Evaluating your research by numbers: an introduction to citation metrics

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Citation metrics rely on counting how many times a research paper has been referenced by other research papers....
Does a citation count demonstrate the value of a paper?
Individual Researchers

H-index

Field-weighted citation impact

Number of citations per publication?
The definition of the index is that a scholar with an index of $h$ has published $h$ papers each of which has been cited in other papers at least $h$ times

Professor X has a total of 10 documents:
• Document 1: 50 cites
• Document 2: 18 cites
• Document 3: 11 cites
• Document 4: 7 cites
• ------------------------------------------------------------- $h$-index: 4
• Document 5: 4 cites
• Document 6: 3 cites
• Documents 7, 8, 9, 10: 0 cites
Overall research performance

- Scholarly Output: 6,385 (▲)
- Authors: 2,809 (▲)
- Field-Weighted Citation Impact: 2.09
- Citation Count: 49,039
- Citations per Publication: 7.7
- h5-index: 72

Distribution of research fields:
- Computer Science (6.4%)
- Mathematics (5.2%)
- Physics and Astronomy (6.7%)
- Chemistry (3.5%)
- Chemical Engineering (2.8%)
- Materials Science (7.3%)
- Engineering (10.4%)
- Environmental Science (4.4%)
- Agricultural and Biological Sciences (4.9%)
- Biochemistry, Genetics and Molecular Biology (5.5%)
- Medicine (12.7%)
- Nursing (2.7%)
- Arts and Humanities (3.3%)
- Psychology (2.8%)
- Social Sciences (6.8%)
- Other (12.0%)

View list of publications

Analyze in more detail
Journal ranking tools

- Journal Citation Reports
- Scimago Journal rank (Elsevier)
- Citation searching
Can you maximize your citation metrics?

https://libguides.swansea.ac.uk/publish
Can metrics tell us....

• Who published the best paper?
• Who are the best researchers?
• Where is the best place to study?
• Where is the best journal to publish?
• Who should have the funding?
• Who should get the job?
Altmetrics

Global trends in wildfire and its impacts: perceptions versus realities in a changing world

Overview of attention for article published in Philosophical Transactions of the Royal Society B: Biological Sciences, June 2016

<table>
<thead>
<tr>
<th>SUMMARY</th>
<th>News</th>
<th>Blogs</th>
<th>Twitter</th>
<th>Facebook</th>
<th>Google+</th>
<th>Dimensions citations</th>
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<td>Title: Global trends in wildfire and its impacts: perceptions versus realities in a changing world</td>
<td>Published in: Philosophical Transactions of the Royal Society B: Biological Sciences, June 2016</td>
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<td>DOI: 10.1098/rstb.2015.0345</td>
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<td>Authors: Stefan H. Doerr, Cristina Santin</td>
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<td>Abstract: Wildfire has been an important process affecting the Earth's surface and atmosphere for over 350... [show]</td>
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The data shown below were collected from the profiles of 335 tweeters who shared this research output. Click here to find out more about how the information was compiled.
Altmetric data is displayed...

• On many publisher websites
• Within bibliographic databases e.g. Scopus
• On our repository Cronfa (if there is a DOI and activity to report)
• Anywhere, using the free Altmetric bookmarklet
• By Creating your own Impactstory Profile
“Metrics have proliferated: usually well intentioned, not always well informed, often ill applied....”

From “The Leiden Manifesto”