



# ALTMETRICS, NOUVEAUX INDICATEURS DE L'IMPACT DE LA RECHERCHE



**Journées URFIST AVIGNON – 24-25/01/2018**

**Améliorer la visibilité de sa production scientifique**

# SOMMAIRE

- ❖ **Présentation**
- ❖ **Prestataires de mesure alternatives**
- ❖ **Discussion - Perspectives**

# PRESENTATION

# Contexte

## ❖ Révolution du cadre traditionnel de la publication

- Diversité des productions scientifiques (type et format) : publications (preprint, postprint ...), ouvrages, diaporamas, jeux de données, vidéos...
- Nombreux documents en accès libre sur le Web
- Nouvelles pratiques collaboratives et sociales du Web : consultation, téléchargement, partage de publications dans des groupes (par ex Mendeley), communication au travers de réseaux sociaux généralistes (Twitter, Facebook...) ou de recherche (ResearchGate...), commentaires de publications sur des médias, des forums de discussion ou des blogs...

## ❖ Impact sociétal de la recherche

- La science ne produit plus sa valeur uniquement dans le champ scientifique mais à travers son "interaction" constante avec la société

## ❖ Indicateurs pour mesurer l'impact et la performance de la recherche

- pour le chercheur, le management de la recherche

# Altmetrics : A manifesto

- ❖ **Altmetrics : mesurent l'impact sur internet d'une publication ou d'un élément d'information**
  
- ❖ **Terminologie proposée par Priem *et al.* (2010)**
  - Nécessité de trouver de nouveaux filtres pour trouver rapidement de l'information pertinente
    - ✓ filtres traditionnels insuffisants/ volume exponentiel de la littérature scientifique (infobésité)
    - ✓ peer review (lent, conventionnel)
    - ✓ "lenteur" des citations
    - ✓ métriques traditionnelles à l'échelle de la revue (facteur d'impact)
  
  - Nouveaux usages des chercheurs sur le Web
    - ✓ dépôt de documents, création de blogs, échanges via les réseaux sociaux...

*"This diverse group of activities forms a composite trace of impact far richer than any available before. We call the elements of this trace altmetrics."*

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

# Altmetrics : Une terminologie confuse (1/2)

## Hétérogénéité des termes

### ❖ Des termes assez similaires mais non synonymes

- Alternatives metrics (Altmetrics)
  - ✓ terminologie critiquée : ce sont des métriques complémentaires et non alternatives des métriques traditionnelles
- Article-level metrics (ALMs)
  - ✓ terminologie également controversée car restrictive; les métriques alternatives peuvent être utilisées pour mesurer l'impact :
    - d'un large spectre de produits de la recherche très divers, au delà des articles
    - d'un chercheur, institution



Source : <https://twitter.com/jasonpriem/status/25844968813?lang=fr>

# Altmetrics : Une terminologie confuse (2/2)

## Besoin de standardisation

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### ❖ Le terme « social media metrics » ne serait-t-il pas plus approprié ?

- Terminologie restrictive car ne comptabilise que les activités sur les réseaux sociaux.

### ❖ Travail de normalisation par le NISO (National information standards organization) : Alternative assessment metrics initiative

- Début du projet juillet 2013; document publié en 2016
- Normalisation de la terminologie, des sources, des méthodes de calculs, bonnes pratiques...
- Définition des altmetrics

***Altmetrics** is a broad term that encapsulates the collection of multiple digital indicators related to scholarly work. These indicators are derived from activity and engagement among diverse stakeholders and scholarly outputs in the research ecosystem, including the public sphere.*

# Des indicateurs d'impact immédiat des produits de la Recherche

## ❖ Diversité des produits de la Recherche

- Article de revue, ouvrage, article de site web, présentation de diapos, vidéo, ensemble de données (dataset), logiciel, billet de blog, tweet, interview, poster, logiciel, code source ...

## ❖ Diversité de usages/manipulations

- Utilisations (vues HTML et téléchargements de pdf)
- Discussions : sur les blogs, la presse, Wikipedia, Twitter, Facebook et autres réseaux sociaux
- Sauvegardes : ex Mendeley
- Citations : dans la littérature académique, dans les bases de données (Scopus, Web of Science...)
- Recommandations : ex F1000Prime (recommandations d'articles en biologie et médecine par un panel d'experts)



# Immédiateté de l'impact sociétal vs impact académique (1/2)

Baranski, M., *et al.* (2014). Higher antioxidant concentrations, and less cadmium and pesticide residues in organically grown crops: a systematic literature review and meta-analyses. *British Journal of Nutrition*, 112 (5), 794-811

Article mis en ligne le 26/06/14 sur le site de l'éditeur

## British Journal of Nutrition

British Journal of Nutrition / Volume 112 / Issue 05 / September 2014, pp 794-811

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DOI: <http://dx.doi.org/10.1017/S0007114514001366> (About DOI), Published online: 26 June 2014

OPEN ACCESS

Citations académiques (Web of science)

## Consumer knowledge and attitudes about genetically modified food products and labelling policy

By: Vecchione, Melissa; Feldman, Charles; Wunderlich, Shahla  
INTERNATIONAL JOURNAL OF FOOD SCIENCES AND NUTRITION Volume: 66 Issue: 3 Pages: 329-335  
Published: MAY 2015

[View Abstract](#)

## Transparency in GM food labeling

By: Melchett, Peter  
NATURE BIOTECHNOLOGY Volume: 33 Issue: 5 Pages: 453-453 Published: MAY 2015

[Full Text from Publisher](#)

## Modeling Human Nutrition Using Human Embryonic Stem Cells

By: Ben-Zvi, Danny; Melton, Douglas A.  
CELL Volume: 161 Issue: 1 Pages: 12-13 Published: MAR 26 2015

[Full Text from Publisher](#)

[View Abstract](#)

## Are organically grown foods safer and more healthful than conventionally grown foods?

By: McCarty, Mark F.; DiNicolantonio, James J.  
BRITISH JOURNAL OF NUTRITION Volume: 112 Issue: 10 Pages: 1589-1601 Published: NOV 28 2014

[View Abstract](#)

## Citations académiques dans des articles édités le :

- 28/11/14 : lettre à l'éditeur et un article de commentaires dans le journal ayant publié l'article
- 26/03/15 : citation dans un article de la revue Cell
- 15/09/15 : 9 articles citants

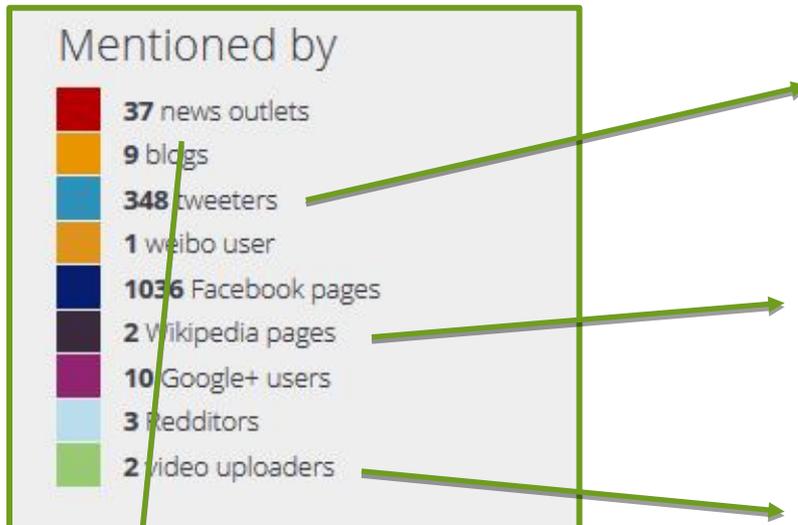
# Immédiateté de l'impact sociétal vs impact académique (2/2)

Baranski, M., *et al.* (2014). Higher antioxidant concentrations, and less cadmium and pesticide residues in organically grown crops: a systematic literature review and meta-analyses. *British Journal of Nutrition*, 112 (5), 794-811

A la date du 15/09/15

Citations dans 9 articles académiques

Citations sur le Web : 37 articles de presse, 348 tweets, 1036 pages facebook....



