The Changing Landscape of the Publishing Industry

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About me

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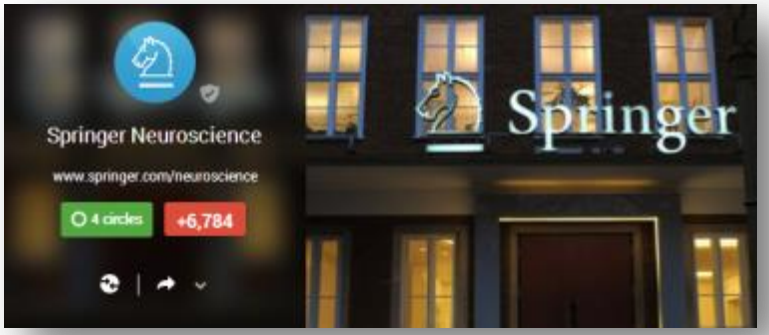

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The need of authors

Main motivations for publishing remain unchanged: furthering the author's career and gaining access to additional funding for future research

But authors become more demanding:

—Are now buyers (in Open Access)

—Want fast and efficient publishing process

—Demand better author experience and services

Springer

Open Access is growing fast …

… but subscription journals grow, too!

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Open Access Publishing, then and now…

2000

BioMed Central
The Open Access Publisher

2014

BioMed Central
The Open Access Publisher

And many more…

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"For me, the Green Road [Open Access] is like coming fourth in a major championship. A great achievement, without doubt, but if you are going for gold, fourth place is the most frustrating place you can achieve. Ultimately, it is only the winner that everyone remembers."

SANDER DEKKER

STATE SECRETARY OF EDUCATION

Open Access market share

Articles in the Web of Science 2013

- **OA has been increasing by 30% pa**
- **Now comprising 13% of the market**

Source: Web of Science; English language articles published in 2013,: N=1,346,405

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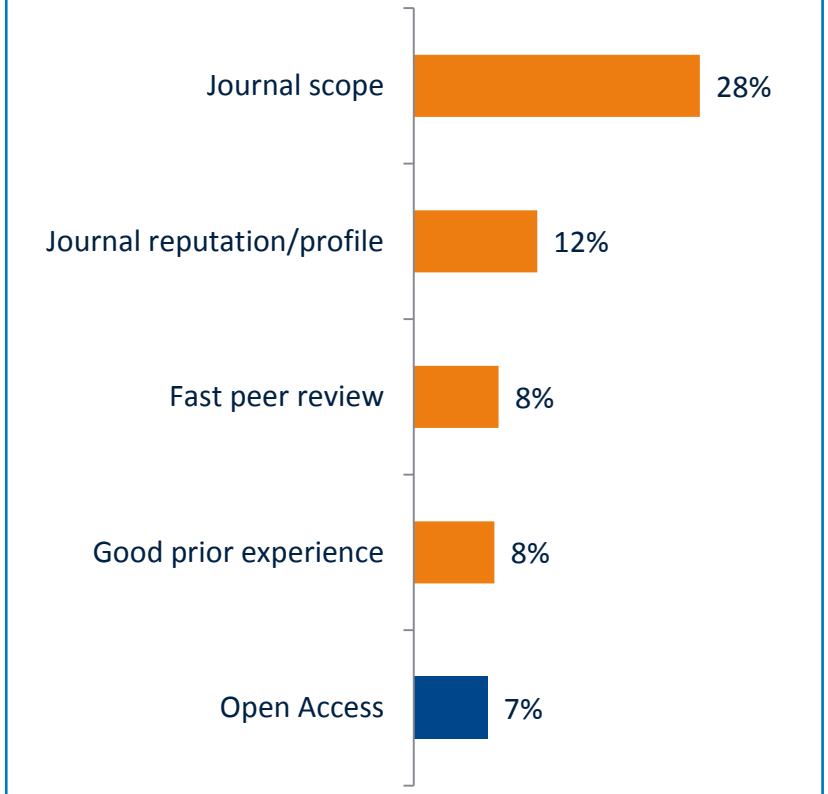
OA not the main decision criterion when selecting a journal

Springer Author Satisfaction Survey

How important are the following factors for you when deciding to submit a manuscript to a particular journal? Top 1 Box (very important; in percent)

BMC Author Satisfaction Survey

Top Reasons why manuscript was submitted (authors are asked to mention the three most important reasons)



