Article-Level Metrics

Martin Fenner

PLOS

Article-Level Metrics (ALM) allow the comprehensive analysis of the post-publication activity around a paper, employing usage stats, citations and altmetrics.

http://article-level-metrics.plos.org/alm-info/

Basic Concepts of Article-Level Metrics and Altmetrics

- Metrics for the individual article, not the journal the article is published in

- More comprehensive metrics than citation count

- More comprehensive target audience than other researchers in the same field

- research outputs other than journal article

THE DOS AND DON'TS IN INDIVIDUAL-LEVEL BIBLIOMETRICS

WOLFGANG GLÄNZEL[1], PAUL WOUTERS[2]

[1]Centre for R&D Monitoring and Dept MSI, KU Leuven, Belgium
[2]Centre for Science and Technology Studies, Leiden University, The Netherlands
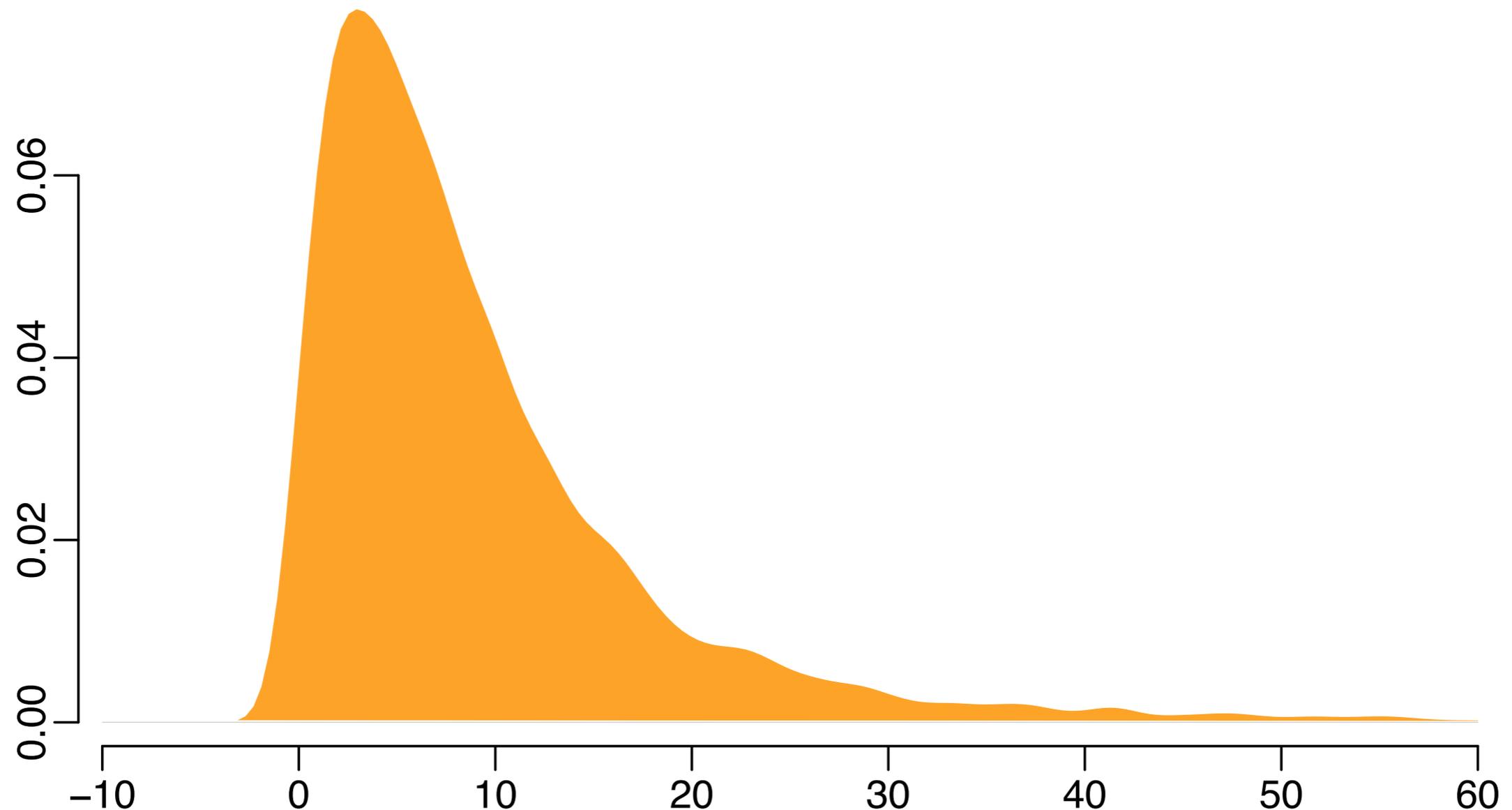
http://www.slideshare.net/paulwouters1/issi2013-wg-pw
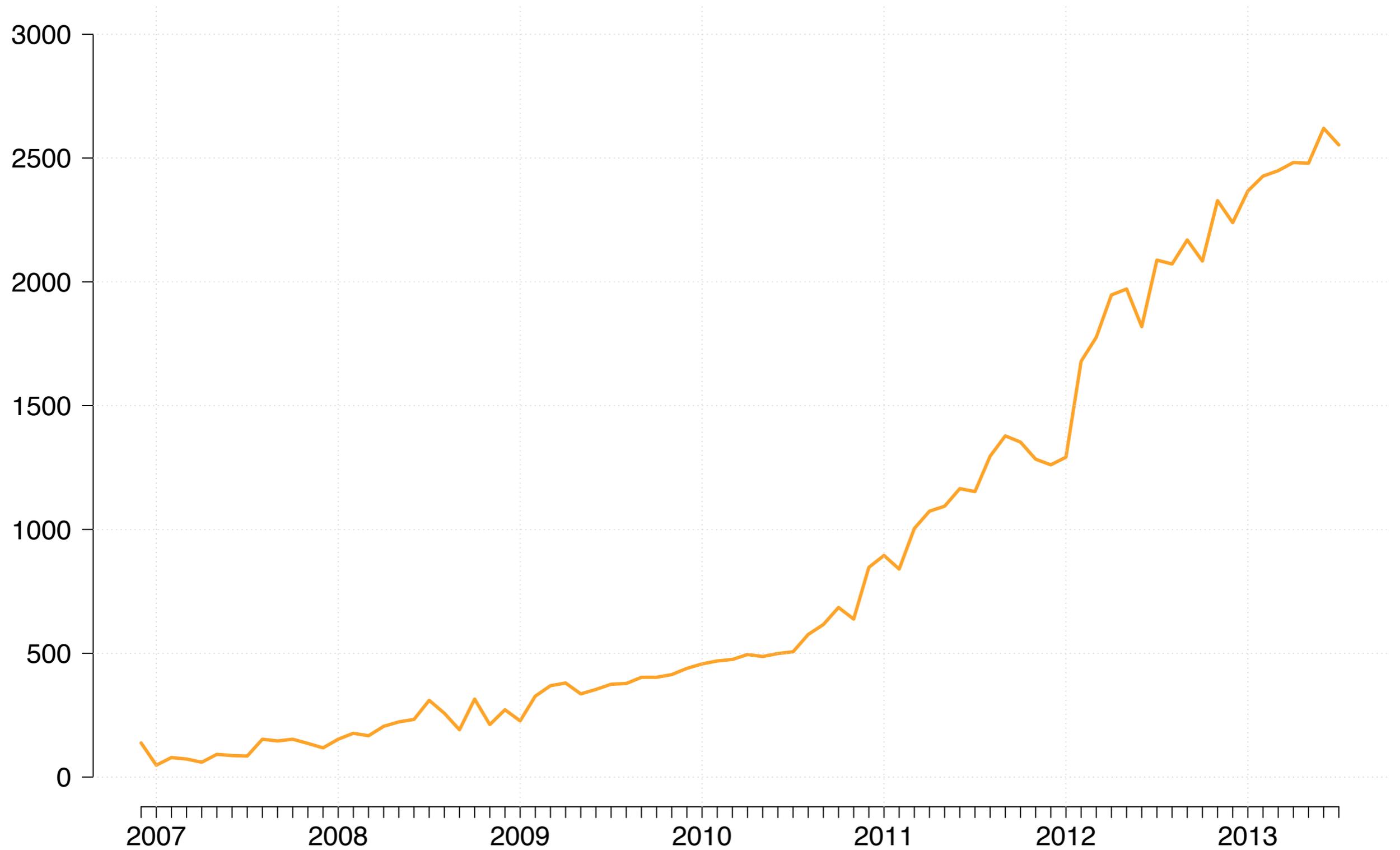
Citation Counts for 2010 PLOS ONE Papers