**Art Skvira**  
@smartial\_arts  
**Tweet le 28/06/14**  
Meta review of 343 studies indicate higher antioxidants levels and lower cadmium/pesticides levels in organic crops <http://t.co/xDCJBHGALy>  
28 Jun 2014

**W**  
ENGLISH  
**Chuck Benbrook**  
**Page Wiki le 21/07/14**  
Cited by user Everymorning on 21 Jul 2014  
Charles M. "Chuck" Benbrook is a research professor at the Center for Sustaining Agricultural and Natural Resources at Washington State University, a position to which he...

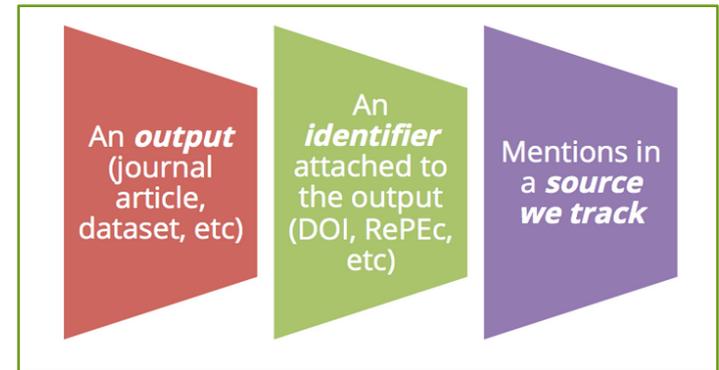
**BIO oder Konventionell? Was ist gesünder? Die Fakten!**  
User enFOODiast on YouTube, 01 Dec 2014  
Hier die Angaben zur genannten Studie: <http://www.ncbi.nlm.nih.gov/pubmed/24968103>  
**Video le 01/12/14**

**BBC** Sign in News Sport Weather Shop Ear  
**NEWS**  
Home Video World UK Business Tech Science Magazine Entertainment  
ADVERTISEMENT  
Science & Environment  
**Study sparks organic foods debate**  
**Article sur BBC News le 11/07/14**

Source : Altmetric

# PRESTATAIRES DE MESURES ALTERNATIVES

# Prestataires de mesure



Source : <https://www.altmetric.com/about-our-data/how-it-works/>

## ❖ Collectent et structurent les données

- Identifient les traces d'un document dans les différentes sources de données : recours à des identifiants pour désambiguïser les éléments qu'ils repèrent
  - ✓ auteurs (ORCID...)
  - ✓ objets/documents (URL, DOI, PMID...)
- Recours à l'utilisation d'interfaces de programme d'application (API) pour identifier les traces

## ❖ Fournissent des indicateurs

- Qualitatifs : sources des données investiguées (peuvent différer selon les prestataires)
- Quantitatifs

# Prestataires de mesure

## ❖ Principaux prestataires



Altmetric



PLOS



MENDELEY



PLUM  
ANALYTICS

## ❖ Prestataires

- à but lucratif : Altmetric (Quelques services gratuits), Plum analytics
- Gratuits : PloS, Impactstory

## ❖ Un secteur évolutif

- 2013 : rachat de mendeley par Elsevier
- 2014 : rachat de Plum analytics par EBSCO (leader mondial des agences d'abonnements)
- 2015 : lancement par Springer d'une plateforme de métriques pour les livres (bookmetrix) en partenariat avec Altmetric
- 2017 : acquisition de Plum analytics par Elsevier

# Altmetrics

- ❖ **Adoptées par les grands éditeurs (modèles économiques traditionnel et open access)**
  - L'éditeur PLoS fut le premier éditeur à introduire les article level metrics
- ❖ **Intégration dans des archives institutionnelles**
- ❖ **Terminologie différente selon les éditeurs**
  - Metrics (PloS)
  - Article metrics (Nature, BioMed Central)
  - Article usage statistics (mbio, Science)
  - Readership statistics (Mendeley)...
- ❖ **Communication des éditeurs sur les articles avec des métriques élevées**

## Biogeosciences

An interactive open-access journal of the European Geosciences Union

| EGU.eu | EGU Journals | EGU Highlight Articles | Contact | Imprint |

## Highlight articles



Reviews and syntheses: t  
Jack J. Middelburg



ews

Recent

Most Viewed

## PlumX Metrics – Top Social Media Articles

Below is a recent list of 2017 articles that have had the most social media attention. The Plum Print next to each article shows the relative activity in each of these categories of metrics: Captures, Mentions, Social Media and Citations. Go [here](#) to learn more about PlumX Metrics.

Ne pas confondre "Altmetric" et " Altmetrics "

## ❖ Financé par Digital science

## ❖ Quelques services gratuits

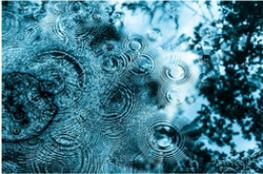
- installer (depuis altmetric.com/) un mini-signet sur son navigateur (Firefox, Chrome) pour obtenir les données altmetric d'un article
- accéder à l'API
- intégrer le badge Altmetric à une page web



Accueil • Zoom • Ice nucleation active bacteria

### Ice nucleation active bacteria in precipitation are genetically diverse and nucleate ice by employing different mechanisms

11 décembre 2017



Failor, K. C., Schmale, D. G., Vinatzer, B. A., Monteil, C. L., H.

Failor, K. C., Schmale, D. G., Vinatzer, B. A., Monteil, C. L. (2017). Ice nucleation active bacteria in precipitation are genetically diverse and nucleate ice by employing different mechanisms. The ISME journal, 11, 2740-2753. DOI : 10.1038/ismej.2017.124 <http://prodinra.inra.fr/record/402565>

22

- Tweeted by 34
- Mentioned in 1 Google+ posts
- 13 readers on Mendeley

See more details

Zoom

#### A télécharger

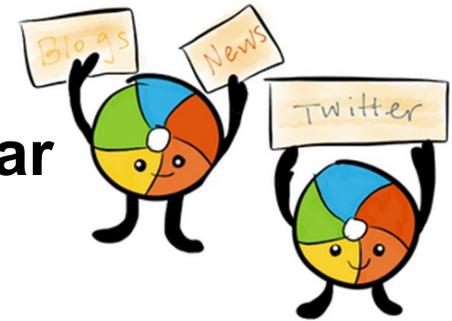
- > Plaquette de l'unité
- > Plan d'accès
- > Organigramme de l'unité

#### Notre actualité

- > Animation scientifique
- > Publications scientifiques 2017-2018
- > Productions scientifiques
- > Thèses en cours
- > Symposium IPVE 2016

# Altmetric (2/8)

## ❖ Identification des sources des données par un code couleur



### Colors of the donut

The colors of the Altmetric donut each represent a different source of attention:

- |   |  |
|---|--|
|  Policy documents              |  Google+              |
|  News                          |  LinkedIn             |
|  Blogs                         |  Reddit               |
|  Twitter                       |  Faculty1000          |
|  Post-publication peer-reviews |  Q&A (stack overflow) |
|  Facebook                      |  Youtube              |
|  Sina Weibo                  |  Pinterest          |
|  Wikipedia                   |  |

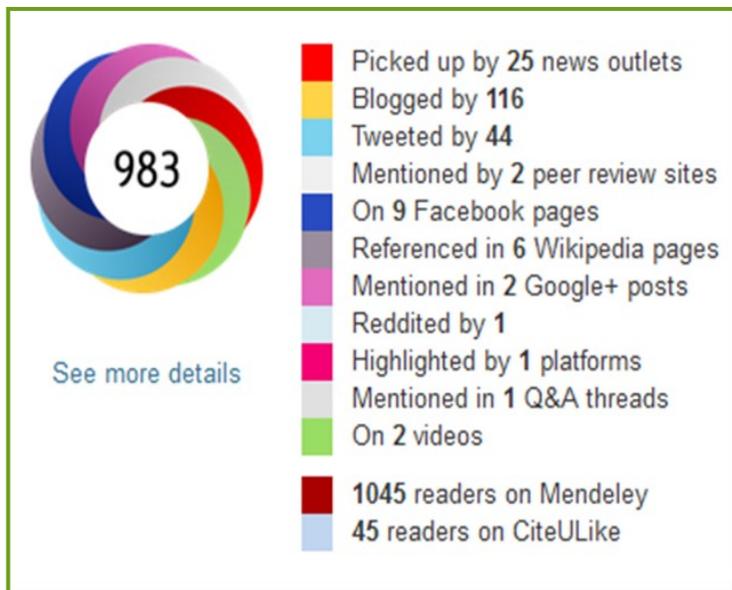


Source : <https://www.altmetric.com/about-our-data/the-donut-and-score/>

## ❖ Quantification

- au niveau de chaque source
- agrégation dans une valeur, Altmetric score, avec un facteur de pondération différent pour chaque type de source (blogs, Twitter,...)

