



New systems for measuring research impact

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<u>www.researcherid.com/rid/C-2414-2009</u> <u>http://scholar.google.com/citations</u>



11th May 2016

All of my presentations are available online at:

https://figshare.com/authors/Nader Ale Ebrahim/100797

Link to this presentation: http://dx.doi.org/10.6084/m9.figshare.1580090

3rd SERIES OF INTRODUCTORY WORKSHOP ON:

Strategies to Enhance Research Visibility, Impact & Citations

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www.researcherid.com/rid/C-2414-2009
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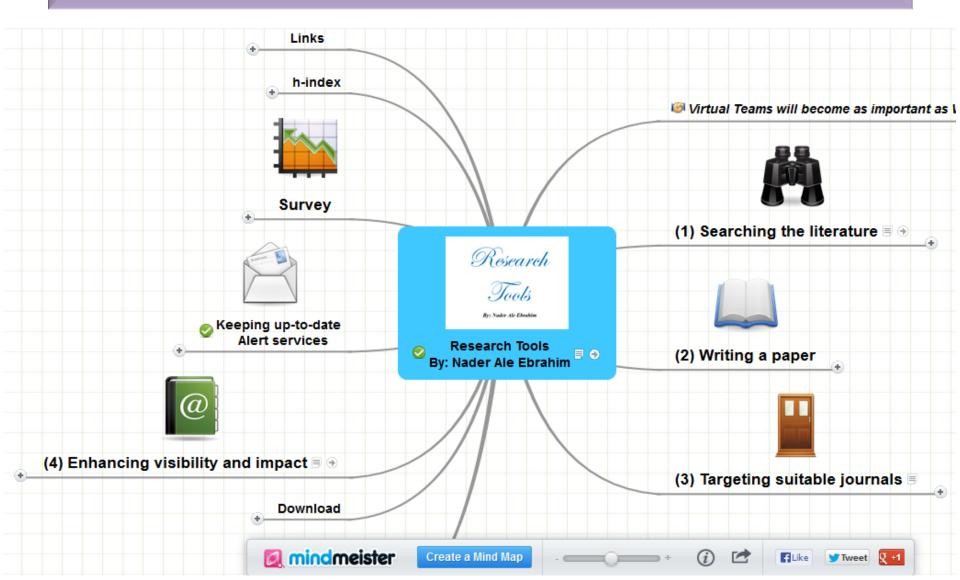
- 1. Ale Ebrahim, N., Salehi, H., Embi, M. A., Habibi Tanha, F., Gholizadeh, H., Motahar, S. M., & Ordi, A. (2013). Effective Strategies for Increasing Citation Frequency. International Education Studies, 6(11), 93-99. doi: 10.5539/ies.v6n11p93
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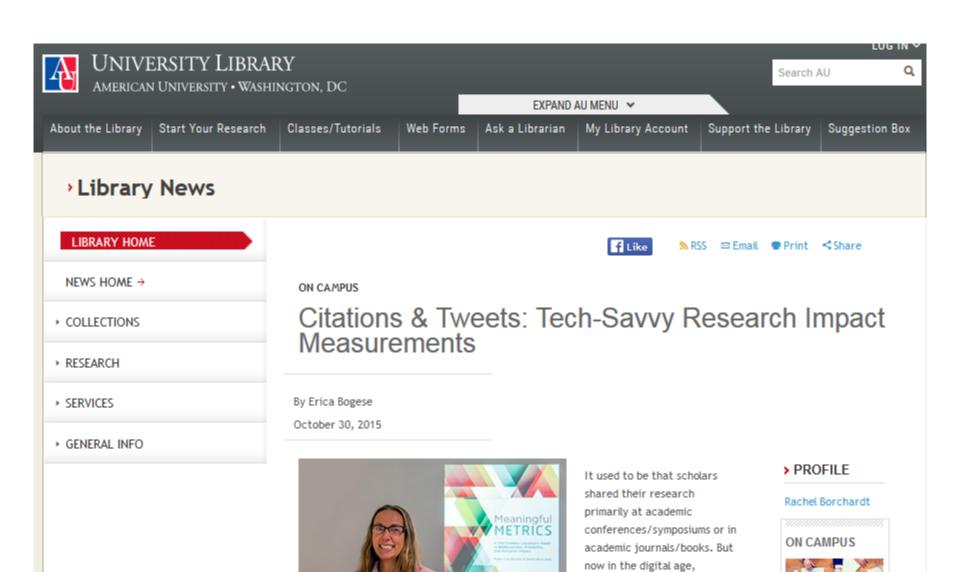
Abstract

Abstract: The reach of a publication can no longer be judged exclusively by the number of times it is cited, because, we are now in the digital and sharing information age, academic conversations are as likely to be found on various academic social networks. So, we need new tools to measure the research impact. Altmetrics are new metrics proposed as alternatives to Impact Factor for journals and personal citation indexes like h-index. Altmetrics attempts to use the online activity to measure impact, buzz, word of mouth for scientific information and it includes new ways to measure usage at the citation level. In this workshop, I will explain about the application of "alternative metrics" tools such as: Altmetric.com, Impactstory.org, Plumanalytics.com, and PLoS metrics.

