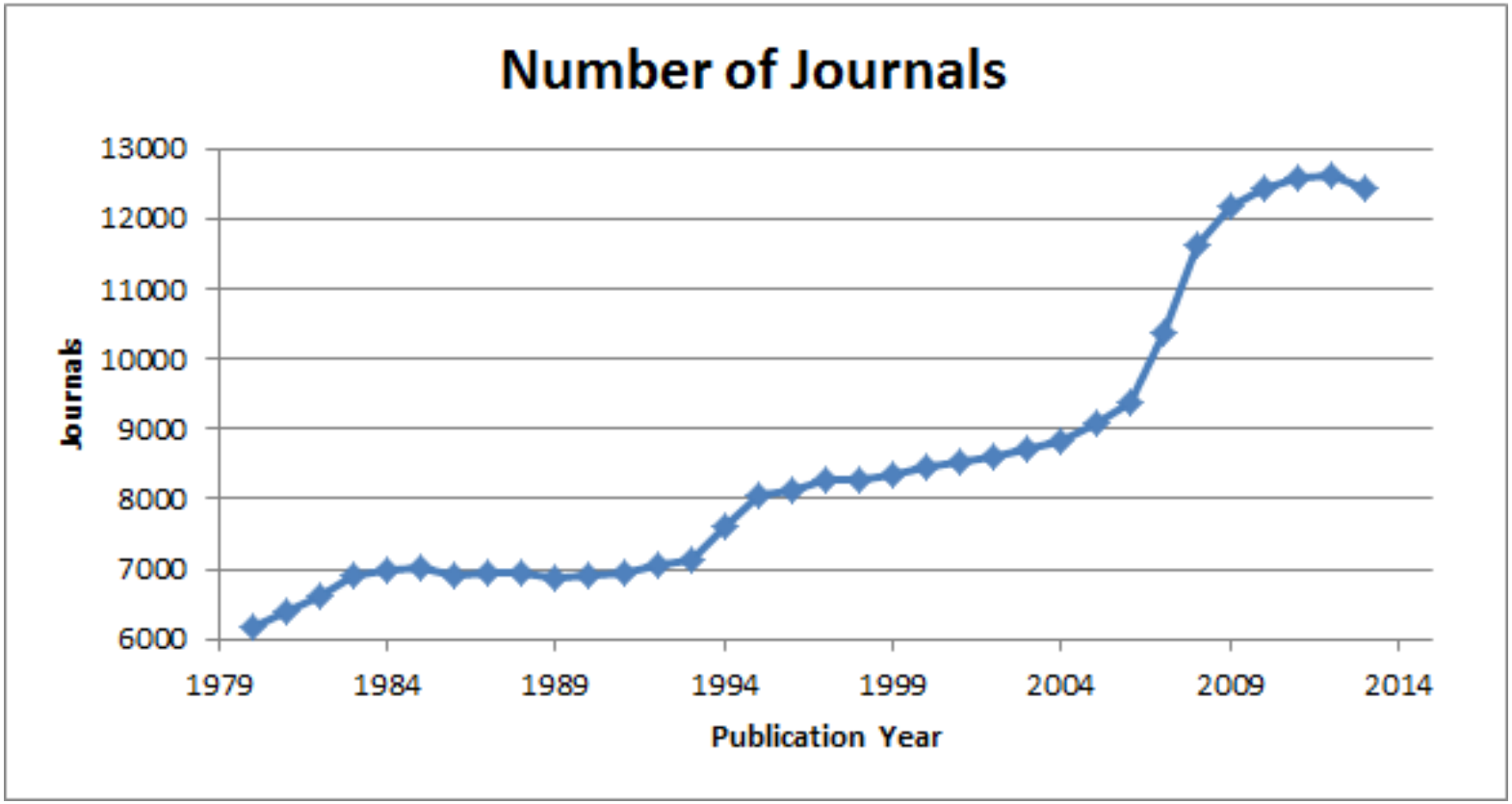
- Intellectual debt
- This paper influenced my work for this manuscript.
- Researcher A cited me, so I cite him, ...
- Scientist B is well known. Therefore, I cite him rather than Researcher C.
- Researcher D will probably be one of the reviewers. Thus, I'll cite him.
- ...

