

BIBLIOMETRIC ANALYSIS OF JOURNAL PERFORMANCE

Philip Purnell

Barcelona, June 2011





HOW IS RESEARCH EVALUATED?

Reputation

Productivity

- Number of researchers •
- Publication output

Grant awards

Research funding awarded

Prestigious awards

Nobel Prizes



Peer Evaluation



Academic Reputation Survey, higher degrees

Industry income and patents

International Mix

Innovation

National / International staff and students

Citation analysis

Normalised for volume and subject • area

WEB OF SCIENCE

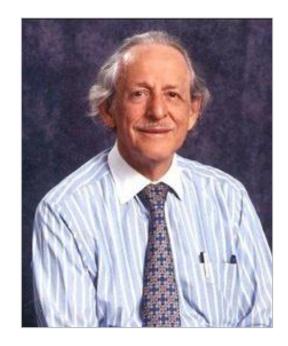
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- Definition:
 - A searchable multidisciplinary, global bibliographic database containing content from individually selected high impact scholarly journals
 - A citation index identifying clusters of related papers and allowing researchers to follow citation pathways



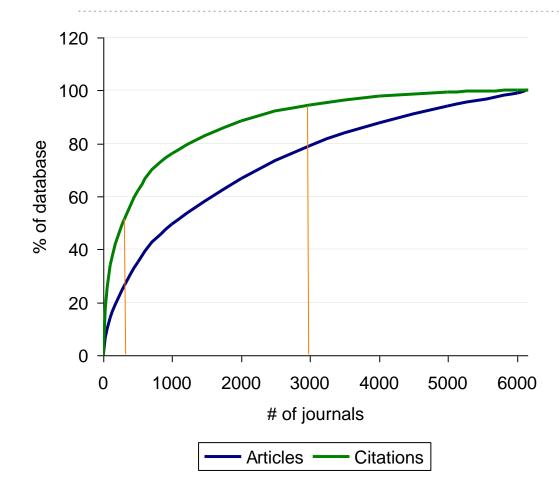
WEB OF SCIENCE SUMMARY

- Bibliographic and citation database Gold Standard
 - 49 million papers (75% with citations)
 - 800 million citations
- 12.000 journals
 - 252 categories
 - SCIE: Natural sciences
 - SSCI: Social sciences
 - A&HCI: Arts & Humanities
 - CPCI: Conference proceedings
- >110 years of consistent coverage
 - Articles: (1898 2011)
 - Citations: (1898 2011)





WHY NOT INDEX ALL JOURNALS?



40% of the journals:

- 80% of the publications
- 92% of cited papers

4% of the journals:

- 30% of the publications
- 51% of cited papers



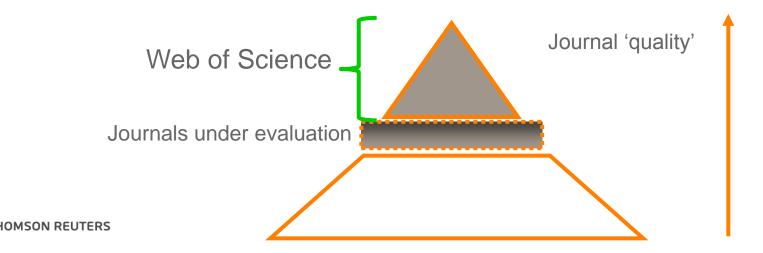
HOW TO DECIDE WHICH JOURNALS TO INDEX

Approx. 2.500 journals evaluated annually

• 10-12% accepted

Thomson Reuters editors

- Information professionals
- Librarians
- Experts in the literature of their subject area



THOMSON REUTERS JOURNAL SELECTION POLICY

Publishing Standards

• Peer review, Editorial conventions

Editorial content

• Addition to knowledge in specific subject field

Diversity

International, regional influence of authors, editors, advisors

Citation analysis

• Editors and authors' prior work



GLOBAL REPRESENTATION WEB OF SCIENCE

Region	# Journ	als from Region in Web of Science
Europe	6,082	50%
North America	4,456	37%
Asia-Pacific	1,031	9%
Latin America	289	2%
Middle East/Africa	200	1%

Language	# Journals in We	b of Science
English	9114	81%
Other	2147	19%



MULTILINGUAL DATABASE

<< Back to results list	Record 1 of 51
Unedited medieval medical texts in Catalan (1	4th-15th centuries)
Order Full Text Øs-F-X Print E- Holdings Go more options	mail) (Add to Marked List) (Save to EndNote Web) (Save to EndNote, RefMan, ProCite
Author(s): Soriano L, Sabate G, Beltran AM	
Source: ROMANCE PHILOLOGY Volume: 56 Pages: 319-353	Published: SPR 2003
Times Cited: 1 References: 66 Exe Citation Map	
Document Type: Anticie	
Language: Catalan	
Reprint Address: Soriano, 2 (reprint author), Univ Barcelona, E-080	007 Barcelona, Spain
Addresses: 1. Univ Barcelona, E-08007 <mark>Barcelona</mark> , Spain	
Publisher: BREPOLS PUBLISHERS, BEGIJNHOF 67, B-2300 TUR	NHOUT, BELGIUM
Subject Category: Language & Linguistics; Literature, Romance	
IDS Number: 019UY	
ISSN: 0035-8002	

THOMSON REUTERS CONFERENCE PROCEEDINGS

Proceedings from journals (30%)

- From Web of Science journals
- Reclassified as 'Proceedings Paper' where necessary

Proceedings from books (70%)

