



Publish and get read!

Max Haring, PhD
Executive editor, SpringerPlus
Max.haring@springer.com

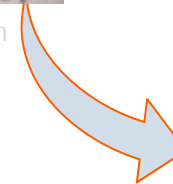
Lithuania 2014 Springer workshop

Overview

- Why Publish?
- Finding the best journal
 - What do editors want?...
- Open Access
- How to read the Impact Factor?
- Writing your manuscript
 - Search Engine Optimisation
 - Publishing ethics
- Peer-review
- After Acceptance: get read & cited!
 - Social Media & Alternative Metrics
 - Be future proof!



critiquemynovel.com



About me



Max.Haring@springer.com

Education & training:

2003: MSc in plant cell biology (*Arabidopsis*, *Medicago*)

2008: PhD in plant epigenetics (Maize)

With Springer:

2007: Publishing Editor, biomedicine

2011: Executive Editor, SpringerPlus

Special interests: Open Access, portable peer-review, author services

SpringerPlus (www.springerplus.com)

- Open Access
 - Online Only
 - Peer-reviewed
 - International editorial board
-
- For all Disciplines in STEM and HSS
 - Never out of scope!
 - All article types
 - Descriptive, negative & replicative results
 - No focus on impact factor
 - Accepts low-cited work
 - Efficient and predictable



Articles

Latest  Most viewed

Research [Open Access](#)

Male reproductive traits of full-sibs of different age classes in three-spined sticklebacks (*Gasterosteus*)

Mehlis M and Bakker TCM
SpringerPlus 2013, **2**:175 (20 April 2013)

Research [Open Access](#)

Influence of socio-demographic factors on awareness of HIV/AIDS among Bangladeshi garment workers

Hasan ATMH, Hassan R, Khan ZR, Nuzhat E and Hassan UA
SpringerPlus 2013, **2**:174 (20 April 2013)

Research [Open Access](#)

Cost of comprehensive patient assistance program in early breast cancer patients

Stey AM, Fei K, Franco R, Mendelson A and Bickell NA
SpringerPlus 2013, **2**:173 (19 April 2013)

Research [Open Access](#)

In --silico molecular docking analysis of prodigiosin and cycloprodigiosin as COX-2 inhibitors

Krishna PS, Vani K, Prasad MR, Samatha B, Bindu NS, Charya MA and Reddy Shetty P
SpringerPlus 2013, **2**:172 (19 April 2013)

Research [Open Access](#)

Aerodynamic drag of modern soccer balls

Asai T and Seo K
SpringerPlus 2013, **2**:171 (19 April 2013)

[View more articles](#)



Why Publish?

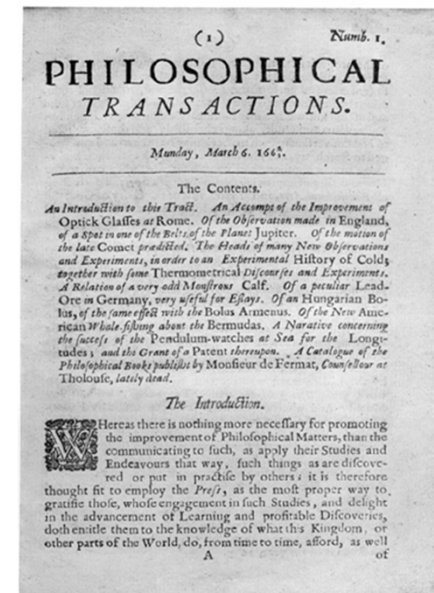
First Scientific Journal

- 6th March 1665 *Philosophical Transactions*
- First true scholarly journal, founded by Henry Oldenburg (1618-1677), secretary of the British Royal Society

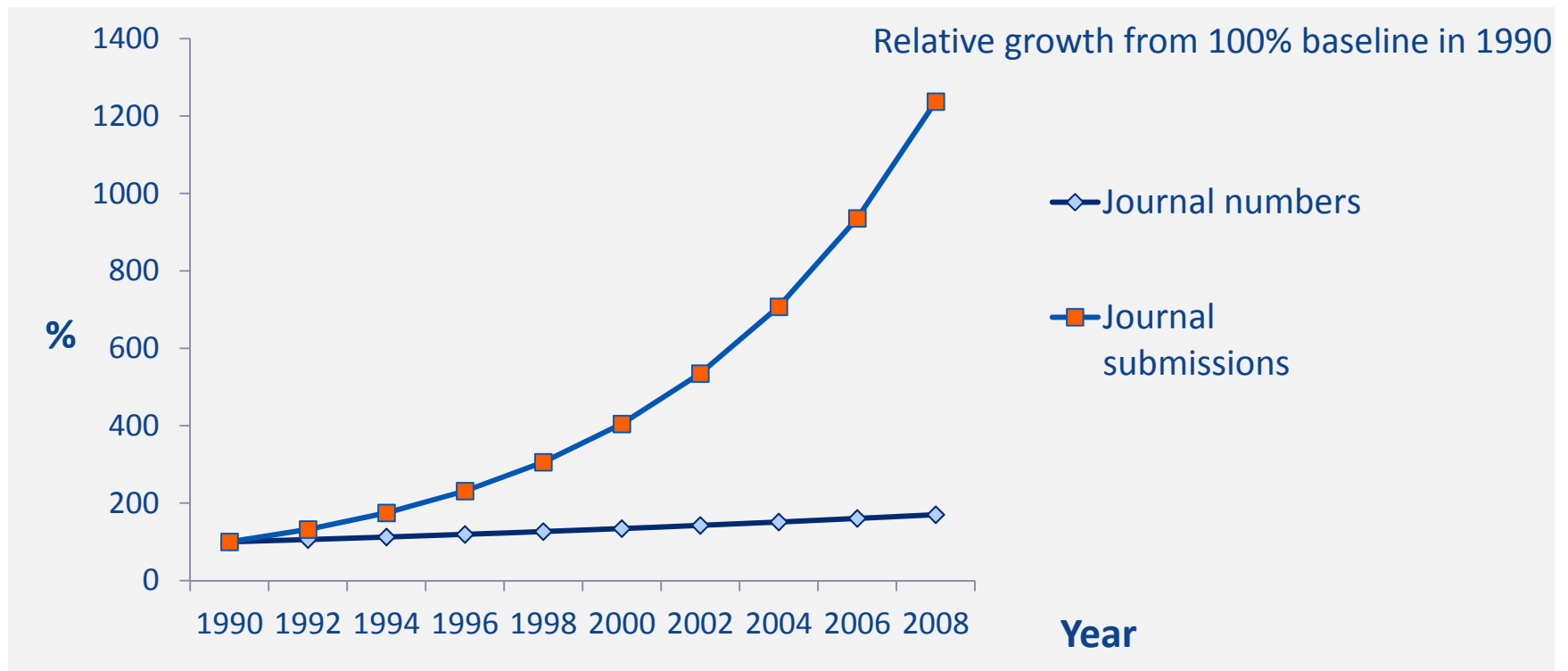
*“There is nothing more necessary for the **improvement** of philosophical matters than the **communication** of such...”*

