

OUVRIR

LA SCIENCE !

Ouvrirlascience.fr

« Un monde post-DORA : pas de métrique, d'autres métriques, plus de métriques ? »

**Vox populi et tour du monde en 80 heures :
mirages, réalité et potentiel des *altmetrics*
pour prendre le pouls de la science**

SF Declaration for Research Assessment

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décembre 2012

Meaningful Assessment Improves Research

- Promotes value of all scholarly outputs

- Journal articles
- Preprints
- Datasets
- Software
- Protocols
- Research materials
- Well-trained researchers
- Societal outcomes and policy changes



- Focuses on the merits of the work

- Reduces JIF-chasing
- Facilitates Open Science practices
- Improves rigor and reliability
- Enhances collaboration

DORA Signers

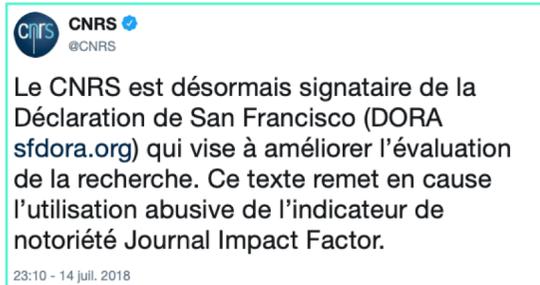
13183 individuals

737 organizations

<https://sfdora.org>



29 juin 2018



14 juillet 2018



27 août 2018



7 septembre 2018



14 novembre 2018

Métriques d'institutions

Métriques de niveau institution

Établissement, pays...

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Academic Ranking of World Universities 2018

Top 500 501-1000 Methodology Statistics					
World Rank	Institution*	By location	National/Regional Rank	Total Score	Score on N&S
		All			
1	Harvard University		1	100	100
2	Stanford University		2	75.6	78.6
3	University of Cambridge		1	71.8	57.6
4	Massachusetts Institute of Technology (MIT)		3	69.9	71.4
5	University of California, Berkeley		4	68.3	67.8
6	Princeton University		5	61	47.1
7	University of Oxford		2	60	52.6

Scientometrics (2010) 84:237–263
DOI 10.1007/s11192-009-0115-x

Should you believe in the Shanghai ranking?
An MCDM view

Jean-Charles Billaut · Denis Bouyssou · Philippe Vincke

Indicators and Weights for ARWU

Criteria	Indicator	Code	Weight
Quality of Education	Alumni of an institution winning Nobel Prizes and Fields Medals	Alumni	10%
Quality of Faculty	Staff of an institution winning Nobel Prizes and Fields Medals	Award	20%
	Highly cited researchers in 21 broad subject categories	HiCi	20%
Research Output	Papers published in Nature and Science*	N&S	20%
	Papers indexed in Science Citation Index-expanded and Social Science Citation Index	PUB	20%
Per Capita Performance	Per capita academic performance of an institution	PCP	10%
Total			100%

* For institutions specialized in humanities and social sciences such as London School of Economics, N&S is not considered, and the weight of N&S is relocated to other indicators.

Métriques de supports

Métriques de niveau support

Revues, actes de conférences...

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InCites Journal Citation Reports

	Full Journal Title	Total Cites	Journal Impact Factor
1	INTERNATIONAL JOURNAL OF COMPUTER VISION	16,572	11.541
2	IEEE TRANSACTIONS ON PATTERN ANALYSIS AND MACHINE INTELLIGENCE	46,505	9.455
3	IEEE Transactions on Cybernetics	9,424	8.803
4	IEEE TRANSACTIONS ON FUZZY SYSTEMS	12,946	8.415
5	IEEE TRANSACTIONS ON EVOLUTIONARY COMPUTATION	10,682	8.124
6	IEEE Transactions on Neural Networks and Learning Systems	19,867	7.982
7	NEURAL NETWORKS	10,086	7.197