- Editorial standards
- Quality of content, fully referenced citations
- Name, date, location of congress
- Full text

6,5 million Proceedings Papers from 120.000 congresses 400.000 added each year from 12.000 congresses

1990 - 2011



CONSISTENCY IS THE KEY TO VALIDITY

- Authoritative data from the world's leading provider of research evaluation data
- Strict selection policy applying consistent criteria over the last 50 years
- This has created a large set of journals containing comparable papers and citations
- One consistent editorial policy
- > Unique set of multi-disciplinary comparable data



USE OF WEB OF SCIENCE DATA FOR EVALUATION

Spain: CSIC

Germany: Max Planck Society, National Science Foundation Netherlands: National Science Foundation France: Ministry of Research, OST - Paris, CNRS United Kingdom: King's College London; HEFCE European Union: EC's DGXII(Research Directorate) US: NSF: biennial Science & Engineering Indicators report (since 1974) Japan: Ministry of Education, Ministry of Economy, Trade & Industry Canada: NSERC, FRSQ (Quebec), Alberta Research Council Australian Academy of Science, gov't lab CSIRO People's Republic of China: Chinese Academy of Science



University rankings agencies

JOURNAL CITATION REPORTS

JOURNAL CITATION REPORTS

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ISI Web of Knowledge™

Journal Citation Reports®

melcome ?	HELP		2009 JCR Science Edition
🔎 Journal	Summary List		Journal Title Changes
Journals from:	countries/territories SPAIN		
Sorted by:	Journal Title	SORT AGAIN	

Journals 1 - 20 (of 60)

Page 1 of 3

MARK ALL UPDATE MARKED LIST

Ranking is based on your journal and sort selections.

						JCR		Eigenfactor [™] Metrics Û			
Mark	Rank	Abbreviated Journal Title (linked to journal information)	ISSN	Total Cites	Impact Factor	5- Year Impact Factor	Immediacy Index	Articles	Cited Half- life	<i>Eigenfactor</i> ™ Score	Article Influence™ Score
	1	ACTAS ESP PSIQUIATRI	1139- 9287	229	0.515	0.547	0.000	36	4.9	0.00075	0.131
	2	AFINIDAD	0001- 9704	141	0.190	0.196	0.000	30	6.3	0.00022	0.031
	3	AIDS REV	1139- 6121	591	3.786	3.738	0.333	21	4.7	0.00298	1.337
	4	ALLERGOL IMMUNOPATH	0301- 0546	443	0.630		0.217	46	6.5	0.00098	





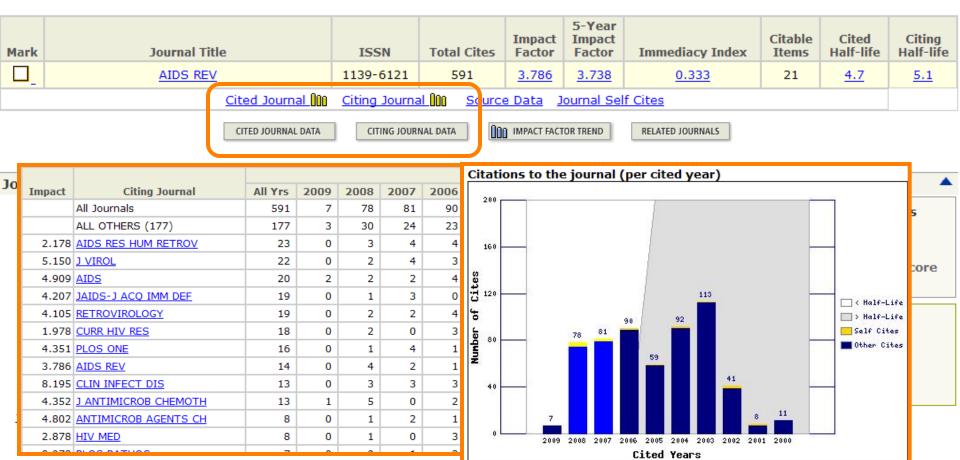
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Journal Citation Reports®



2009 JCR Science Edition

Journal: AIDS REVIEWS



JOURNAL IMPACT FACTOR

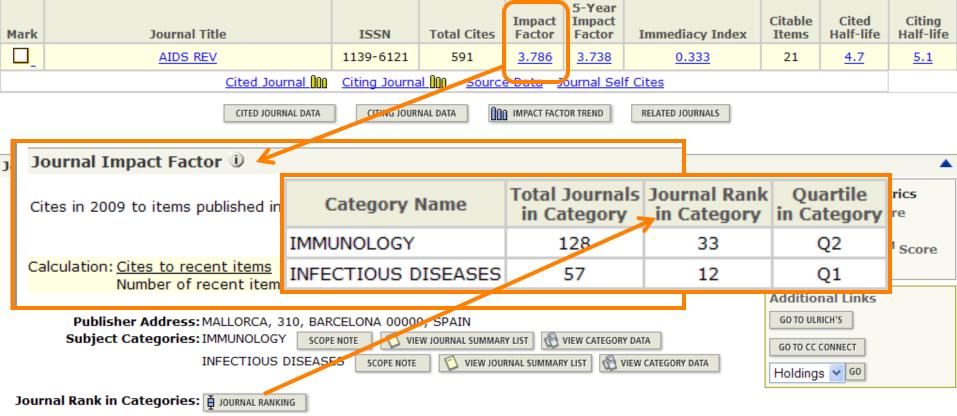
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Journal Citation Reports®



2009 JCR Science Edition

Dournal: AIDS REVIEWS



WHAT'S IN THE DENOMINATOR?