- A scientific journal has 4 roles:

Registration
Certification
Dissemination
Archive



Increased competition



“It is certainly impossible for any person [...] to read all the papers that are published”

Michael Faraday 1826





Finding the best journal

Journal selection

Types of publication:

- Journals
 - Research journal
 - Review journal
 - Mega journal
- Scientific books
 - Edited volume
 - Monograph
 - Book series
 - Reference works
 - Briefs
- Repository / databases / archive / ...
 - Share (preliminary) data



www.ntnu.no



The anatomy of a journal

Journal editorial board

- Active academics
- Voluntary or paid,
- Organizes peer-review
- Decides to accept or reject

Not financially responsible!

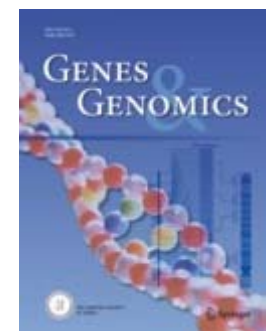
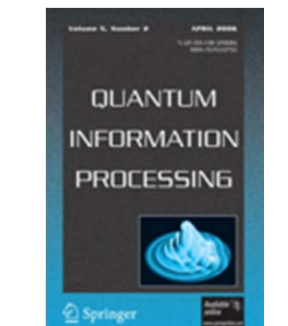
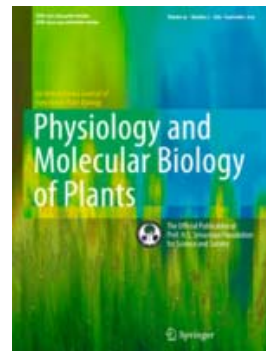
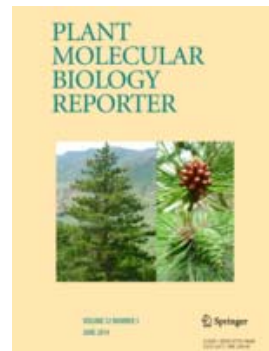
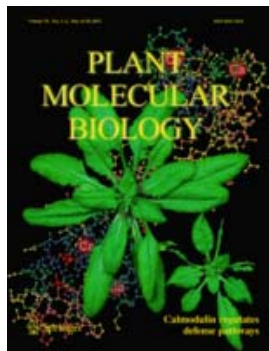
Journal Publisher

- Professional organisation
- Organizes infrastructure
- Develops and maintain titles

Not involved in accept/reject !



Journal Selection



Journal selection

- What is the main focus of your work?
- What is the type of publication?
(research, review, method, data)
- Who will be interested?
- How significant are your results?
- Where have similar articles been published?
(who would be appropriate peer reviewers)
- Open Access options?
(OA mandates, public outreach,
reach researchers outside academia)



Find the right journal for your manuscript

Springer Journal Selector ^{beta}
Find the Springer journal that's right for you [FAQ](#)

Journals	Recommended: 1	Match	Impact Factor	Publishing Model
Allergy, Asthma & Clinical Immunology				Full OA
Current Allergy and Asthma Reports			2.5	Hybrid