Note: Citations do not necessarily mean usage.
Value of a citation depends on the reason.

Publications per Year (WoS data)

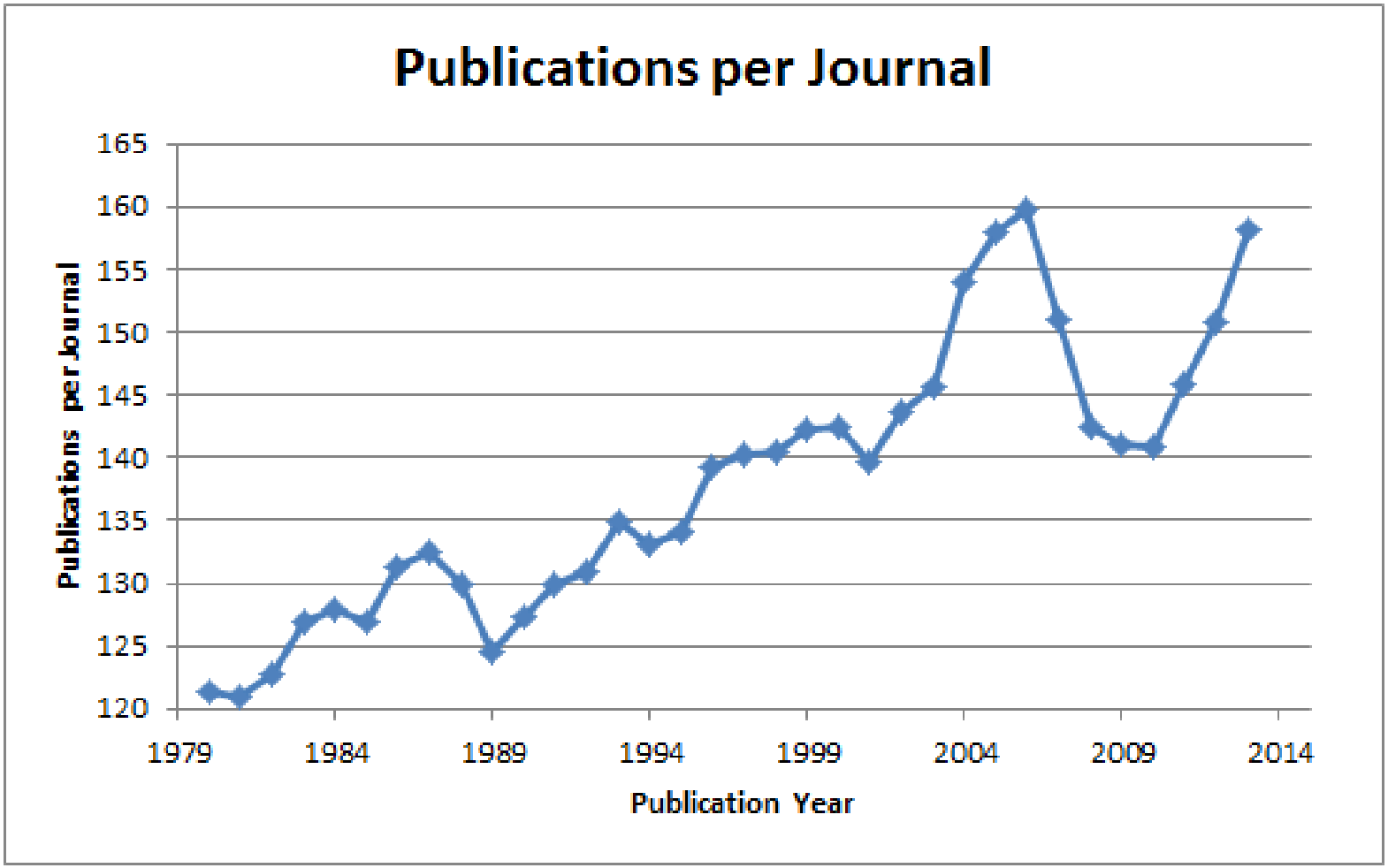


Journals (WoS data)