ITEMS COUNTED:

- Original research articles
- Review articles
- Proceedings papers (published in the journal)

"Citable Items"

ITEMS <u>NOT</u> COUNTED:

- Editorials
- Discussions
- Commentaries
- Meeting abstracts
- Book reviews
- News items
- Letters typically not counted unless they function as "articles"

<u>"Other Items</u>"

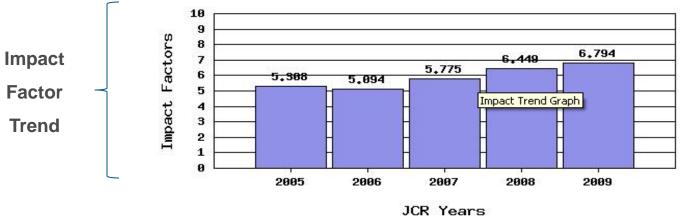


The data behind the Journal Impact Factor

Emerging Infectious Diseases...

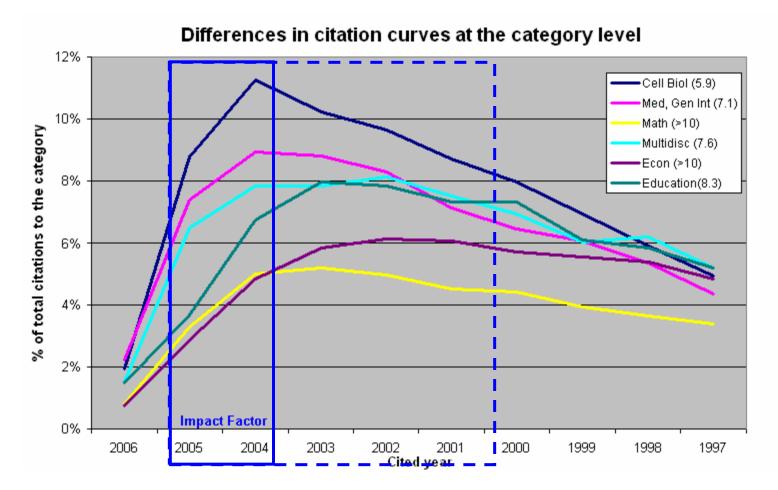
	-		Citable ite	ms	
Source		Articles	Reviews	Combined	Other items
Data -	Number in JCR year 2009 (A)	344	5	349	197
2009	Number of references (B)	6938	147	7085	1580.00
	Ratio (B/A)	20.2	29.4	20.3	8.0

EMERGING INFECTIOUS DISEASES





CITATION BEHAVIOUR VARIES BETWEEN SUBJECT CATEGORIES





5-YEAR IMPACT FACTOR

		Abbreviated Journal Title				JCR [Eigenfactor [™] Metrics Û			
Mark	Rank	(linked to journal information)	ISSN	Total Cites			mmediacy Index	Articles	Cited Half- life	<i>Eigenfactor</i> ™ Score	Article Influence™ Score
	1	J ALLERGY CLIN IMMUN	0091- 6749	30363	9.165	8.530	1.884	328	5.9	0.08532	2.336
	2	ALLERGY	0105- 4538	10370	6.380	5.735	1.366	213	5.3	0.02796	1.389
	3	CLIN EXP ALLERGY	0954- 7894	9261	4.084	4.002	0.824	204	6.3	0.02313	1.043
	4	CONTACT DERMATITIS	0105- 1873	5413	3.635	3.653	0.500	82	9.2	0.00667	0.673
	5	IMMUNOL ALLERGY CLIN	0889- 8561	766	3.181	2.712	0.528	53	3.8	0.00380	0.877
	6	PEDIATR ALLERGY IMMU	0905- 6157	2152	2.676	2.630	0.462	104	4.7	0.00633	0.605
	7	ANN ALLERG ASTHMA IM	1081- 1206	5395	2.457	2.451	0.302	159	6.9	0.01302	0.657
	8	INT ARCH ALLERGY IMM	1018- 2438	4633	2.542	2.342	0.424	151	8.0	0.00965	0.655
	9	CLIN REV ALLERG IMMU	1080- 0549	989	2.597	2.335	0.875	40	4.5	0.00374	0.717
	10	CURR ALLERGY ASTHM R	1529- 7322	806	1.887	1.775	0.403	62	4.3	0.00331	0.504



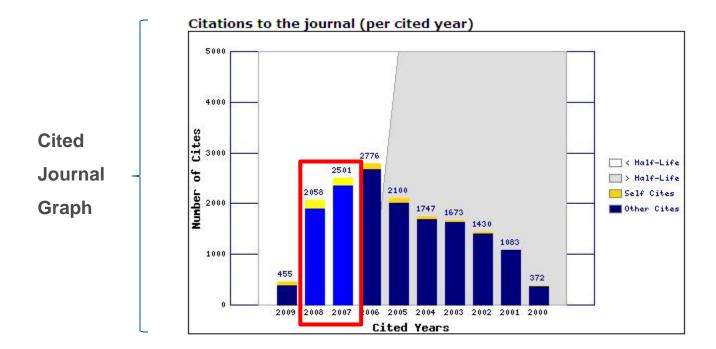
The data behind the Journal Impact Factor

Emerging Infectious Diseases...

Journal Self Cites 🛈

The tables show the contribution of the journal's self cites to its impact factor. This information is also represented in the cited journal graph.

