

Measuring impact at the article level

why, how and what

# Why?

Scientists talk about papers online

- **They really do. Approximately 750.000 articles shared each year and at least 1,3 million articles saved to online reference managers.**

# Let's take a look!



## Mentioned by

1 Facebook users

## Readers on

0 Mendeley

0 CiteULike

0 Connotea

## Actions

Open report in new tab

Fetch as JSON

Facebook



Glória Brandão

Revista do Instituto de Medicina Tropical de São Paulo - Chagas' disease in the Brazilian Amazon: II

[http://www.scielo.br/scielo.php?pid=S0036-46651995000200003&script=sci\\_arttext ..](http://www.scielo.br/scielo.php?pid=S0036-46651995000200003&script=sci_arttext..)

20 Oct 12



Altmetric

# Why?

Scientists share links to articles  
(measured from July 2011 – July 2012)

**468 000 tweeters**

**62 358 shared more than 1 paper**

**6933 shared more than 10 papers**

**....and growing**

# How do we know?

By chance.

- **Traditional metrics do not capture the opinion people have of an article.**
- **Impact means different things for different people.**

# Traditional Metrics

Citation counts

- **Alt = Alternative**
- **Flexibility**
- **Sources of data**

# Different things for different people

Institution, funder and publisher

- **Which questions do they have?**
- **Definition of an article**
- **Relevant data and indicators**



facebook



reddit



social media



reference managers

MSM



Connotea



citeulike

BibSonomy ::



(& more)





# The Promise of Altmetrics

We are not there yet.

- **More experimentation, more research**
- **Useful metrics**
- **Predicting success?**



# So what do we do?

We aggregate, identify, disambiguate and expose

- **Raw Data**
- **Articles discussed**
- **Identifiers (DOI, PMID, PII, handle, arxiv ID)**
- **API**



# A Concrete Example:

University of Sao Paulo excels in Life Sciences

[http://altmetric.com/explorer.php#current\\_timeframe=3m&filter%5Bpubmed\\_query%5D=%22University+of+Sao+Paulo%22&filter%5Border\\_by%5D=score&display\\_type=tiled](http://altmetric.com/explorer.php#current_timeframe=3m&filter%5Bpubmed_query%5D=%22University+of+Sao+Paulo%22&filter%5Border_by%5D=score&display_type=tiled)



More colours around a score mean more varied sources of attention.

Each article has a score that represents both how much attention it has received and the quality of that attention.



Click on a score to see a detailed breakdown of who mentioned the paper and what they said



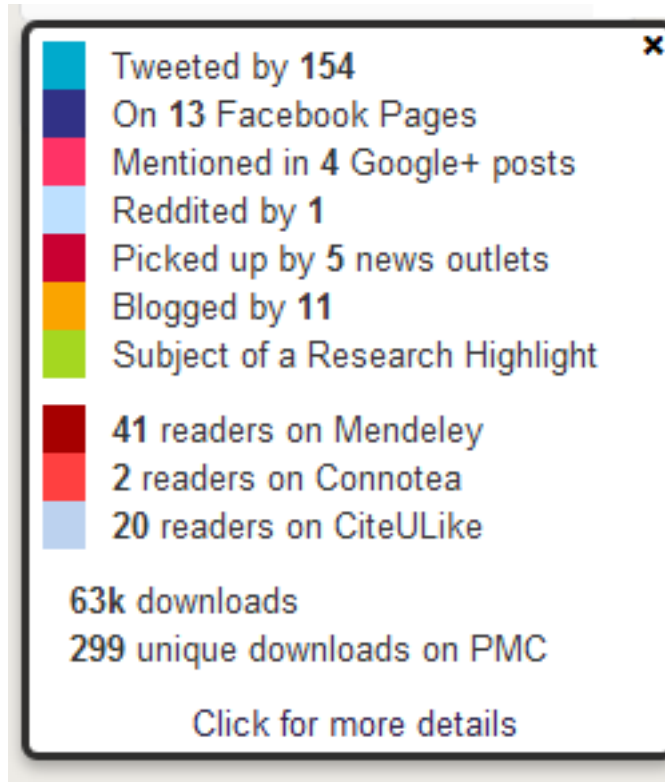
Saudi Universities Offer Cash in Exchange for Academic Prestige Science

Alexandra Witze @alexwitze  
 #Fukushima disaster released far more radiation than govt said, new study claims. By @gbrumfiel <http://t.co/zRynQJBr> #nuclear 25 Oct 11

みっちコ @mits\_k3\_panda  
 RT @r\_isotope: 新着論文 <http://t.co/Df34tgVl> あり。Xe133の大気放出は1.7e19Bqでチェルノブの半分。ネイチャー誌に記事 <http://t.co/gH8dc> 掲載。