COMPUTER SCIENCE,
ARTIFICIAL INTELLIGENCE

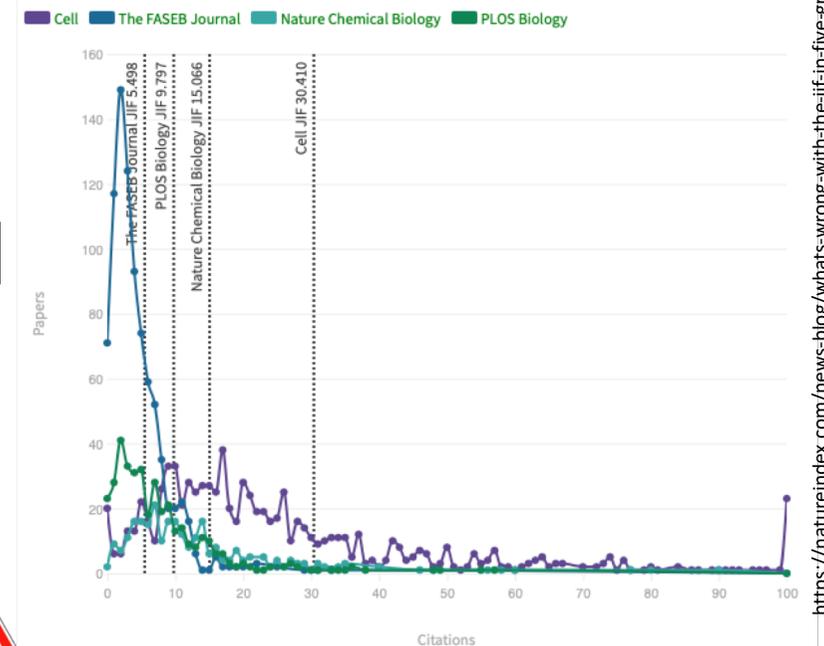


<http://webofknowledge.com/jcr>

What's wrong with the JIF in 5 graphs

Dalmeeth Singh Chawla

Journal citations for articles and reviews are unevenly distributed, with a large number of papers receiving fewer citations than the journal's impact factor in 2016.



<https://natureindex.com/news-blog/whats-wrong-with-the-jif-in-five-graphs>



Journal Portal

Conference Portal

<http://www.core.edu.au>



ERA2010 Summary:

A* - 7%

A - 17%

B - 27%

C - 46%

Other - 3%

End of an ERA: journal rankings dropped

By JILL ROWBOTHAM

THE AUSTRALIAN
5:51PM MAY 30, 2011



“There is clear and consistent evidence that the rankings were being deployed inappropriately within some quarters of the sector, in ways that could produce **harmful outcomes**, and based on a poor understanding of the actual role of the rankings.”

Métriques d'articles

Métriques de niveau article

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altmetrics

altmetrics is the creation and study of new metrics based on the Social Web for analyzing, and informing scholarship.

J. Priem, D. Taraborelli, P. Groth, C. Neylon (2010), *Altmetrics: A manifesto*, (v.1.0), 26 October 2010. <http://altmetrics.org/manifesto>

Value of bibliometrics

The challenges of measuring social impact using altmetrics

Mike Taylor

Altmetrics is the collective term for scholarly usage data that goes beyond formal citation counts.

Issue 33 June 2013



About Us

About Research Trends
Contact Us

Métriques de niveau article

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OPEN ACCESS PEER-REVIEWED **PLOS ONE**

RESEARCH ARTICLE

"Freshwater Killer Whales": Beaching Behavior of an Alien Fish to Hunt Land Birds

Julien Cucherousset, Stéphanie Boulétreau, Frédéric Azémar, Arthur Compin, Mathieu Guillaume, Frédéric Santoul

Published: December 5, 2012 • <https://doi.org/10.1371/journal.pone.0050840>

136 Save 25 Citation

72,733 View 141 Share

Article Authors **Metrics** Comments Media Coverage

Download PDF Print Share

Viewed ?