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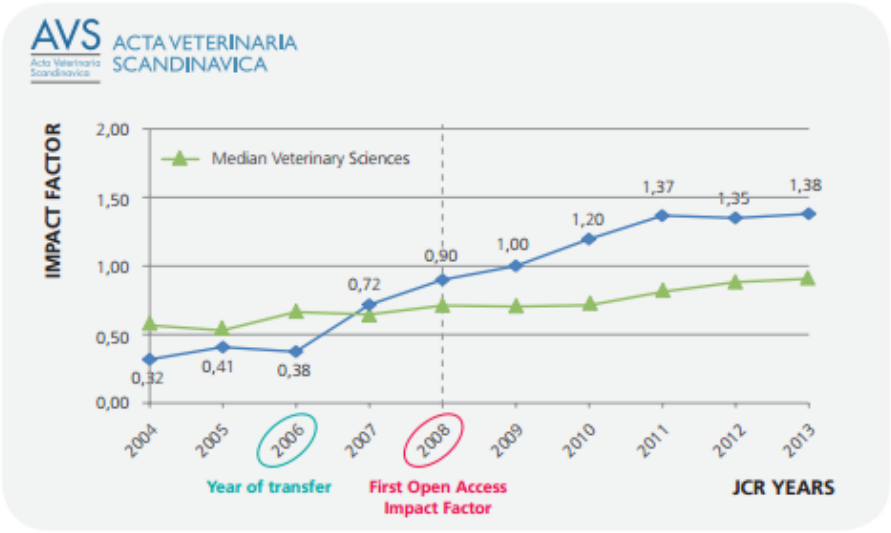
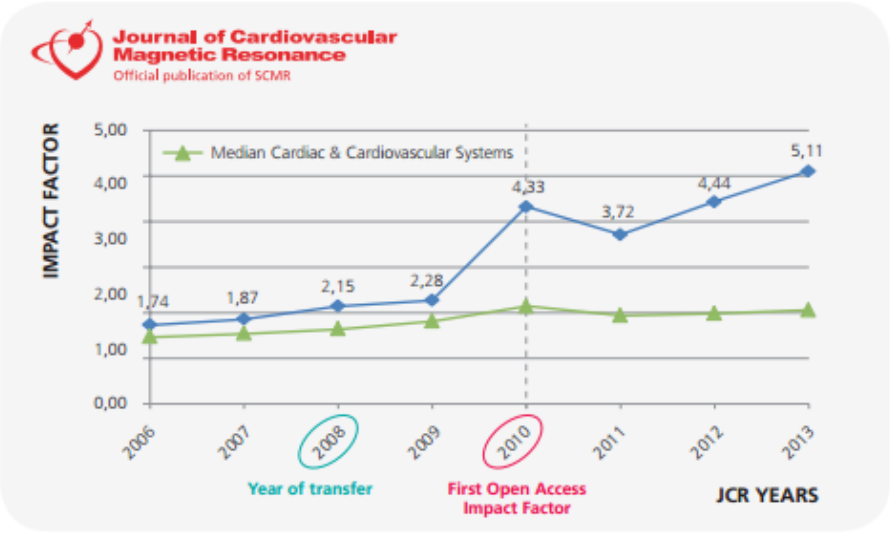
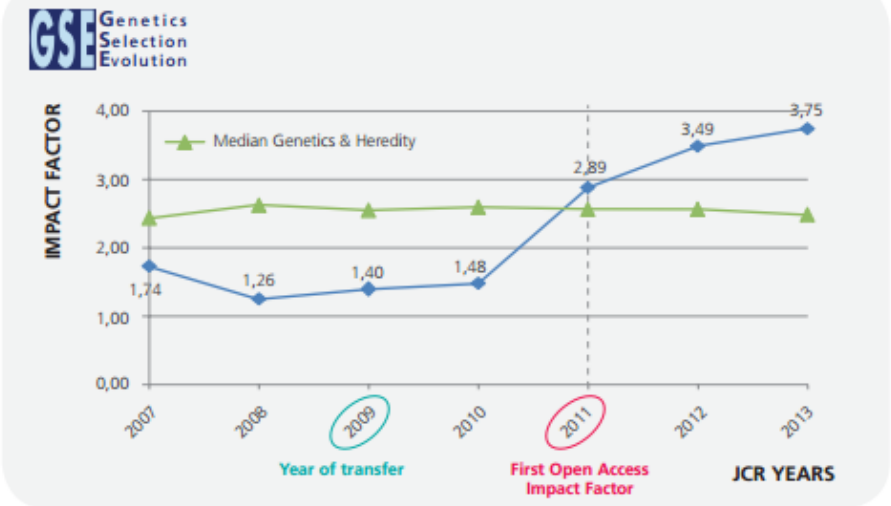
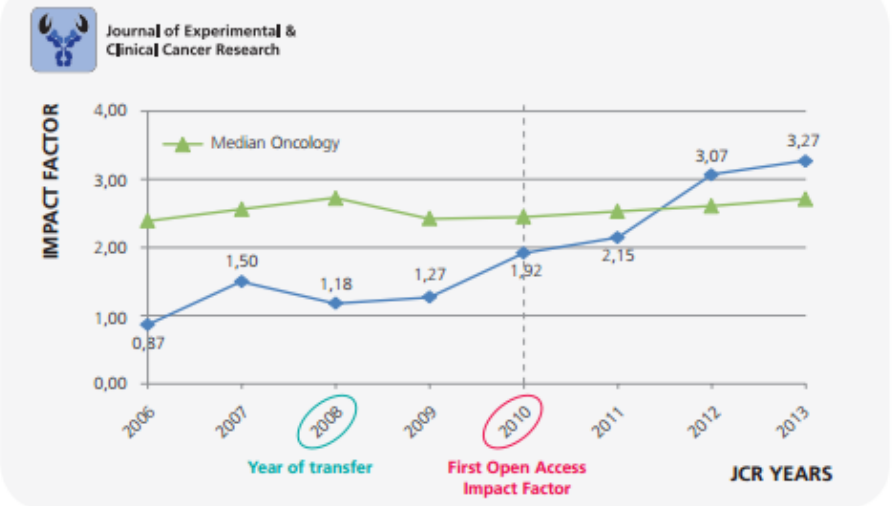
The Impact Factor of journals converting from subscription to OA









http://blogs.biomedcentral.com/bmcblog/wp-content/uploads/sites/7/2014/11/IF_trend_transferjournals_BMC.pdf

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The measurement of ‘quality’

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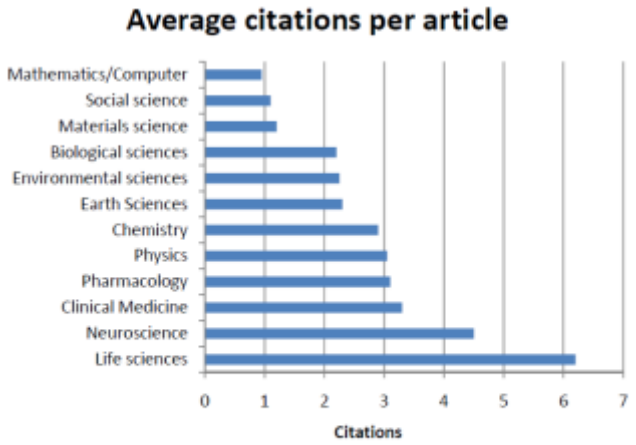
The rise of the mega-journals

- Launched June 2006
- Biology and Medicine
- Rejection rate: 15%
- Jan 2012: Article 30.000 published
- 2010 Impact Factor: 4.351



Average citations per article for different disciplines, showing that citation practices differ markedly. Data from Thomson Scientific [Amin-Mabe 2000].

Chemistry Central Journal

SpringerPlus

AIP Advances

mBio An ASM Access Publication

BIOLOGY OPEN

Physical Review

SAGE Open

nature.com SCIENTIFIC REPORTS

WILEY Open Access

BMC Research Notes

QSCIENCE connect

BMJ open accessible medical research

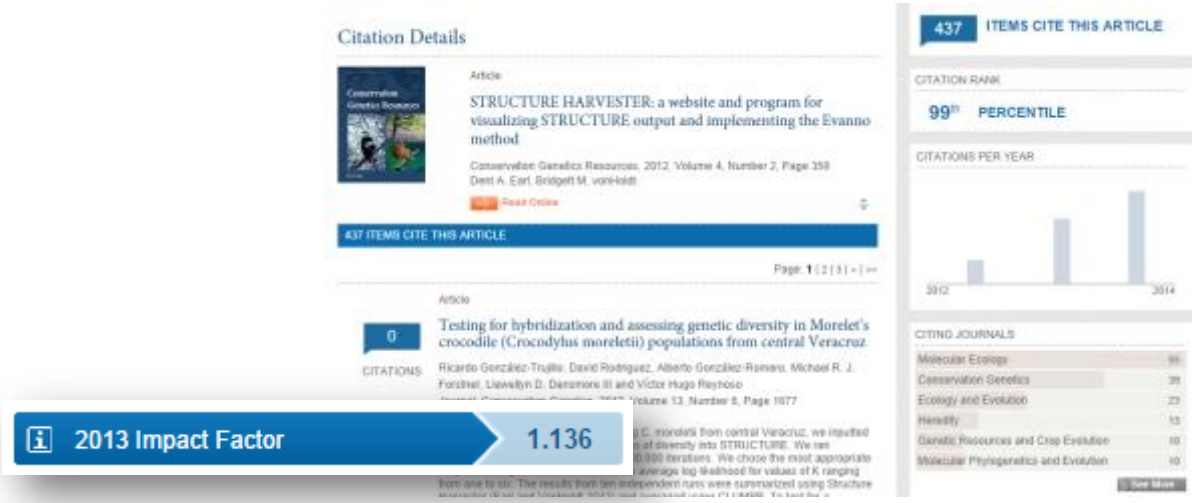
open Biology

G3

Which article made a bigger impact?