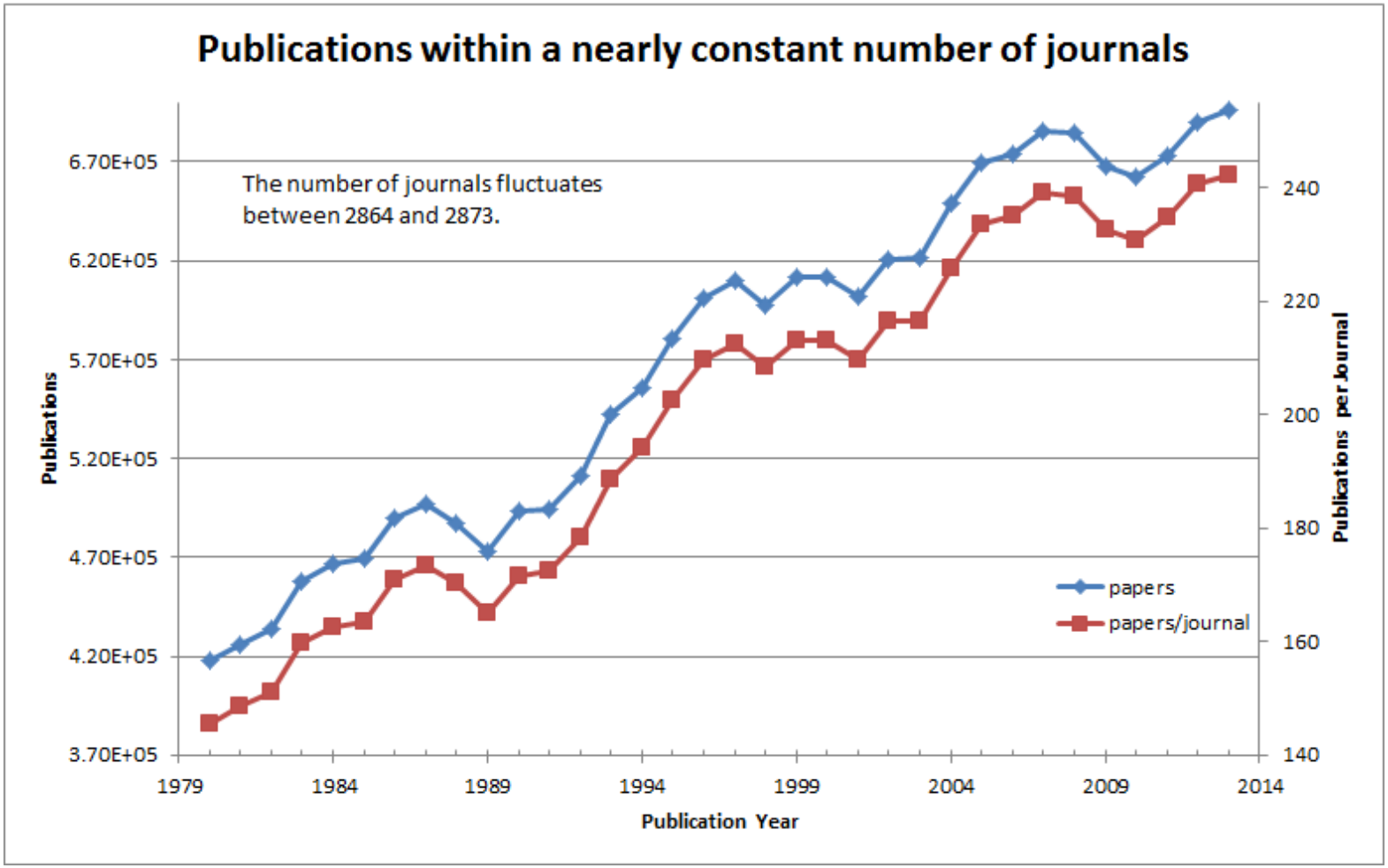


Open Access hype?

