Journal Citation Reports on the Web

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Introduction

- JCR distills citation trend data for over 10,000 journals from more than 28 million cited references indexed by Thomson Reuters – Science and Scholarly Research division (formally ISI) every year
- Science Edition and Social Science Edition released annually
 - The 2010 edition was released in June 2011
 - The JCR typically takes 6 months to produce
- No Arts and Humanities edition
- No plans for a Book Citation Index Edition
- All journals in JCR appear in Web of Science



New in 2010 edition

- 500 titles receiving Impact Factor for the first time
 - 800 regional titles added in past 4 years
- Total of over 10,000 journals representing:
 - 2,200 publishers
 - 230 disciplines
 - 78 countries



Uses of the JCR

What do librarians, researchers, and publishers do with the JCR?

- Discover highest-impact journals
- Develop and manage journal collections
- Find related journals
- Identify review journals
- View citation information for subject categories



Using the JCR Wisely

- JCR metrics provide useful perspectives for evaluating journals, but users should not depend solely of citation data when making evaluation (Peer review, local usage, etc.)
- Citation rates and citation patterns are different in different disciplines
- Compare Similar Journals (Journals from same/similar subject categories.)
- Changes in format, frequency of publication, and percentage of original research articles can affect a journal's citation rate
- Language of publication can affect a journal's citation rate
- Impact Factor data should not be used to evaluate individual articles or researchers

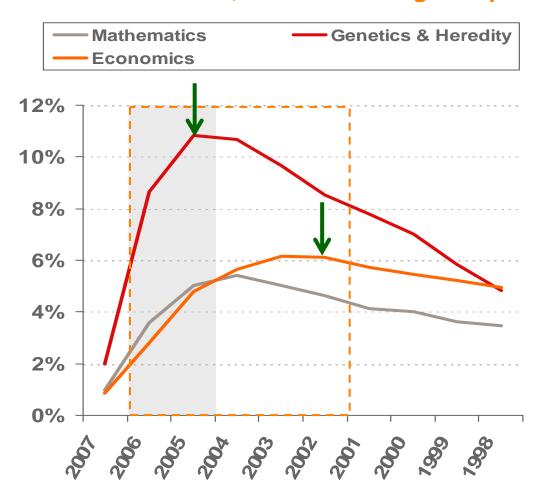


New Metrics (Since 2009)

- Five year Impact Factor
- Impact factor controlled for self citations
- Rank in Category
- Eigenfactor[™] Metrics
- Eigenfactor™ Score
- Article Influence™
 - More information on Eigen Factor metrics at http://eigenfactor.org/



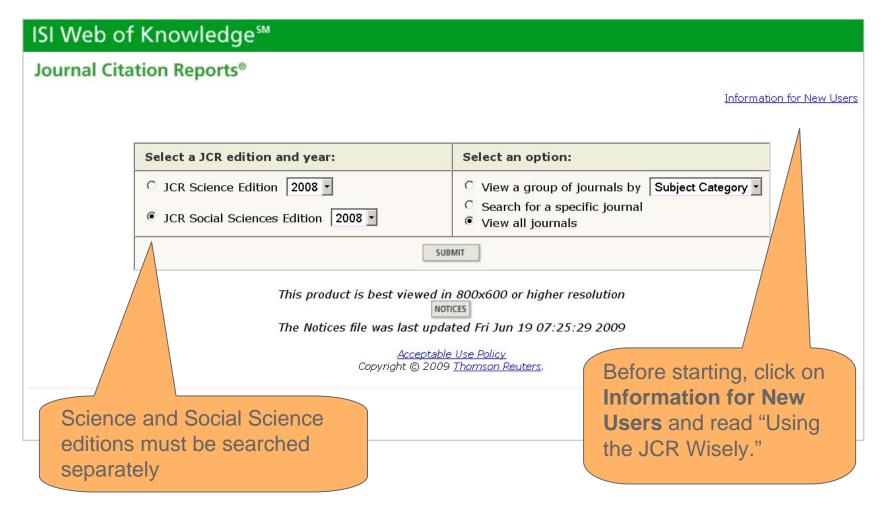
Citation Behavior, variance among disciplines:



There are inherent differences between different fields with regards to citation behavior. For some fields such as Mathematics or Economics it takes longer to reach the peak of citation activity.