- Article published in a top-tier journal with ‘0’ citations after 2 years

- Article published in a lower impact journal with tens of citations



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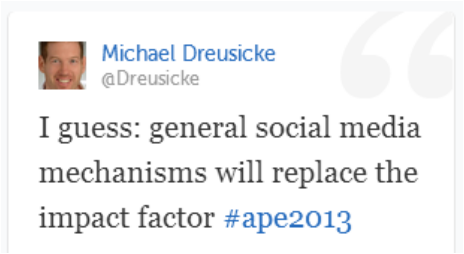
Which article made a bigger impact?

- Article with many citations

- Article widely discussed in the social web

- Article with lots of downloads

- Article discussed on CNN



External forces are driving change

Part 3 Section 3: Impact template and case studies (REF3a/b)

Definition of impact for the REF

140. For the purposes of the REF, impact is defined as an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia (as set out in paragraph 143).

141. Impact **includes**, but is not limited to, an effect on, change or benefit to:

- the activity, attitude, awareness, behaviour, capacity, opportunity, performance, policy, practice, process or understanding
- of an audience, beneficiary, community, constituency, organisation or individuals
- in any geographic location whether locally, regionally, nationally or internationally.

142. Impact **includes** the reduction or prevention of harm, risk, cost or other negative effects.

"The Wellcome Trust OA Policy (…) affirms the principle that it is the intrinsic merit of the work, and not the title of the journal in which the author's work is published, that should be considered in making funding decisions."

wellcome trust

"There is a pressing need to improve the ways in which the output of scientific research is evaluated by funding agencies, academic institutions, and other parties."

San Francisco Declaration on Research Assessment

San Francisco DORA Declaration on Research Assessment

Changed Research Evaluation in:

- UK
- Netherlands
- Australia

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Research dissemination channels are changing rapidly to accommodate the increasing volume of scholarly literature

Article Usage	**Scholarly Citation**	Non-scholarly Citation
Blogs Patents	Social Media	News Policy documents

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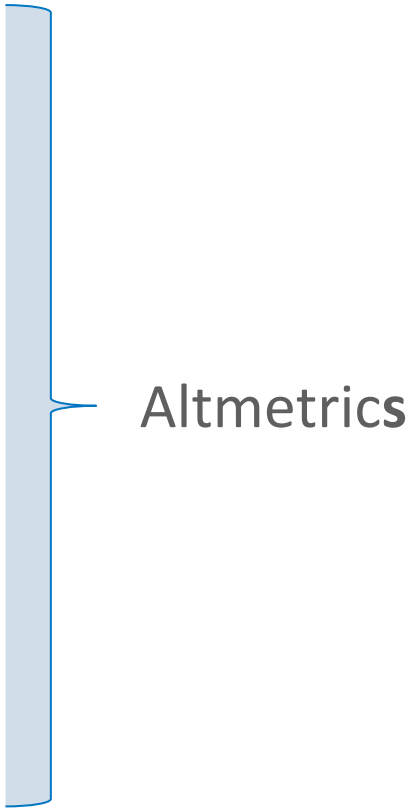
Article-level Metrics

- Scholarly citations
- Downloads
- Non-scholarly citation
  - News coverage
  - Twitter, Facebook, Google+
  - Blogs, Wikipedia
  - Policy documents
- Post-publication recommendations
  - Faculty of 1000
  - PubPeer, Pubmed Commons, Publon
  - Mendeley, ResearchGate, Academia.edu, Papers



Altmetrics: meaning?

- Altmetrics are “representing very different things”

(Lin & Fenner, 2013)

- unclear what exactly they measure:
  - scientific impact
  - social impact
  - “buzz”

Lin, J. & Fenner, M. (2013). Altmetrics in evolution: Defining and redefining the ontology of article-level metrics. *Information Standards Quarterly*, 25(2), 20-26.

Policy documents

World Health Organization (WHO)

"WHO policy on collaborative TB/HIV activities: guidelines for national programmes and other stakeholders"

Intergovernmental Panel on Climate Change (IPCC)

"Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation"

National Institute for Health and Care Excellence (NICE)

"Delivering Accident Prevention at local level in the new public health system: Road safety policy and links to wider objectives"

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Article authors like it

65%

felt the metrics were useful

77%

agreed or strongly agreed that altmetrics enhanced the value of the journal article

50%

agreed they were more likely to submit a paper to a journal that supports altmetrics

Source: Web poll from Wiley's alternative metrics pilot, 2014

http://exchanges.wiley.com/blog/2014/03/19/wiley-introduces-altmetrics-to-its-open-access-journals/

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As do institutional users

Librarians

★ I want to help researchers track the attention paid to their articles.

★ I want to add value to my institutional repository.

Research administrators

★ I want to monitor & report on uptake, usage, and impact of publications by department.

★ I want to comply with funder and governmental mandates.

Communications / PR team

★ I want to share our institution's success stories.

★ I want to maximise the reach of our institution's research.

Researchers

★ I want to find indicators of impact for my CV and funding applications.

★ I want to make informed decisions on future publishing choices.

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Current use of altmetrics at Wellcome

Engagement/Influence beyond citations

OPEN ACCESS

5,079	7	91
VIEWS	SAVES	SHARES

POLICY FORUM

Industry Use of Evidence to Influence Alcohol Policy: A Case Study of Submissions to the 2008 Scottish Government Consultation

Jim McCambridge, Ben Hawkins, Chris Holden

Article | About the Authors | Metrics | Comments | Related Content

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Summary Points

- We examine how research evidence is used in alcohol industry submissions made to a Scottish Government consultation in 2008 to advocate policies in line with their commercial interests.
- Industry actors consistently oppose the approaches found in research to be most likely to be effective at a population level without actually engaging with the research literature in any depth.

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Engagement/Influence beyond citations

C_Stihler_MEP @peterricev2 now commenting on today's article exposing tactics of alcohol industry. Link beneath http://t.co/88r2Wdje9K
Apr 24, 2013

MEP

bermaninstitute #PLOSMedicine: Industry Use of Evidence to Influence Alcohol Policy: Case Study of Submissions to 2008 Scottish Govt http://t.co/iwoxOupWLp
Apr 24, 2013

Centre for Bioethics

RTaylor_MEP #LSHTM publishes article suggesting #alcohol industry submissions on #Scottish alcohol policy are misleading: http://t.co/zEsYTFQwJ4
Apr 24, 2013

MEP

MaroeskaRovers "@veitchemma: Alcohol industry influence on policy. http://t.co/4dB7RuYhkf @plosmedicine" As expected comparable to tobacco industry.
Apr 24, 2013

Professor of EBM

veitchemma Alcohol industry influence on policy: misrepresented strong evidence and promoted weak evidence. http://t.co/WwSzV5MMLw @plosmedicine
Apr 24, 2013

