Outline of the Session

Citation and analysis metrics for

- Journals
- Articles
- Books & book chapters
- Authors

Hands-on activity at the end of the session
• Do not use journal-based metrics, such as Journal Impact Factors, as a surrogate measure of the quality of individual research articles, to assess an individual researcher’s contributions, or in hiring, promotion, or funding decisions.

• the research content of a paper is much more important than publication metrics or journal title
What about the REF?

• ‘Responsible metrics’
  – The Metric Tide (July 2015) report on uses and limitations of research metrics and indicators.
  – UK Forum for Responsible Research Metrics.

• REF 2021 - assessment methods:
  – expert review
  – citation counts in some subjects
  – not journal impact factors.
Journal Metrics
Journal Metrics

Factor – JIF  
Eigenfactor  
JIF Quartile  
JIF range

SJR  
CiteScore  
Percentile  
SNIP

Journal Citation Reports®

WEB OF SCIENCE™

SJR  
Scimago Journal & Country Rank

Scopus
Tools for finding Journals in my subject areas

- Journal Citation Reports®
- WEB OF SCIENCE™
- SJR
  Scimago Journal & Country Rank
- Scopus
- SOLO
  Search Oxford Libraries Online
# Journals By Rank

All Journal Categories ranked by Number of Journals

<table>
<thead>
<tr>
<th>Rank</th>
<th>Category</th>
<th>Edition</th>
<th>#Journals</th>
<th>Total Cites</th>
<th>Median Impact Factor</th>
<th>Aggregate Impact Factor</th>
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<tr>
<td>1</td>
<td>ECONOMICS</td>
<td>SSCI</td>
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<td>2</td>
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<td>3</td>
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<td>ONCOLOGY</td>
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<td>SURGERY</td>
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<td>45</td>
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<td>MMWR. Recommendations and reports : Morbidity and mortality weekly report. Recommendations and reports / Centers for Disease Control</td>
<td>journal</td>
<td>48.894</td>
<td>134</td>
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<td>119</td>
<td>391</td>
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</table>
Welcome to the 10th volume of *Immunotherapy*

Message from the editor: welcome to the 10th volume of *Immunotherapy*

Monoclonal antibodies in cancer immunotherapy

Mechanisms of efficacy in cancer immunotherapy: 14th Annual Meeting of the Association for Cancer Immunotherapy (CIMT), Mainz, Germany, May 10-12, 2016
1. The blockade of immune checkpoints in cancer immunotherapy

2. Nivolumab versus docetaxel in advanced squamous-cell non-small-cell lung cancer
Open Access Journals

DOAJ
DIRECTORY OF OPEN ACCESS JOURNALS

SHERPA/ROMEO

Journal Citation Reports®

SJR
Scimago Journal & Country Rank

Predatory Journals
List of top 100 journals

List of top 20 journals in categories and sub-categories

Coverage from academic repositories, author and publisher websites

H5-index calculated in the last 5 years

“determined automatically by a computer program”

Calculation covers articles published between 2014 and 2018 and indexed in Google Scholar in July 2019
Journal Metrics

Activity Book
Sections
1 & 2
Article Metrics

Citations and Altmetrics

Altmetric
Snowball Metrics
Impactstory
PLUM Analytics
Tools for Article Metrics Counts and Beyond

Papers
- WEB OF SCIENCE™
- Scopus
- Google Scholar
- Europe PMC

Metrics
- Hot Paper
- Highly Cited Paper
- Altmetric
- Cited by: 4196
- SNIP
- Impactstory
1. Employing Phylogenomics to Resolve the Relationships among Cnidarians, Ctenophores, Sponges, Placozoans, and Bilaterians
   
   By: Whelan, Nathan V.; Kocot, Kevin M.; Halanych, Kenneth M.
   
   INTEGRATIVE AND COMPARATIVE BIOLOGY Volume: 55  Issue: 6  Pages: 1084-1095  Published: DEC 2015
   
   Times Cited: 8
   (from All Databases)

   Hot Paper
   Highly Cited Paper

   Usage Count

2. Experimental studies illuminate the cultural transmission of percussive technologies in Homo and Pan
   
   By: Whiten, Andrew
   
   PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY B-BIOLOGICAL SCIENCES Volume: 370  Issue: 1682  Article Number: 20140359  Published: NOV 19 2015
   
   Times Cited: 9
   (from All Databases)

   Hot Paper
   Highly Cited Paper

   Usage Count

This hot paper was published in the past two years and received enough citations in November/December 2015 to place it in the top 0.1% of papers in its academic field.