Total Cites	18017	Self Cites	789 (4	% of 18017)
Cites to Years Used in Impact Factor Calculation	4559	Self Cites to Years Used in Impact Factor Calculation	310 (6	% of 4559)
Impact Factor	6.794	Impact Factor without Self Cites	6.332	





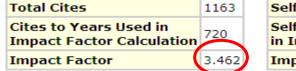
Self citation rates in 2009 Journal Citation Report

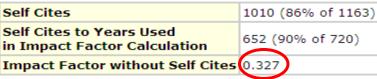
Revista Brasileira de Farmacognosia-Brazilian Journal of Pharmacognosy

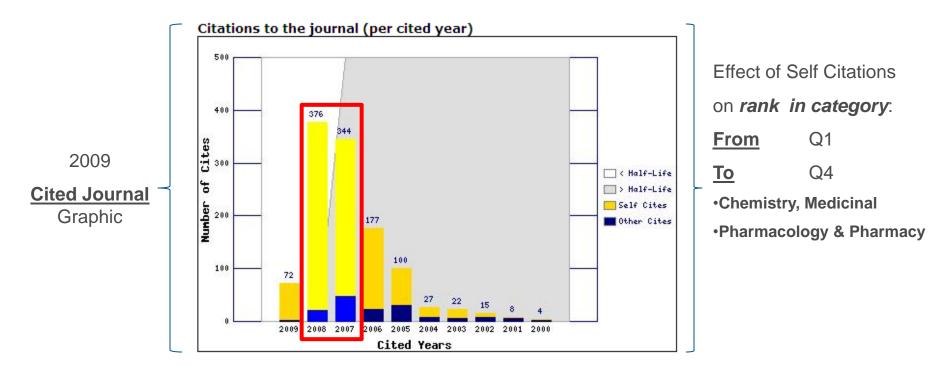
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Journal Self Cites 🕕

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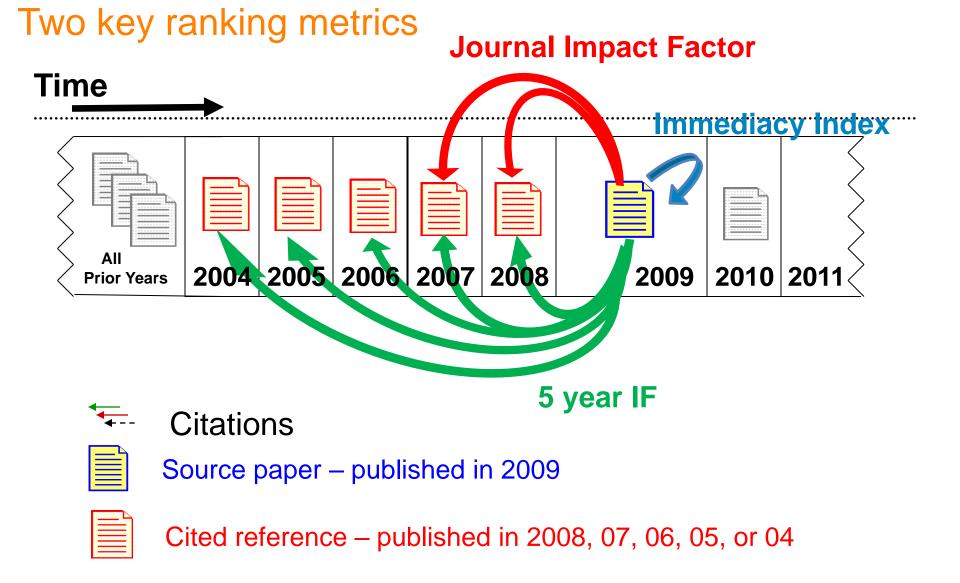








Journal will be suppressed from <u>2010</u> JCR for at least 2 years





Impact Factor and Journal Publishing

Editor-in-Chief: Paul S. Weiss Rank of the 34 ACS peer-reviewed journals in citations and/or Impact Factor in seven ISI chemistry categories. Editor-in-Chief: Paul S. Weiss University of California, Los Angeles E-mail: editor@nano.psu.edu Print Edition ISSN: 1936-0851 Web Edition ISSN: 1936-086X Odds that a peer-reviewed ACS journal	ACS Publications	Annual Report 2008 2008 HIGHLIGHTS
University of California, Los Angeles E-mail: editor@nano.psu.edu Print Edition ISSN: 1936-0851 Web Edition ISSN: 1936-086X 2008 ISI Impact Factor: 5.472		Rank of the 34 ACS peer-reviewed journals in citations and/or Impact Factor in seven ISI chemistry
	University of California, Los Angeles E-mail: <u>aditor@nano.psu.edu</u> Print Edition ISSN: 1936-0851	
Indexed/Abstracted in: CAS, SCOPUS, MEDLINE/PubMed and Web of Science.	2008 Total Citations: 703	

IOP Impact Factors



Another great year for IOP Journal Impact Factors

Journals published by IOP Publishing have once again received excellent Impact Factor results from Thomson Reuters for the fifth year in a row.