### coefficients de pondération



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

Source : <https://help.altmetric.com/support/solutions/articles/6000060969-how-is-the-altmetric-attention-score-calculated->

# Altmetric (4/8)

## Editeurs scientifiques



### Frontiers

ORIGINAL RESEARCH ARTICLE  
Front. Plant Sci., 22 May 2017 | <https://doi.org/10.3389/fpls.2017.00842>

### Investigation of Amino Acids As Herbicides for Control of *Orobanche minor* Parasitism in Rec

Mónica Fernández-Aparicio<sup>1,2\*</sup>, Alexandre Bernard<sup>3</sup>, Laurent Falchetto<sup>4</sup>, Christian Steinberg<sup>5</sup>, Cindy E. Morris<sup>6</sup>, Stephanie Gibot-Leclerc<sup>7</sup>, Angela Boari<sup>8</sup>, Maurizio Vanzo<sup>9</sup>, David A. Bonari<sup>10</sup>, David C. Sands<sup>6</sup> and Xavier Reboud<sup>1</sup>

Am score 3

1,516 TOTAL VIEWS

View Article Impact

### Nature publishing

nature  
International journal of science

Access provided by INRA

Altmetric: 84 Citations: 100

More detail >>

### Oxford Academy

ANNALS OF BOTANY  
Founded 1887

Issues More content Subject Submit Purchase

### Anaesthetics stop div affect endocytic vesic homeostasis, and block action potentials in Venus

184 View Metrics

### APS

## Phytopathology

Editor-in-Chief: Harald Scherm  
Published by The American Phytopathological Society

Home > Phytopathology > Table of Contents > Abstract

December 2013, Volume 103, Number 12  
Pages 1204-1208  
<https://doi.org/10.1094/PHYTO-01-13-00>

Letter to the Editor

### Phytophthora Database Future Direction

Bongsoo Park, Frank Martin, David M. Ekaterina Nikolaeva, Sook-Young Park, Kim, Yilmaz Balci, Gloria Abad, Treena Cheong, Jaeyoung Choi, Yong-Hwan L

Am score 4

See more details

Tweeted by 5

32 readers on Mendeley

Quick Links

- Add to favorites
- Email to a colleague
- Alert me when new articles cite this article
- Download to citation manager
- Related articles found in APS Journals



**Science** Home News Journals Topics Careers

» There's a way to do it better - find it.  
Thomas Alva Edison, Innovator

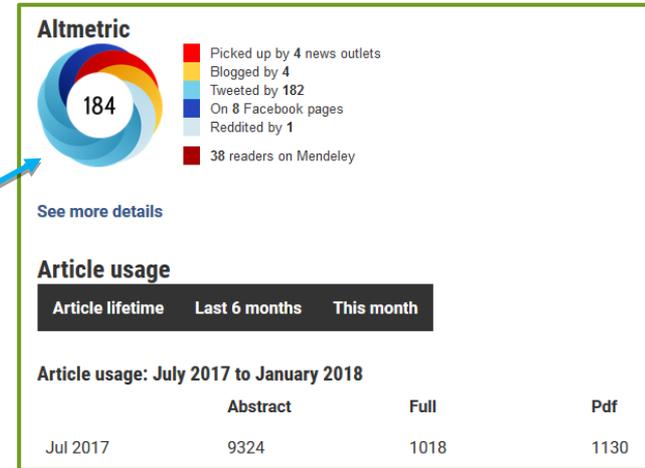
**SHARE** POLICY FORUM AGRICULTURE

**Improving global integration of crop research**

M. P. Reynolds<sup>1</sup>, H. J. Braun<sup>1</sup>, A. J. Cavalieri<sup>2</sup>, S. Chapotin<sup>3</sup>, W. J. Davies<sup>4</sup>, P. Ellul<sup>5</sup>, C. Feuillet<sup>6</sup>, B. Govaer<sup>7</sup>

Science 28 Jul 2017:  
Vol. 357, Issue 6349, pp. 359-360  
DOI: 10.1126/science.aam8559

Article Figures & Data **Info & Metrics** eLetters



**Altmetric**

184

- Picked up by 4 news outlets
- Blogged by 4
- Tweeted by 182
- On 8 Facebook pages
- Reddited by 1
- 38 readers on Mendeley

See more details

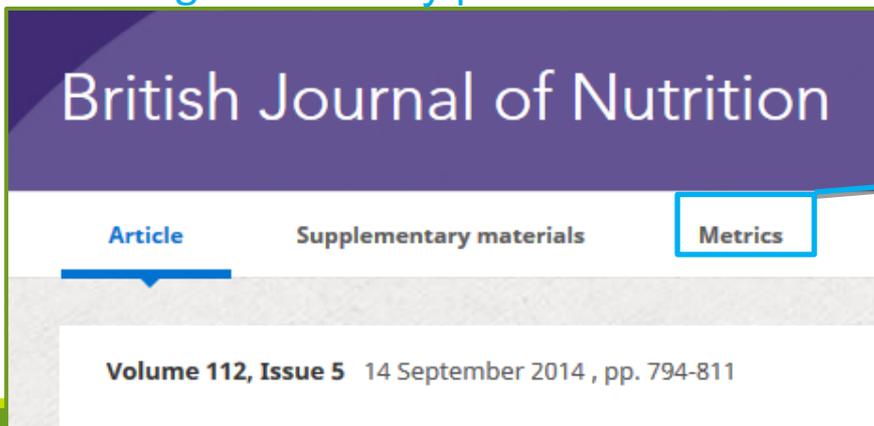
**Article usage**

Article lifetime Last 6 months This month

Article usage: July 2017 to January 2018

	Abstract	Full	Pdf
Jul 2017	9324	1018	1130

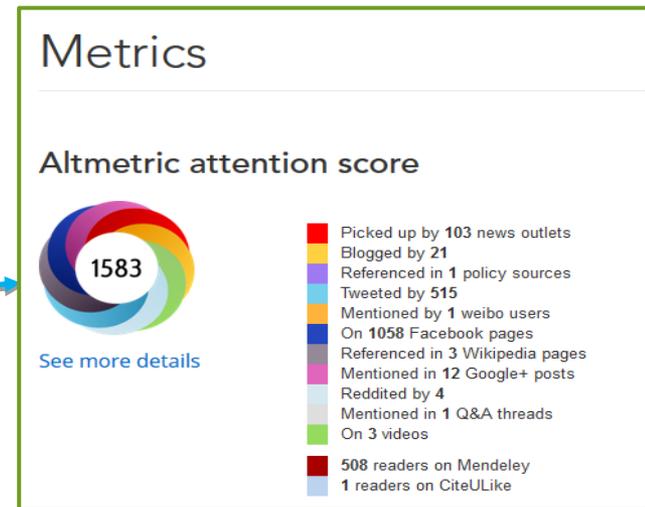
## Cambridge University press



**British Journal of Nutrition**

Article Supplementary materials **Metrics**

Volume 112, Issue 5 14 September 2014, pp. 794-811



**Metrics**

**Altmetric attention score**

1583

- Picked up by 103 news outlets
- Blogged by 21
- Referenced in 1 policy sources
- Tweeted by 515
- Mentioned by 1 weibo users
- On 1058 Facebook pages
- Referenced in 3 Wikipedia pages
- Mentioned in 12 Google+ posts
- Reddited by 4
- Mentioned in 1 Q&A threads
- On 3 videos
- 508 readers on Mendeley
- 1 readers on CiteULike