# Explaining our donut



# The Altmetric Explorer

Altmetric Explorer

Reports dashboard

Explore the data

Feedback & Support

Logged in as euan

## Articles published by BioMedCentral mentioned at least once in the past 1w

### Pick new articles:

#### ▼ Mentioned in the past

- 1 day
- 3 days
- 1 week
- 1 month
- 3 months
- 6 months
- 1 year
- Any time

#### ► With identifiers

#### ▼ From publisher

- BioMedCentral
- Or enter a DOI prefix:

#### ► In Medline journal(s)

#### ► With Medline subject

#### ► Mentioned at any time on

#### ► Order by

Show matching articles

Articles 529

Activity 1,186

Journals 76

Export to Excel

Save these filters as a report

Standard

Tiled

Condensed



Spectrum of gluten-related disorders: consensus on new nomenclature and classification  
**BMC Medicine**



Does the world need a scientific society for research on how to improve healthcare?  
**Implementation Science**



Is there a role for carbohydrate restriction in the treatment and prevention of cancer?  
**Nutrition & Metabolism**



All your base: a fast and accurate probabilistic approach to base calling  
**Genome Biology**



Rest versus exercise as treatment for patients with low back pain and Modic changes. A randomised controlled clinical trial.  
**BMC Medicine**



A 'Snip' in time: what is the best age to circumcise?  
**BMC Pediatrics**



Mindfulness based cognitive therapy improves frontal control in bipolar disorder: a pilot EEG study  
**BMC Psychiatry**



Yabi: An online research environment for Grid, High Performance and Cloud computing  
**Source Code for Biology and Medicine**



Colon cancer risk and different HRT formulations: a case-control study.  
**BMC Cancer**



Chromatin structure changes around satellite repeats on the Schistosoma mansoni female sex chromosome suggest a possible mechanism for sex chromosome emergence  
**Genome Biology**



The draft genome and transcriptome of Cannabis sativa  
**Genome Biology**



Extremely short duration high intensity interval training substantially improves insulin action in young healthy males  
**BMC Endocrine Disorders**



Influence of Tertiary paleoenvironmental changes on the diversification of South



The wider determinants of inequalities in health: a decomposition analysis



Can rights stop the wrongs? Exploring the connections between framings of sex workers

# The Altmetric Explorer

## Articles mentioned at least once in the past 1d

### Pick new articles:

Articles **4,647**

Activity **14,156**

Journals **1,696**

People **0**

Debug

Export to Excel

Save these filters as a report

API

#### Mentioned in the past

- 1 day
- 3 days
- 1 week
- 1 month
- 3 months
- 6 months
- 1 year
- Any time

With keyword

In these journals

With identifiers

From publisher

With Medline subjects

Matching PubMed query

Funded by

Mentioned at any time on

Order by

[reset filters and search terms](#)

Show matching articles

Showing all types

from past 1d

from any time

- Show blog posts
- Show tweets
- Show news stories
- Show Facebook posts
- Show Google+ posts
- Show F1000 reviews
- Show Reddit stories
- Show all types

TWEET



ROMA  
marktonderzoek  
@roma\_research

Are happy managers more productive? <http://t.co/ek01mDyl> Interesting rese #HRIZON

10 The impact of happiness on managers' contextual and task performance

TWEET



ほおずき山  
@hoozukiyama

タバコの話: 喫煙者の遺伝子変異率は非喫煙者の10倍以上の頻度だそうですが、患者の全ゲノム研究ですが、タバコの悪影響が、ここまで具体的に赤裸々になったのは、初めてではないでしょうか。衝撃!

505 Genomic Landscape of Non-Small Cell Lung Cancer in Smokers and Never-Smokers Cell

TWEET



Sheena Jeffers  
@sheenajeffers

RT @ADTAorg: Dance/movement therapy effective in short & long term to improve quality of life. <http://t.co/yCkgP5FW> Arts in Psychotherapy

9 The efficacy of dance movement therapy group on improvement of quality of life: A randomized controlled trial The Arts in Psychotherapy

TWEET



TheActiveSynergist  
@activesynergist

@runnersworld Here is an interesting study on the effects of static stretching before training #running #10 Tips <http://t.co/FSsoTpmR>

19 Effects of static stretching on energy cost and running endurance performance. The Journal of Strength Hornbuckle, Lyndsey M.;Kim, Jeong-Su;Ugrinowitsch, Carlos;Lee, Sang-Rok;Zourdos, Michael C;Sommer, Brian;Panton, Lynn B

TWEET



Nicki Whitehouse  
@fossilbeetle

Super cool paper: Interglacial insects and their possible survival in Greenland during the last glacial stage <http://t.co/vb0HXBZN>