This year, 34 of the titles published by IOP have seen an increase in citations on last year, 17 titles have had an increase of over 10%. Five journals have an Impact Factor over 5,000 and more than 40% have Impact Factors above 2,000. The top three increases were:

- Biomedical Materials: 1.233, up 57%
- Journal of Physics G: Nuclear and Particle Physics: 5.270, up 51%
- Environmental Research Letters: 1.7 19, up 43%

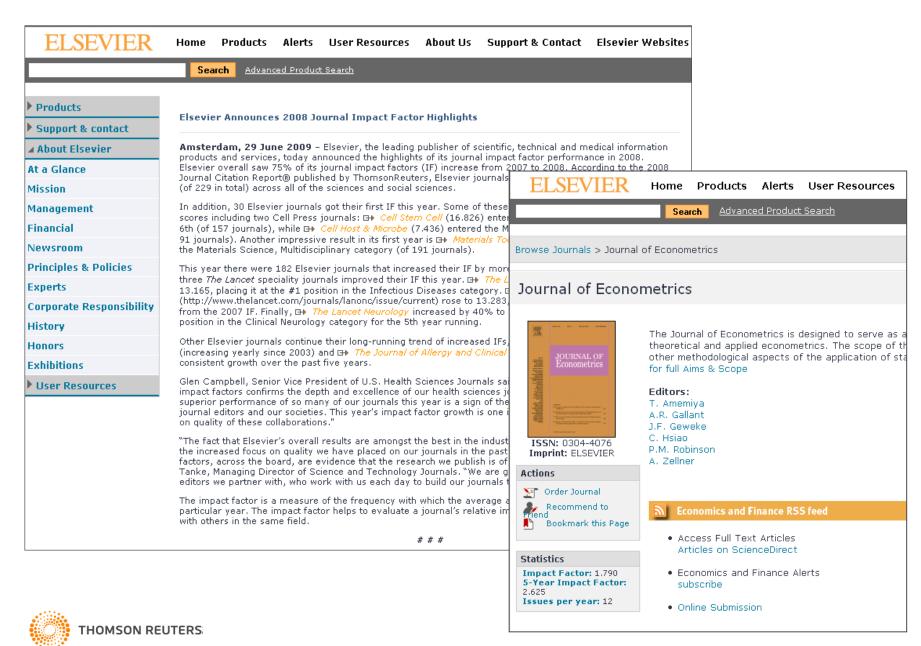
Other journals in the IOP portfolio which have seen significant growth in citation performance include:

- Physics in Medicine and Biology and Physiological Measurement: Both journals have increased their Impact Factors by over 10% to 2.784 and 1.691 respectively, IOP co-publishes these titles with the Institute of Physics and Engineering in Medicine.
- Nanctechnology: has increased its Impact Factor to 3.44. This is a major achievement as the journal became a weekly
 publication in 2007, reflecting its ongoing commitment to publishing only the very best papers in the field.
- Classical and Quantum Gravity: has increased its Impact Factor to 3.035.

2008 Impact Factors			
The Astronomical Journal	4.769	Journal of Radiological Protection	1.169
The Astrophysical Journal	6.331	Journal of Statistical Mechanics: Theory and Experiment	2.758
The Astrophysical Journal Supplement Series	13.990	Measurement Science and Technology	1.493
Biomedical Materials	1.233	Metrologia	1.780
Chinese Journal of Chemical Physics	0.455	Modelling and Simulation in Materials Science and Engineering	1.388
Chinese Physics	1.680	Nanotechnology	3.446
Chinese Physics Letters	0.743	New Journal of Physics	3.440
Classical and Quantum Gravity	3.035	Nonlinearity	1.359
Communications in Theoretical Physics	0.719	Nuclear Fusion	2.730
Environmental Research Letters (ERL)	1.7 19	Physica Scripta	0.970
European Journal of Physics	1.7 19	Physical Biology	3.137
P I I I I I I I I I I I I I I I I I I I	0.000	THE REPORT OF TH	0.704



Impact Factor and Journal Publishing

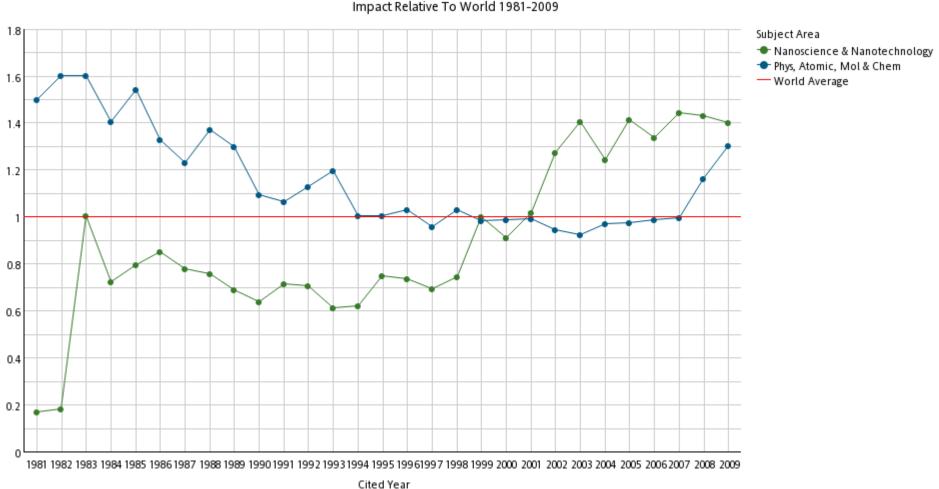


JOURNAL IMPACT FACTOR

- Librarians to aid decision-making with regards to journal subscriptions, archiving and maintenance.
- **Authors** to help decide which journals to publish in and identify the leading journals within their discipline
- Information Analysts to track trends; study the sociology of scholarly communication; study citation patterns within and between disciplines.
- **Publishers & Editors** monitor the influence your journals and compare to competing journals.
- Anyone with an interest in journal metrics



