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A guide to publishing in scholarly journals

Impact Factors and other quality measures

Impact Factor

The Impact Factor is the most widely referenced quality measure amongst academic publications. It is defined as the ratio between citations and recent citable articles published in a journal; the average number of citations received per published article. The following is an explanation of how Thomson Reuters calculate Impact Factors.

Calculating Impact Factors

Citations in 2007 to articles published in:	2006 187 total citations 2005 318 total citations Sum 505
Number of articles published in:	2006 54 total articles 2005 46 total articles Sum 100
Calculation:	505 Total citations to articles published in 2005 and 2006 100 Number of articles published in 2005 and 2006 The 2007 Impact Factor for the journal is **5.050**

Impact Factors vary greatly by subject discipline and comparison is only meaningful within the same subject category or group.

H-index

The H-index rates a scientist's performance based on his or her career publications, as measured by the lifetime number of citations each article receives. The measurement is dependent on both quantity (number of publications) and quality (number of citations) of an academic's publications.

If you list all of a scientist's publications in descending order of the number of citations received to date, their H-index is the highest number of their articles, H, that have each received at least H citations. So, their H-index is 10 if 10 articles have each received at least 10 citations; their H-index is 81 if 81 articles have each received at least 81 citations. Their H-index is 1 if all of their articles have each received 1 citation, but also if only 1 of all their articles has received any citations.

How is the H-index different from the Impact Factor?

The main difference is that the H-index refers to the performance of an individual scientist or journal.

- The H-index is based on lifetime citations received by a scientist's articles. The Impact Factor is based on only 2 years' worth of citations.
- Both rankings measure the average performance of an individual scientist or a journal. Some articles will receive many more citations, and some fewer, than the ranking figure.

Usage

Usage is a new concept for measuring journal value and impact. It can be defined as how often the full-text article is downloaded or viewed. Counting Online Usage of Networked Electronic Resources (COUNTER) is attempting to standardize usage reporting and develop a Usage Factor metric.

Libraries already use usage statistics heavily to evaluate their collections and spending. Authors are also interested to see how much their work is downloaded. For more information visit http://www.projectcounter.org

To find out more about these journal measures and others, please visit
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