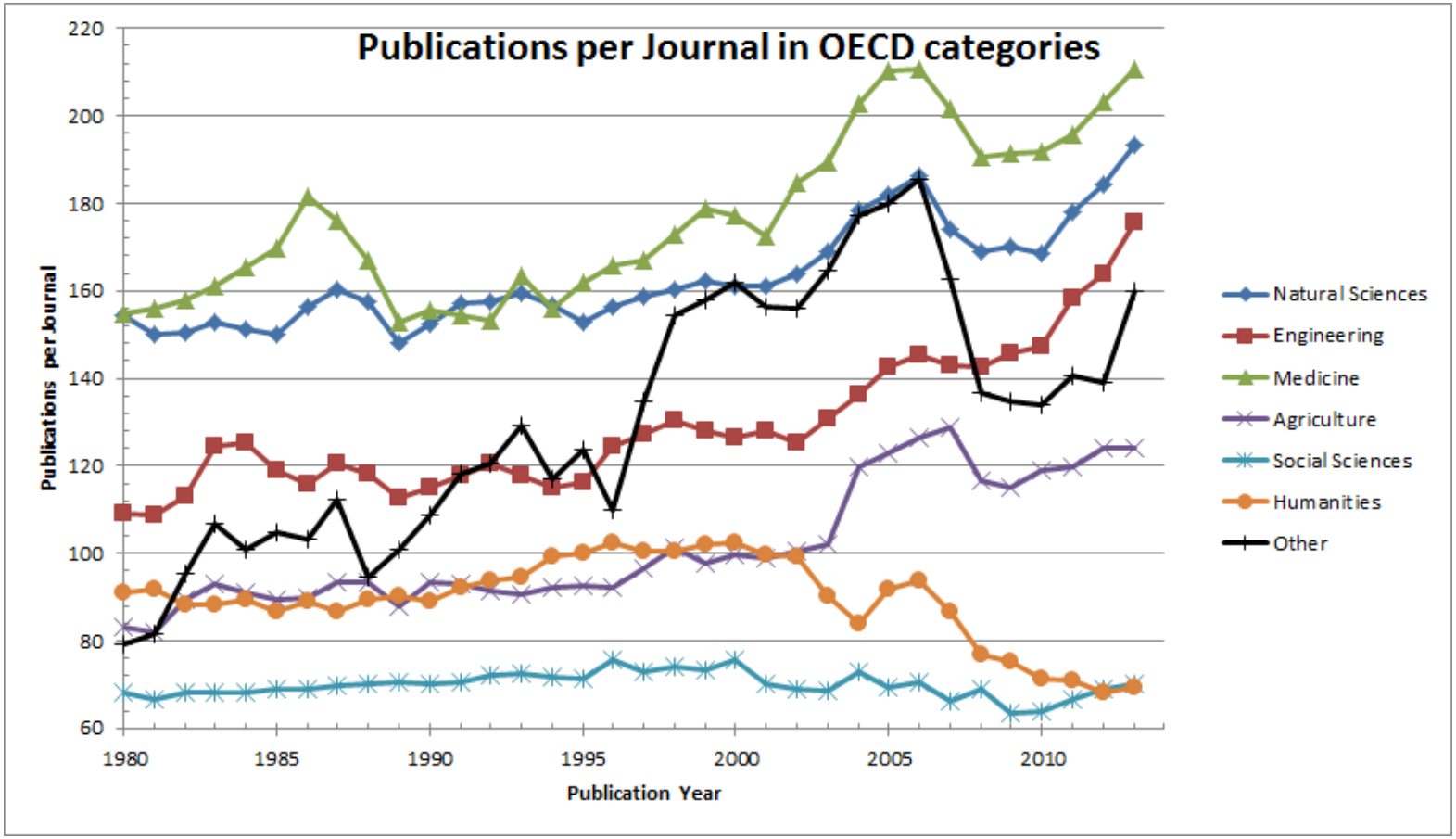
Publications per Journal (WoS data)



Publications per Journal (WoS data)



Distribution across OECD Categories (WoS data)



Citations vs. Mentions ...

Citations

- Rather long citation window
- Multiple reasons for citing

Mentions, ...

- Very short period of time until mentions appear.
- Multiple reasons for mentions.
- Influence on scientists and society.