Scopus citation counts for all 6,730 PLOS ONE papers published in 2010. Data collected May 20, 2013. Median 5, mean 9.7 citations, 10% of papers have at least 16 citations.
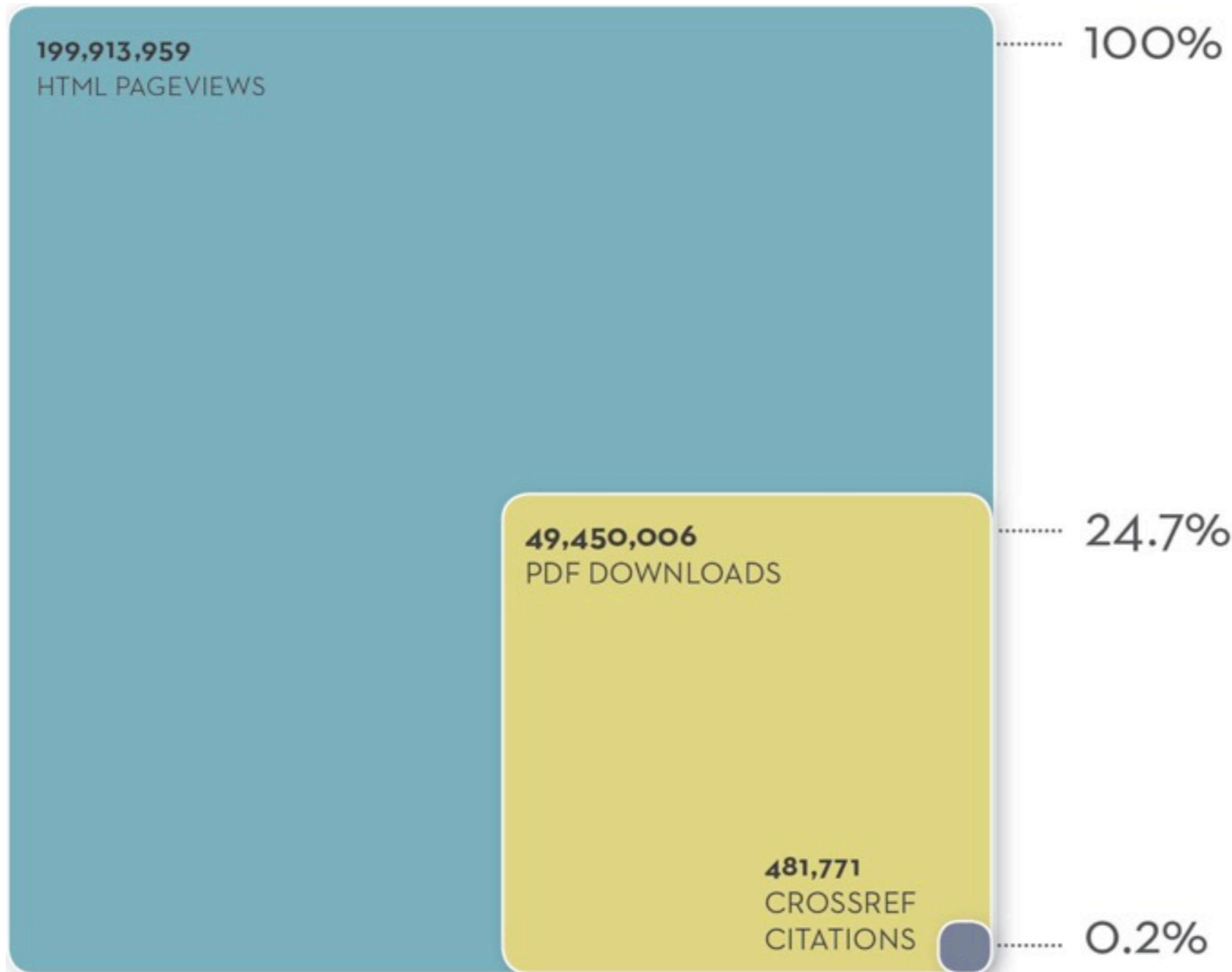