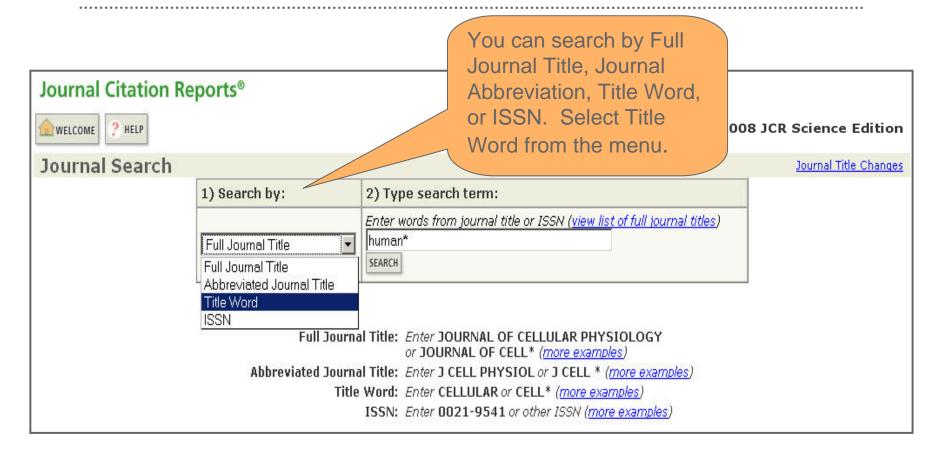


JCR Home Page



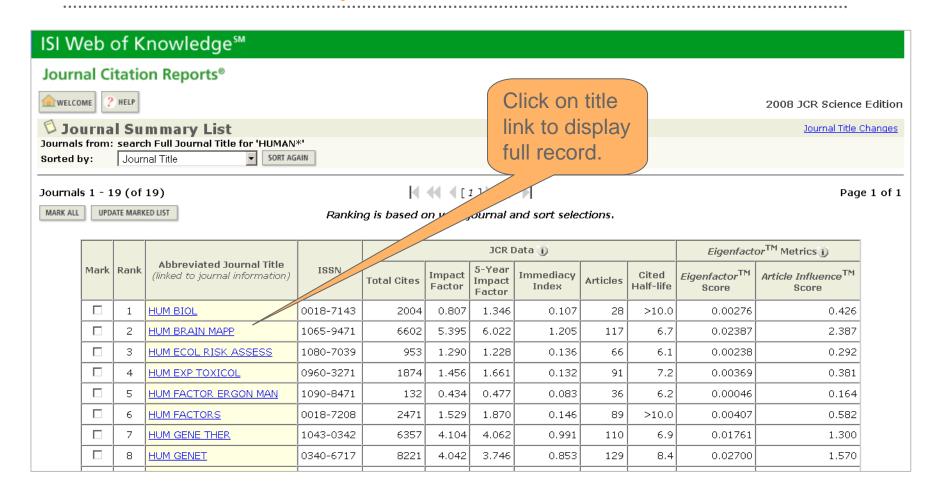


Journal Search Screen



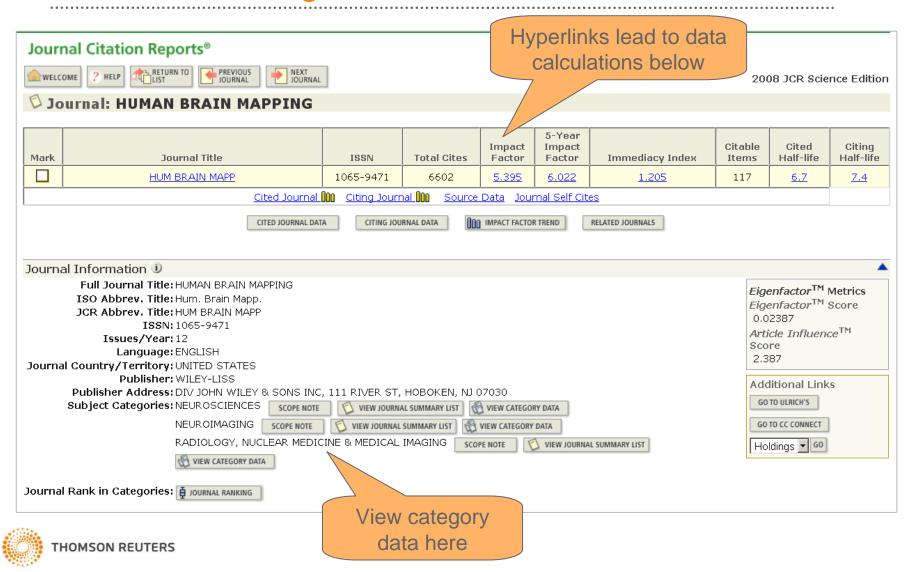


Journal Summary List





Full Record Page



Impact Factor

Journal Impact Factor 10

Cites in 2008 to items published in: 2007 = 559 Number of items published in: 2007 = 121

2006 = 574

Sum: 1133

Calculation: Cites to recent items 1133

Number of recent items 210

= 5.395

2006 = 89

Sum: 210

ISI calculates the impact factor by:

dividing the number of citations in 2008 to articles published in previous two years (2006-2007) by the total number of articles published in the previous two years (2006-2007).