Article Metrics at Nature

nature International weekly journal of science

Search Go

Advanced search

Home | News & Comment | Research | Careers & Jobs | Current Issue | Archive | Audio & Video | For Authors

Archive > Volume 517 > Issue 7532 > Correspondence > Article > Article metrics

Article metrics for:

Publishing: Criteria for Nature Index questioned

Robin Haunschild & Lutz Bornmann

Nature **517**, 21 (01 January 2015) | doi:10.1038/517021d

Last updated: 3 February 2015 12:35:39 EST

Total citations

Data not available — Web of Science

Data not available — CrossRef

Data not available — Scopus

Online attention

Altmetric score (what's this?)

Tweeted by **30**

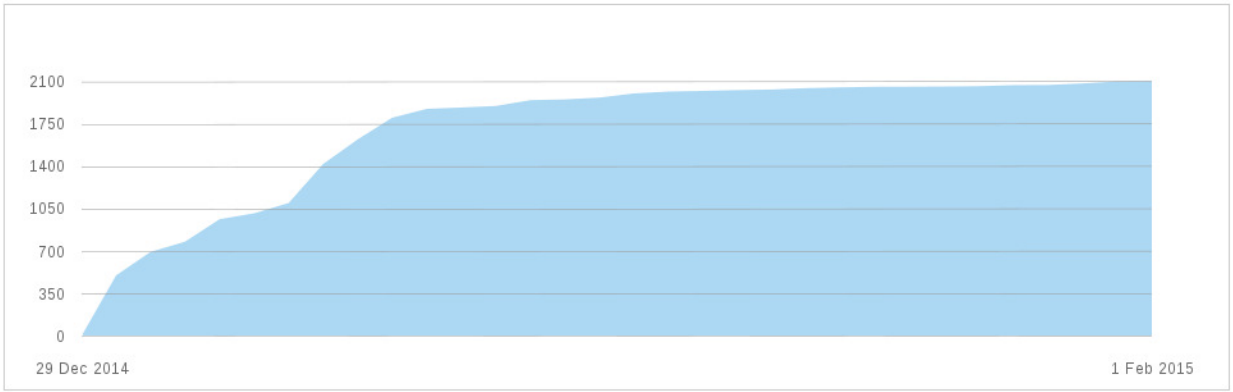
On **1** Facebook pages

Picked up by **1** news outlets

This Altmetric score means that the article is:

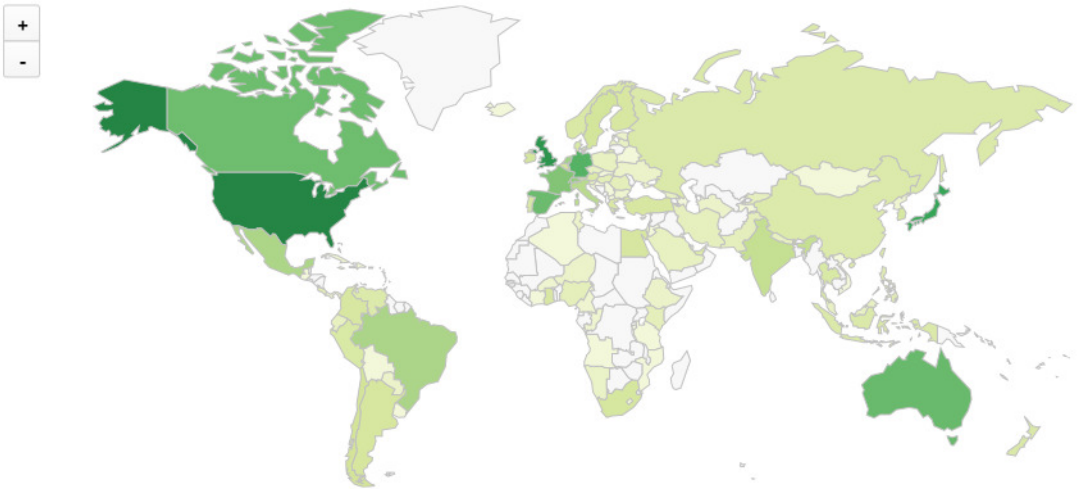
- in the 96 percentile (ranked 2,699th) of the 67,932 tracked articles of a similar age in all journals
- in the 51 percentile (ranked 276th) of the 574 tracked articles of a similar age in *Nature*