Probability

Scopus Citations

PLOS ONE Articles Published per Month

199,913,959
HTML PAGEVIEWS

49,450,006
PDF DOWNLOADS

481,771
CROSSREF
CITATIONS

100%

24.7%

0.2%

Article-Level Metrics for all 80,602 PLOS papers published until May 20, 2013.

http://dx.doi.org/10.3789/isqv25no2.2013.04

Article-level metrics add granularity and more dimensions

Viewed	Saved	Discussed	Recom-mended	Cited
PLOS Journals (HTML, PDF, XML)	Mendeley	Twitter	F1000Prime	CrossRef
PubMed Central (HTML, PDF)	CiteULike	Facebook		Scopus
Figshare (HTML, Downloads, Likes)		Wikipedia		Web of Science
		Reddit		PubMed Central
		PLOS Comments		PMC Europe
		ResearchBlogging		PMC Europe Database Links
		ScienceSeeker		
		Nature Blogs		
		Wordpress.com		
		OpenEdition		

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New ALM Sources August - October 2013

F1000Prime
Post-publication peer review of the biomedical literature

Citations and Database Links
Europe PubMed Central (Europe PMC) is an archive of life sciences journal literature
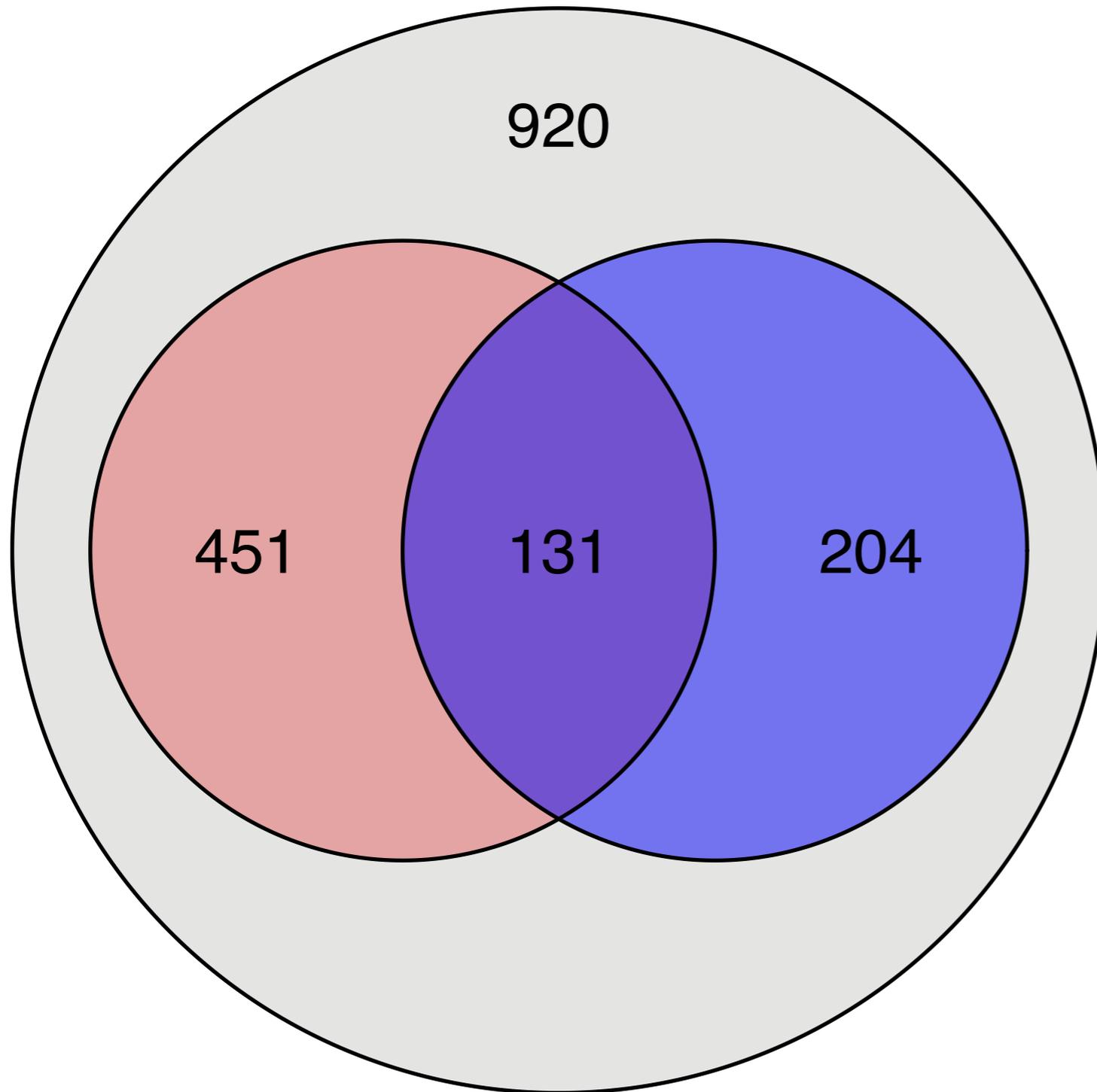
Reddit
User-generated news links