Journal editor

andy_rowell Big Alcohol, Bad Habits: RT@PLOSMedicine: Drinks industry attempted to influence Scottish Government's alcohol policy http://t.co/nxbAv9DMks
Apr 24, 2013

Health journalist

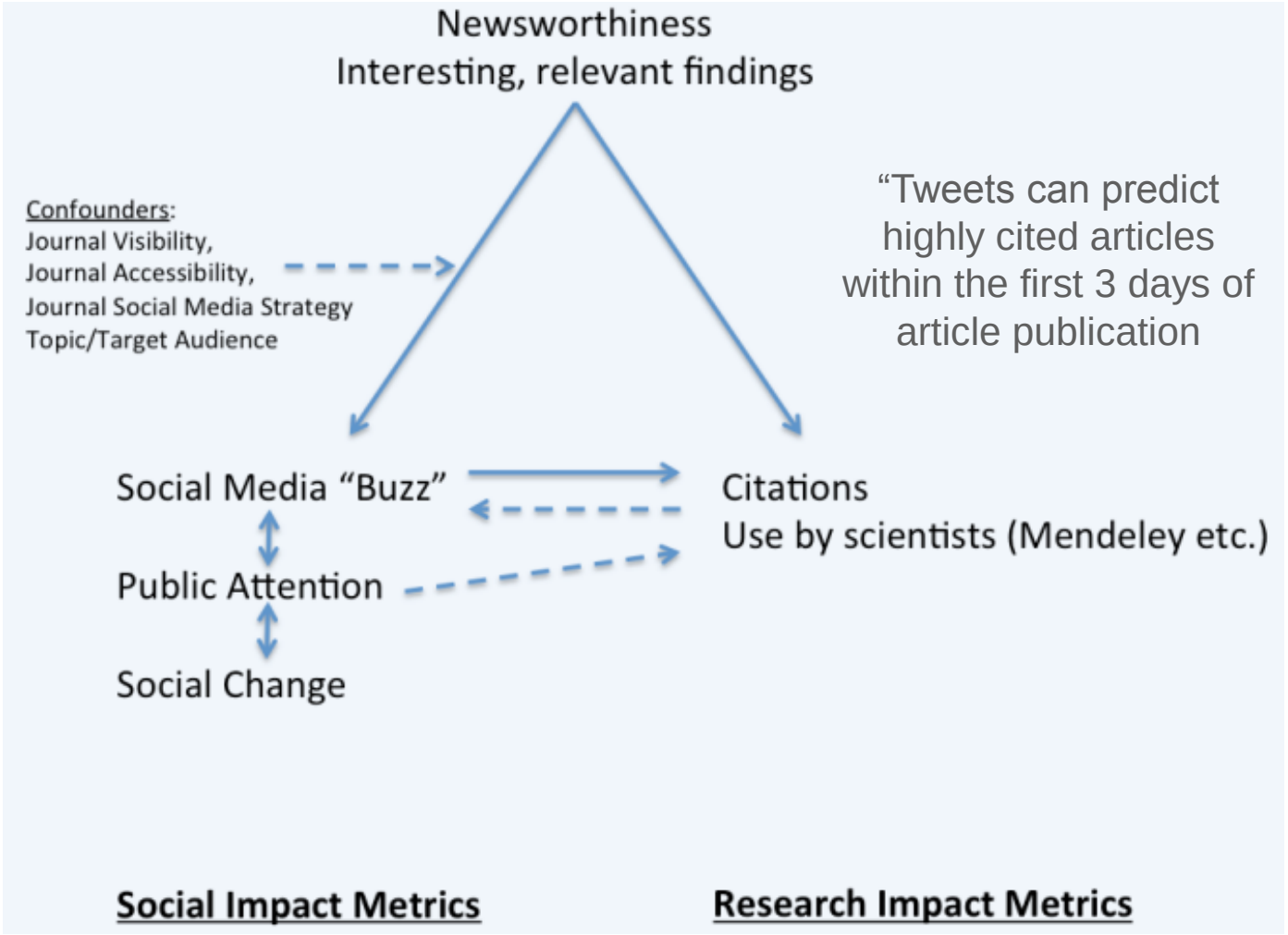
IOGTInt RT @SCPHRP: MT @PLOSMedicine Drinks industry attempted to influence Scottish Government's alcohol policy http://t.co/CSFKU1wkhW #bigalcohol
Jun 3, 2013

NGO

SojiAdeyi Shaken and stirred. @PLOSMedicine: Drinks industry attempted to influence Scottish Government's #alcohol policy http://t.co/na8QSdLix3"
Apr 24, 2013

Health, Population & Nutrition @ The World Bank

Scholarly vs non-scholarly citations



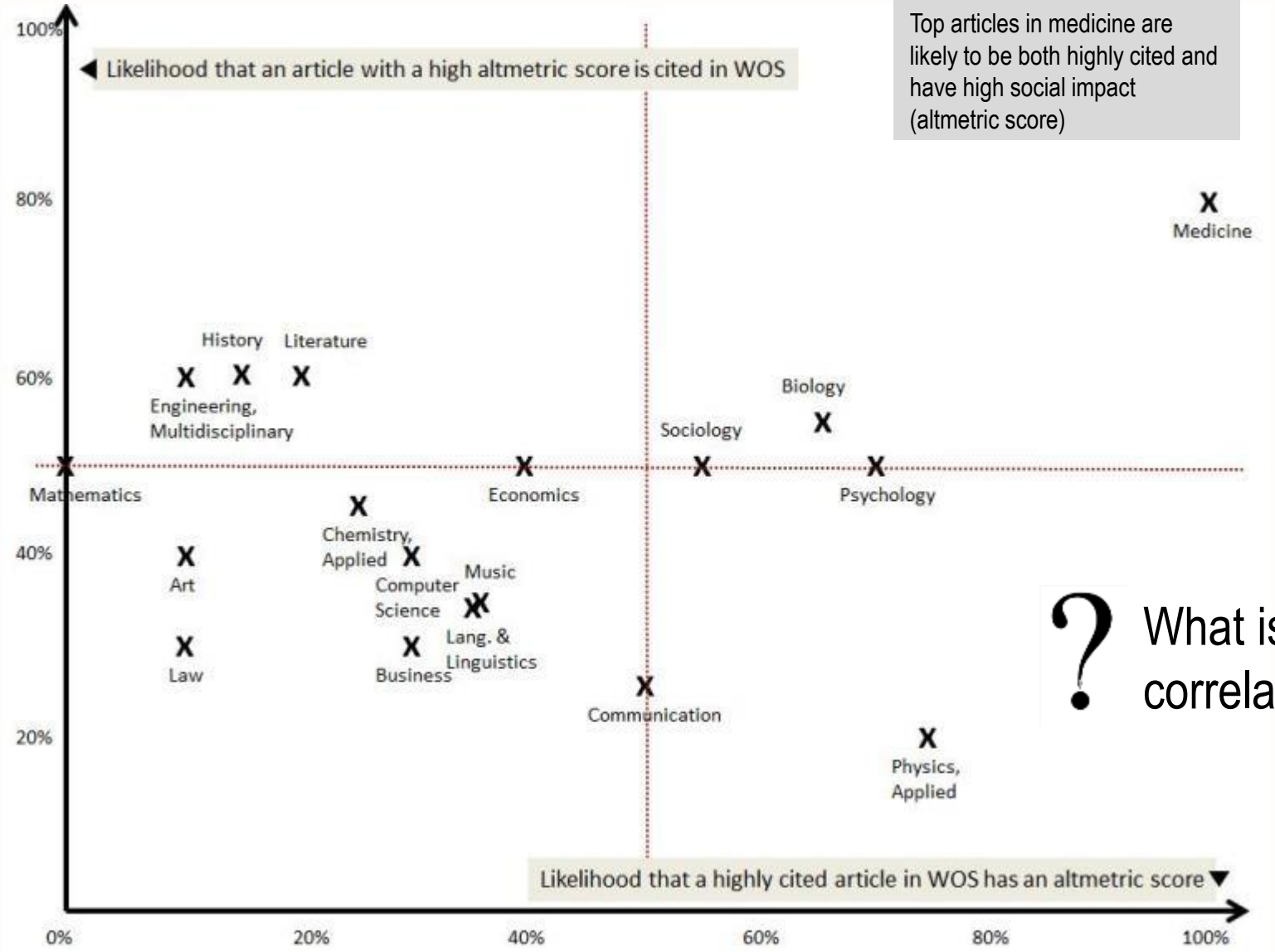
Eysenbach G Can Tweets Predict Citations? Metrics of Social Impact Based on Twitter and Correlation with Traditional Metrics of Scientific Impact J Med Internet Res 2011;13(4):e123