Page views 2,073



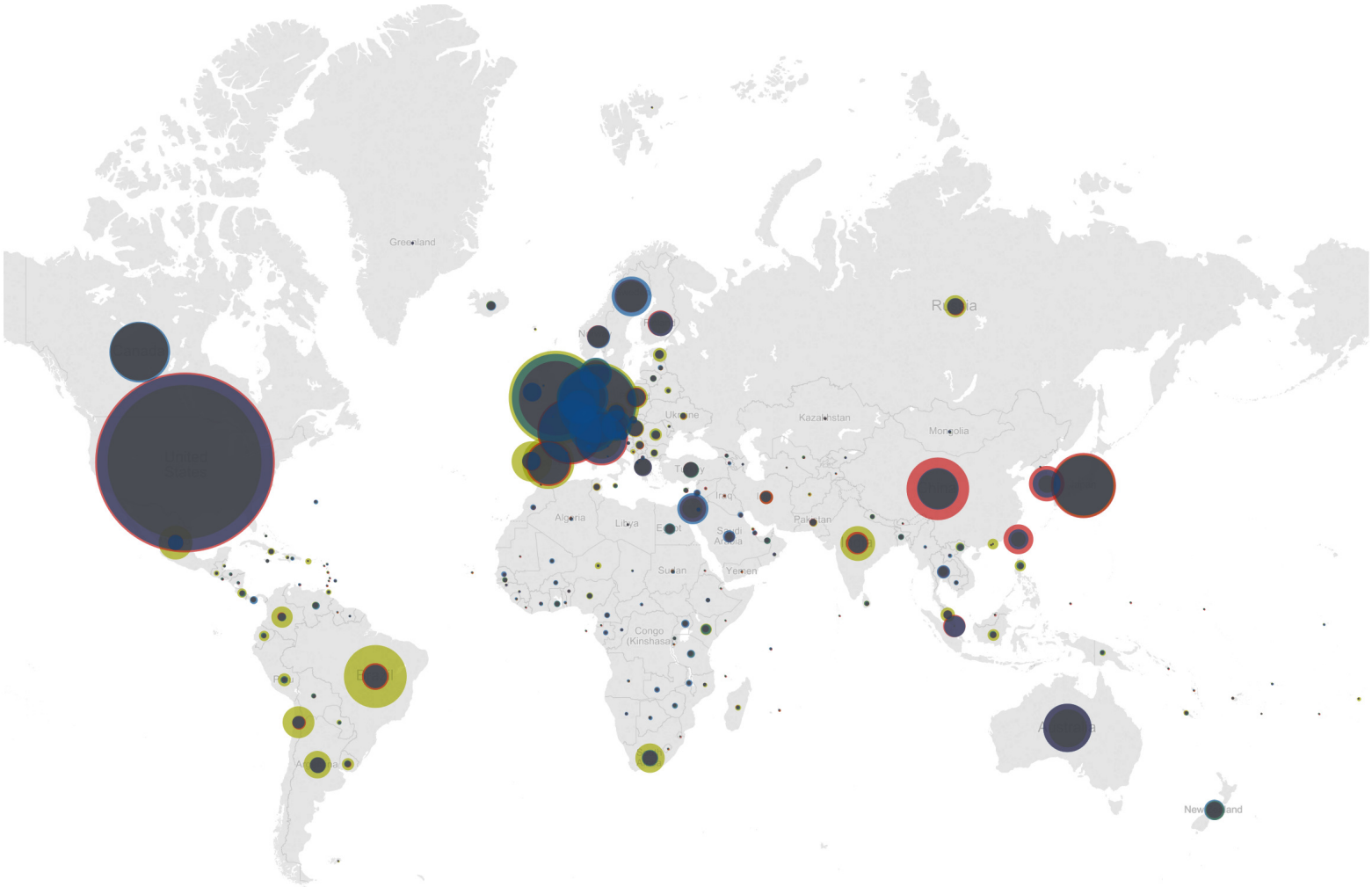
Tweets about MPG Papers

Location of Twitter users



Ranking	Country	Percentage
1	US	34 %
2	UK	17 %
3	JP	8 %
4	DE	5 %
5	AU	4 %
5	ES	4 %
5	CA	4 %
6	FR	3 %
7	CH	2 %
-	Other	18 %