See more details



Springer



**Agronomy for Sustainable Development**  
January 2015, Volume 35, [Issue 1](#), pp 169–181 | [Cite as](#)

## Fourteen years of evidence for positive effects of conservation agriculture and organic farming on soil life

Authors [Authors and affiliations](#)

Ludovic Henneron, Laetitia Bernard, Mickaël Hedde, Céline Pelosi, Cécile Villenave, Claire Chenu, Michel Bertrand, Cyril Girardin, Eric Blanchart [✉](#)

RESEARCH ARTICLE  
First Online: 08 April 2014

30 Shares 2.2k Downloads 25 Citations

Clic sur "Shares" redirige vers le site Altmetric.com

Prodnra

HaL

Nb de consultations de cette notice : 245

Web of Science® Times Cited : 20

Altmetric 19

-  Blogged by 1
-  Tweeted by 14
-  On 1 Facebook pages
-  109 readers on Mendeley

See more details



MÉTRIQUES

Consultations de la notice

245

 19

See more details

-  Blogged by 1
-  Tweeted by 14
-  On 1 Facebook pages
-  109 readers on Mendeley

# Altmetric (7/8)

Altmetric.com

Source : <https://www.altmetric.com/details/2471643> (interrogé le 24/01/2017)

Positionnement de l'article par rapport à d'autres articles

Accès aux sources

Higher antioxidant and lower cadmium concentrations in organically grown crops: a systematic literature review and meta-analysis

Overview of attention for article published in British Journal of Nutrition, June 2014



About this Attention Score

In the top 5% of all research outputs scored by Altmetric

MORE...

Mentioned by

- 103 news outlets
- 21 blogs
- 1 policy source
- 515 tweeters
- 1 weibo user
- 1058 Facebook pages
- 3 Wikipedia pages
- 12 Google+ users
- 4 Redditors

SUMMARY News Blogs Policy documents Twitter Weibo Facebook Wikipedia Go

So far, Altmetric has seen 1 policy document that references this research output.

**Connecting global priorities: biodiversity and human health: a state of knowledge review**  
Cited by World Health Organization on 01 Jan 2015  
The World Health Organization (WHO) is the directing and coordinating authority for health within the United Nations system.

SUMMARY News Blogs Policy documents Twitter Weibo Facebook Wikipedia Google+ Reddit Q&A Video

**Title** Higher antioxidant and lower cadmium concentrations and lower incidence of pesticide residues in organically grown crops: a systematic literature review and meta-analyses.

**Published in** British Journal of Nutrition, June 2014

**DOI** 10.1017/s0007114514001366

**Pubmed ID** 24968103

**Authors** Marcin Barański, Dominika Srednicka-Tober, Nikolaos Volakakis, Chris Seal, Roy Sanderson, Gavin B... [show]

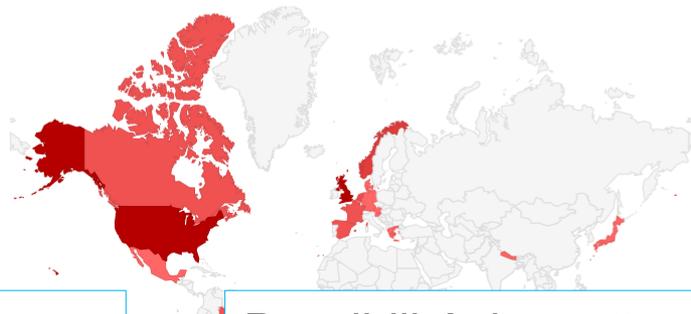
**Abstract** Demand for organic foods is partially driven by consumers' perceptions that they are more... [show]

View on publisher site

Alert me about new mentions

TWITTER DEMOGRAPHICS MENDELEY READERS ATTENTION SCORE IN CONTEXT

The data shown below were compiled from readership statistics for 508 Mendeley readers of this research output. [Click here to see the associated Mendeley record.](#)



Cartographie de l'audience pour Twitter et Mendeley

Possibilité de mettre une alerte

# Altmetric - Springer (8/8)

Bookmetrix



- ❖ Nouvelle plateforme (2015)
- ❖ Impact social et scientifique des livres

<http://www.springer.com/us/book/9783319233703>

[http://www.bookmetrix.com/detail\\_full/book/338b8fef-6ff0-4c81-a09c-5030c837cd57#readers](http://www.bookmetrix.com/detail_full/book/338b8fef-6ff0-4c81-a09c-5030c837cd57#readers)

The screenshot displays the Bookmetrix interface for the book 'Botrytis - the Fungus, the Pathogen and its Management in Agricultural Systems' (2016). The main dashboard shows 46 Citations, 0 Mentions, 160 Readers, and 18.2K Downloads. A 'Mendeley Readership by Country' map highlights Spain and Brazil. A 'Book Metrics' sidebar lists Citations (46), Readers (159), and Downloads (18165). The book cover and title are visible at the top right.

The screenshot shows the Springer website for the same book. The title is 'Botrytis - the Fungus, the Pathogen and its Management in Agricultural Systems - 2016'. The editors are Sabine Fillinger and Yigal Elad. A 'Book Metrics' box at the bottom highlights 18.2K Downloads, 46 Citations, 0 Reviews, 0 Mentions, and 160 Readers.



- ❖ Rachat en 2017 par Elsevier
- ❖ Outil payant qui permet d'obtenir des métriques sur des individus, des groupes de recherche ou des institutions
- ❖ Sources des données classées par catégorie identifiée par un code couleur
- ❖ Quantification par catégorie



# Plum analytics (2/6)

Editeur Elsevier



**Global Environmental Change**  
Volume 43, March 2017, Pages 51-61

Research paper

## Trees, forests and water: Cool insights for a hot world

David Ellison <sup>a, b</sup>, Cindy E. Morris <sup>c, d</sup>, Bruno Locatelli <sup>e, f</sup>, Douglas Sheil <sup>g</sup>, Jane Cohen <sup>h</sup>, Daniel Murdiyoso <sup>i, j</sup>, Victoria Gutierrez <sup>k</sup>, Meine van Noordwijk <sup>l, m</sup>, Irena F. Creed <sup>n</sup>, Jan Pokorny <sup>o</sup>, David Gaveau <sup>†</sup>, Dominick V. Spracklen <sup>p</sup>, Aida Bargaúes Tobella <sup>q</sup>, Ulrik Ilstedt <sup>r</sup>, Adriaan J. Teuling <sup>s</sup>, Solomon Gebreyohannis Gebrehiwot <sup>t, s</sup>, David C. Sands <sup>d</sup>, Bart Muys <sup>†</sup>, ... Caroline A. Sullivan <sup>w</sup>

<https://doi.org/10.1016/j.gloenvcha.2017.01.002> [Get rights and content](#)  
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### Highlights

- We review the advantages of forests highlighted in the literature on forest, water and energy cycle interactions.
- Forest, water and energy cycle interactions provide the foundation for achieving forest-based adaptation and mitigation goals.
- Forests can be used, in particular, to mitigate problems related to water scarcity and global warming.
- In addition to up- and downstream relationships, policy frameworks need to consider the transboundary nature of up- and downwind forest, water and energy cycle interactions.
- Alongside the local level, regional and continental policy-making frameworks are necessary for adequate consideration of transboundary forest, water and energy cycle interactions.