Total Article Views	HTML Page Views	PDF Downloads	XML Downloads	Totals
72,733	PLOS: 69,808	2,231	71	72,110
Dec 05, 2012 (publication date) through Dec 03, 2018 *	PMC: 510	113	n.a.	623
	Totals: 70,318	2,344	71	72,733

3.33 % of article views led to PDF downloads

Cited ?

SCOPUS	CROSSREF	Europe PubMed Central
25	22	2

Saved ?

citeulike	MENDELEY
1	135

Discussed ?

nature.com/blogs	WIKIPEDIA	twitter	facebook	Comments
1	7	135	6	3

Métriques de niveau article

Altmetric.com (supported by Macmillan Science and Education, which owns Nature Publishing Group) in 2011.

Bibliometrics: Global gender disparities in science

Overview of attention for news story in Nature



About this **Attention Score**

- In the top 5% of all research outputs scored by Altmetric
- High Attention Score compared to outputs of the same age (99th percentile)
- High Attention Score compared to outputs of the same age and source (99th percentile)

Mentioned by

- 27 news outlets
- 34 blogs
- 2 policy sources
- 1208 tweeters
- 151 Facebook pages
- 15 Google+ users
- 7 Redditors

Citations

- 213 Dimensions

Readers on

- 420 Mendeley
- 2 CiteULike

SUMMARY News Blogs Policy documents Twitter Facebook Google+ Reddit Misc. Dimensions citations

So far, Altmetric has seen 1359 tweets from 1208 users, with an upper bound of 7,473,310 followers.

journaliste...

Showing items 401-500 1 2 3 4 5 6 7 8 9 ... 13 14

<p>Steven R Clark @maelorin</p> <p>Global gender disparities in science: Bibliometric analysis of ~5.5M papers across numerous disciplines http://t.co/16ji2ksQ5f #bbscir</p> <p>28 Mar 2015</p>	<p>Kelly Dobrovolski @Be_loved_Freak</p> <p>Bibliometric analysis confirms gender imbalances in research output worldwide http://t.co/tUTNKSdXQE via @monsoon0 http://t.co/0IR6c5b3YV</p> <p>28 Mar 2015</p>
<p>Steven R Clark @maelorin</p> <p>Bibliometric analysis confirms gender imbalances in research output worldwide http://t.co/tUTNKSdXQE via @monsoon0 http://t.co/0IR6c5b3YV</p> <p>28 Mar 2015</p>	<p>Orla Moylan Hegarty @ohegarty</p> <p>Global gender disparities in science: Bibliometric analysis of ~5.5M papers across numerous disciplines http://t.co/16ji2ksQ5f #bbscir</p> <p>28 Mar 2015</p>
<p>Lady Paragons @LadyParagons</p> <p>Bibliometric analysis confirms gender imbalances in research output worldwide http://t.co/tUTNKSdXQE via @monsoon0 http://t.co/0IR6c5b3YV</p> <p>28 Mar 2015</p>	<p>Dr. Izabella Laba @ilaba</p> <p>Wow "articles with women in dominant author positions receive fewer citations than those with men in same positions" http://t.co/JRL4dtlTHt</p> <p>28 Mar 2015</p>
<p>Nalini Joshi @monsoon0</p> <p>Bibliometric analysis confirms gender imbalances in research output worldwide http://t.co/tUTNKSdXQE via @monsoon0 http://t.co/0IR6c5b3YV</p> <p>28 Mar 2015</p>	<p>Kate Carruthers @kcarruthers</p> <p>Wow "articles with women in dominant author positions receive fewer citations than those with men in same positions" http://t.co/JRL4dtlTHt</p> <p>28 Mar 2015</p>
<p>Republic of Math @republicofmath</p> <p>Bibliometric analysis confirms gender imbalances in research output worldwide http://t.co/tUTNKSdXQE via @monsoon0 http://t.co/0IR6c5b3YV</p>	<p>Nalini Joshi @monsoon0</p> <p>Global gender disparities in science: Bibliometric analysis of ~5.5M papers across numerous disciplines http://t.co/16ji2ksQ5f #bbscir</p>

grand public

association

universitaire

société savante

2011
Altmetric
somme pondérée

remember, attention can be both positive and negative!