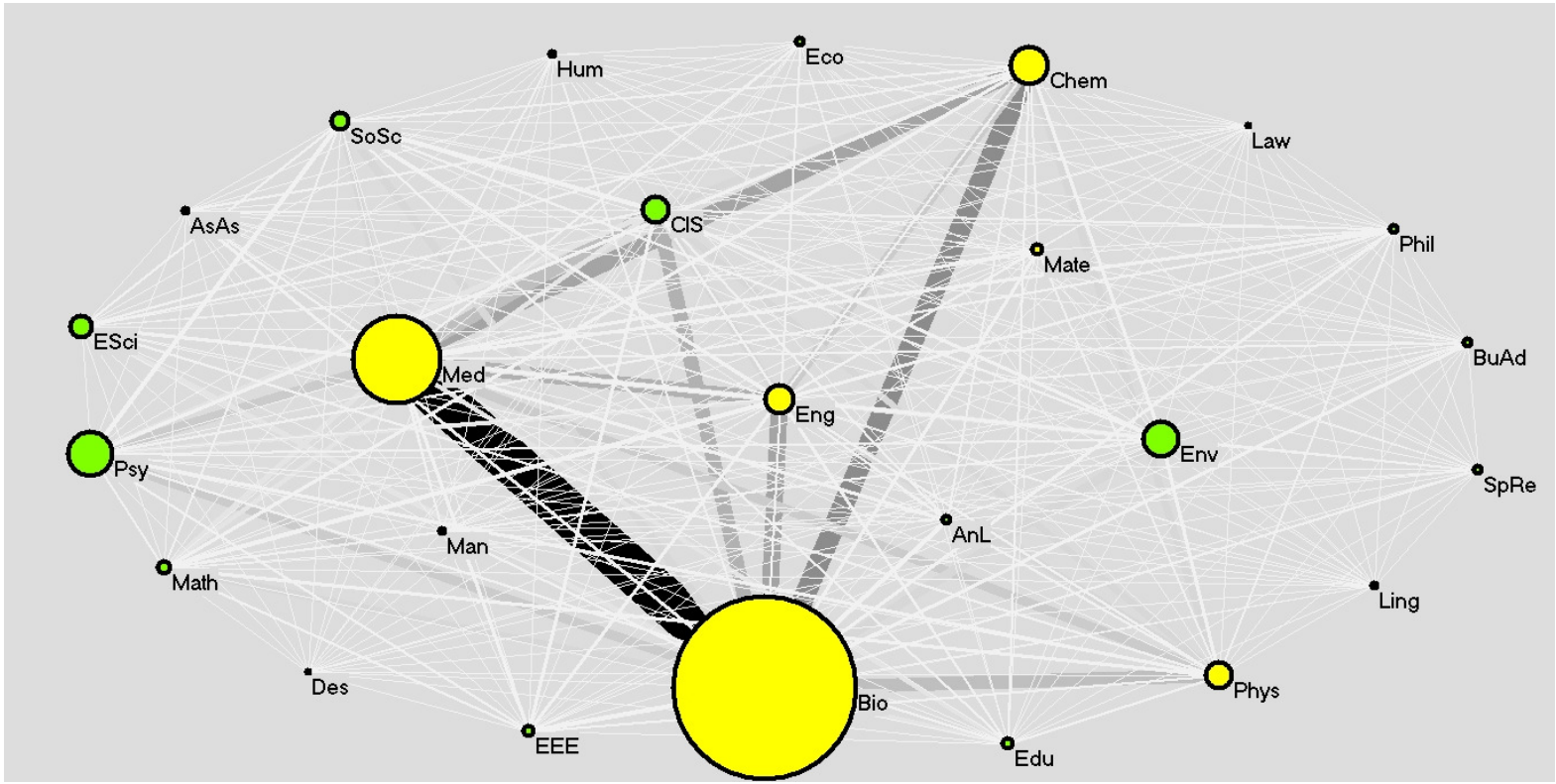
Authors, Citers, and Readers of F1000Prime papers