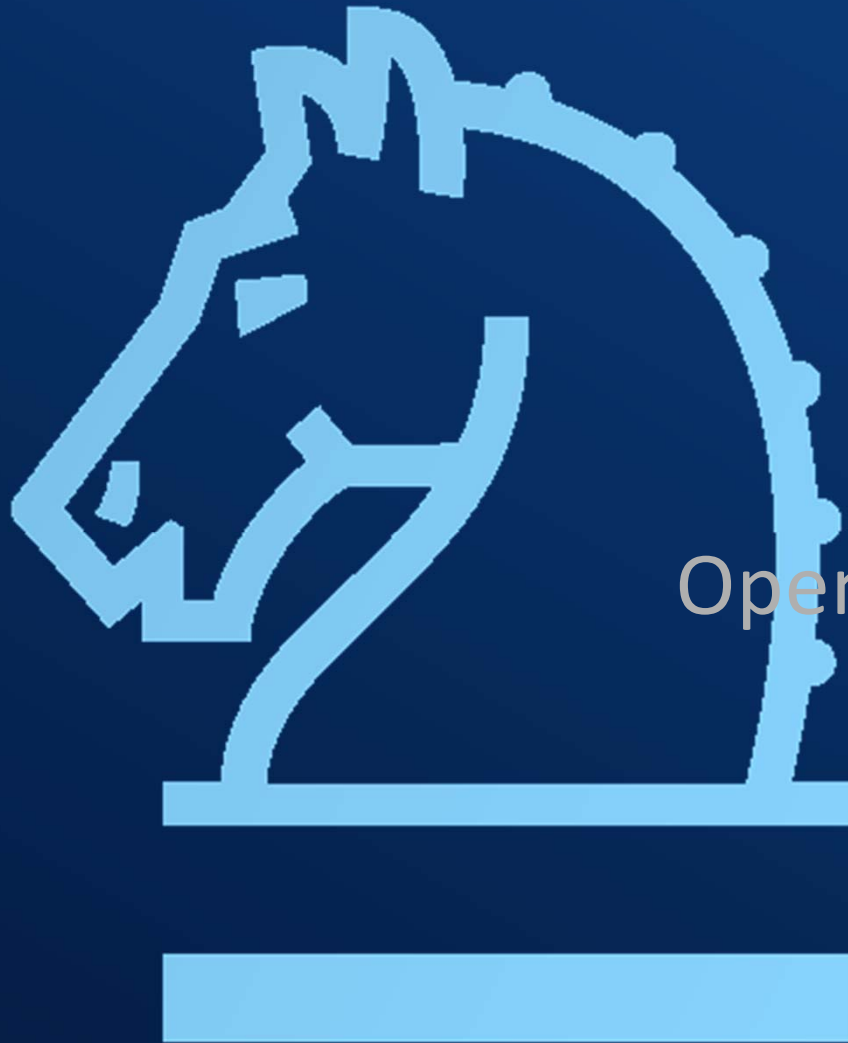
Your matched text (abstract or description):
You can update this text at any time, then use the Refine List button to refresh results: "Anaphylaxis avocado, latex sensitization, literature. 15 male anaphylaxis hour eating avocado- food. Avocado consumption common . avocado anaphylaxis, patients sensitized latex."

Advanced Matching:
Impact Factor 0 0.5 1 1.5 2 3 5 7 10+
Frequency
Publishing model ☐ Open Access ☐ Hybrid
☒ Any Publishing Model

[← Home](#) [Refine List](#)

a free tool from edanz - english editing for scientists

www.springer.com/authors



Open Access Publishing

What is Open Access?

By Open Access, we mean the free, immediate, availability on the public Internet of those works which scholars give to the world without expectation of payment – permitting any user to read, download, copy, distribute, print, search or link to the full text of these articles, crawl them for indexing, pass them as data to software or use them for any other lawful purpose.

What is Open Access?

By Open Access, we mean the **free, immediate, availability on the public Internet** of those works which scholars give to the world without expectation of payment – **permitting any user to read**, download, copy, distribute, print, search or link to the full text of these articles, crawl them for indexing, pass them as data to software **or use them for any other lawful purpose**.

free, immediate, availability on the public Internet

- All OA publications are free to download for everyone
- No access barriers

permitting any user to (..) use them for any (..) lawful purpose.

- Reuse permitted (depends on exact license)
- Minimum copyright restrictions

Open Access Publishing

Free to read

Free to re-use



- Easier to find & use relevant literature
- Increases the **visibility, readership** and **impact** of author's works
- Creates **new ways** of use
- Enhances interdisciplinary research
- **Accelerates the pace** of research, discovery and innovation

<http://www.sparc.arl.org/openaccess/why-oa.shtml>

theguardian

News | Sport | Comment | Culture | Business | Money | Life & style | Travel | Envir

News > Science > Open access scientific publishing

NOTES&THEORIES
DISPATCHES FROM THE SCIENCE DESK



Previous

Blog home

Open access means a bright future for scientific research

Free access to British scientific research will give us more and cost us less than we realise



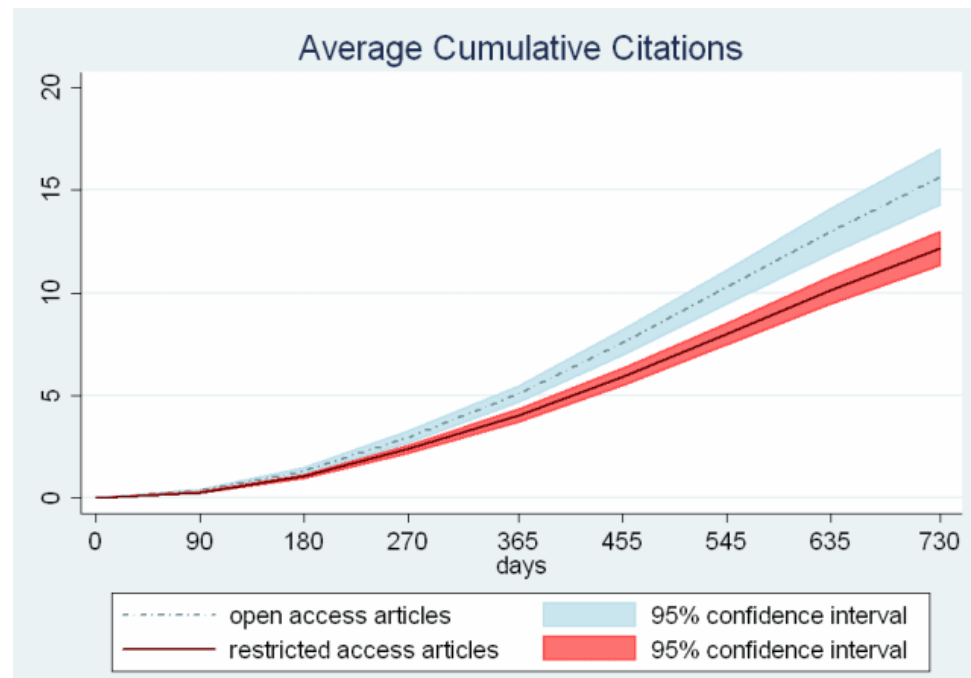
The UK government this week announced plans to make publicly funded scientific research immediately available for anyone to read for free by 2014. Photograph: Matthew Fearn/PA

<http://www.guardian.co.uk/science/blog/2012/jul/17/open-access-scientific-research>

Progress is about communication!