DETECT EMERGING & DECLINING FIELDS



Impact Relative To World 1981-2009



JOURNAL IMPACT FACTOR USE, MISUSE & ABUSE

Appropriate use

• To evaluate journals

Misuse

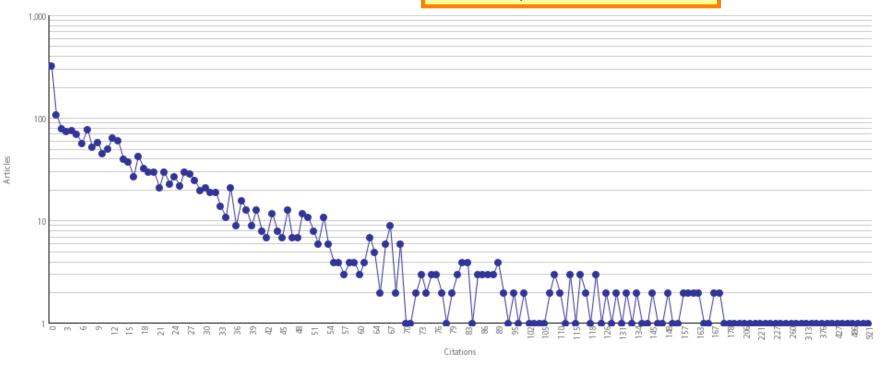
- Evaluation of individual articles
- Evaluation of institution or researcher



JOURNAL IMPACT FACTOR

Citation Frequency Distribution

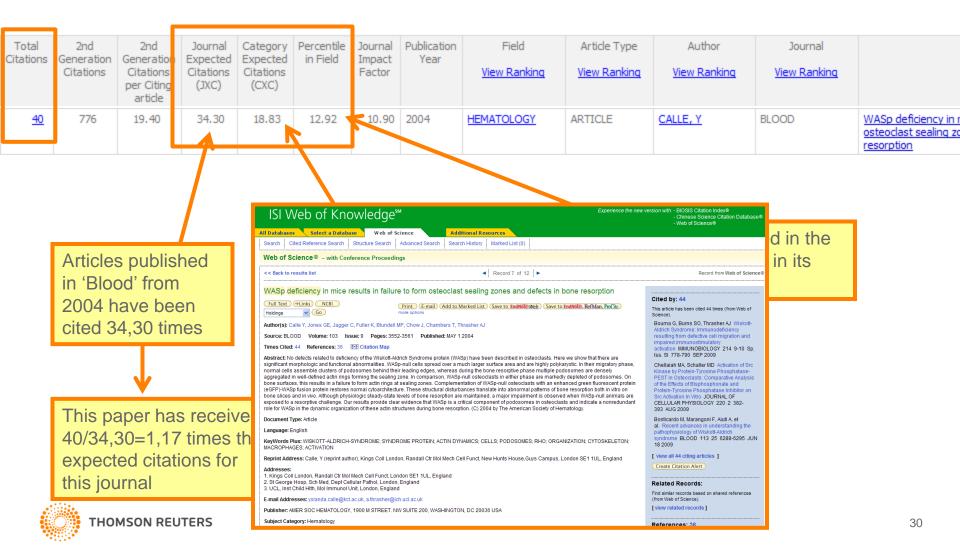
Journal Impact Factor = 2,011





Source: Thomson Reuters InCites

BENCHMARK YOUR PAPERS AGAINST GLOBAL AVERAGES – IS THIS A HIGHLY CITED PAPER?



WHO IS YOUR MOST PRODUCTIVE RESEARCHER?

Rank	Author	Times Cited	Web of Science Documents	A	verage Cites per Document	h-index	Journal Actual/Expected Citations	Category Actual/Expected Citations
1	SELBERHERR, S	<u>66</u>	<u>43</u>		<u>1.53</u>	4	<u>0.59</u>	<u>0.28</u>
2	BIRO, O	<u>40</u>	<u>30</u>		<u>1.33</u>	4	<u>1.12</u>	0.35
3	POGANY, D	<u>51</u>	<u>27</u>		<u>1.89</u>	4	<u>0.78</u>	0.42
3	SCHUELLER, GI	<u>75</u>	<u>27</u>		<u>2.78</u>	<u>5</u>	<u>1.57</u>	0.89
4	PFURTSCHELLER, G	<u>205</u>	<u>26</u>		<u>7.88</u>	<u>8</u>	<u>2.38</u>	<u>1.34</u>
4	ZIMMERMANN, H	<u>28</u>	<u>26</u>		<u>1.08</u>	<u>3</u>	<u>0.54</u>	0.34
5	HOLLAUS, K	<u>60</u>	<u>25</u>		<u>2.40</u>	<u>5</u>	<u>1.26</u>	<u>0.41</u>
5	MANG, HA	<u>38</u>	<u>25</u>		<u>1.52</u>	4	<u>0.68</u>	0.42
6	GORNIK, E	<u>45</u>	<u>24</u>		<u>1.88</u>	4	<u>0.60</u>	<u>0.34</u>
6	KOSINA, H	<u>55</u>	<u>24</u>		<u>2.29</u>	4	<u>0.92</u>	<u>0.47</u>
7	PREIS, K	<u>23</u>	<u>22</u>		<u>1.05</u>	<u>3</u>	<u>1.09</u>	0.33
8	HAUSER, H	<u>25</u>	<u>21</u>		<u>1.19</u>	<u>3</u>	<u>0.44</u>	0.28
9	BERTAGNOLLI, E	<u>39</u>	<u>20</u>		<u>1.95</u>	4	<u>1.10</u>	0.50
9	STRASSER, G	<u>21</u>	<u>20</u>		<u>1.05</u>	<u>3</u>	<u>0.65</u>	0.25
9	WATZEK, G	<u>105</u>	<u>20</u>		<u>5.25</u>	<u>5</u>	<u>0.85</u>	0.77
10	SCHARFETTER, H	<u>78</u>	<u>19</u>		<u>4.11</u>	<u>5</u>	<u>1.51</u>	0.53
11	BYCHIKHIN, S	<u>34</u>	<u>18</u>		<u>1.89</u>	<u>3</u>	<u>0.91</u>	<u>0.44</u>
11	FIDLER, J	<u>39</u>	<u>18</u>		<u>2.17</u>	4	<u>0.73</u>	<u>0.41</u>
11	HOLZAPFEL, GA	<u>138</u>	<u>18</u>		<u>7.67</u>	<u>8</u>	<u>2.36</u>	<u>1.48</u>
11	SCHREFL, T	<u>34</u>	<u>18</u>		<u>1.89</u>	<u>3</u>	<u>0.80</u>	<u>0.37</u>