Data from Essential Science Indicators℠

As of November/December 2015, this highly cited paper received enough citations to place it in the top 1% of its academic field based on a highly cited threshold for the field and publication year.

Data from Essential Science Indicators℠
Type 2 diabetes prevention in the community: 12-Month outcomes from the Sydney Diabetes Prevention Program

Aims/hypothesis: The Sydney Diabetes Prevention Program screening and recruitment in the program's reach, adoption and primary care physicians in the group sessions/individual sessions. Results: At baseline, the mean age of those who entered the program was 58.8 ± 4.4 years, 65% female, and the mean body mass index was 31.6 ± 5.2 kg/m². There was a significant weight reduction of 2 ± 4.3 kg (p < 0.02) in the 850 participants who completed the 12-month follow-up.
Breakdown of selected metrics

Scopus Metrics
- Citation Count: 6
- Field-Weighted Citation Impact: 2.13

Cited by
- Number of citations over years:
  - 2013: 2
  - 2014: 5
  - 2015: 13
  - 2016: 25
  - 2017: 5

Benchmarking
- Measures of activity relative to specific research domains, based on cited by in Scopus
- Compared to:
  - Articles of the same age and document type

PlumX Metrics
- Usage:
  - EBSCO - Abstract Views: 624
  - EBSCO - Link-outs: 273
- Captures:
  - EBSCO - Exports-Saves: 127
  - Mendeley - Readers: 25
- Social Media:
  - Facebook - Shares, Likes & Comments:
  - Twitter - Tweets: 2
- Citations:
  - CrossRef - Citation Indexes: 3
  - Policy Citation - Policy Citations: 1
  - PubMed - Citation Indexes: 4
Micron: An Actively Stabilized Handheld Tool for Microsurgery

https://doi.org/10.1109/tro.2011.2169834

Authors
Robert A. MacLachlan - Carnegie Mellon University
Brian C. Becker - University of Central Florida; Carnegie Mellon University
Jaime Cuevas Tabarés - Jaime Cuevas Tabarés received the B.S. degree in electrical engineering from the Polytechnic University of Madrid, Madrid, Spain, in 2007 and 2010, respectively. Since 2011, he has been a Research Engineer working on electronic design for high sensitivity vapor analysis instrument. University of Valladolid, Spain.

Abstract
We describe the design and performance of a hand-held actively stabilized tool to increase accuracy in micromanipulation by actuating the tip to counteract the effect of the undesired handle motion. The key components are an optical position measurement subsystem that acquires two-to-three components that attenuates hand motion by at least 15 dB (a fivefold reduction). By considering the effect of the filter that reduces unintentional motion, yet preserves intuitive eye-hand coordination. We evaluated the performance of the tool.

Publication references - 55

Cell micromanipulation with an active handheld micromanipulator
Jaime Cuevas Tabarés, R. A. MacLachlan, C. A. Ettenson, C. N. Riviere
2010, 2010 Annual International Conference of the IEEE Engineering in Medicine and Biology - Proceed

Semiautomated intracocular laser surgery using handheld instruments
Brian C. Becker, Robert A. MacLachlan, Louis A. Lobes, Cameron N. Riviere
2010, Lasers in Surgery and Medicine - Article

Altmetric
3 Patents (2) Mendeley (82)
What about Book Metrics?

- **Web of Science**
- **Scopus**
- **Google Scholar**
- **Altmetric**

**Book Citation Index**

Select a database: Web of Science Core Collection

Basic Search

- selfish gene

And

Book Review
Tools for “Top” Publications

InCites™ Essential Science Indicators™

Abstract
OBJECTIVES: We aimed to measure the impact of gaming on society by analyzing general elementary and secondary education, developing or overcoming pathologies.

RESULTS: The prevalence of pathological gaming is a primary or secondary disorder. Use this section to learn more about the topic, find key authors to follow, and view related documents.

SciVal Topic Prominence

New: SciVal Topic Prominence
Topics are unique areas of research, created using all Scopus publications from 1996 onwards.

Learn more about these Topics.