More readers => More citations

- Early Access advantage
- Wide audience advantage
- Effect depends on discipline
- Bias for Selection or quality may apply



What else can be open?

Peer-review

- Reviewers name and comments are available
- Post-publication Open Peer-review / comments



Manuscripts

- Pre-publication history
- Revisions and comments



Data

- Research output, images, algorithms, software code, statistics, ...

Metrics

- Usage, citations (IF, H-index), interaction (tweets, likes, mentions, news)

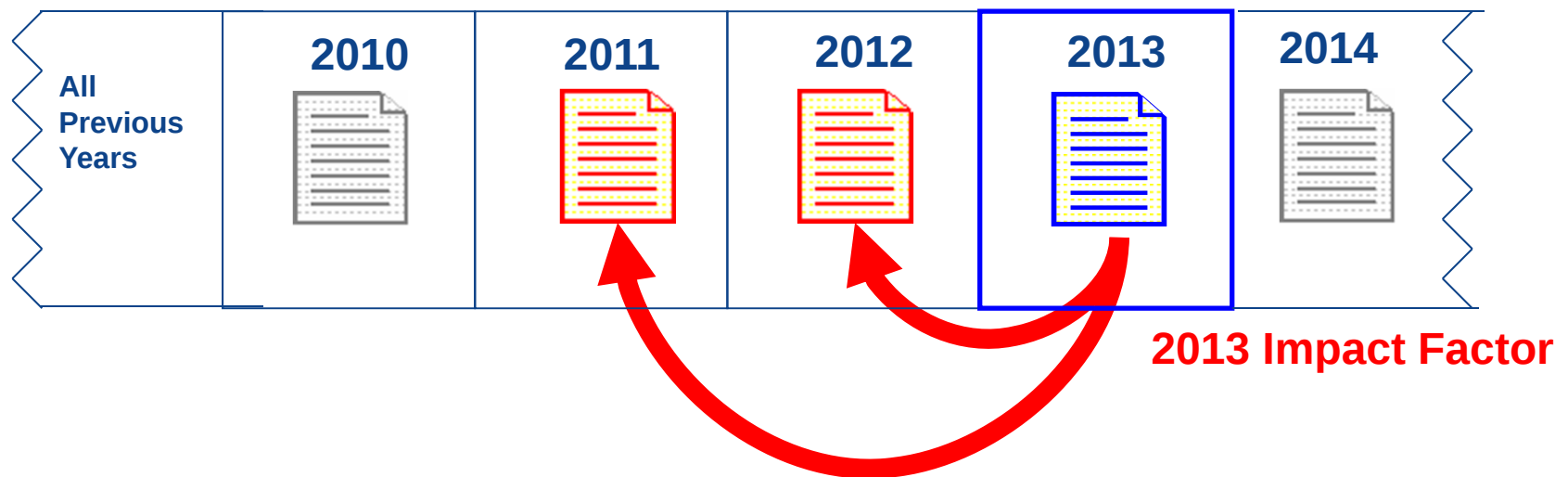


How to read the Impact factor?

How to read the Impact factor?

The Impact factor is patented by ISI Thompson Reuters

- The ISI database contains data from <1/3 of all journals
- Every year in June ISI publishes the new Journal Citation Report



$$\text{2013 Impact Factor} = \frac{\text{Cites in 2013 to 2012 and 2011}}{\text{No. of Papers published in 2012 and 2011}}$$

How to read the Impact factor?

The Impact factor:

- Covers a 2 year window
- Is based on a limited database
- was set up as a service for libraries (not scientists!)
- Can be negotiated: <http://www.plosmedicine.org/article/info:doi/10.1371/journal.pmed.0030291>
- Measures average number of citations for **one journal**
- Should **not** be used to compare scientists (!) or journals in different fields

IF distribution: (data for 2010-2011)