Five-Year Impact Factor

5-Year Journal Impact Factor 🕕

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Cites in \{2008\} to items published in: 2007 = 559 Number of items published in: 2007 = 121 2006 = 574 2006 = 89 2005 = 786 2004 = 430 2004 = 73 2003 = 367 2003 = 72 Sum: 2716 Sum: 451
```

Calculation: <u>Cites to recent items</u> <u>2716</u> = **6.022**Number of recent items 451

Calculated similarly to the traditional Impact Factor: the number of citations in 2008 to articles published in previous five years (2003-2007) by the total number of articles published in the previous two years (2003-2007).



Journal Self-Cites

Journal Self Cites 1

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	6602
Cites to Years Used in Impact Factor Calculation	1133
Impact Factor	5.395

Self Cites	326 (4% of 6602				
Self Cites to Years Used in Impact Factor Calculation	47 (4% of 1133)				
Impact Factor without Self Cites	5.171				

This table provides the ability to easily compare selfcitation rates among journals. The Impact Factor (2year) is recalculated to exclude self-cites. The selfcitation percentage is also included.



Journal Rank in Category

Journal Ranking

For 2008, the journal HUMAN BRAIN MAPPING has an Impact Factor of 5.395.

This table shows the ranking of this journal in its subject categories based on Impact Factor.

Category Name	Total Journals in Category	Journal Rank in Category	
NEUROIMAGING	12	2	Q1
NEUROSCIENCES	219	30	Q1
RADIOLOGY, NUCLEAR MEDICINE & MEDICAL IMAGING	90	4	Q1

The rank in category table displays each category assigned to the journal and the journal's rank in each based on Impact Factor.

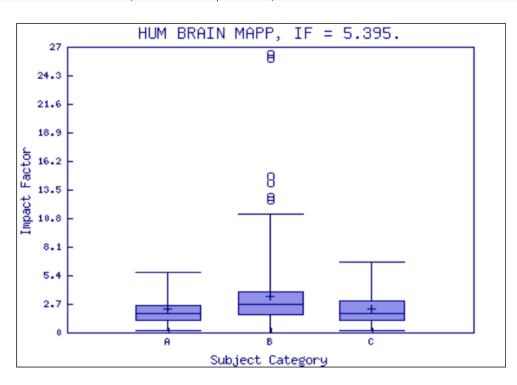


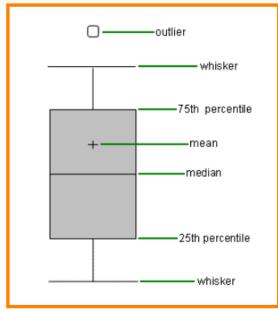
Journal Rank in Category – Box Plot

Category Box Plot 1

For 2008, the journal HUMAN BRAIN MAPPING has an Impact Factor of 5.395.

This is a box plot of the subject category or categories to which the journal has been assigned. It provides information about the distribution of journals based on Impact Factor values. It shows median, 25th and 75th percentiles, and the extreme values of the distribution.





Kev

- A NEUROIMAGING
- B NEUROSCIENCES
- C RADIOLOGY, NUCLEAR MEDICINE & MEDICAL IMAGING



Immediacy Index

Calculated by dividing the number of citations to articles published in a year (2008) by the total number of articles published in that year (2008).

Journal Immediacy Index

Cites in 2008 to items published in 2008 = 141