Google Scholar

Altmetric

ALTMETRIC TOP 100 2018
In the face of inadequate government data on mortality rates following one of the deadliest hurricanes in history, mortality rates have been determined. This has been done by partners of the non-profit Open Arms, who are dedicated to providing relief to those affected by natural disasters.

Published in: New England Journal of Medicine
Date: July 2018
Subject area: Medical & Health Sciences
Article Metrics

Citations and Altmetrics

Altmetric
Snowball Metrics
Impactstory
PLUM Analytics

Activity Book
Section 3
“I propose the index $h$, defined as the number of papers with citation number $\geq h$, as a useful index to characterize the scientific output of a researcher.” J.E. Hirsch
Web of Science
Author search by name or ORCID
Select Author Identifiers
<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Journal</th>
<th>Volume</th>
<th>Issue</th>
<th>Pages</th>
<th>Year Published</th>
<th>Citations</th>
<th>Average Citations per Year</th>
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<tbody>
<tr>
<td>Probability for primordial black holes</td>
<td>Bousso, R; Hawking, S</td>
<td>Physical Review D</td>
<td>52</td>
<td>10</td>
<td>5655-5664</td>
<td>1995</td>
<td>33017</td>
<td>733.71</td>
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<td>Black holes from cosmic strings</td>
<td>Hawking, S</td>
<td>Physical Review B</td>
<td>231</td>
<td>3</td>
<td>237-239</td>
<td>1989</td>
<td>80</td>
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<td>Virtual black holes</td>
<td>Hawking, S</td>
<td>Physical Review D</td>
<td>53</td>
<td>6</td>
<td>3099-3107</td>
<td>1995</td>
<td>75</td>
<td>3.41</td>
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<td>Limits on inflationary models of the universe</td>
<td>Hawking, S</td>
<td>Physical Review B</td>
<td>150</td>
<td>5</td>
<td>339-341</td>
<td>1985</td>
<td>72</td>
<td>2.13</td>
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<tr>
<td>Supersymmetric bianchi models and the square root of the Wheeler-Dewitt equation</td>
<td>Death, P; Hawking, S; Obregón, O</td>
<td>Physical Review B</td>
<td>330</td>
<td>1-2</td>
<td>44-48</td>
<td>1993</td>
<td>71</td>
<td>2.84</td>
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<td>The boundary conditions for gauged supergravity</td>
<td>Hawking, S</td>
<td>Physical Review B</td>
<td>126</td>
<td>3-4</td>
<td>175-177</td>
<td>1983</td>
<td>71</td>
<td>2.83</td>
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<td>Propagation of particles in spacetime foam</td>
<td>Hawking, S; Page, D; Pope, C</td>
<td>Physical Review B</td>
<td>86</td>
<td>2</td>
<td>175-178</td>
<td>1979</td>
<td>70</td>
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<td>No-boundary measure of the universe</td>
<td>Hartle, James B; Hawking, S; Hertog, Thomas</td>
<td>Physical Review Letters</td>
<td>100</td>
<td>20</td>
<td>291301</td>
<td>2008</td>
<td>65</td>
<td>6.50</td>
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</tbody>
</table>
Web of Science – Analyze Results option
I propose the index $h$, defined as the number of papers with citation number $\geq h$, as a useful index to characterize the scientific output of a researcher. — J.E. Hirsch
Other Tools for h-index

Metrics
- H-index
- i10-index

Google Scholar

Publish or Perish

Top Researchers

InCites™ Essential Science Indicators™

Activity Book Section 4
All metrics in one place *nearly*
All broad disciplines covered
Very good for Arts and Humanities
ORCID – Author ID

ORCID: the unique ID for researchers worldwide
**Distinguishes** you from others with same name
Helps you link and display your publications
**Stays with you** wherever you go
**Increasingly used and required** by publishers, funders & websites
What metrics can’t tell

Why it is cited (self citations, negative citations etc)
The quality of the paper regardless of the journal title
If everything has been included in the calculation
Differences of publication speed and quantity between disciplines
It takes time to develop an academic career
Hands-on activity

• iSkills Handouts and Slides on the Bibliometrics guide
  http://ox.libguides.com/bibliometrics

• Quick Reference cards for Research Impact Metrics

• Work through the workbook

• Any questions just ask!

• Subject Librarians
  http://www.bodleian.ox.ac.uk/subjects-and-libraries/subjects