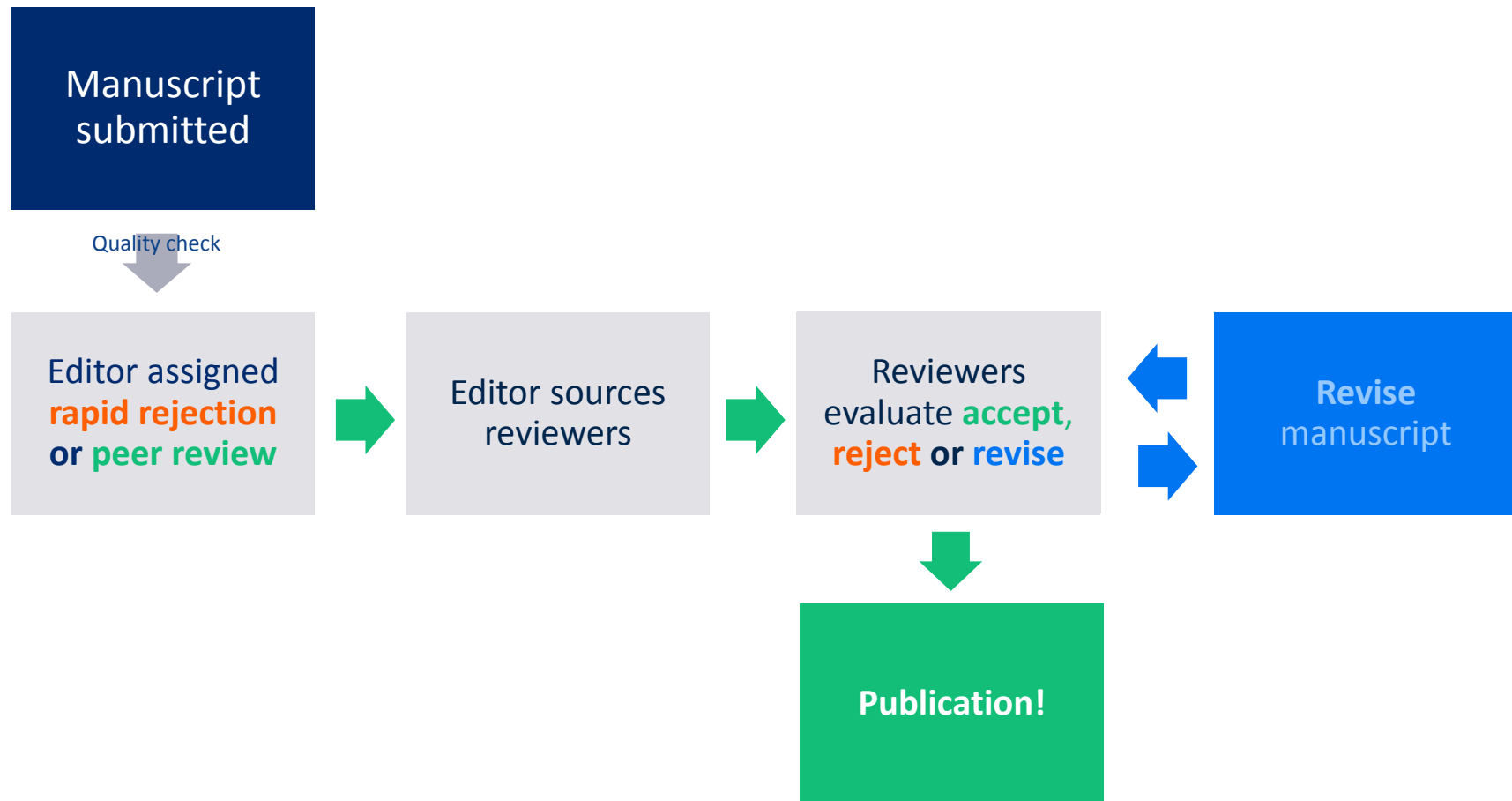
	Nature	Science
• 2011 Impact Factor	36.2	31.2
• above-IF cited articles	11%	30%
• below-IF cited articles	89%	70%
• of which zero-cited articles	27%	15%



Writing your manuscript

Publishing timeline

Submission to publication, 3–12 months



The importance of your title



Grabs the reader's
attention



Introduces
your manuscript
to an editor



Label
for indexing

- Convey the main topics of manuscript
- Be specific and concise
- **Avoid** jargon, abbreviations and acronyms
- Use  to your advantage!

The importance of your title example

Research

Open Access

Construction of a scoring system for predicting the risk of severe gastrointestinal involvement in Henoch-Schönlein



Construction of a scoring system for predicting the risk of ...

www.springerplus.com/content/3/1/171 ▼

by T Nagamori - 2014

Apr 2, 2014 - **Research** ... This is an **Open Access** article distributed under the terms of the Creative ... Data for HSP patients hospitalized at each of seven institutes were ... was of use in predicting severe GI involvement in HSP patients.

Case study

Open Access

One-stage laparoscopic surgery for inspissated bile syndrome: case report and review of surgical techniques



One-stage laparoscopic surgery for inspissated bile ...

www.springerplus.com/content/2/1/648 ▼ Vertaal deze pagina

door S Berger - 2013 - Verwante artikelen

Spring naar **Case report** - **Inspissated bile syndrome** was diagnosed when sludge was ... complete obstruction of the common bile duct (Figure 1). ... This technique

Abstract

- The majority of people will only read this section
- **It must be able to 'stand alone'**
- An accurate summary of your research and conclusions reached
- No data!
- Structured or unstructured?

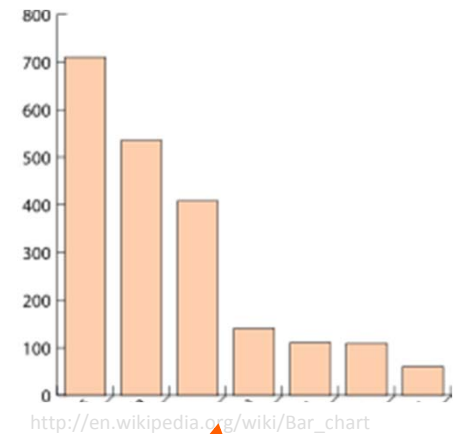
ALWAYS consult the 'Instructions for Authors' for specific requirements

Keywords

- Choose appropriate keywords for indexing purposes → citations
- Use established keywords and terminology from the literature and databases
 - MeSH
 - PACS
- **Avoid** general terms (like DNA, gene, physiology)
- Do not use keywords in the title
- Avoid overlap with abstract
- Good keywords help to get cited!

Results

- Assemble your findings in a logical order to make a ‘story’
(**BEGINNING - MIDDLE - END**)
- Use subheadings
- Present the facts, do not discuss your results
- Do not duplicate data among figures, tables and text
- Include results of statistical analyses in the text
- **Best practice:** Include as supplement files:
 - All data behind figures or graphs as a table
 - The full statistical analysis
 - All software code, algorithms etc.



Data	
Point A	705
Point B	540
Point C	400
Point D	180

References

Always format your references: check the *instructions for authors*

Formatting is required *in text* for citations and for your references section

Use reference management software

(EndNote, Papers)

ENDNOTE®

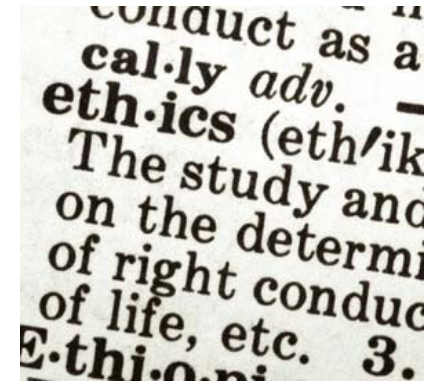


www.papersapp.com

Publication ethics

PLEASE DO NOT ...