Keywords: Altmetric, H-index, Improve citations, Research tools, Bibliometrics, Research Visibility

Research Tools Mind Map



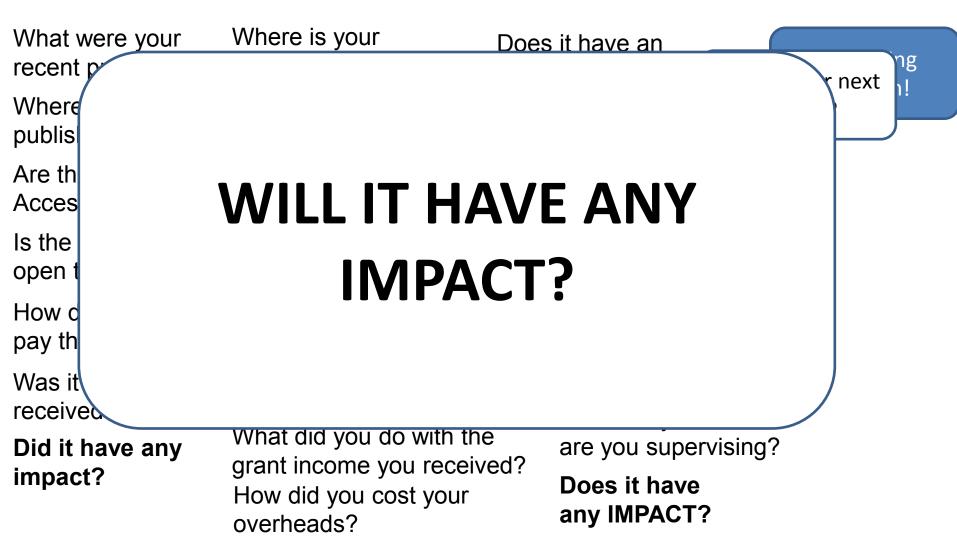


academic conversations are as likely to be found on Twitter or Facebook.

Informetrics, scientometrics, bibliometrics, webometrics, cybermetrics and altmetrics Bibliographies – Whole Internet, Science of largely cyberspace Science references **Bibliometrics** Scientometrics Cybermetrics Altmetrics Web presence, Webometrics visibility and Alternative impact - links, metrics – views, pages, downloads, web documents citations, etc

Source: Onyancha, Omwoyo Bosire. "Can informetrics shape biomedical research? A case study of the HIV/AIDS research in sub-Saharan Africa 1." *Inkanyiso: Journal of Humanities and Social Sciences* 6.1 (2014): 49-65.

What it's like being a researcher



Source: Owen Roberson, Research Information Analyst (2015) Research Information and Analytics at Cambridge: Insight over measurement, Research Information Office, Academic Division



Source: http://altmetrics.org/manifesto/

Problems with citation-based indicators



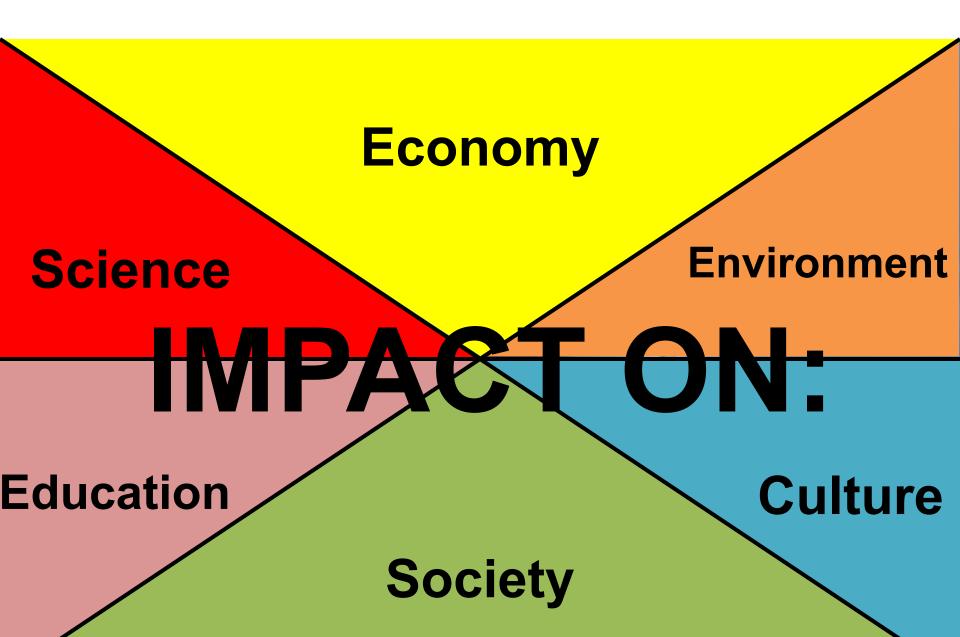
Problem 1: Time

Problem 2: Journals

Problem 3: Impact







Created by researchers

Created by the public

Created by researchers

Indicating future scientific impact?

Indicating other types of impact, such as societal impact?

Created by the public

How is the Altmetric score calculated?

The score is a weighted count

The score is derived from an automated algorithm, and represents a weighted count of the amount of attention we've picked up for a research output. Why is it weighted? To reflect the relative reach of each type of source. It's easy to imagine that the average newspaper story is more likely to bring attention to the research output than the average tweet. This is reflected in the default weightings:

News	8
Blogs	5
Twitter	1
Facebook	0.25
Sina Weibo	1
Wikipedia	3
Policy Documents (per source)	3
Q&A	0.25
F1000/Publons/Pubpeer	1
YouTube	0.25
Reddit/Pinterest	0.25
LinkedIn	0.5

Altmetrics Tools

- Altmetric.com
- Impactstory.org







- Plumanalytics.com
- ImpactStory.
- PLoS Article-Level Meuros
- Usage Count (webofknowledge.com)
- Bookmetrix (http://www.bookmetrix.com)



Article Metrics in Scopus

 Altmetrics are new metrics proposed as alternatives to Impact Factor for journals and personal citation indexes like h-index. The term "article level metrics" was first put forward in 2010, but altmetrics (derived from "alternative metrics") become prevalent as it better suggested a range of new metrics. Altmetrics can be applied not only to articles but also to people, journals, books, data sets, web pages, etc. Many aspects of the impact of a work (such as article views, downloads, mentions in social media and new services) can be measured, as well as traditional citation counts.