WHICH RESEARCHER'S PAPERS HAVE PERFORMED BEST IN THEIR FIELD?

Rank	Author	Times Cited	Web of Science Documents	Average Cites per Document	h-index	Journal Actual/Expected Citations	Category Actual/Expected Citations
1	DENSCHLAG, JH	<u>1,440</u>	<u>17</u>	<u>84.71</u>	<u>11</u>	<u>4.49</u>	<u>14.65</u>
2	SAUER, R	<u>1,013</u>	<u>17</u>	<u>59.59</u>	<u>5</u>	<u>4.77</u>	<u>13.58</u>
3	CHIN, C	<u>1,539</u>	<u>17</u>	<u>90.53</u>	<u>11</u>	<u>3.66</u>	<u>12.80</u>
4	HAROUSSEAU, JL	<u>1,015</u>	<u>16</u>	<u>63.44</u>	4	<u>5.26</u>	<u>11.52</u>
5	GRIMM, R	<u>1,935</u>	<u>30</u>	<u>64.50</u>	<u>17</u>	<u>2.95</u>	<u>9.16</u>
6	RIEDL, S	<u>1,140</u>	<u>21</u>	54.00	<u>6</u>	<u>4.53</u>	<u>7.14</u>
7	MARTIN, P	<u>727</u>	15	Public health	4	<u>5.37</u>	<u>7.11</u>
8	SCRINZI, A	<u>859</u>	<u>24</u>	<u></u>	<u>10</u>	<u>2.50</u>	<u>6.95</u>
9	NEUBAUER, A	<u>730</u>	<u>16</u>	<u>45.62</u>	<u>5</u>	<u>3.68</u>	<u>6.92</u>
10	BALTUSKA, A	<u>95.</u>	<u>18</u>	<u>52.83</u>	<u>9</u>	<u>2.89</u>	<u>5.87</u>
11	PAUL, C	869	18	48.28	7	3.72	5.68
12	SEVELDA, P	<u>589</u>	<u>15</u>	<u>39.27</u>	<u>3</u>	<u>6.68</u>	<u>5.54</u>
13	RIEBE, M	<u>821</u>	<u>15</u>	<u>54.73</u>	<u>10</u>	<u>1.68</u>	<u>5.51</u>
14	OGAWA, Y	<u>719</u>	<u>15</u>	<u>47.93</u>	<u>13</u>	<u>3.11</u>	<u>5.37</u>
15	ABE, R	<u>672</u>	<u>15</u>	<u>44.80</u>	Z	<u>3.50</u>	<u>5.26</u>
16	ST CLAIR, EW	<u>288</u>	<u>16</u>	<u>18.00</u>	<u>5</u>	<u>2.82</u>	<u>4.77</u>
17	KRAUSZ, F	<u>1,363</u>	40	Physics 30.29	<u>18</u>	<u>2.57</u>	<u>4.70</u>
18	HAFFNER, H	<u>871</u>	<u>21</u>	FTIYSICS 41.48	<u>11</u>	<u>1.72</u>	<u>4.70</u>
19	FERCHER, AF	<u>687</u>	<u>22</u>	31.23	<u>11</u>	<u>3.79</u>	<u>4.54</u>
20	WALTHER, P	<u>410</u>	<u>15</u>	27.33	<u>10</u>	<u>1.29</u>	<u>4.46</u>



IN WHICH JOURNALS DO OUR BIOLOGISTS PUBLISH?