**Abstract**

Forest-driven water and energy cycles are poorly integrated into regional, national, continental and global decision-making on climate change adaptation, mitigation, land use and water management. This constrains humanity's ability to protect our planet's climate and life-sustaining functions. The substantial body of research we review reveals that forest, water and energy interactions provide the foundations for carbon storage, for cooling

**Recommended articles**

- Daily dynamics of radiation surface temperature of different land ...  
Ecological Engineering, Volume 54, 2013, pp. 145-154  
[Download PDF](#) [View details](#)
- Approaching moisture recycling governance  
Global Environmental Change, Volume 45, 2017, pp. 15-23  
[Download PDF](#) [View details](#)
- A place-based approach to payments for ecosystem services  
Global Environmental Change, Volume 43, 2017, pp. 92-108  
[Download PDF](#) [View details](#)

[View more articles >](#)

**Citing articles (11)**

**Article Metrics**

Captures	
Readers:	257
Exports-Saves:	2
Mentions	
Blog Mentions:	2
News Mentions:	2
Comments:	4
Social Media	
Shares, Likes & Comments:	1391
Tweets:	533
Citations	
Citation Indexes:	17

[View details >](#)

### Article Metrics

#### Captures

Readers:	257
Exports-Saves:	2

#### Mentions

Blog Mentions:	2
News Mentions:	2
Comments:	4

#### Social Media

Shares, Likes & Comments:	1391
Tweets:	533

#### Citations

Citation Indexes:	17
-------------------	----

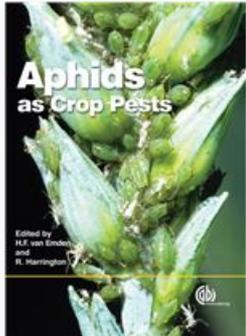
[View details >](#)

# Plum analytics (3/6)

Editeur CABI : E-books en agriculture – sciences de la vie

## CABI Book Info

### Aphids as crop pests.



#### Description

This book contains 31 chapters covering aphids as crop pests, from recent advances in molecular science and chemical ecology to forecasting and insect pest management decision support systems. It is a comprehensive reference volume on all aspects of the biology of aphids that are relevant to their pest status (including aphid taxonomy, population genetics, life cycle, host plant selection and feeding, nutrition and symbiosis, growth and development, movement, predators, parasitoids, entomopathogens, insecticide resistance and population dynamics) and management strategies to control these pests. Intended for students, researchers and practitioners in the field of entomology and crop production, this book includes several case study chapters on integrated pest management in specific crops, such as cotton, sorghum and cucurbits.

Available In Print →

#### Metrics



#### Usage

Abstract Views: **89**

Link-outs: **10**

Full Text Views: **7**

Downloads: **1**

Holdings: **1081**

#### Captures

Exports-Saves: **17**

Readers: **9**

#### Mentions

References: **6**

#### Citations

Citation Indexes: **183**

 **PLUMX** - see details

# Plum analytics (4/6)

Base de donnée scientifique : Scopus

Scopus

[Search](#)

[Sources](#)

[Alerts](#)

[Lists](#)

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[SciVal](#) ↗

[Example View](#) ▾



## Document details

[< Back to results](#) | 1 of 1

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[Full Text](#)

[Copac](#)

[View in EMBASE](#)

[BIBSYS](#) ✕

Diabetes Research and Clinical Practice  
Volume 112, 1 February 2016, Pages 13-19

### Type 2 diabetes prevention in the community: 12-Month outcomes from the Sydney Diabetes Prevention Program (Article)

Vita, P.<sup>a</sup> ✉, Cardona-Morrell, M.<sup>bc</sup> ✉, Bauman, A.<sup>b</sup> ✉, Singh, M.F.<sup>a</sup> ✉, Moore, M.<sup>d</sup> ✉, Pennock, R.<sup>e</sup> ✉, Snow, J.<sup>e</sup> ✉, Williams, M.<sup>f</sup> ✉, Jackson, L.<sup>g</sup> ✉, Milat, A.<sup>bh</sup> ✉, Colagiuri, S.<sup>a</sup> ✉ 

<sup>a</sup>Boden Institute of Obesity, Nutrition, Exercise and Eating Disorders, Sydney Medical School, University of Sydney, Sydney, NSW, Australia

<sup>b</sup>Prevention Research Collaboration, School of Public Health, University of Sydney, Sydney, NSW, Australia

<sup>c</sup>The Simpson Centre for Health Services Research, The University of New South Wales, Sydney, NSW, Australia

[View additional affiliations](#) ▾

**The Article Metrics Module appears in the sidebar here**

Metrics ⓘ

[View all metrics](#) >

4  Citations in Scopus  
82nd Percentile

2.14  Field-Weighted Citation Impact



PlumX Metrics ▾

Usage, Captures, Mentions, Social Media and Citations beyond Scopus.

# Plum analytics (5/6)

Plumx



## Accès aux sources

**PLUMX**

Trees, forests and water: Cool i...



### Trees, forests and water: Cool insights for a hot world

Citation data: Global Environmental Change, ISSN: 0959-3780, Vol: 43, Page: 51-61  
Publication Year: 2017

**CAPTURES** 259 **MENTIONS** 8 **SOCIAL MEDIA** 1924 **CITATIONS** 17 **RATINGS**

Readers	257	Comments	4	Shares, Likes & Comments	1391	Citation Indexes	17	Reddit	8
Exports-Saves	2	Blog Mentions	2	Tweets	533				
		News Mentions	2						

ARTICLE SUMMARY | TWEETS | BLOG MENTIONS | NEWS MENTIONS

DOI: 10.1016/j.gloenvcha.2017.01.002

AUTHOR(S): David Ellison, Cindy E. Morris, Bruno Locatelli, Douglas Sheil, Jane Cohen, Daniel Murdiyarmo, Victoria Gutierrez, Meine van Noordwijk, Irena F. Creed, Jan Pokorny, [Show More](#)

PUBLISHER(S): Elsevier BV

TAGS: Environmental Science, Social Sciences

Source : <https://plu.mx/plum/a/?doi=10.1016%2Fj.gloenvcha.2017.01.002&theme=plum-science-direct-theme&hideUsage=true&display-tab=summary-content>

ARTICLE SUMMARY | TWEETS | BLOG MENTIONS | NEWS MENTIONS

This article has 2 Blog Mentions across 2 URLs.

View by URL

- View All Blog Mentions
- 2
- 1 <http://www.sciencedirect.com/science/articl...>
- 1 <http://dx.doi.org/10.1016/j.gloenvcha.2017...>

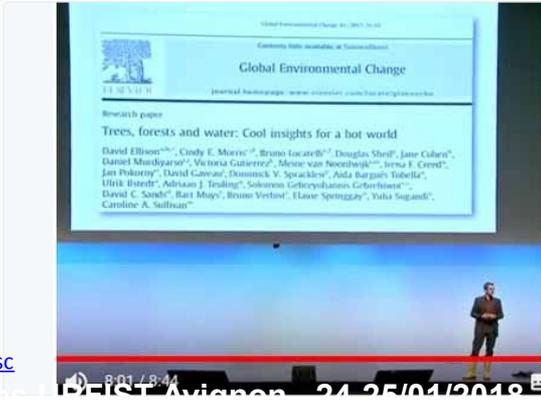
Adventures in Self-Experimentation: Matrix Plowing Tropical Fields

July 19, 2017 | Cool Green Science: The Science Blog of The Conservation

Sometimes, science requires that you get dirty. And here we do. As graduate students, we never imagined that climate change research would lead to us plowing a rural Indiana farm field in 96 degree Fahrenheit heat, topped off with 100 percent humidity. But here we were....