Métriques de niveau article



mentionné ≠ téléchargé ≠ lu ≠ valide ≠ utile ≠ ...

<https://www.altmetric.com/top100/2015/>

#20 HIGHEST-SCORING ARTICLE

A New Horned Dinosaur Reveals Convergent Evolution in Cranial Ornamentation in Ceratopsidae

Published in **Current Biology** — June 2015

1423

71 news stories	1 Weibo post
22 blog posts	4 Google Plus posts
945 tweets	5 Reddit posts
33 Facebook posts	3 Wikipedia references

WHAT'S THE STORY? This paper describes an intriguing new horned dinosaur. As reported by Ian Sample in The Guardian, "Nicknamed Hellboy, the dinosaur had short horns over the eyes and a long nose horn, the opposite of the features sported by its close relative triceratops." The discovery was covered by many news outlets and online media sites. But Regaliceratops's amazing looks weren't the only aspect of this study that attracted media coverage. It may touch your heart to know that the leading author of the paper, Caleb M. Brown, proposed to his girlfriend in the acknowledgements sections of the published paper!

C.M.B. would specifically like to highlight the ongoing and unwavering support of Lorna O'Brien. [Lorna, will you marry me?](#)

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1901

RETRACTED
Food & Chemical Toxicology
(Séralini et al., 2012)
doi:10.1016/j.fct.2012.08.005

About this Attention Score

- In the top 5% of all research outputs scored by Altmetric
- One of the highest-scoring outputs from this source (#1 of 3,257)
- High Attention Score compared to outputs of the same age (99th percentile)
- High Attention Score compared to outputs of the same age and source (98th percentile)

Mentioned by

- 46 news outlets
- 58 blogs
- 5 policy sources
- 1179 tweeters
- 1 peer review site
- 2 weibo users
- 272 Facebook pages
- 3 Wikipedia pages
- 62 Google+ users
- 2 Redditors
- 4 Pinners
- 1 Q&A thread
- 10 video uploaders

Métriques de niveau article

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Complémentarité : citations + *altmetrics*

Do “Altmetrics” Correlate With Citations? Extensive Comparison of Altmetric Indicators With Citations From a Multidisciplinary Perspective

An extensive analysis of the presence of different altmetric indicators provided by Altmetric.com across scientific fields is presented, particularly focusing on their relationship with citations. Our results confirm that the presence and density of social media altmetric counts are still very low and not very frequent among scientific publications, with 15%–24% of the publications presenting some altmetric activity and concentrated on the most recent publications, although their presence is increasing over time. Publications from the social sciences, humanities, and the medical and life sciences show the highest presence of altmetrics, indicating their potential value and interest for these fields. The analysis of the relationships between altmetrics and citations confirms previous claims of positive correlations but is relatively weak, thus supporting the idea that altmetrics do not reflect the same kind of impact as citations. Also, altmetric counts do not always present a better filtering of highly-cited publications than journal citation scores. Altmetric scores (particularly mentions in blogs) are able to identify highly-cited publications with higher levels of precision than journal citation scores (JCS), but they have a lower level of recall. The value of altmetrics as a complementary tool of citation analysis is highlighted, although more research is suggested to disentangle the potential meaning and value of altmetric indicators for research evaluation.



C + A

Costas et al., *JASIST*, 2015
doi:10.1002/asi.23309

Altmetric Scores: An Early Indicator of Research Impact

In this article we test whether metrics of online attention describing research can provide information on research quality and societal impact that is not found in citation data alone. Our approach is to set up a traditional model in which the true quality or impact of a university department is determined by a panel of experts, but a citation metric is regarded as a reasonable proxy. However, the model assumes that the information contained in the scores provided by an expert panel exceeds that contained in a citation metric (HEFCE, 2015). Finally, we extend this model by including altmetric data to see if it adds information about a department's performance that cannot be gleaned from citations alone. We find the presence of altmetric data for the cited underpinning research to be highly correlated with peer review scores for societal impact. Conversely, no such connection was seen with the assessment of research quality. Our findings therefore suggest altmetric data could be useful as an aid to assessing impact.