Source: http://www.swansea.ac.uk/iss/researchsupport/metrics/altmetrics/

On Friday, June 27, 2014 6:07 PM, The Impactstory team < team@impactstory.org > wrote:



Your new research impacts this week



Dr. Nader Ale Ebrahim impactstory.org/aleebrahim

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Enhancing Research Visibility and Improving Citations: Publication Marketing ToolsMpws publication marketing tools by nader ale ebrahim 2013 □

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slides milestone

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Antony Williams

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- Pinterest, (DORCID, Vimeo

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Researcher from:

Sample Profiles / Royal Society of Chemistry

My passion is connecting people to chemistry. Over the past decade I held many jobs and responsibilities including the direction of the development of scientific software applications for spectroscopy and general chemistry, directing marketing efforts, sales and business development collaborations for the company. I have almost... + More



Groups v Sign in Q

Home / Nader Ale Ebrahim



Nader Ale Ebrahim

نادر آل ابراهیم

ResearcherID, DORCID, Bepress, & RePEc,

Copernicus,
 Diigo,
 How to write a review paper,
 ORCID,
 Twitter,

🔋 The Berkeley Electronic Press™, & Archive, 📊 Resume, 📊 LinkedIn,

Blogspot, & Postach.io, FaceBook, About.me, SCOPUS,

\$\pm\$ ISDT Organizing Committee, \$\pm\$ Ecademy, \$\pm\$ Tumblr, \$\pm\$ Vizify, \$\pm\$ Informatik, \$\pm\$ WiKi,

The Effective Use of "Research Tools" and Resources – Training of Trainers (TOT), ResearcherID, & Peerevaluation,

EduBlogs, & Managing Research Candidature, PSlid Share, Science Wise, Mendeley,

🔋 The academic impact of research: Current and the future citation trends in developing countries, 💾 Delicious,

🚾 ResearchGate, 💆 arxiv, 🕹 Pearl Trees, 🔋 Enhancing Research Visibility and Improving Citations: Publication Marketing Tools, 🐽 Flickr,

🕄 SSRN. 🕄 Social Science Research Network (SSRN). 🕹 Homepage



PlumX Metrics



USAGE (views, downloads)



CAPTURES (bookmarks, favorites, readers)



MENTIONS (Wikipedia, comments, blogs)



SOCIAL MEDIA (Fa cebook likes, shares, tweets)

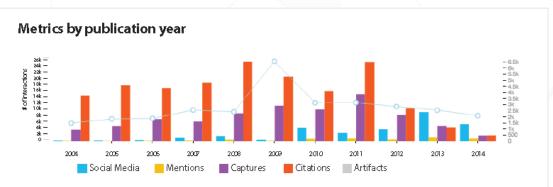


CITATIONS (Scopus, patents)

Analyze

You can aggregate metrics at any level to help you understand what is happening with your grant-funded research. For example you can see output and metrics by:

- Researcher
- Grant
- Department
- Journal



In this example, it is apparent that citations (red bars) are a lagging indicator; there are substantially fewer citations in the recent years, especially 2013 and 2014. The other categories of metrics help you see what has been going on recently.

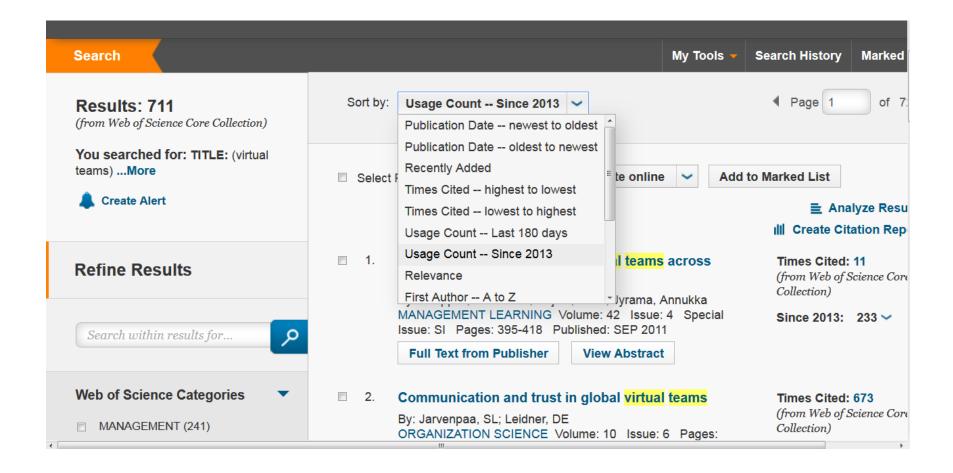
Public Library of Science (PLOS) Article-Level Metrics (ALMs)

At PLOS, we believe that research articles should primarily be judged on their individual merits, rather than on the basis of the journal in which they were published. In March 2009, we inaugurated a program to provide Article-Level Metrics (ALM) on every article across all journals. Article-Level Metrics (ALMs) capture the manifold ways in which research is disseminated and can help users determine the value of an article to them and to their scientific community. The regularly updated data include the following metrics:

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

Source: http://www.lagotto.io/plos/

Usage Count



Elsevier journals <u>Top downloaded OA articles</u>

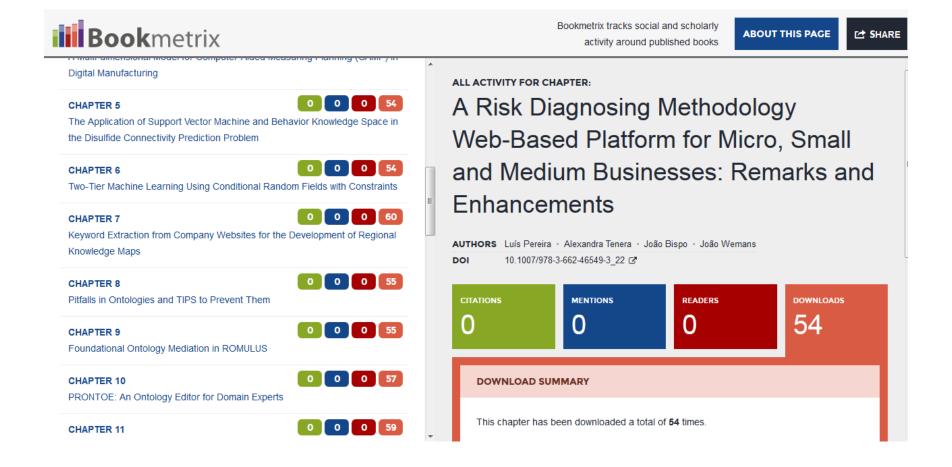
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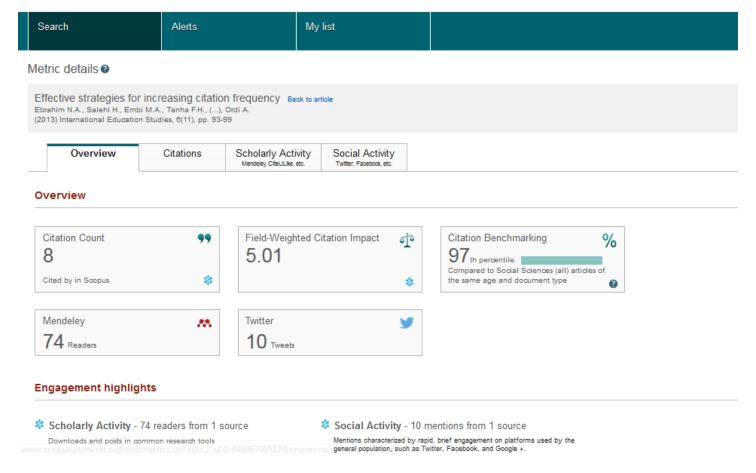
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 - o Agriculture Science, General
 - o Forest Science
 - o Plant Science
 - o Soil Science
- Aquatic Sciences
 - Marine and Freshwater Biology
 - Oceanography
 - Water Resources
- Chemistry
 - Analytical Chemistry
 - o Colloids
 - o Electrochemistry
 - Inorganic Chemistry
 - o Organic Chemistry
 - o Physical and Theoretical Chemistry
 - Spectroscopy
- Computer Science
 - Artificial Intelligence
 - o Computer Science for Engineering
 - o Microelectronics and Hardware

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Article Metrics in Scopus

Scopus





Introduction to altmetrics and Altmetric

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altmetric.com





Altmetric Ambassador of the Month:

Nader Ale Ebrahim

Our Ambassador of the Month for September is Nader Ale Ebrahim, a visiting research fellow at the University of Malaya. He has run over 100 workshops for researchers in Malaysia, and is considered an authority on research promotion practices and metrics tools. Learn more about what Nader has done so far as an Altmetric Ambassador on our blog.



In this session, we'll cover...

- Introduction to altmetrics
- 2 Altmetric tools
- 3 Altmetrics use cases
- Examples of using altmetrics data
- Questions?

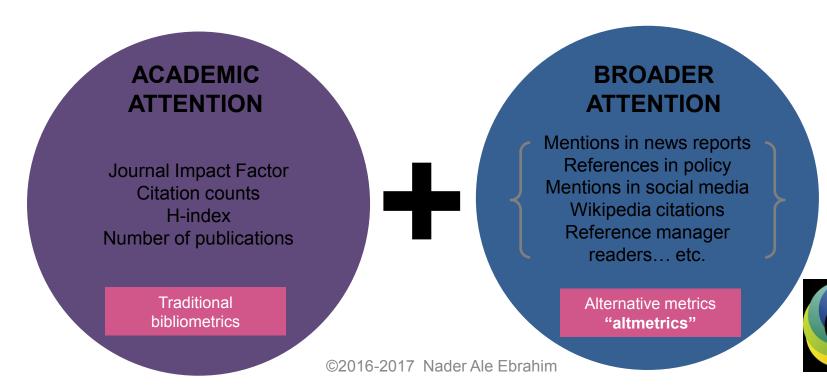


Part 1: Introduction to Altmetrics



What are altmetrics?

- Attention to research outputs in non-traditional sources, e.g. policy documents, news, blogs and social media
- Indicators of research impact
- Help understand how research is being received and used
- Complementary to traditional citation-based analysis



Why altmetrics?

- Provide a more coherent understanding of research attention
- Understand the broader reach and early impact of research
- Track attention to a broad range of research outputs, including articles, posters, data sets and working papers, etc.
- Help researchers get credit for impact activities





Advantages of metrics for single research outputs

- Real-time, immediate feedback on attention to scholarly content
- Useful for early career researchers whose work may not have accrued citations
- Showcase attention to a research output beyond academia
- Not biased by an over-arching metric



Altmetric in numbers: mentions and shares

Each day, we track
~44,000 new
mentions of research
across sources incl.
social media, news,
and policy docs.

Each week,~50kunique itemsare shared.

That's 1 mention every 2 seconds!

Mentions range in complexity, from quick shares to comprehensive reviews.

18m
mentions of
~3.7m scholarly
outputs



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What sources does Altmetric track?

News outlets

- Over 1,300 sites
- Manually curated list
- Text mining
- Global coverage

Social media and blogs

- Twitter, Facebook, Google+, Sina Weibo
- Public posts only
- Manually curated list

Post-publication peer review

- Publons
- PubPeer

Reference managers

- Mendeley, CiteULike
- Reader counts
- Don't count towards the Altmetric score

Other sources

- Wikipedia
- YouTube
- Reddit
- F1000
- Pinterest
- Q&A

Policy documents

- NICE Evidence
- Intergovernmental Panel on Climate Change
- Many more...

How does Altmetric c online attention?

Follow a list of sources.

E.g. blogs, news, policy documents, social media.