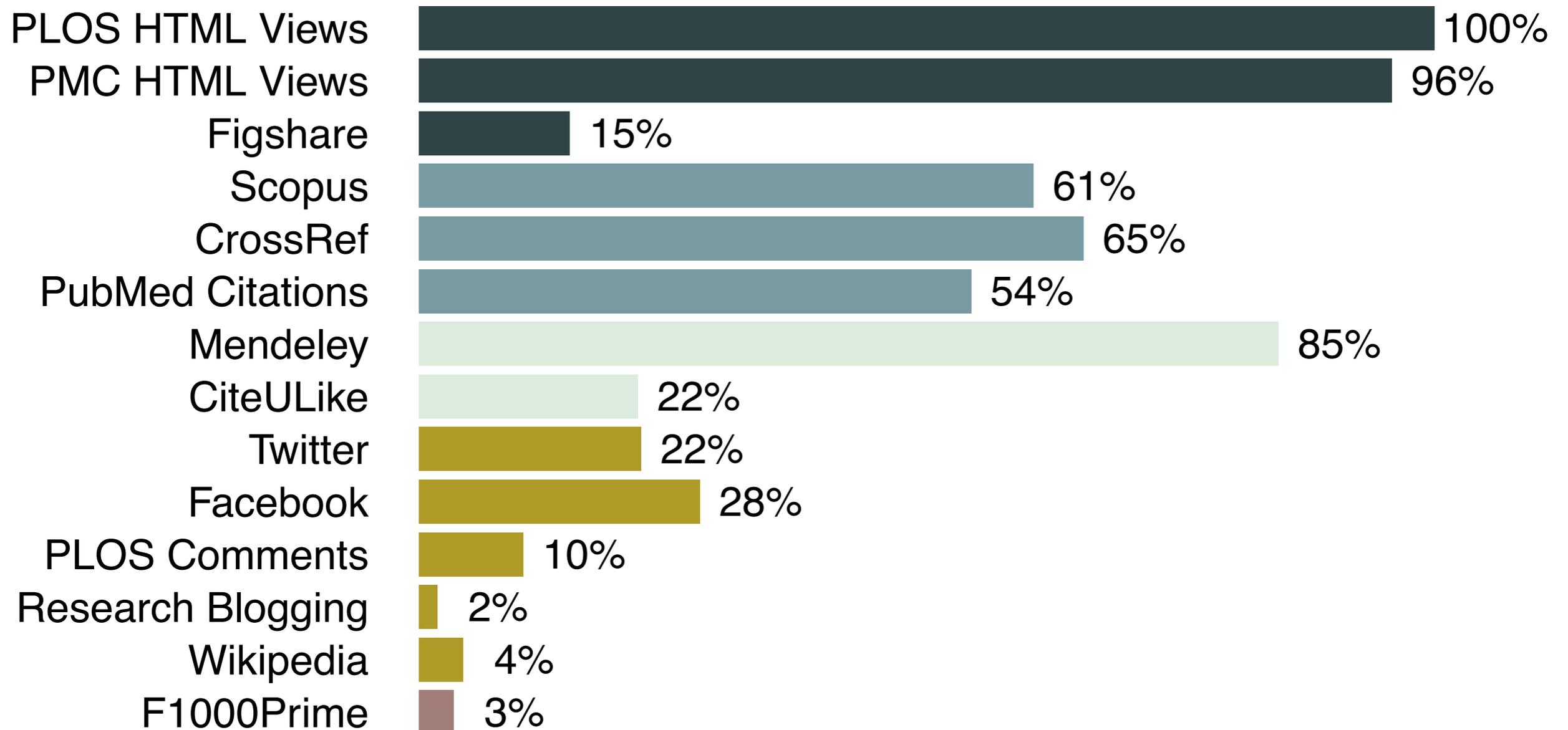OpenEdition is an umbrella portal dedicated to electronic resources in the humanities and social sciences.