S. I.

A ~ P. R.

Wooldridge & King, *JASIST*, 2018
doi:10.1002/asi.24122

Issues in the Interpretation of “Altmetrics” Digital Traces: A Review

Xu, *Front. Res. Metrics Analytics*, 2018
doi:10.3389/frma.2018.00029



Métriques d'individu

Métriques de niveau individu

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Ego-quantification tous azimuts

temporalités

Revue de sciences sociales et humaines



18 | 2013 : Temporalités de la recherche

Le « je suis débordé » de l'enseignant-chercheur

Petite mécanique des pressions et ajustements temporels

Nawel Aït Ali et Jean-Pierre Rouch

doi:10.4000/temporalites.3584

Scientometrics, Vol. 40, No. 1 (1997) 13–21

ON THE WORKING TIME BUDGET OF THE UNIVERSITY
TEACHER

D. TODOROVSKY

Faculty of Chemistry, University of Sofia, 1, J. Bourchier Ave., Sofia 1126 (Bulgaria)

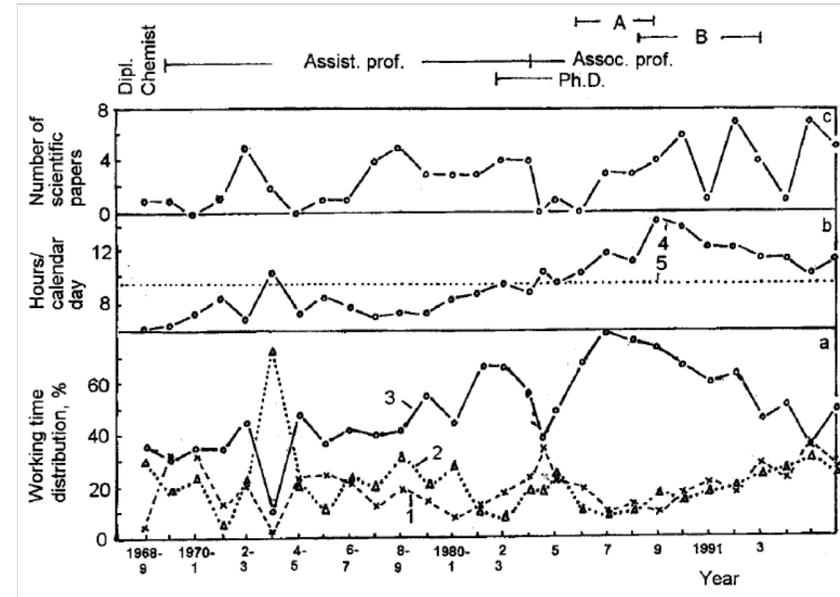
doi:10.1007/bf02459259

Scientometrics (2014) 101:2063–2070

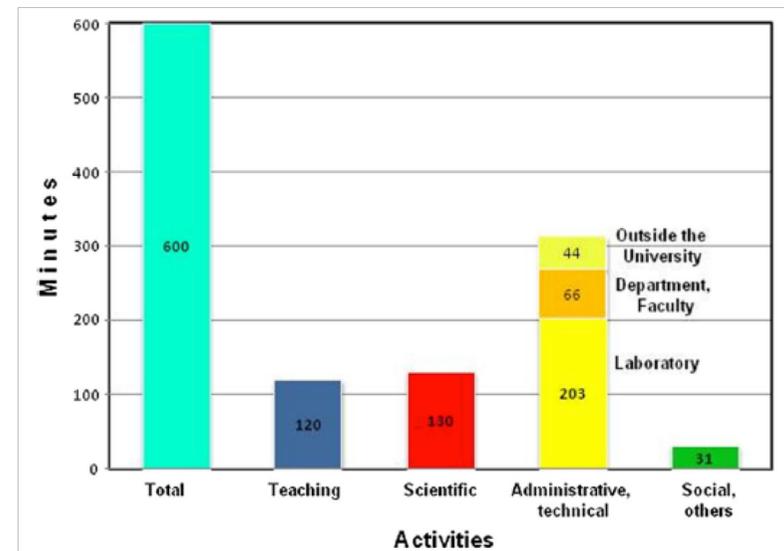
Follow-up study: on the working time budget
of a university teacher. 45 years self-observation