Data & Methodology

- Top 20 most cited articles published between 2011 to 2013 in Web of Science (WOS) for 18 subject categories
- Top 20 articles from altmetric.com with high altmetric score for 18 subject categories
- Subject categories –

(1) economics;
(2) medicine, general & internal;
(3) mathematics;
(4) sociology;
(5) psychology;
(6) computer science, information systems;
(7) engineering, multidisciplinary;
(8) physics, applied;
(9) chemistry, applied;
(10) biology;
(11) business;
(12) literature;
(13) language and linguistics;
(14) law;
(15) history;
(16) art;
(17) music
(18) communication.

Is there a relationship between altmetrics scores and citation counts for these 18 subject categories?



? What is the correlation?

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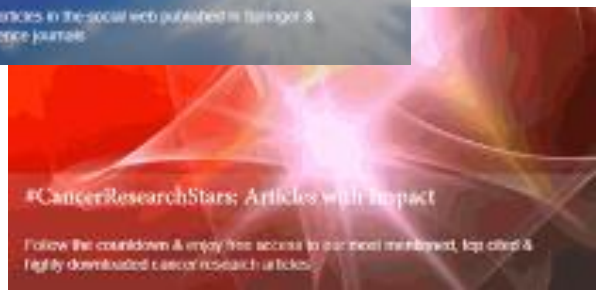
How could they be useful?

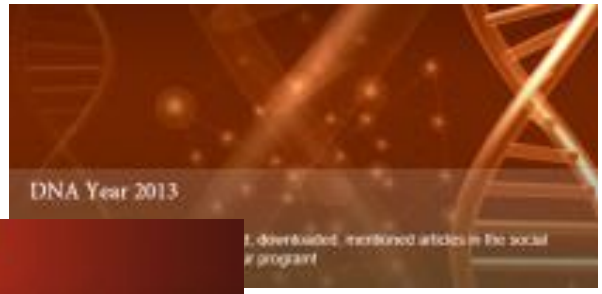
Article level metrics present different ways to look at the scientific community's reaction to a publication, and could help:

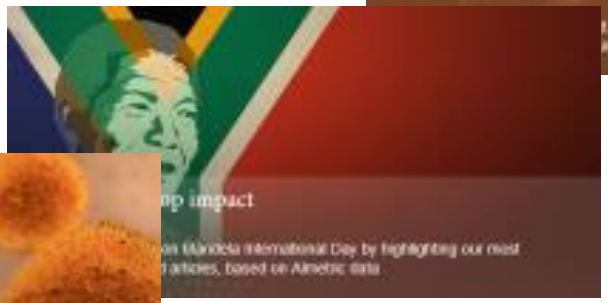
- filter research for relevance, impact & quality
- give an alternative to the Impact Factor in assessing the impact of research
- understand of how research findings are disseminated and discovered
- research into the relationship of new article level metrics with more traditional measures, i.e. citations

Article level metrics at Springer

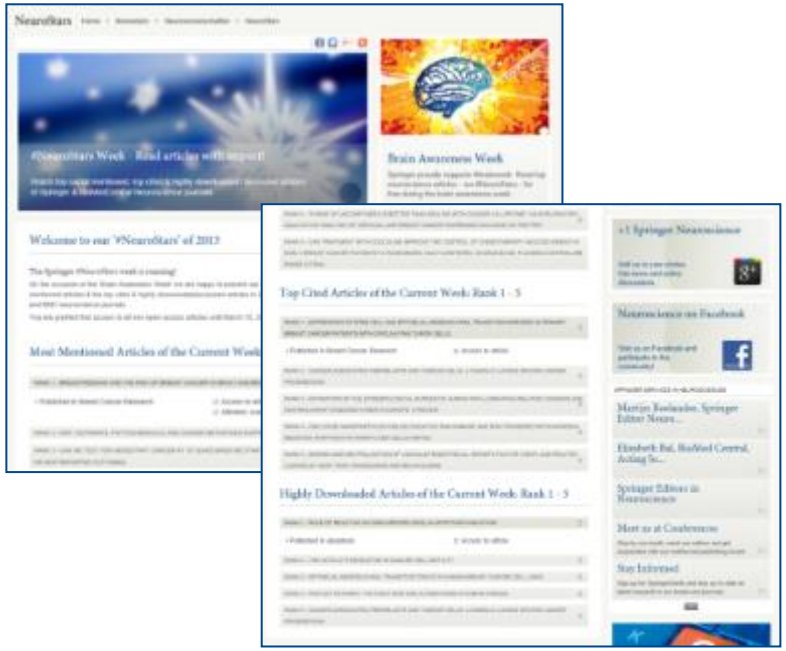
- ‘Translating’ article level metrics data into attractive promotional messages
- Highlighting the top shared, cited, downloaded articles of key journals
- Highlights:
  - NeuroStars
  - Week of Citations