Articles	Score			Activity in past 1y	Journal
	3m Total	Total	Median		
1,227	69k	100k	13.2		<b>Nature</b> Add to filters
1,262	15k	25k	9		<b>arXiv</b> Add to filters
702	13k	22k	10		<b>Science</b> Add to filters
823	12k	19k	8		<b>PLoS ONE</b> Add to filters
347	10k	17k	12.75		<b>New England Journal of Medicine</b> Add to filters
520	10k	19k	8.86		<b>Proceedings of the National Academy of Sciences of the United States of America</b> Add to filters
424	9,134	13k	10.75		<b>The Lancet (British Edition)</b> Add to filters
443	7,311	11k	8		<b>British Medical Journal (Clinical Research Edition)</b> Add to filters
504	5,492	6,592	6		<b>Social Science Research Network (SSRN)</b> Add to filters
46	5,415	11k	7.94		<b>Canadian Medical Association. Journal</b> Add to filters
92	4,586	6,401	8.55		<b>Scientific Reports</b> Add to filters
162	2,927	4,775	9		<b>Pediatrics</b> Add to filters
83	2,119	3,060	11.85		<b>Nature Climate Change</b> Add to filters
100	2,118	2,561	7.51		<b>Cell</b> Add to filters
89	1,828	2,650	9		<b>American Journal of Clinical Nutrition</b> Add to filters



# Altmetric on Publishers' Platform: Scopus

Kočovská, E.<sup>a</sup> , Fernell, E.<sup>b</sup>, Billstedt, E.<sup>b</sup>, Minnis, H.<sup>a</sup>, Gillberg, C.<sup>b</sup> 

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<sup>b</sup> Gillberg Neuropsychiatry Centre, Kungsgatan 12, SE-411 19 Gothenburg, Sweden

## Abstract

[View references \(80\)](#)

**Background:** **Autism** spectrum disorder (ASD) is a complex neurodevelopmental disorder with multiple genetic and environmental risk factors. The interplay between genetic and environmental factors has become the subject of intensified research in the last several years. Vitamin D deficiency has recently been proposed as a possible environmental risk factor for ASD. **Objective:** The aim of the current paper is to systematically review the research regarding the possible connection between ASD and vitamin D, and to provide a narrative review of the literature regarding the role of vitamin D in various biological processes in order to generate hypotheses for future research. **Results:** Systematic data obtained by different research groups provide some, albeit very limited, support for the possible role of vitamin D deficiency in the pathogenesis of ASD. There are two main areas of involvement of vitamin D in the human body that could potentially have direct impact on the development of ASD: (1) the brain (its homeostasis, immune system and neurodevelopment) and (2) gene regulation. **Conclusion:** Vitamin D deficiency - either during pregnancy or early childhood - may be an environmental trigger for ASD in individuals genetically predisposed for the broad phenotype of **autism**. On the basis of the results of the present review, we argue for the recognition of this possibly important role of vitamin D in ASD, and for urgent research in the field. © 2012 Elsevier Ltd.

## Author keywords

ASD; **Autism**; Brain; Calcidiol; Calcitriol; Gene regulation; Neurodevelopment; Vitamin d

ISSN: 08914222 CODEN: RDDIE Source Type: Journal Original language: English

DOI: 10.1016/j.ridd.2012.02.015 Document Type: Review

## References (80)

[View in table layout](#)

Page  Export  Print  E-mail  Create bibliography

Alexianu, M.E., Robbins, E., Carswell, S., Appel, S.H.

 Set alert |  Set feed

## Related documents

Showing the 2 most relevant related documents by all shared references:

Eyles, D., Burne, T., McGrath, J.  
**Vitamin D in fetal brain development**  
(2011) *Seminars in Cell and Developmental Biology*

Harms, L.R., Burne, T.H.J., Eyles, D.W.  
**Vitamin D and the brain**  
(2011) *Best Practice and Research: Clinical Endocrinology and Metabolism*

[View all related documents](#) based on all shared references or [select the shared references](#) to use

**Find more related documents in Scopus based on:**

 [Authors](#) |  [Keywords](#)

## Altmetric for Scopus



Up to now this article has been mentioned 24 times by 21 sources.

### Sources

 1 Facebook user  
 20 tweeters

### Saved to reference managers

 0 CiteULike  1 Mendeley

[see details](#) | [open report in new tab](#)

This app is provided by [Altmetric](#). [Learn more here.](#)

Altmetric collects article level metrics on behalf of publishers, funders and institutions



nature publishing group



wellcome trust



SCOPUS

frontiers



# Bad Ways to Get Attention

- **Sex, Cannabis or Weight Loss**
- **Robots**
- **The Impact of Article Titles on Citation Hits:  
An Analysis of General and Specialist Medical  
Journals:**  
[shortreports.rsmjournals.com/content/1/1/2.  
abstract](http://shortreports.rsmjournals.com/content/1/1/2.abstract)

# Good Ways to Get Attention

- **Have an engaged social media strategy**
- **Include links or DOIs in press releases**
- **Be Open Access (or free to read...)**

# How To Get Involved

- **Let's take a look together! (DOI's)**
- **See how people talk about the articles of your researchers.**
- **Interact through the tools they use.**



# So What Do You Think?

Let us know!

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[ewan@altmetric.com](mailto:ewan@altmetric.com)