Dimitar Todorovsky

doi:10.1007/s11192-014-1284-9



period of 28 years



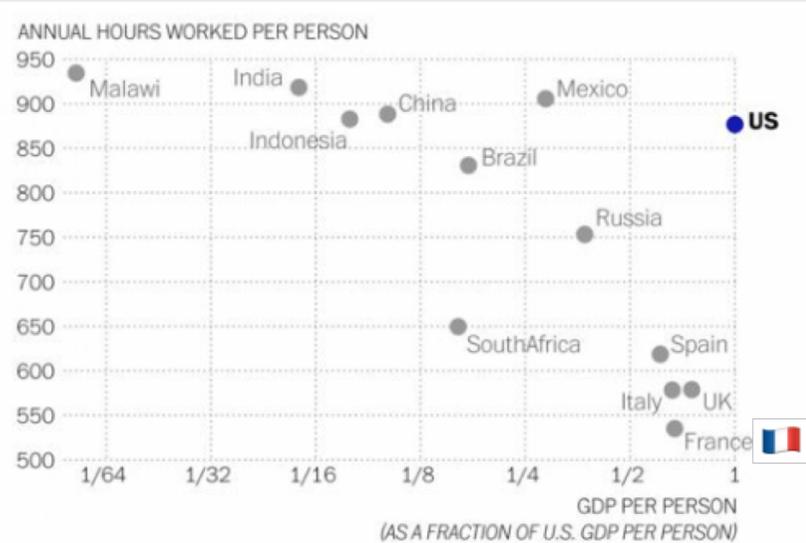
Métriques de niveau individu

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Ego-quantification : prendre conscience du temps consacré aux activités

Arthur Charpentier @freakonometrics  [Follow](#)

"Richer countries have more leisure time, with one big exception"
washingtonpost.com/news/wonk/wp/2...



Country	GDP Per Person (fraction of US)	Annual Hours Worked
Malawi	1/64	930
India	1/16	920
China	1/8	900
Mexico	1/4	900
US	1	880
Indonesia	1/16	860
Brazil	1/8	830
Russia	1/4	760
SouthAfrica	1/8	650
Spain	1/2	630
Italy	1/2	570
UK	1/2	570
France	1/2	540

WAPO.ST/WONKBLOG
Source: Beyond GDP? Welfare across Countries and Time

2:12 pm - 20 Feb 2016 From [Rennes, France](#)

★ ★ **Tom Roud** @tomroud · 21 Feb 2016
Replying to @freakonometrics
@freakonometrics je me suis installé des compteurs de temps de travail: j'en suis à 300 h depuis début janvier. C'est effarant.

1 1 1

Arthur Charpentier @freakonometrics · 21 Feb 2016
@tomroud quel genre ? des appli ? ou tu as autre chose ? va falloir que je tente... ici pareil, mais je vais lever le pied !

2 1 1

★ ★ **Tom Roud** @tomroud · 21 Feb 2016
@freakonometrics [RescueTime](#) sur mes ordi, et [Toggl](#) pour les trucs sans ordi (meetings, etc ...)

★ ★ **Tom Roud** @tomroud · 21 Feb 2016
@freakonometrics mais je ne vois pas comment je pourrais faire moins. J'aimerais même faire plus en fait...



Find your ideal work-life balance.