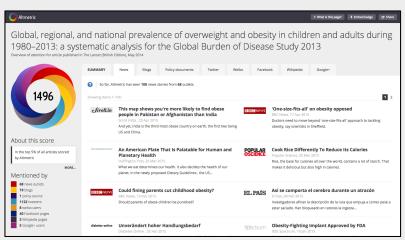
Search for links to papers.

Automatically link searching and text mining.



Collecting attention data

Reporting attention data



Collate attention.

Disambiguation of mentioned items across different versions.

Display data in "Altmetric details pages".

All research outputs with mentions have an Altmetric Details Page in our database.

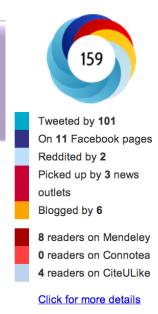
Part 2: Altmetric Tools



The Altmetric Bookmarklet

The free Bookmarklet lets you instantly retrieve altmetrics data for any article.

To install, go to: http://altmetric.it

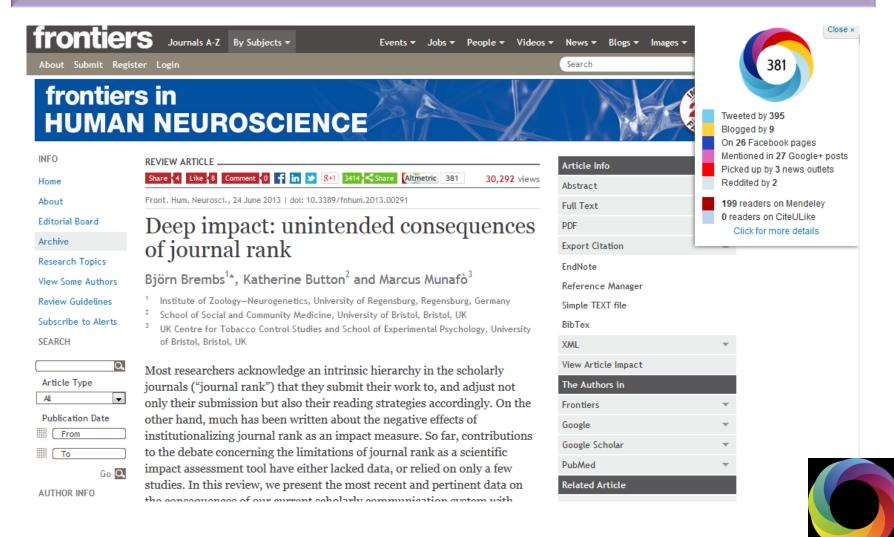




A Comprehensive Comparison of Educational Growth within Four Different Developing Countries between 1990 and 2012



The Altmetric Bookmarklet

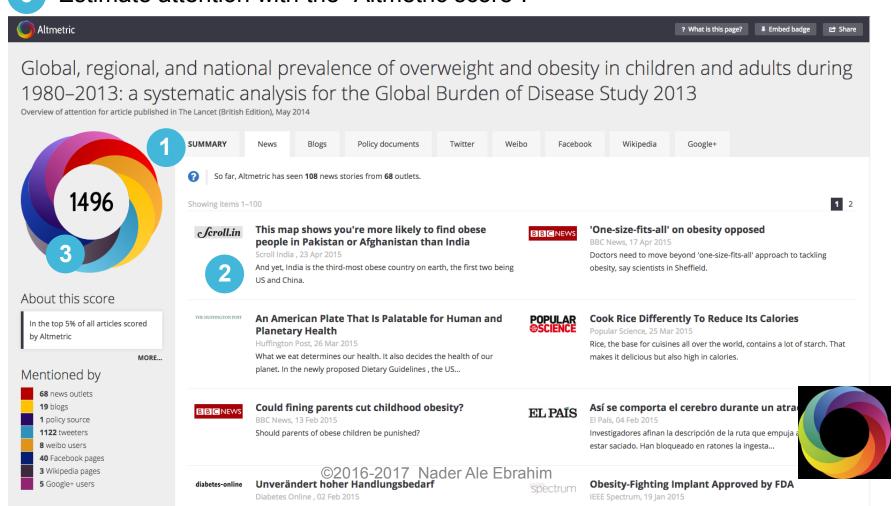


Major trends in knowledge management research: a bibliometric study



Altmetric Details Pages

- 1 See all the conversations and mentions.
- Monitor mentions in the mainstream news.
- 3 Estimate attention with the "Altmetric score".



What is the Altmetric donut?

The Altmetric donut visualizes which are sources discussing an item.

In the Altmetric Explorer, hover the cursor over the donut visualization to see the appropriate legend for an item.

Each source is colour coded:

The Colours of the Donut

- Policy documents
- News
- Blogs
- Twitter
- Post-publication peer-reviews
- Facebook
- Sina Weibo
- Wikipedia

- Google+
- LinkedIn
- Reddit
- Faculty1000
 - Q&A (stack overflow)
- Youtube
- Pinterest



What is the Altmetric score of attention?



The Altmetric score provides an indicator of the attention surrounding a research output.

It represents a weighted approximation of all the attention we've picked up for a research output and is calculated according to three facets:

Volume	Sources	Authors
The score for an article rises as more people mention it.	Each source category contributes a different base amount to the final score.	How often the author of each mention talks about scholarly articles influences the contribution of the mention.

Read more about the score here: <u>altmetric.com/blog/scoreanddonut/</u>



What can the data tell you?



What type of attention is this research receiving?



Where has this article received the most traction?



Which countries are engaging most with the content?