NeuroStars

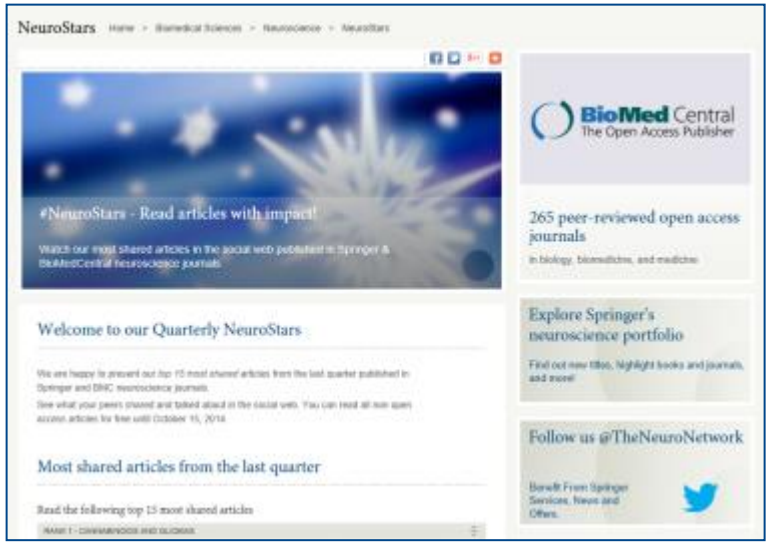


- The first ALM driven promotional campaign from Springer, launched December 2012
- Campaign duration 2014: March 10-16, in time for the Brain Awareness Week (jointly with BioMed Central)
- Article selection: Top 15 shared, top cited, top downloaded articles from all journals in the field

Now available: Quarterly NeuroStars

- A permanent website on springer.com presenting the top shared articles in Neuroscience from Springer and BioMed Central – updated on a quarterly basis

http://www.springer.com/neurostars



Diversity of Citations Metrics

What is the impact of an article?

When assessing the impact of a published research article, it might seem logical to look at the Impact Factor of the journal that you find it in. But as journals and scholars have moved online, and citation indexing has been automated, the wealth of information for citation discovery and analysis has vastly increased.

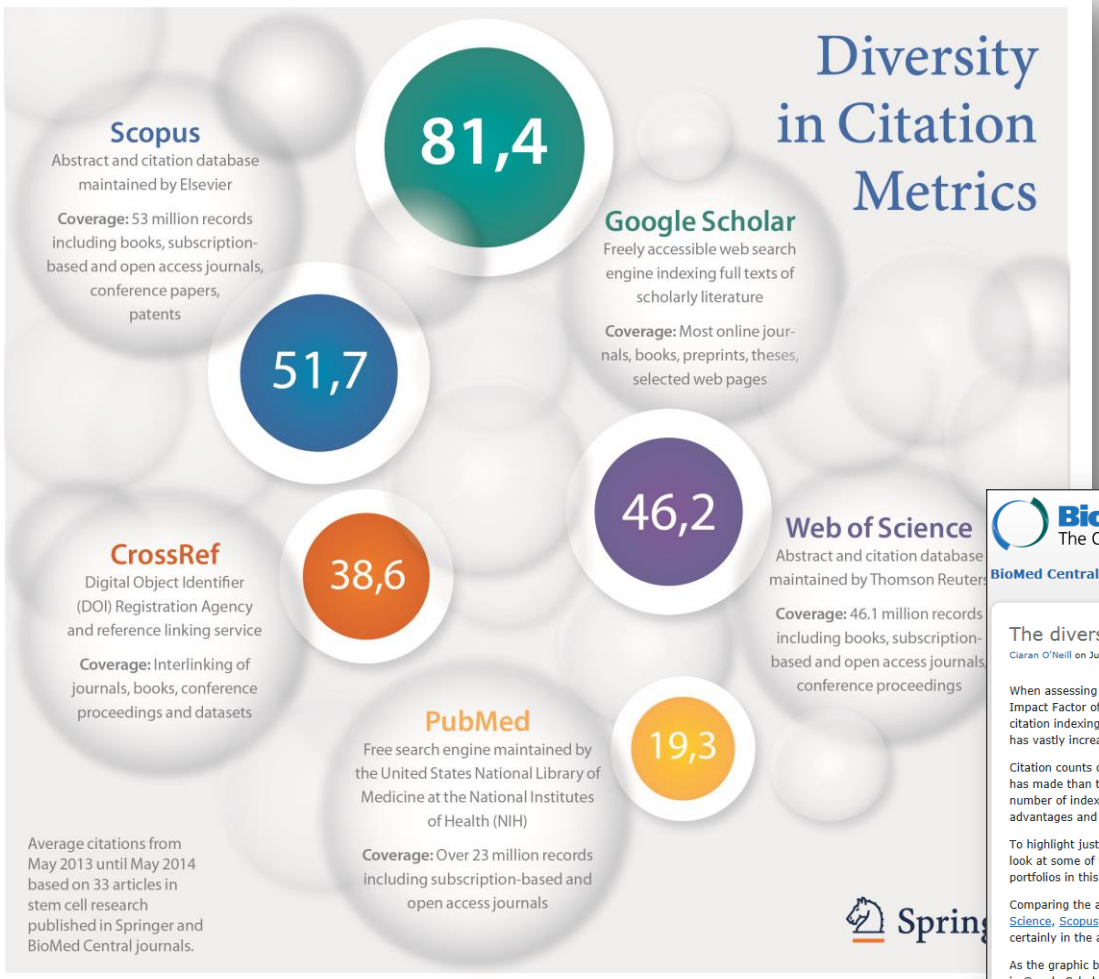
Citation counts can tell a more accurate story about the scholarly impact that an individual article has made than the journal Impact Factor. But where should you look for these counts? There are a number of indexing services tracking and providing information about citations, each with advantages and disadvantages, spanning from bias to discipline-dependence, and limitations of the citation data source.

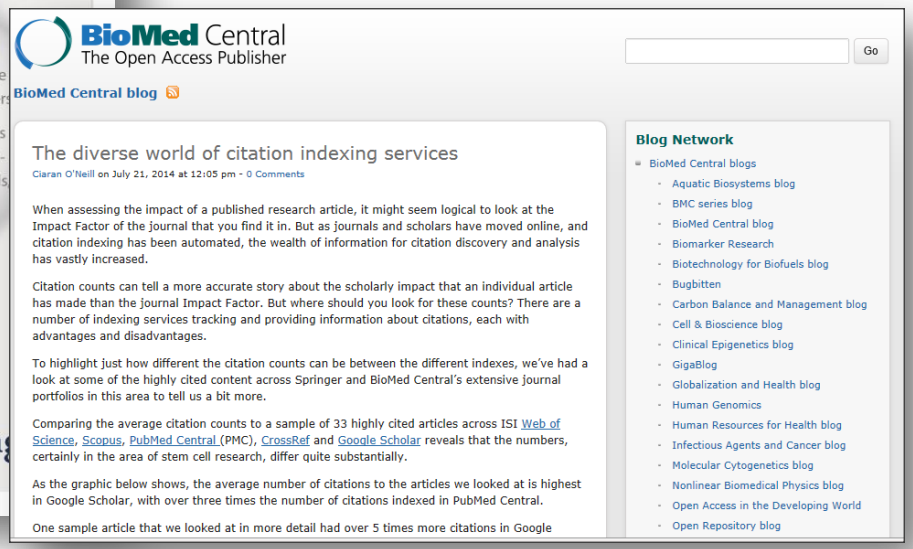
Web of Science® crossref PubMed Google scholar Scopus

An often heard question in the academic realm:

"HOW MANY CITATIONS DO YOU HAVE?"