MOST RECENT TWEET

View All Tweets

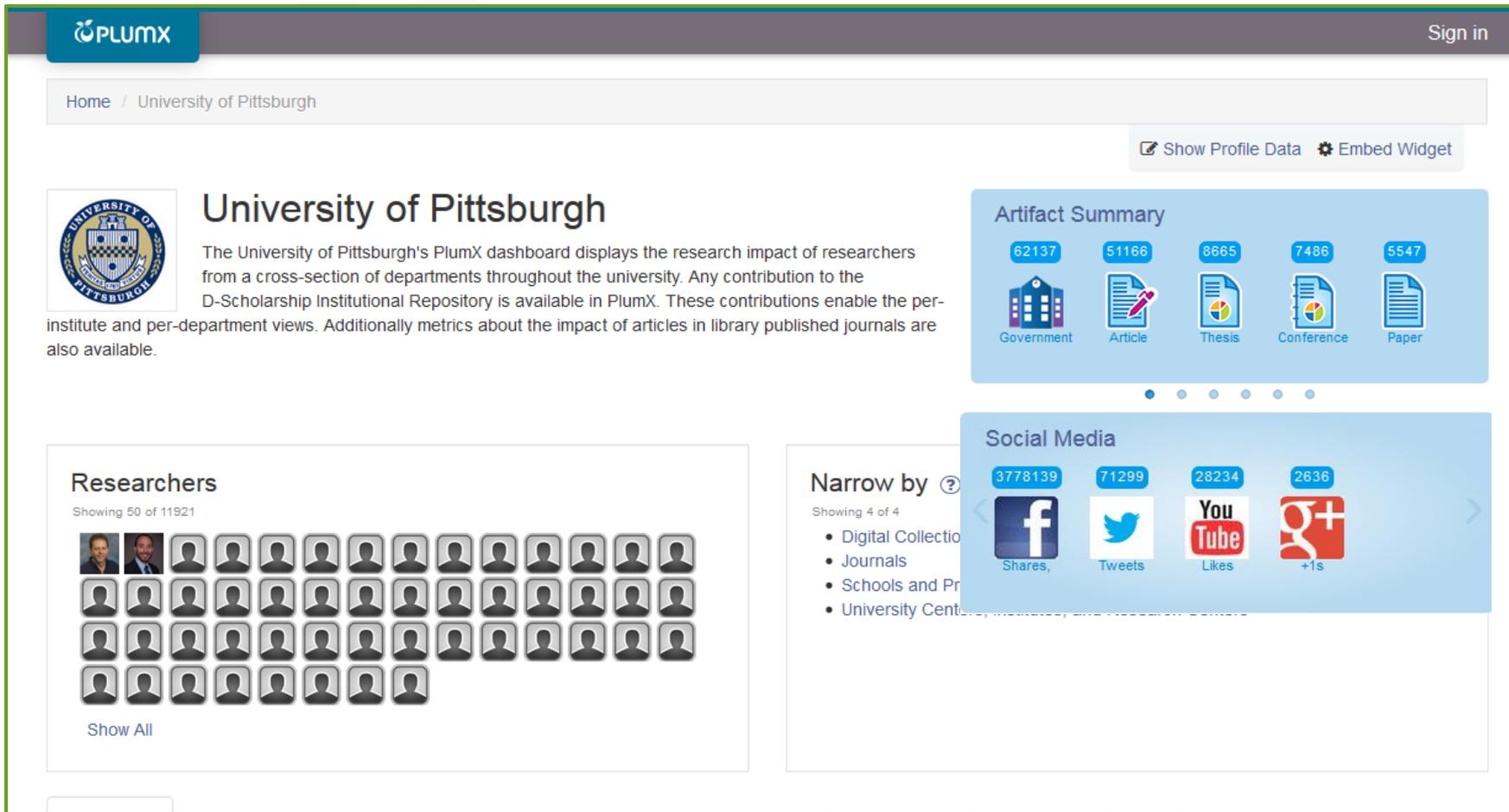


8:01 / 8:44

CE Morris @bio\_ice\_nuclei

# Plum analytics (6/6)

## Plumx - Institution



The screenshot shows the PlumX dashboard for the University of Pittsburgh. At the top, there is a navigation bar with the PlumX logo and a 'Sign in' button. Below the navigation bar, the breadcrumb 'Home / University of Pittsburgh' is visible. The main content area features the University of Pittsburgh logo and a title 'University of Pittsburgh'. A descriptive paragraph explains that the dashboard displays the research impact of researchers from a cross-section of departments throughout the university. To the right of the description, there are two buttons: 'Show Profile Data' and 'Embed Widget'. Below the description, there are two main sections: 'Researchers' and 'Social Media'. The 'Researchers' section shows a grid of 50 researcher profiles (out of 11921 total) and a 'Show All' button. The 'Social Media' section shows a 'Narrow by' filter with four categories: Digital Collections (3778139 shares), Journals (71299 tweets), Schools and Programs (28234 likes), and University Centers (2636 likes).

Home / University of Pittsburgh

Show Profile Data Embed Widget

### University of Pittsburgh

The University of Pittsburgh's PlumX dashboard displays the research impact of researchers from a cross-section of departments throughout the university. Any contribution to the D-Scholarship Institutional Repository is available in PlumX. These contributions enable the per-institute and per-department views. Additionally metrics about the impact of articles in library published journals are also available.

#### Artifact Summary

Category	Count
Government	62137
Article	51166
Thesis	8665
Conference	7486
Paper	5547

#### Researchers

Showing 50 of 11921

Show All

#### Narrow by

Showing 4 of 4

- Digital Collections: 3778139 Shares
- Journals: 71299 Tweets
- Schools and Programs: 28234 Likes
- University Centers: 2636 Likes

Source : <https://plu.mx/plum/g/ptu/> (interrogé le 24/01/2017)

## Article-level metrics (ALMs)

**VIEWED:**  
PLOS Journals (HTML, PDF, XML), PubMed Central (HTML, PDF)

**SAVED:**  
CiteULike, Mendeley

**CITED:**  
CrossRef, Datacite, Europe PMC, PubMed Central, Scopus, Web of Science

**RECOMMENDED:**  
F1000 Prime

**DISCUSSED:**  
PLOS Comments, Facebook, Reddit, Twitter, Wikipedia

OPEN ACCESS PEER-REVIEWED

RESEARCH ARTICLE

### Estimating virus effective population size and selection without neutral markers

Elsa Rousseau, Benoît Moury, Ludovic Mailleret, Rachid Senoussi, Alain Palloix †, Vincent Simon, Sophie Valière, Frédéric Grogard, Frédéric Fabre

Version 2 Published: November 20, 2017 • <https://doi.org/10.1371/journal.ppat.1006702>

Article | Authors | **Metrics** | Comments | Related Content

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**Viewed** ?

Total Article Views  
**3,375**

Nov 20, 2017 (publication date) through Jan 24, 2018 \*

	HTML Page Views	PDF Downloads	XML Downloads	Totals
PLOS	2,238	255	881	3,374
PMC	1	0	n.a.	1
<b>Totals</b>	<b>2,239</b>	<b>255</b>	<b>881</b>	<b>3,375</b>

11.39 % of article views led to PDF downloads

7 Save	0 Citation
3,375 View	11 Share

<http://journals.plos.org/plospathogens/article/metrics?id=10.1371/journal.ppat.1006702>

## Article-level metrics (ALMs)

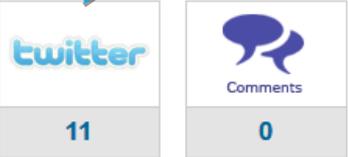
**Cited** ?



**Saved** ?



**Discussed** ?



### Identification des sources des données

References Events Details Recommendations

▼ All Relations ▼ ▼ Twitter ▼

**RT @Virus\_Evolution: Estimating virus effective population size and selection without neutral markers. <https://t.co/ocX6yCNTKB> <https://t.co...>**  
December 20, 2017. <http://twitter.com/talzinger1/status/943344520086937601>  
Discusses <http://doi.org/10.1371/journal.ppat.1006702> via Twitter  
Twitter: NaN

**RT @Virus\_Evolution: Estimating virus effective population size and selection without neutral markers. <https://t.co/ocX6yCNTKB> <https://t.co...>**  
December 09, 2017. <http://twitter.com/sociovirology/status/939292743305633793>  
Discusses <http://doi.org/10.1371/journal.ppat.1006702> via Twitter  
Twitter: NaN

**Estimating virus effective population size and selection without neutral markers. <https://t.co/ocX6yCNTKB> <https://t.co/YL0LDTqlrc>**  
December 08, 2017. [http://twitter.com/Virus\\_Evolution/status/939075331440496641](http://twitter.com/Virus_Evolution/status/939075331440496641)  
Discusses <http://doi.org/10.1371/journal.ppat.1006702> via Twitter  
Twitter: NaN

- ❖ **Organisation à but non lucratif (financement par la National Science Foundation,...)**
- ❖ **Permet aux chercheurs de mesurer et partager le produit de leur recherche**
  - traditionnel (articles)
  - produits émergents (blogs, jeux de données, logiciels)
  - Implémentation manuelle avec ses productions ou import automatique par paramétrage avec son profil google, identifiant Orcid, compte slideshare...
- ❖ **Sources des données très diverses**
- ❖ **Services gratuits**
- ❖ **Code source ouvert**

# Impact story (2/2)



Impactstory



Jon Tennant

Open Science MOOC Founder

open access 91%



OVERVIEW   ACHIEVEMENTS   TIMELINE   PUBLICATIONS

## ACHIEVEMENTS

view all



**Wikitastic** Top 10%

Your research is mentioned in 16 Wikipedia articles! Only 2% of researchers are this highly cited in Wikipedia.