PLOS Biology articles: sites of recommendation and discussion

Number of PLOS Biology research articles published until May 20, 2013 that have been recommended by F1000Prime (red) and/or mentioned in Wikipedia (blue).

PLOS Article–Level Metrics by Source

Proportion of all 90,141 PLOS articles published until August 27, 2013 mentioned by particular article–level metrics source. Colors indicate categories (Viewed, Cited, Saved, Discussed, Recommended), as used on the PLOS website.
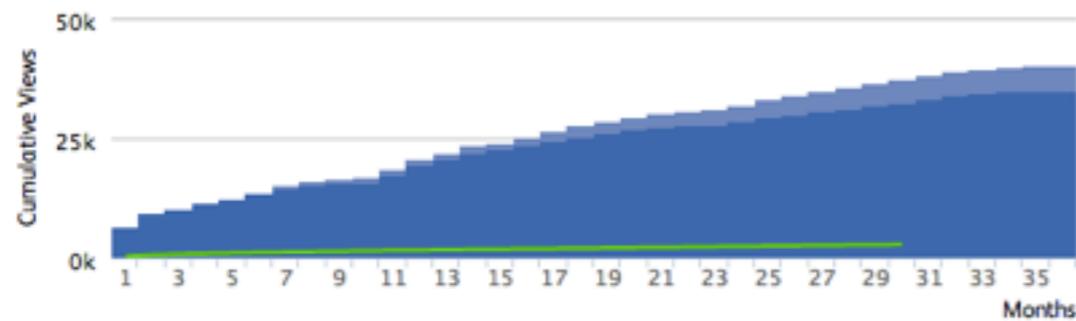

Source	Percentage
PLOS HTML Views	100%
PMC HTML Views	96%
Figshare	15%
Scopus	61%
CrossRef	65%
PubMed Citations	54%
Mendeley	85%
CiteULike	22%
Twitter	22%
Facebook	28%
PLOS Comments	10%
Research Blogging	2%
Wikipedia	4%
F1000Prime	3%

Distinct Clones of Yersinia pestis Caused the Black Death

Viewed

Total Article Views		HTML Page Views	PDF Downloads	XML Downloads	Totals
40,286	PLOS	30,815	4,038	88	34,941
Oct 7, 2010 (publication date) through Sep 11, 2013*	PMC	4,548	797	n.a.	5,345
	Totals	35,363	4,835	88	40,286
13.67% of article views led to PDF downloads					

BETA
Compare average usage for articles published in **2010** in the subject area:
Microbiology | Show reference set

Cited

SCOPUS	crossref	PMC	ISI Web of SCIENCE.	Google scholar
41	30	20	29	Search

Saved

citeulike	MENDELEY
7	61

Discussed

Research Blogging	WIKIPEDIA	twitter	facebook	Comments
4	11	5	161	0

http://dx.doi.org/10.1371/journal.ppat.1001134

PLOS ALM Software is Open Source

https://github.com/articlemetrics/alm

Article-Level Metrics and Open Access

- Business model can be similar to OA in that ALM are paid by producer and then made openly available: strategy used by PLOS

- both part of larger open science movement (open data, open source, etc.)

- can show Open Access advantage in reuse that goes beyond citations

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Standards and Best Practices

- In June 2013 NISO received a grant from the Sloan Foundation to work on standards and best practices for alternative metrics

- First in-person workshop October 9 in San Francisco

http://www.niso.org/topics/tl/altmetrics_initiative/