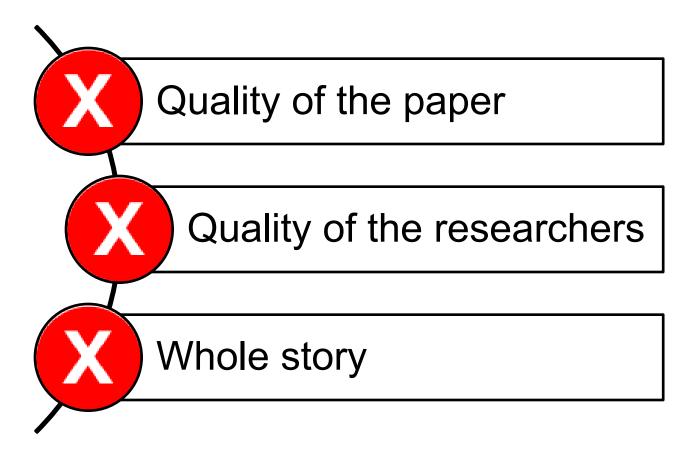
Has this article influenced policy, spurred new research, or engaged a new audience?



Are reactions to this article positive or negative?



Remember that the numbers don't tell you...



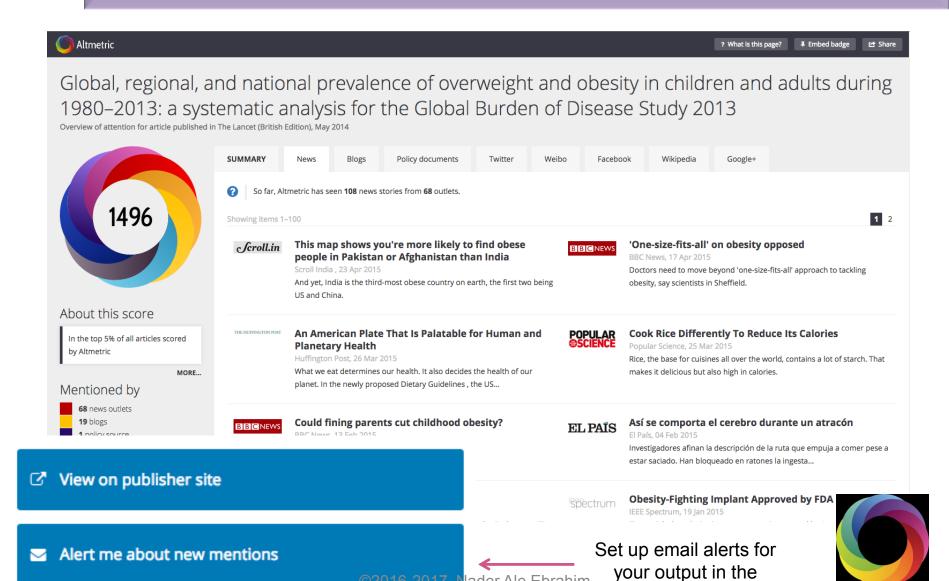


Part 3: Altmetrics Use Cases





Uncover conversations about your research



Summary tab



Discovering policy references

Cochrane Library paper investigated use of probiotics to treat eczema: There is not enough evidence to recommend using probiotics for the treatment of eczema.

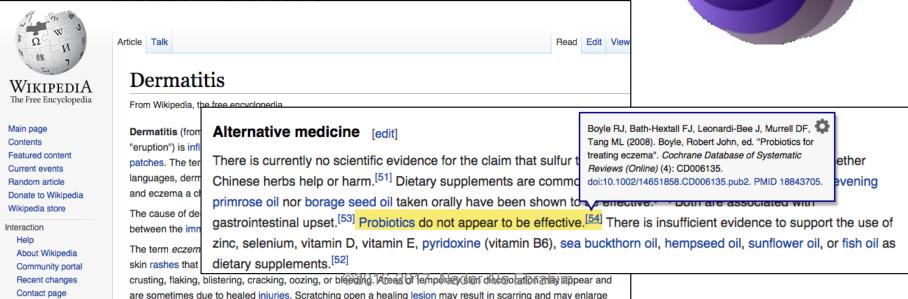


Trusted evidence. Informed decisions. Better health.

The paper has a *relatively* low score of attention but received mentions across policy documents and Wikipedia:

 Royal College of Paediatrics and Child Health -Allergy Care Pathways for Children: core competency for health professionals treating





An electrocorticographic brain interface in an individual with tetraplegia.

Author(s): Wei Wang, Jennifer L. Collinger, Alan D. Degenhart, Elizabeth C. Tyler-Kabara, Andrew B. Schwartz, Daniel W. Moran, Douglas J. Weber, Brian Wodlinger, Ramana K. Vinjamuri, Robin C. Ashmore

PubMedCentral - HTML Views:

PubMedCentral - PDF Views:



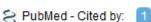
Pitt-EPrint-DScholarship - Downloads:



PLoS - HTML Views:



Mendeley - Readers:



CrossRef - Cited by:

Facebook - Comments:

Twitter - Tweets:

🌉 Google+ - +1s: 🔳

Facebook - Shares:

Facebook - Likes: 3



HOME

ABOUT

FAO

HELP

The University of Pittsburgh has embedded PlumX widgets in their D-Scholarship institutional repository. You can see metrics across their institution at Plu.mX/Pitt. They have also built profiles for researchers across a variety of disciplines. Some sample profiles:

Peter Brusilovsky Rebecca Crowley Michael Pinsky





Puts article in the top 25% of all articles ranked by attention

show more...

Mentioned by



1 Facebook users

1 Google+ users

Readers on



17 Mendeley 2 CiteULike

Track this article

· Get email updates when this article is shared

A Comparison between Two Main Academic Literature Collections: Web of Science and Scopus Databases

Twitter

Facebook

Google+

Score

Demographics

Help

The Altmetric score is one measure of the quality and quantity of online attention that this article has received. You can read about how Altmetric scores are calculated here.

This article scored 3.75

The context below was calculated when this article was last mentioned on 13th May 2013

Compared to all articles in Asian Social Science

So far Altmetric has tracked 29 articles from this journal. They typically receive a little less attention than average, with a mean score of 1.0 vs the global average of 4.2. This article scored the same or higher as 28 of them. It's actually the highest scoring article in this journal that we've seen so far.