That depends on the platform! Let's have a look…





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Going forward…

- article-level metrics
- journal-level metrics
- chapter-level metrics
- book-level metrics
- data-level metrics
- person-level metrics
- …-level metrics

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Person-level metrics: Altmetric & ORCiD

Altmetric

0000-0003-0018-4439 Show my profile

Profile for John Maunsell ORCID profile

Editor-in-Chief, The Journal of Neuroscience

ORCID

Published works

2 **Cover videos**
10.1523/JNEUROSCI.2491-13.2013

1 **Insights into cortical mechanisms of behavior from microstimulation experiments**
10.1016/j.pneurobio.2012.01.006

2 **New journal sections**
10.1523/JNEUROSCI.5529-12.2012

14 **Strength of Gamma Rhythm Depends on Normalization**
10.1371/journal.pbio.1001477

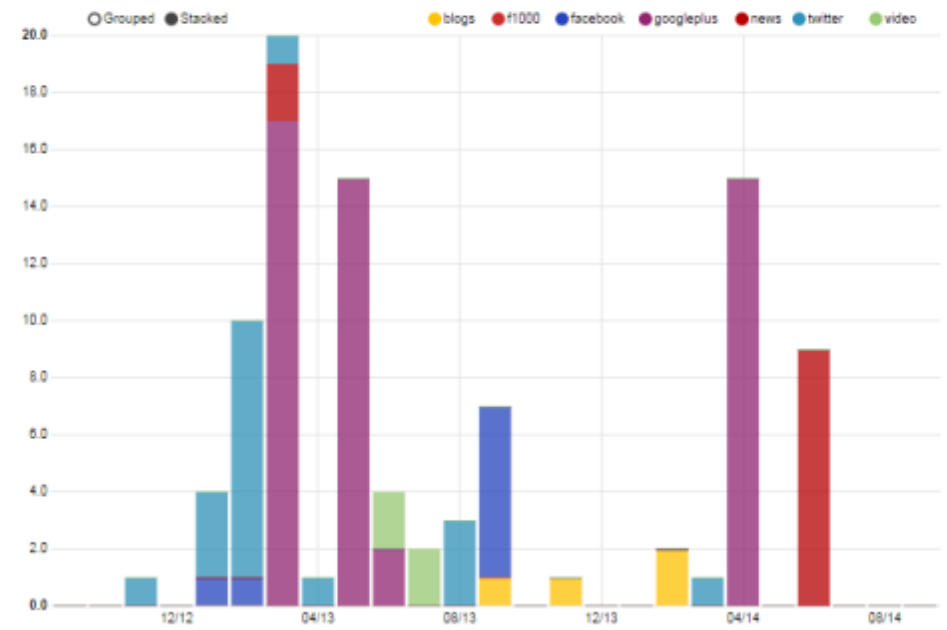
0 **A strong constraint to the joint processing of pairs of cortical signals**
10.1523/JNEUROSCI.2186-12.2012

0 **Potential confounds in estimating trial-to-trial correlations between neuronal response and behavior using choice probabilities**
10.1152/jn.00471.2012