- Submit to more than one journal at the same time
- Plagiarize
- Recycle your own text - images - data
- fabricate or falsify data or images
- Improperly add or remove authors
- Improperly use human subjects and animals (always declare approved ethical standards)



Committee on Publication Ethics

Plagiarism detection



MS1082938871131732

ORIGINALITY REPORT

36%

SIMILARITY INDEX

PRIMARY SOURCES

- 1 Pujari, Jagadeesh Devdas; Yakkundimath, Rajesh and Byadgi, Abdulmunaf Syedhusain. "Grading and Classification of Anthracnose Fungal Disease of Fruits based on Statistical Texture Features", International Journal of Advanced Science & Technology, 2013. 318 words – 4%
- 2 www.csse.monash.edu.au 234 words – 3%
- 3 caesjournals.org 156 words – 2%
- 4 Cui, D.. "Image processing methods for quantitatively detecting soybean rust from multispectral images", Biosystems Engineering, 201011 122 words – 2%

function based on a measure of the generalized squared distance. The model using fourteen selected HSI texture features achieved the best classification accuracy of 96.7%. (Tuker and Chakraborty, 2008) have implemented a software which detects and characterizes disease lesions on leaves to provide data on the number and type of lesions and the percentage of leaf area diseased using digital image processing (severity). The usefulness and adaptability of the software is evaluated using two foliar diseases, alternaria blight of sunflower, and oat leaf rust, which differ in symptoms. Using image segmentation and classification techniques, the software discriminated disease symptoms from the healthy leaf area. (Ying, et al., 2008) have discussed the preprocessing methods to carry out the intelligent diagnosis to crop diseases based on image processing and appropriate features extracted. They suggested the importance of image pre-processing for the disease diagnosis and setting up pattern recognition system for recognition of crop diseases. (Huang, 2007) have presented an application of neural network and image processing techniques for detecting and classifying phalaenopsis seedling diseases. Phalaenopsis seedlings segmented by an exponential transform with an adjustable parameter and image processing techniques. A Back Propagation Neural Network (BPNN) classifier is employed to classify Bacterial Soft Rot (BSR), Bacterial Brown Spot (BBS), Phytophthora Black Rot (PBR), and OK (uninfected area of leaf) of phalaenopsis seedlings. The methodology presented herein effectively detected and classified these phalaenopsis seedling lesions to an accuracy of 89.6%. The detection capability of the system, without classifying the disease type, is as high as 97.2%. (Doudkin, et al., 2007) have described a neural network approach for segmentation of agricultural lands in remote sensing data. A neural network clusterization algorithm for segmentation of the color images of crop field infected by diseases that change usual color of agricultural plants is proposed. It can be applied for cartography of fields infected with plant diseases to reduce the use of plant protection products. (Pydipati and Burks, 2006) have used a CCM to determine whether texture based HSI color features in conjunction with statistical classification algorithms could be used to identify diseased and normal citrus leaves under laboratory conditions. Normal and diseased citrus leaf samples with greasy spot, melanose, and scab are evaluated. The leaf sample discriminant analysis using CCM textural features achieved classification accuracies of over 95% for all classes when using hue and saturation texture features. (Muhammed and Hamed, 2005) discussed characterizing and estimating fungal disease severity in a spring wheat crop. This is accomplished by using a reference data set consisting of hyperspectral crop reflectance data vectors and the corresponding disease severity field assessments. The hyperspectral vectors are first normalized into zero-mean and unit-variance vectors by performing various combinations of spectral and band-wise normalizations. Then, after applying the same normalization procedures to the new hyperspectral data, a Nearest Neighbor classifier is used to classify the new data against the reference data. The effects of increased disease severity can be characterized by analyzing the resulting disease signatures obtained when applying the different normalization procedures. (Sena, 2003) have developed and evaluated an algorithm at simplified lighting conditions for identifying damaged maize plants by the fall armyworm using digital color images. Images of damaged and non-damaged maize plants are taken in eight different stages and in three different light intensities. The proposed algorithm had two stages: the processing and the image analysis. During the first stage, the images are processed to create binary images where the leaves are segmented from the other pixels. At the second stage, the images are subdivided into blocks and classified as damaged or non-damaged depending on the number of objects found in each block. The algorithm correctly classified 94.72% of 720 images. (Lefebvre, et al., 1993) have presented the problem in automating pulp sampling of potatoes such as their shape, color, and texture in order to detect viral diseases. Two computer vision approaches that have been implemented and tested, as well as the robotic apparatus required for the complete installation. The first computer vision approach, the so-called 3-D image analysis, is based on a combination of classical image analysis methods with active vision. The second approach, the so-called thermographic analysis, combines analysis of thermal images of potatoes with active vision.