Where did time go?

Turn your team on to productivity with Toggl the time tracker.

Métriques de niveau individu

[OUVRIRE LA SCIENCE !](#)

Quantifier la diversité des activités des chercheurs



Daniel Le Berre

Enseignant-chercheur en informatique

Médaille de l'innovation du CNRS 2018

Père fondateur du logiciel libre Sat4j, utilisé par des millions de personnes à travers le monde, Daniel Le Berre est enseignant-chercheur à l'université d'Artois-Centre de recherche en informatique de Lens¹.

<http://www.cnrs.fr/fr/personne/daniel-le-berre>

sat4j Public LICENSE

Boolean satisfaction and optimization engines to solve SAT, Pseudo-Boolean and MAXSAT problems.

Files (25.1 MB) Commits (2,655) Branches (32)

Issues Open 44 Closed 106



<https://gitlab.ow2.org/sat4j/sat4j/>

C'est une autre histoire ✓
176345 abonnés 4690266 vues

ACCUEIL VIDÉOS PLAYLISTS COMMUNAUTÉ

Description

La chaîne youtube qui te parle d'histoire autrement. C'est de l'histoire. Mais en drôle. C'est de l'histoire drôle. Et c'est plus drôle que cette blague. Dans la vraie vie en 3D, je suis docteur en histoire contemporaine et j'ai fait une thèse sur Athéna au XIXe siècle (parce que why not ?)

<https://www.youtube.com/channel/UckjDY4joMPcoRMmd-G1yz1Q>



Et ce n'est qu'un début car les chiffres parlent par eux-mêmes :

1 million d'inscriptions à 150 cours disponibles !

<https://www.fun-mooc.fr/about>

Radovan Sebesta @RadovanSebesta Follow

Honored to be named a top peer reviewer in 2018! See my medal from @publons Peer Review Awards: publons.com/a/1304608 #SentinelsofScience

Radovan Sebesta's profile on Publons
Publons offers you a verified record of your peer review activity. See Radovan Sebesta's profile with 58 reviews. publons.com

9:56 am - 30 Oct 2018

Métriques de niveau individu

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Manipulations : de faux articles ... et tweets, mentions, téléchargements...
gaming, spamming...

https://evaluation.hypotheses.org/files/2010/12/pdf_lkeAntkareISSI.pdf

SCIENCE vs. FRAUDULENCE

IKE ANTKARE, ONE OF THE GREAT STARS IN THE SCIENTIFIC FIRMAMENT



CYRIL LABBÉ
University of Grenoble, LIG Laboratory. France
E-mail: [Cyril.Labbe\[at\]imag.fr](mailto:Cyril.Labbe@imag.fr)

Albert Einstein

Institute of Advanced Studies, Princeton
Physics
Aucune adresse e-mail validée

	Toutes	Depuis 2008
Citations	72688	22104
indice h	99	59
indice i10	424	199

Citations des articles de l'auteur

Sélectionner : Tous, Aucun Exporter Afficher : 20 : 1-20 Suivante >

Titre/Auteur	Citée par	Année
<input type="checkbox"/> James Clerk Maxwell: A Commemoration JJ Thomson, M Planck, A Einstein Cambridge University Press	11	2012
<input type="checkbox"/> Letters on Wave Mechanics: Correspondence with HA Lorentz, Max Planck, and Erwin Schrödinger A Einstein Philosophical Library/Open Road	10	2011
<input type="checkbox"/> Essays in humanism A Einstein Philosophical Library/Open Road	10	2011
<input type="checkbox"/> Essays in science A Einstein Philosophical Library/Open Road	184	2011
<input type="checkbox"/> Elementary Considerations on the Interpretation of the Foundations of Quantum Mechanics A Einstein arXiv preprint arXiv:1107.3701	2	2011

<https://scholar.google.com/citations>

Scholar

et al.
The academic superstar everybody wants to be co-author with. See my home page for more info.

bibliometrics, scientometrics, citation analysis
No verified email - Homepage

Citation indices	All	Since 2011
Citations	2416015	782240
h-index	333	275
i10-index	333	333

Co-authors View all...