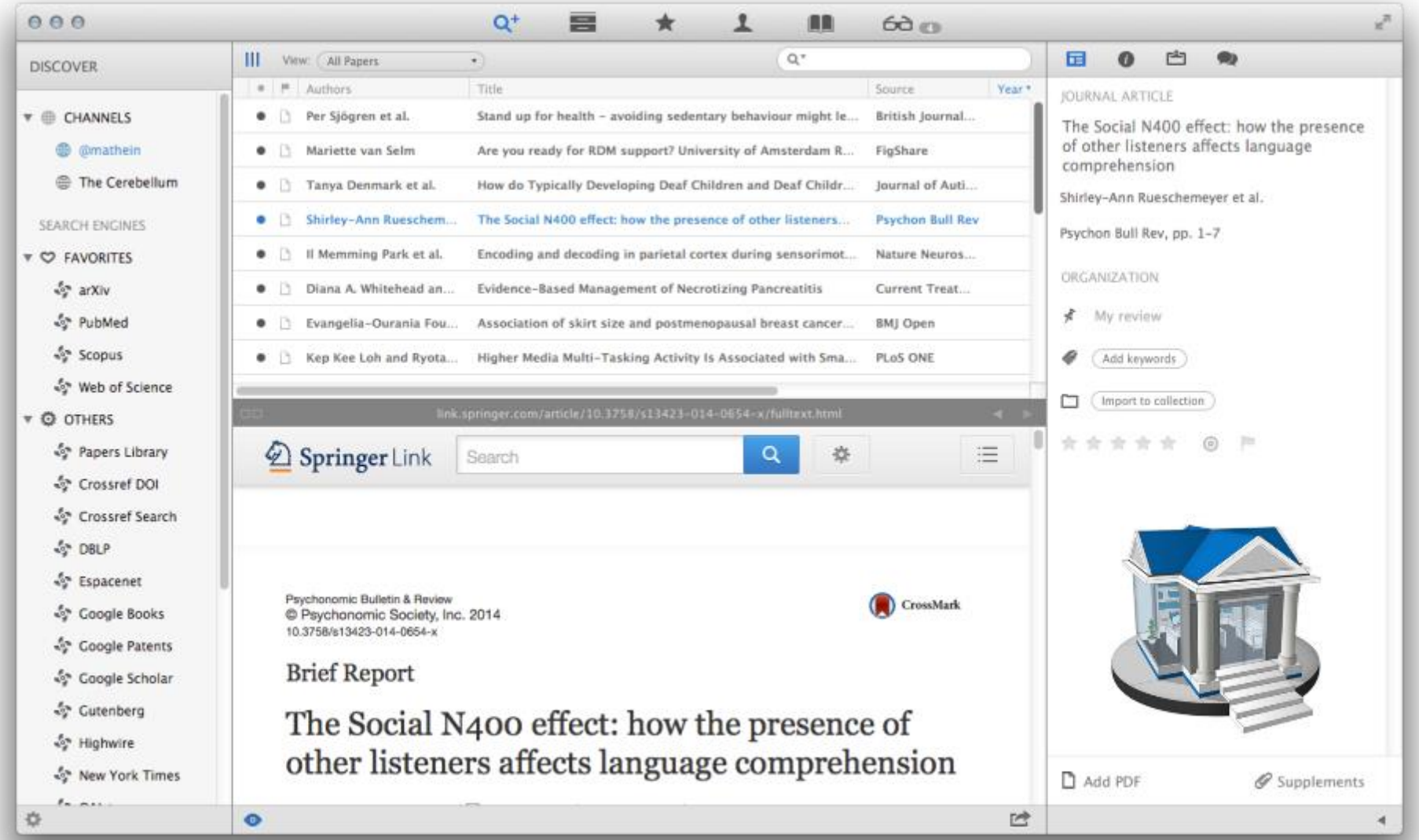
Altmetric stats

BLOGS	F1000	FACEBOOK	GOOGLEPLUS	NEWS
11	13	15	50	11

TWITTER	VIDEO
49	4



http://altmetric-orcid-profiles.herokuapp.com/0000-0003-0018-4439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CHANNELS
@mathein
The Cerebellum
SEARCH ENGINES
FAVORITES
arXiv
PubMed
Scopus
Web of Science
OTHERS
Papers Library
Crossref DOI
Crossref Search
DBLP
Espacenet
Google Books
Google Patents
Google Scholar
Gutenberg
Highwire
New York Times
View: All Papers
Authors
Title
Source
Year
Per Sjögren et al.
Stand up for health – avoiding sedentary behaviour might le...
British Journal...
Mariette van Selm
Are you ready for RDM support? University of Amsterdam R...
FigShare
Tanya Denmark et al.
How do Typically Developing Deaf Children and Deaf Childr...
Journal of Auti...
Shirley-Ann Rueschem...
The Social N400 effect: how the presence of other listeners...
Psychon Bull Rev
Il Memming Park et al.
Encoding and decoding in parietal cortex during sensorimot...
Nature Neuros...
Diana A. Whitehead an...
Evidence-Based Management of Necrotizing Pancreatitis
Current Treat...
Evangelia-Ourania Fou...
Association of skirt size and postmenopausal breast cancer...
BMJ Open
Kep Kee Loh and Ryota...
Higher Media Multi-Tasking Activity Is Associated with Sma...
PLoS ONE
link.springer.com/article/10.3758/s13423-014-0654-x/fulltext.html
SpringerLink
Search
Psychonomic Bulletin & Review
© Psychonomic Society, Inc. 2014
10.3758/s13423-014-0654-x
CrossMark
Brief Report
The Social N400 effect: how the presence of other listeners affects language comprehension
JOURNAL ARTICLE
The Social N400 effect: how the presence of other listeners affects language comprehension
Shirley-Ann Rueschemeyer et al.
Psychon Bull Rev, pp. 1-7
ORGANIZATION
My review
Add keywords
Import to collection
Add PDF
Supplements

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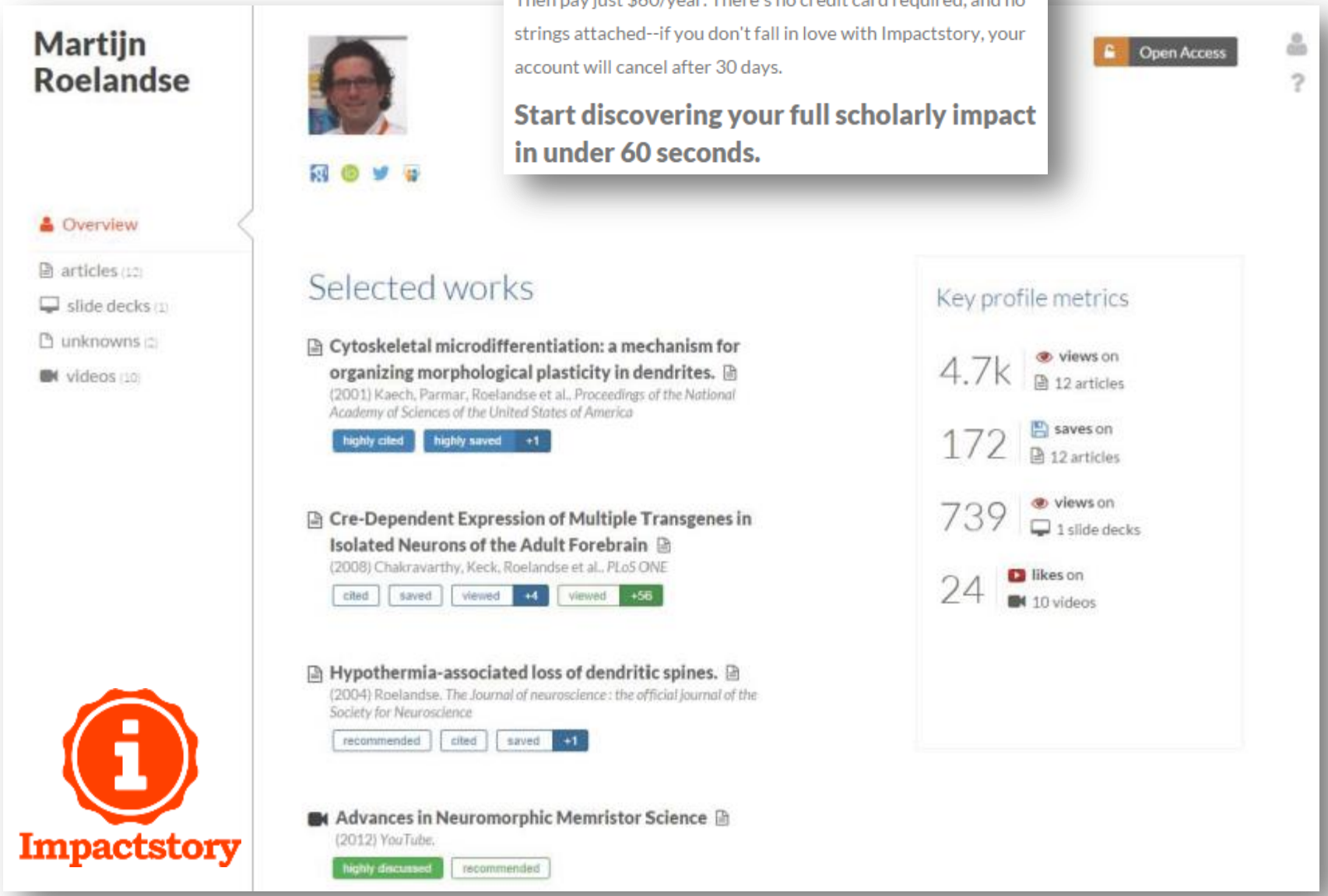
Person-level metrics



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1:AM LONDON 2014

Wellcome Collection, Euston Road
25th—26th September 2014

OVERVIEW | BLOG | SCHEDULE | FUNDING | POSTERS | REGISTRATION | ACCOMMODATION AND TRAVEL | ORGANISING COMMITTEE

Announcing the 1st Altmetrics Conference: London

As scholarly communication evolves, alternative measures of impact and reach are taking an increasingly important role in the research evaluation process. Following a number of constructive workshops over the last few years, we now invite you to join us this September for the 1st Altmetrics Conference: London.

We will be taking a closer look at how authors, readers, funders, publishers and institutions are beginning to integrate altmetrics into their scholarly communication processes — and the challenges that they face along the way.

With a quick overview of recent developments and future plans, we will aim to better understand how and why altmetrics can be of use to the community — and draw further inspiration from those outside academia.

Additionally, the scope of the workshop will expand to examine online behaviour at a more granular level; how and why do people share and discuss scholarly content online, and what is the impact of this?

Tweets Follow

1AM London @1AMconf 27 Sep
Up next: Outside the article - tracking other research outputs. #1amconf blog write up by @jwrhardcastle: ow.ly/C1shy
Expand

1AM London @1AMconf 27 Sep
Lessons learnt: a look back at the #1amconf session with @cameronneylon and Geoff Bilder: ow.ly/C1fbj #altmetrics
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https://www.youtube.com/user/altmetricsconference

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Questions?