All articles of a similar age

Older articles will score higher simply because they've had more time to accumulate mentions. To account for age we can compare this score to the 73,149 tracked articles that were published within six weeks on either side of this one in any journal. This article has done well, scoring higher than 78% of its contemporaries.

All articles

More generally, Altmetric has tracked 1,646,693 articles across all journals so far. Compared to these this article has done well and is in the 79th percentile: it's in the top 25% of all articles ever tracked by Altmetric.

In the

In the

99_{%ile}

Ranks

1st

78_{%ile}

In the

79%ile



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Current Issue

Genome Engineering of *Drosophila* with the CRISPR RNA-Guided Caso Nuclease

Scott J. Gratz*, Alexander M. Cummings*, Jennifer N. Nguyen*, Danielle C. Hamm[§], Laura K. Donohue[†], Melissa M. Harrison^{§,**,1}, Jill Wildonger , and Kate M. O'Connor-Giles, ; ;

+ Author Affiliations

Author Notes

→¹Corresponding authors: 6204B Blochemical Sciences Bidg., 440 Henry Mail, Madison WI 53706. E-mail: mharrison3@wisc.edu; 2204B Blochemical Sciences Bidg., 440 Henry Mall, Madison, WI 53706. E-mail: wildonger@wisc.edu; 227D Robert M. Bock Labs, 1525 Linden Dr., Madison, Wi 53706. E-mail: oconnorgiles@wisc.edu

Abstract

We have adapted a bacterial CRISPR RNA/Cas9 system to precisely engineer the Drosophila genome and report that Cas9-mediated genomic modifications are efficiently transmitted through the germline. This RNA-guided Cas9 system can be rapidly programmed to generate targeted alleles for probing gene function in Drosophila.

homologous recombination

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Notes

Methods, Technology, and Resources

Early Online May 24, 2013, doi: 10.1534/genetics.113.152710 Genetics August 1, 2013 vol. 194 no. 4 1029-1035

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» Abstract

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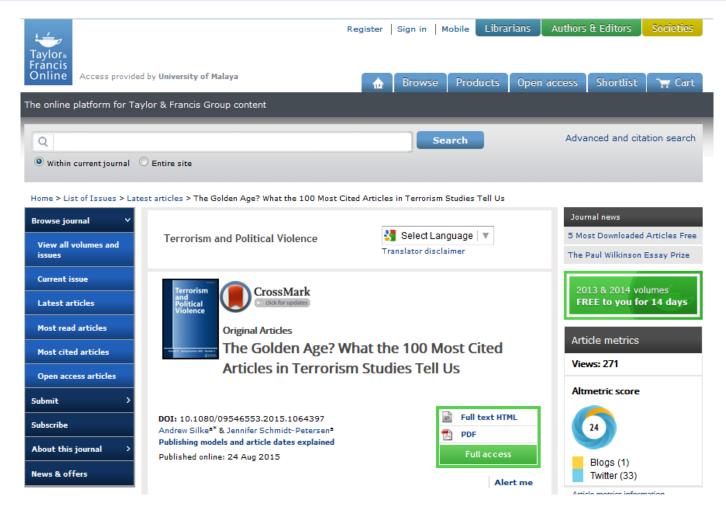




genome engineering

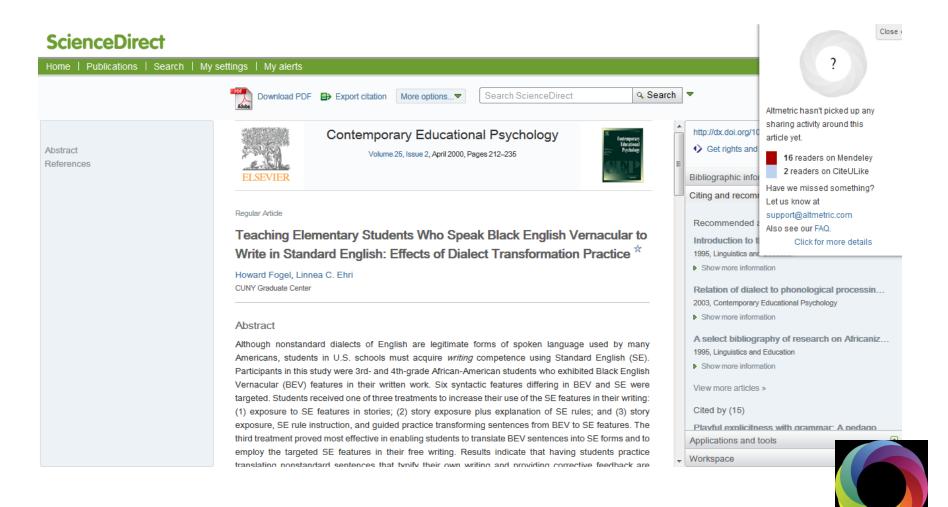
Drosophila

"The Golden Age? What the 100 Most Cited Articles in Terrorism Studies Tell Us"





<u>Teaching Elementary Students Who Speak Black English Vernacular to Write in Standard English: Effects of Dialect Transformation Practice</u>



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Academic Search Engine Spam and Google Scholar's Resilience Against it

Joeran Beel and Bela Gipp

Joeran Beel

Bela Gipp

Volume 13, Issue 3, December 2010

DOI: http://dx.doi.org/10.3998/3336451.0013.305

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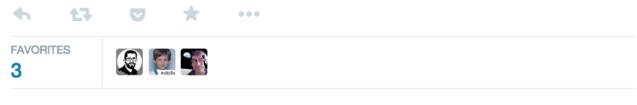




Discover popular new content to read



Neat study found via @altmetric on the use of personas in academic libraries. Go user research! crl.acrl.org/cgi/content/lo... #citylis