**Open Access** Top 10%

91% of your research is free to read online. This level of availability puts you in the top 3% of researchers.



**Hot Streak** Top 10%

People keep talking about your research. Someone has shared your research online every month for the last 43 months. That's a sharing streak matched by only 1% of scholars.

## TIMELINE

view all

2901

Online mentions over 1 years

2.7k 91 36 34 16 11 6 1

## PUBLICATIONS

view all

**The academic, economic and societal impacts of Open Access: an evidence-based review**  
2016 *F1000Research*  
472

**Open Letter to The American Association for the Advancement of Science**  
2014 *The Winnower*  
383

**Sea level regulation the Jurassic/Cretaceous boundary**  
2016 *Nature Communications*  
267

## Filter by channel

- Tweets (2.7k ↑)
- Blog posts (91 ↑)
- Facebook pages (36)
- News mentions (34)
- Wikipedia articles (16)
- Google+ posts (11)
- Reddit posts (6)
- Public peer reviews (1)

## 2901 ONLINE MENTIONS OVER 1 YEARS

- Our once and future oceans**  
14 hours ago by *Letters From Gondwana*.  
 *Biotic and environmental dynamics through the Late Jurassic-Early Cretaceous...*
- 1 tweets** click to hide  
15 hours ago  
 **Jan 23rd** by *CrystationalBio* 730 followers  
 *A multi-disciplinary perspective on...*
- 12. Peer Review: Anonymity Versus Identification 2**  
2 days ago by *Green Tea And Velociraptors*  
 *A multi-disciplinary perspective on emergent and future innovations in peer...*

<https://profiles.impactstory.org/u/0000-0001-7794-0218>

### Higher antioxidant and lower cadmium concentrations and lower incidence of pesticide residues in organically grown crops: a systematic literature review and meta-analyses.

by Marcin Barański, Dominika Srednicka-Tober, Nikolaos Volakakis, Chris Seal, Roy Sanderson, ...show all authors

Biological Sciences > Miscellaneous Papers

Save reference to library

Share   

#### Overview

#### Related research

The British journal of nutrition (2014)

Pages: 1-18

ISSN: 1475-2662

ISBN: 1475-2662 (Electronic) 0007-1145 (Linking)

DOI: 10.1017/S0007114514001366

PubMed: 24968103

Available from [The British journal of nutrition](#)

or Find this paper at:

#### Abstract

Demand for organic foods is partially driven by consumers' perceptions that they are more nutritious. However, scientific opinion is divided on whether there are significant nutritional differences between organic and non-organic foods, and two recent reviews have concluded that there are no differences. In the present study, we carried out meta-analyses based on 343 peer-reviewed publications that indicate statistically significant and meaningful differences in composition between organic and non-organic crops/crop-based foods. Most importantly, the concentrations of a range of antioxidants such as polyphenolics were found to be substantially higher in organic crops/crop-based foods, with those of phenolic acids, flavanones, stilbenes, flavones, flavonols and anthocyanins being an estimated 19 (95 % CI 5, 33) %, 69 (95 % CI 13, 125) %, 28 (95 % CI 12, 44) %, 26 (95 % CI 3, 48) %, 50 (95 % CI 28, 72) % and 51 (95 % CI 17, 86) % higher, respectively. Many of these compounds have previously been linked to a reduced risk of chronic diseases, including CVD and neurodegenerative diseases and certain cancers, in dietary intervention and epidemiological studies. Additionally, the frequency of occurrence of pesticide residues was found to be four times higher in conventional crops, which also contained significantly higher concentrations of the toxic metal Cd. Significant differences were also detected for some other (e.g. minerals and vitamins) compounds. There is evidence that higher antioxidant concentrations and lower Cd concentrations are linked to specific cropping practices (e.g. use of mineral N and P fertilizers).

#### Related Full-Text Papers for Free

Sign up to download and organize them across all your devices with Mendeley, for free.

#### Contribution of organically grown crops to human health

Eva Johansson, Abrar Hussain, Ramune Kuktaite, Staffan C. Andersson, Marie E. Olsson in *International Journal of Environmental Research and Public Health* (2014)

Save PDF to library

42 readers

#### Readership Statistics

123 Readers on Mendeley

by Discipline

- 14% Biological Sciences
- 6% Medicine
- 5% Social Sciences

by Academic Status

- 10% Student (Master)
- 5% Ph.D. Student
- 4% Researcher (at a non-Academic Institution)

by Country

- 1% Australia
- 1% Switzerland
- 1% Spain

#### Tags

Antioxidants/(poly)phenolics

# ResearchGate



- ❖ RG Score
- ❖ Reads : comptabilisation du nombre de lectures du résumé ou du full-text, et du nombre de téléchargements
- ❖ Citations
- ❖ Recommandations

The screenshot displays the ResearchGate 'Stats' page for a user. At the top, navigation tabs include Overview, Contributions, Info, Stats (highlighted), and Scores. The main content area features three summary cards: Reads (436, Last week: 5), Citations (4, Last month: 0), and Recommendations (—). Below these is a line graph titled 'Reads' with the subtitle 'Read : comptabilisation du nombre de lectures du résumé ou du full-text, et du nombre de téléchargements'. The graph shows weekly read counts from Oct 29 to Dec 17. A 'Total reads breakdown' table shows 436 publication reads, 0 project update reads, and 0 question reads. A 'View report' button is highlighted with an orange box and an arrow. The right sidebar shows a 'December 10th, 2017' summary with +5 reads, +0 citations, and +0 recommendations. It also lists 'People who read your work' (El. Bouassouvi Cherreji), 'Your most read research' (MIOFAR), and 'Reeds by institution' (Mohammadia School of Engineers, Abu-Marcouille Université) and 'Reeds by country' (China, France).

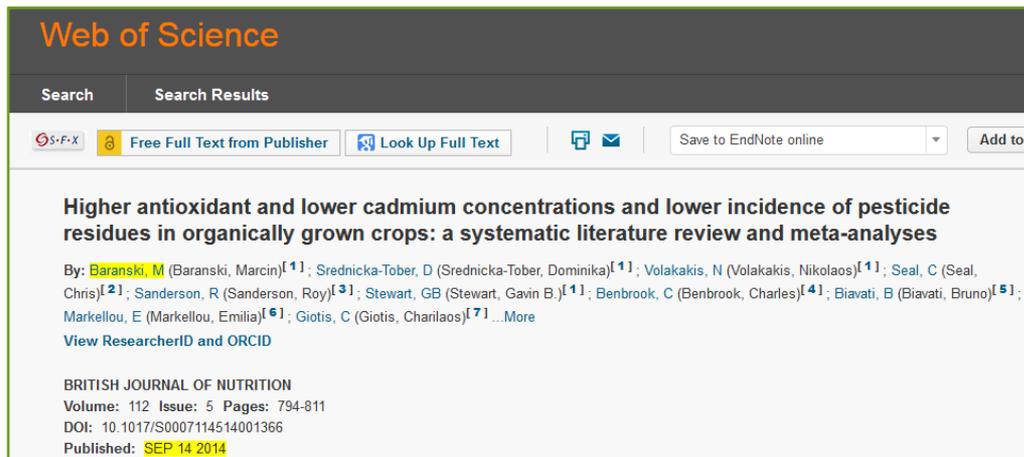
Category	Count
Publication reads	436
Project update reads	0
Question reads	0

Institution	Reads
Mohammadia School of Engineers, Rabat	+1
Abu-Marcouille Université, France - Marseille	+1

Country	Reads
China	+3
France	+2

### ❖ Mesure de l'intérêt d'un article par les utilisateurs du WoS

- Nombre de clics vers le site de l'éditeur
- Nombre de sauvegardes dans une base de gestion bibliographique (imports directs ou en format d'export)



The screenshot shows a search result for the article "Higher antioxidant and lower cadmium concentrations and lower incidence of pesticide residues in organically grown crops: a systematic literature review and meta-analyses". The authors listed are Baranski, M; Srednicka-Tober, D; Volakakis, N; Seal, C; Sanderson, R; Stewart, GB; Benbrook, C; Biavati, B; Markellou, E; and Giotis, C. The article is published in the British Journal of Nutrition, Volume 112, Issue 5, Pages 794-811, in September 2014. The DOI is 10.1017/S0007114514001366.