Paul Erdős, A. Author

Title	Cited by
Protein measurement with the Folin phenol reagent OH Lowry, NJ Rosebrough, AL Farr, RJ Randall J biol Chem 193 (1), 265-275, 1951	195669
Molecular cloning J Sambrook, EF Fritsch, T Maniatis Cold spring harbor laboratory press 2, 14-9.23, 1989	176258
Psychometric theory JC Nunnally, IH Bernstein, JMF Berge McGraw-Hill, 1967	85858

Métriques sur le terrain : DORA-compatibles ?

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Pluridisciplinaire

Liste des revues qualifiantes en 71ème section
Publié le 17 novembre 2017 Catégorie : Divers

Tweeter J'aime 9 G+

Liste des revues qualifiantes
du domaine Sciences de l'information et de la communication (SIC)
(mise à jour 17/11/2017)

Liste commune CNU - SFSIC - CPDirSIC



<https://www.sfsic.org>

indique une connaissance du champ et une visibilité à l'intérieur de celui-ci. Cependant, la recommandation de publier dans ces revues n'exclut pas que la publication dans des revues reconnues par d'autres disciplines soit aussi appréciée. La 71e section écarte une évaluation exclusivement fondée sur la « mesure de l'impact » des articles et n'attribue pas de points aux divers titres de revues.

Ordre des co-signataires d'un article :
alphabétique, doctorant ... les autres ... le PI, par institution,
noblesse oblige, aléatoire

Auteur « étoilé » / de correspondance

Frandsen, T. F., & Nicolaisen, J. (2010). What is in a name? Credit assignment practices in different disciplines. *Journal of Informetrics*, 4(4), 608–617. doi:10.1016/j.joi.2010.06.010

Sciences

Le rôle du CNU dans le recrutement des enseignants-chercheurs

Rapport du bureau de la CP-CNU
janvier 2015 <http://bit.ly/rapport-bureau-cp-cnu2015>

Groupe 10

Section 64 - Biochimie et biologie moléculaire

Section 65 - Biologie cellulaire

Section 66 - Physiologie

Section 67 - Biologie des populations et écologie

Section 68 - Biologie des organismes

Section 69 - Neurosciences

<https://www.conseil-national-des-universites.fr>

« Le candidat doit avoir publié un minimum de deux à trois articles (en fonction des sections et de la qualité des publications) de facteur d'impact significatif (IF > 1-1,2 en fonction des sections) dont au moins un article comme 1er auteur. Les sections souhaitent promouvoir la qualité des publications ; c'est pourquoi l'excellence des revues ciblées et la position dans les publications sont des critères importants qui peuvent moduler l'exigence quantitative de production scientifique. » (p. 71)

Un monde post-DORA

An 6

Prendre le pouls de la science : bilan

« Un monde post-DORA : pas de métrique, d'autres métriques, plus de métriques ? »

■ *Scientometrics* : observer les citations, thèmes et collaborations



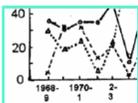
- Délimiter les champs scientifiques, réaliser des revues de la littérature
- Identifier les fronts de recherche et les thèmes émergents

■ *Altmetrics* : observer les mentions



- Quantifier l'attention (positive / négative) suscitée par des résultats
- Engager un dialogue dépassant l'entre-soi académique

■ *Ego-metrics* : observer les activités



- Tendre à équilibrer loisir – travail et types de tâches
- Mettre en visibilité une grande variété de contributions

“When a measure becomes a target, it ceases to be a good measure”

Goodhart's Law

doi:10.1017/s1062798700002660

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Ouvrirlascience.fr

Merci !

Guillaume Cabanac

Université de Toulouse

Institut de Recherche en Informatique de Toulouse

guillaume.cabanac@univ-tlse3.fr

 @gcabanac

décembre 2018