4:47 AM - 10 Nov 2014





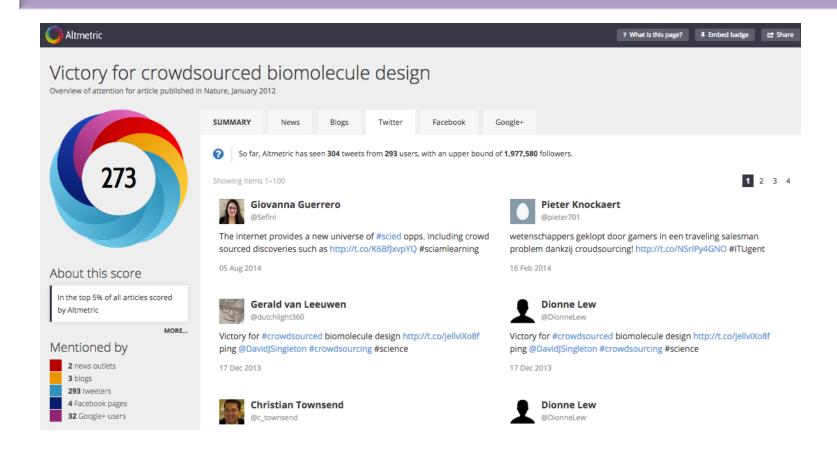
Use in grant applications and funder reporting







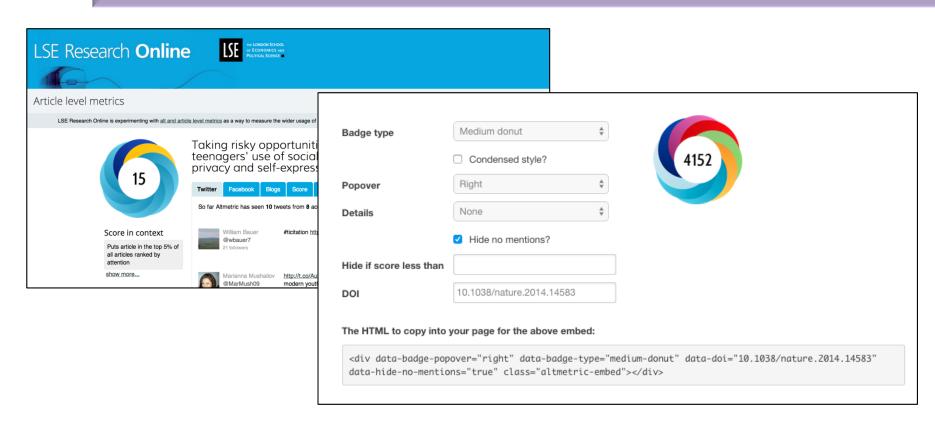
Find potential collaborators

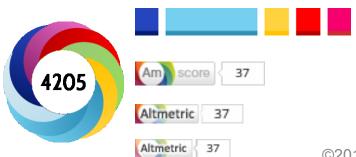






Embed badges on your website or CV







How are institutions using Altmetric?

Researchers

- Track attention to your research immediately
- Uncover (unknown) conversations about your research
- Use in grant applications & funder reporting

Librarians

- Support researchers in all of the above
- Enhance department liaison activities
- Encourage staff to deposit in your research information system

Research Administrators

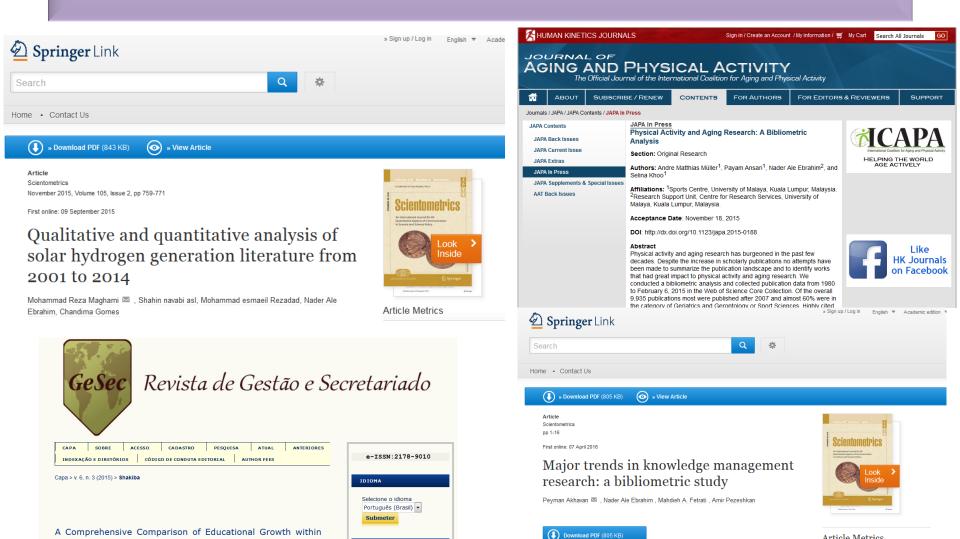
- Integrate data into your existing performance reports
- Identify key impacts across institution (i.e. policy docs)
- Benchmarking (thoughtfully!)

Marketing Comms.

- Identify research to promote
- Evaluate success of promotion activities
- Identify key researchers



My recent publications



Nader A

View Article

CONTEÚDO DA REVISTA

Four Different Developing Countries between 1990 and 2012

Masoud Shakiba, Nader Ale Ebrahim, Mahmoud Danaee, Kaveh Bakhtiyari, Elankovan Sundararajan

Article Metrics

Social Mentions

10



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CENTRE FOR RESEARCH SERVICES
RESEARCH MANAGEMENT & INNOVATION COMPLEX (IPPP)
UNIVERSITY OF MALAYA

Questions?

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www.researcherid.com/rid/C-2414-2009
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