**Citation Network**  
In Web of Science Core Collection  
**97**  
Times Cited  
Highly Cited Paper

Métriques classiques (citations)



**Use in Web of Science**  
Web of Science Usage Count  
**8** Last 180 Days  
**189** Since 2013  
[Learn more](#)

Altmetrics

# DISCUSSION -PERSPECTIVES

# Atouts et limites des métriques alternatives

	Atouts	Limites
Diversification des types de documents	Toutes les productions scientifiques	
Métrique de l'article	et non de la revue (IF)	
Sources	Activité Web qui échappe aux indicateurs traditionnels de la publication : Presse, réseaux sociaux, blogs, pages wiki...	<ul style="list-style-type: none"> <li>- Identification des traces (Homonymie des noms des auteurs...)</li> <li>- Sources instables : pérennité et accessibilité non garanties</li> </ul>
Vérifiabilité des sources	Possibilité de vérifier les sources (liens)	Mesures quantitatives : Pas d'analyse qualitative
Immédiateté	<ul style="list-style-type: none"> <li>- Mise à jour en temps réel/indicateurs traditionnels</li> <li>- Identification d'experts</li> </ul>	Court terme pas forcément compatible avec le temps de la recherche
Mesure socialisation de la recherche	Mesure de l'impact de la recherche hors du monde académique	Reproductibilité des données contestée, risque de manipulations dans l'usage des réseaux sociaux
Standardisation		Pas de normes, pas de standardisation entre les différentes métriques
Disciplines	Toutes disciplines et langues	Biais pour certaines langues (anglais) et disciplines (médecine, physique)

# Des atouts qui sont aussi des limites

Une attention dans les médias sociaux parfois biaisée

- ❖ en fonction de la discipline (articles médicaux), titre attractif (humoristique, accrocheur, vendeur...), de l'auteur



**10** Were James Bond's drinks shaken because of alcohol induced tremor?  
Johnson G, Guha IN, Davies P

<b>Journal</b>	British Medical Journal	<b>Category</b>	Medical and Health Sciences
<b>Institution</b>	Royal Derby Hospital	<b>Country</b>	United Kingdom

**Score of attention**  
This is ranked 3rd in this journal.  
[Click for more details](#)

**Mentioned by**

- 127 news stories
- 14 blog posts
- 1559 tweets
- 165 Facebook posts
- 8 Google+ posts
- 2 Reddit posts

Article classé au 10<sup>e</sup> rang du [Top 100 de altmetric.com \(2014\)](#)

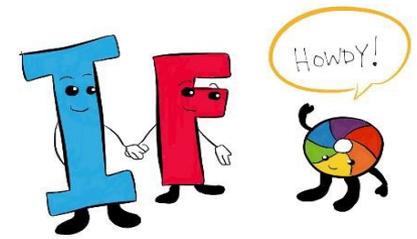
ARTICLE #1 OF 100  
United States Health Care Reform: Progress to Date and Next Steps  
SPECIAL COMMUNICATION IN JAMA  
In the first academic paper to be published by a sitting president, Obama assesses the effect of the Affordable Care Act and recommends additional healthcare priorities for future governments.

[MORE DETAILS](#) [FREE TO READ](#)

- 315 news stories
- 40 blog posts
- 6,948 tweets
- 201 Facebook posts
- 2 peer reviews
- 14 Reddit posts
- 1 article on F1000
- 2 Wikipedia citations

Article classé au 1<sup>e</sup> rang du [Top 100 de altmetric.com \(2016\)](#)

# Altmetrics pour évaluer la science?



- ❖ **"Ce n'est pas mieux que le mauvais facteur d'impact"**
  - Rapport "The Metric Tide« , Higher Education Funding Council for England  
[http://www.hefce.ac.uk/media/HEFCE.2014/Content/Pubs/Independentresearch/2015/The.Metric.Tide/2015\\_metric\\_tide.pdf](http://www.hefce.ac.uk/media/HEFCE.2014/Content/Pubs/Independentresearch/2015/The.Metric.Tide/2015_metric_tide.pdf)
- ❖ **Ne sont pas des indicateurs de qualité de la recherche (le peer reviewing reste nécessaire) mais complémentaires des indicateurs traditionnels**
  - Corrélation faible entre altmetric score et taux de citation
- ❖ **Sont de bons indicateurs de la communication autour de la science : dans la sphère académique et en dehors (intérêt du public et de popularité)**

*"En résumé, rien ne vaut une bonne évaluation par des pairs qui ne regardent pas ces indicateurs qui n'ont pas été conçus pour évaluer la recherche, mais évaluer la communication de la science ! "* (Maisonneuve H, 13/08/2015, [Blog Rédaction médicale et scientifique](#))

## NISO Recommended Practice: Outputs of the Alternative Assessment Metrics Project

Jill O'Neill, *National Information Standards Organization*

Follow

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157 Downloads  
Since November 23, 2016

Included in  
Library and Information  
Science Commons

### Abstract

In September of 2016, the National Information Standards Organization (NISO) published the collaboratively produced Recommended Practice, *NISO RP-25-2016, Outputs of the Alternative Assessment Metrics Project*. Funded by the Alfred P. Sloan Foundation, the project sought to establish a consensus among stakeholders whose activities require robust and precise tools for gauging the impact and reach of scholarship in a globally networked research environment—more robust than were available from impact factor and other such measures.

Contributions to this effort came from an international population via one-on-one interviews, satellite meetings at conferences, and numerous teleconference gatherings. Based on those inputs, working group efforts coalesced around the need for a consensually derived definition of terms, the development of use cases illustrating the anticipated applications for such metrics, and the crafting of a code of conduct aimed at establishing benchmarks for improving the quality of altmetric data through a focus on transparency, replicability, and accuracy.

### Recommended Citation

O'Neill, Jill (2016) "NISO Recommended Practice: Outputs of the Alternative Assessment Metrics Project," *Collaborative Librarianship*: Vol. 8 : Iss. 3 , Article 4.  
Available at: <https://digitalcommons.du.edu/collaborativelibrarianship/vol8/iss3/4/>



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## RESEARCH & INNOVATION Open Science

European Commission > Research & Innovation > Open Science > Expert Group on Altmetrics

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### Expert Group on Altmetrics

#### NEW: Final Report of the Expert Group on Altmetrics is available

Publication date: 20 March 2017

The Expert Group on Altmetrics outlines in this report how to advance a next-generation metrics in the context of Open Science and delivers an advice corresponding to the following policy lines of the Open Science Agenda: Fostering Open Science, Removing barriers to Open Science, Developing research infrastructures and Embed Open Science in society.

The report will be presented and discussed at the Open Science Policy Platform on 20 March 2017

The report can be downloaded here  796 KB

[https://ec.europa.eu/research/openscience/index.cfm?pg=altmetrics\\_eg](https://ec.europa.eu/research/openscience/index.cfm?pg=altmetrics_eg)