(produced using Tableau)

blue: authors, red: citers, and green: readers

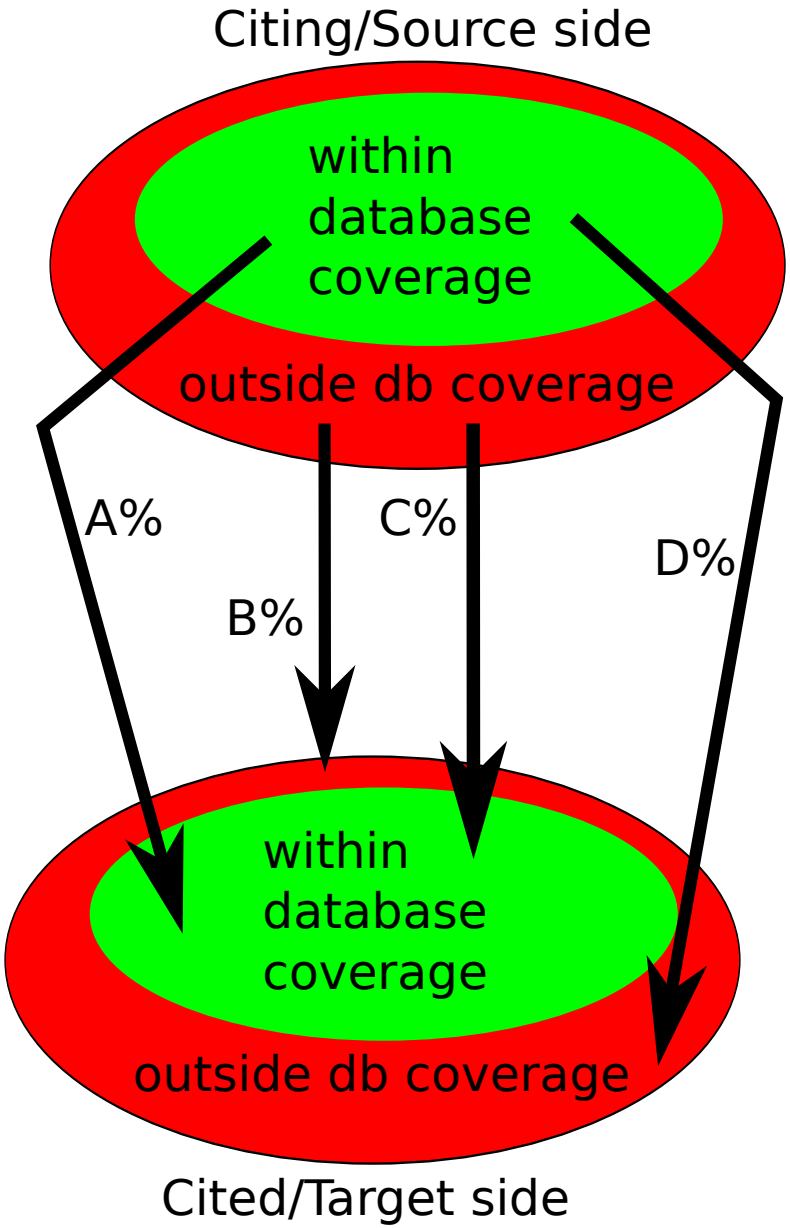
Readers of F1000Prime Papers across Mendeley Disciplines



see also F1000Research, 4, 41 (2015)

DOI: 10.12688/f1000research.6062.1

Cited Side vs. Citing Side



Citation potential

A, B, C, and D differ between disciplines.

Citation impact

Cited Side vs. Citing Side

Cited Side

Number of citations **received by papers** within a reference set are used to normalize the citations of a paper of interest.

Citing Side

Number of citations **originating from papers** within a reference set are used to normalize the citations of a paper of interest.

Citing side normalization might be better suited to measure the interdisciplinary impact.

Summary

- Number of indexed research papers increased since 1980 because of more journals and more scientists.
- Publication behaviour differs between disciplines. Scientists in natural sciences publish more (indexed) journal papers, while researchers in social sciences and humanities publish more outside of citation index coverages.
- Database coverage should be extended.
- Citation cultures are different between disciplines, too.
- There are more subtile differences comparing subdisciplines.
- Citing side normalization might be better suited to measure interdisciplinary impact.