	Rank	Journal	Total Citations	Total Articles	Avg Cites per Article	h-index	Journal actual / Expected Cites (JXC)	
Ste	1	APPLIED AND ENVIRONMENTAL MICROBIOLOGY	<u>11,425</u>	<u>780</u>	<u>14.65</u>	<u>42</u>	<u>1.15</u>	nistr
	2	FASEB JOURNAL	<u>9,488</u>	<u>1,405</u>	<u>6.75</u>	<u>43</u>	<u>1.06</u>	
Ste	3	BIOINFORMATICS	<u>6,310</u>	<u>479</u>	<u>13.17</u>	<u>35</u>	<u>0.89</u>	OGY
Ste	4	NATURE BIOTECHNOLOGY	<u>4,849</u>	<u>144</u>	<u>33.67</u>	<u>41</u>	<u>1.07</u>	_
50	5	GENOME RESEARCH	<u>3,882</u>	<u>113</u>	<u>34.35</u>	<u>35</u>	<u>1.04</u>	
Au	6	APPLIED MICROBIOLOGY AND BIOTECHNOLOGY	<u>3,785</u>	<u>369</u>	<u>10.26</u>	27	<u>1.18</u>	
In	7	PLOS BIOLOGY	<u>3,286</u>	<u>137</u>	23.99	<u>30</u>	<u>1.06</u>	
Co Fie	8	JOURNAL OF GENERAL VIROLOGY	<u>3,207</u>	<u>325</u>	<u>9.87</u>	<u>25</u>	<u>1.02</u>	
Jo	9	JOURNAL OF BIOTECHNOLOGY	<u>3,099</u>	<u>421</u>	7.36	<u>25</u>	<u>1.26</u>	
W Ar	10	JOURNAL OF EXPERIMENTAL BIOLOGY	<u>2,684</u>	<u>327</u>	<u>8.21</u>	21	<u>1.05</u>	
Ye	11	GENE THERAPY	<u>2,581</u>	<u>170</u>	<u>15.18</u>	27	<u>1.06</u>	
	12	PROCEEDINGS OF THE ROYAL SOCIETY OF LONDON SERIES B-BIOLOGIC	<u>2,272</u>	<u>99</u>	22.95	<u>29</u>	<u>1.05</u>	
	13	PHARMACOGENETICS	<u>2,193</u>	<u>64</u>	<u>34.27</u>	<u>28</u>	<u>1.17</u>	
	14	GENOME BIOLOGY	2,142	<u>118</u>	<u>18.15</u>	<u>19</u>	<u>1.56</u>	
	15	MOLECULAR THERAPY	<u>2,129</u>	<u>255</u>	<u>8.35</u>	<u>26</u>	<u>1.18</u>	
	16	CURRENT OPINION IN BIOTECHNOLOGY	2,096	<u>74</u>	28.32	27	<u>1.32</u>	
	17	BIOSENSORS & BIOELECTRONICS	<u>1,961</u>	<u>155</u>	<u>12.65</u>	<u>23</u>	<u>1.00</u>	
	18	STEM CELLS	<u>1,825</u>	<u>146</u>	<u>12.50</u>	<u>19</u>	<u>0.90</u>	
	19	BIOESSAYS	<u>1,813</u>	<u>106</u>	<u>17.10</u>	<u>24</u>	<u>1.04</u>	
	20	BIOTECHNOLOGY AND BIOENGINEERING	<u>1,779</u>	<u>181</u>	<u>9.83</u>	<u>21</u>	<u>1.18</u>	
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View Overall Reports	1	CELL	84,679	<u>1,260</u>	67.21		
Step 1: Select the article	2	EMBO JOURNAL	42,395	<u>1,566</u>	27.07	iology & Biochemistry	
Step 2: Select the report	3	MOLECULAR CELL	40,780	<u>1,172</u>	34.80	the following:	
Step 2: Select the report	4	MOLECULAR AND CELLULAR BIOLOGY	40,318	2,324	17.35	OGY, BIOTECHNOLOGY & APPLIE	
Step 3: Select the element	5	ONCOGENE	39,149	<u>1,912</u>	20.48		
<u>Author</u> Institution	6	NATURE REVIEWS MOLECULAR CELL BIOLOGY	37,019	<u>476</u>	77.77		
Country Field	7	GENES & DEVELOPMENT	36,941	<u>939</u>	39.34		
Journal	8	JOURNAL OF CELL BIOLOGY	28,282	<u>1,174</u>	24.09		
Word Article Type	9	JOURNAL OF CELL SCIENCE	25,757	<u>1,459</u>	17.65		
Year	10	FEBS LETTERS	25,742	<u>2,424</u>	10.62		
	11	PLANT CELL	24,126	<u>1,022</u>	23.61		
	12	APPLIED AND ENVIRONMENTAL MICROBIOLOGY	21,076	<u>2,174</u>	9.69		
	13	MOLECULAR BIOLOGY OF THE CELL	18,872	<u>1,344</u>	14.04		
	14	NATURE MEDICINE	18,658	<u>392</u>	47.60		
	15	NATURE BIOTECHNOLOGY	18,657	<u>448</u>	41.65		
	16	GENOME RESEARCH	18,481	<u>729</u>	25.35		
	17	CURRENT OPINION IN CELL BIOLOGY	16,999	<u>414</u>	41.06		
	18	NATURE CELL BIOLOGY	16,676	<u>508</u>	32.83		
	19	NATURE	15,602	<u>219</u>	71.24		
	20	PLOS BIOLOGY	14,299	Thom:	son Reuters InCi	tes ³⁴	

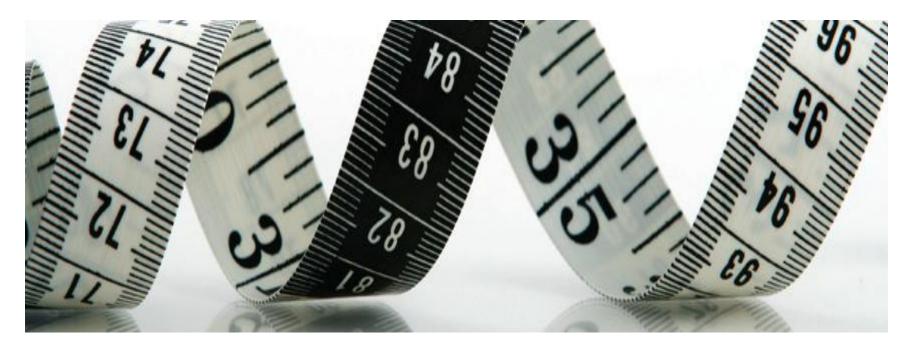
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¡MOLTES GRACIES!

Philip Purnell

Barcelona, June 2011