Recent research has shown that machine vision has the potential to become a viable tool to identify disease type. From the literature survey, it is observed that the work on detecting soybean rust and quantify disease severity at each stage of disease development is not attempted to the best of our knowledge. Although several image processing approaches have been presented for detecting plant diseases, no attempts are made for detecting disease based on infection levels using color features by exploiting global and local regions. The goal of this study is to investigate the possibility of quantitatively detecting soybean rust infection at different stages of disease development and identify rust disease even before specific symptoms become visible. The present work has the following objectives: (i) to record grades and calculate percentage of disease severity, (ii) to detect the soybean rust disease severity using



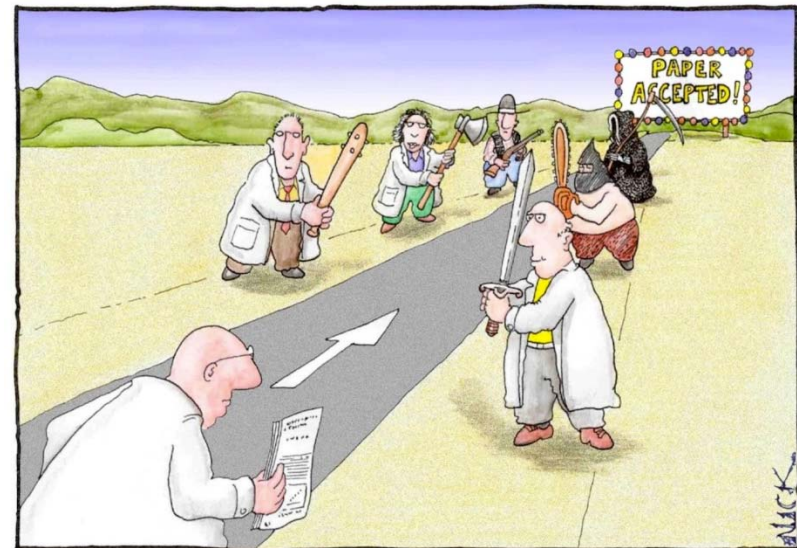
Peer review

What is peer review?

- A review process for scientists by scientists
- Filters what is published as “science”
- Peer review is used for:
 - Scientific publication
 - Grant review
 - Promotion

Who are peer reviewers

- Other scientists – your peers!
- Experts in the field
- journal editors can also review

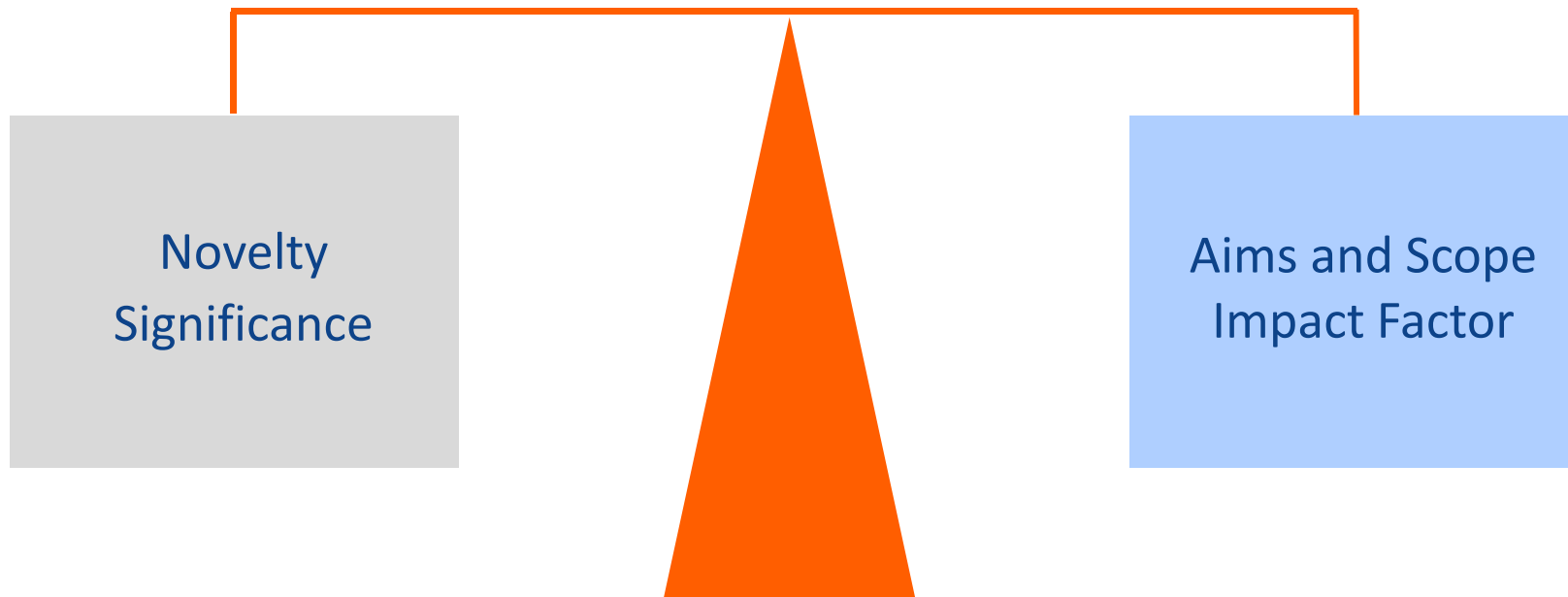


Most scientists regarded the new streamlined peer-review process as “quite an improvement.”

Cartoon by Nick D Kim, strange-matter.net

What do reviewers look for?

- Is it likely that the research is correct?
- Do the introduction and discussion fit the data?
- Are the results presented in the manuscript sufficiently novel?
- Is the manuscript of enough interest to readers of the journal?
- Will the manuscript get cited?



Please keep in mind that:

The average scientist will publish **2.2 articles every year** during his career

The **number of submissions** needed before an article is accepted: **2.1**

72 percent of the articles **rejected** by the 'American Journal of Public Health' (IF 3.8) were subsequently published in other journals.

References:

Testing bibliometric indicators by their prediction of scientists promotions" P. Jensen, J. Rouquier and Y. Croissant. Scientometrics Volume 78, Number 3 / March, 2009 Pages 467-479 DOI 10.1007/s11192-007-2014-3

<http://science-professor.blogspot.com/2011/08/how-many-times.html>, <http://chronicle.com/forums/index.php?topic=42273.0>,
<http://scientopia.org/blogs/drbecca/2011/03/07/publishing-probs-where-next/>, <http://www.insidehighered.com/advice/2009/04/27/belcher>
http://www.frontiersin.org/computational_neuroscience/10.3389/fncom.2011.00055/full

Common reasons for rejection (by editors and reviewers)

From: Ali J. Manuscript rejection: Causes and remedies. J Young Pharmacists. Wolters Kluwer Health DOI 10.4103/0975-1483.62205

- Lack of novelty, originality, or necessity of the study
- Unimportant and irrelevant subject matter
- Lack of interpretation or focus
- Flaws in methodology, interpretation of data, or statistics
- Presentation or formatting
- Reviewers' field of knowledge
- Inappropriateness for the journal
- Journals' popularity and priority given to the manuscript by the editor



<http://www.maxbingham.com/blog/2012/03/how-to-deal-with-rejection-without-review/>



And then....

Accepted!

Congratulations!



Manuscript will enter the production workflow

- Tight deadlines
- Proof reading – last chance to correct mistakes!
- Check title and all names! Check again!



Published! Now get cited!

Everyone reads before citing!

Get Read!

- Publish Open Access
- Make your data available
- Use Social Media, Blogs, websites
- Comment on Mendelay, Papers etc.
- Add Alt-metrics to your CV
- Always use the DOI as a reference



www.ntnu.no



SpringerPlus 2014, 3:594

doi:10.1186/2193-1801-3-594

Published: 9 October 2014

Citing Data!



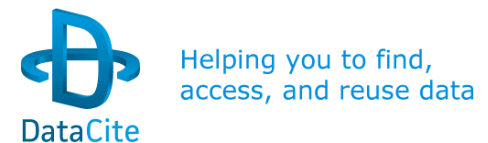
Publish your data!

- Linked to journal article
- Data with its own DOI
 - Citable
 - Impact calculation

Data mandates

- US: NHF, NIH, NASA, CDC
- EU: Horizon 2020, Wellcome Trust
 - Publish with DOI !

(GIGA)ⁿ
SCIENCE



DANS





Science goes Social

Citations come from everywhere!

Scholarly citations

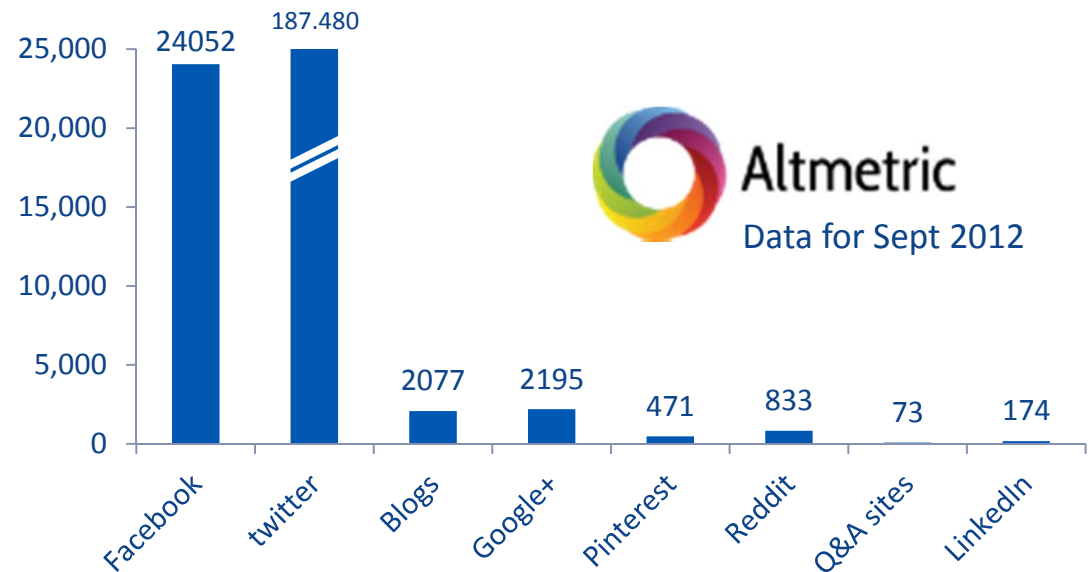
DNA genome. HPV L1 protein can be self-assembled as a VLP when this protein is expressed in various expression systems (Trus et al. 1997). To display this whole

Non-scholarly citation

- News coverage
- Twitter, Facebook, Google+
- Blogs, Wikipedia

Post-publication comments

- Faculty of 1000
- Mendeley, ResearchGate, Academia.edu, Papers



Open metrics

‘Traditional’ metrics are closed



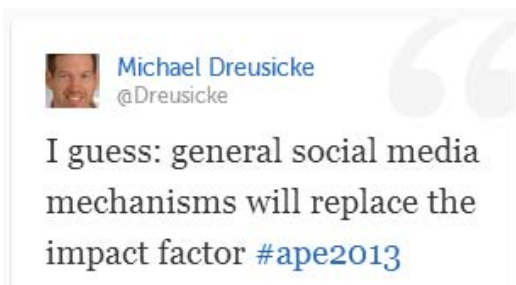
Altmetrics “*representing very different things**” are open!



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

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



The Future is now!

- Publish Open Access (with DOI)
- Contribute to the discussion!
 - Make your data available (with DOI)
 - Use social media, blogs, websites
 - Publish figures, images, posters, slides (With DOI)
 - Comment on F1000, Mendelay, Papers etc.
- Add Altmetrics to your CV, highlight meaning & importance
- Always use the DOI as a reference



www.ntnu.no



Resources: <http://www.springer.com/authoracademy>

Springer Author Academy



Welcome to the Springer Author Academy, a guide from Springer and Edanz on the basics of writing and publishing a scientific manuscript. You can use the links to the right or below to find advice on specific topics.



Thank you!

Max Haring, PhD
Executive editor, SpringerPlus
Max.haring@springer.com