Number of items published in 2008 = 117

Calculation: Cites to current items :

Number of current items

141 = 1.205

Tells you how often articles published in a journal are cited during their year of publication

This can be an indication of how "hot" a journal is



Cited Half Life

Journal Cited Half-Life

The cited half-life for the journal is the median age of its items cited in the current

Cited Half-Life: 6.7 years

Half of the citations received in 2008 were to articles published in 2002/2003 or later

Breakdown of the citations to the journal by the cumulative percent of 8008 cites to items published in the following years:

		<u>/</u>											
Cited Year	2008	2007	2006	2005	200	4	2003	2002	1	2001	2000	1999	1998-all
# Cites from 2008	141	559	574	786	41	30	367	670		477	473	566	1559
Cumulative %	2.14	10.60	19.30	31.20	37.7	2	43.27	53.42	ě	50.65	67.81	76.39	100

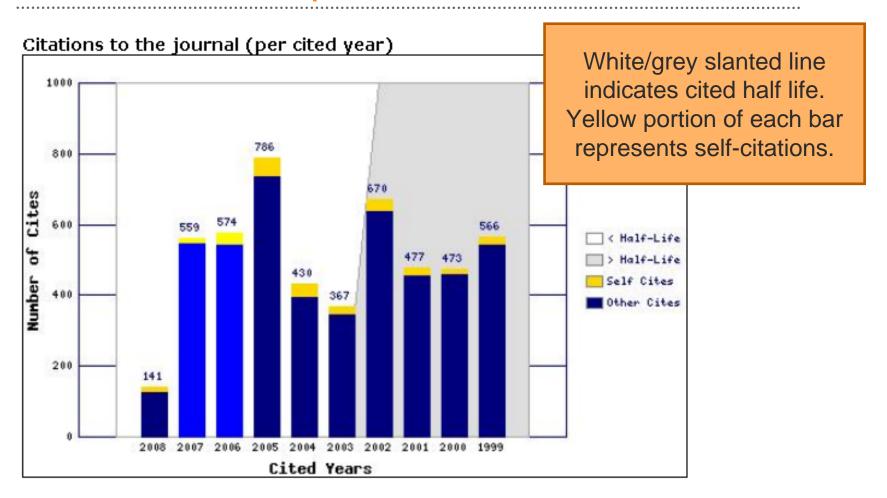
Cited Half-Life Calculations:

The cited half-life calculation finds the number of publication years from the current JCR year that account for 50% of citations in the calculation.

- Median age of the articles published in this journal that were cited in 2008



Cited Journal Graph





Citing Half Life

Journal Citing Half-Life

The citing half-life for the journal is the median age of the items the journ half-life.

Citing Half-Life: 7.4 years

Over half of the articles *cited by* the selected journal were published in 2001/2002 or later.

Breakdown of the citations from the journal by the cumulative percent of 2898 cites to items published in the following years:

# Cites from 2008 25 160 521 631 618 59 <mark>6 532 530 </mark> 439 44	2120
Cumulative % 0.38 2.80 10.68 20.22 29.57 38.58 46.63 54.64 61.28 67.9	100

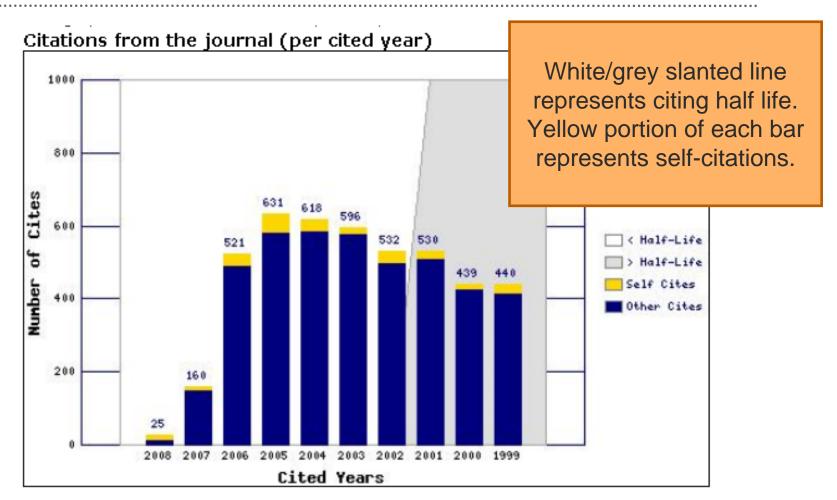
Citing Half-Life Calculations:

The citing half-life calculation finds the number of publication years from the current JCR year that account for 50% of citations calculation.

- Median age of articles cited by the selected journal in its article references



Citing Journal Graph





Source Data

Journal Source Data

Review articles are often more highly cited than original research articles: consider a journal's source data by document type.

		Citable items							
	Articles	Reviews	Combined	Other items					
Number in JCR year 2008 (A)	110	7	117	3					
Number of references (B)	5855	738	6593	19.00					
Ratio (B/A)	53.2	105.4	56.4	6.3					

Tallies the number of original research and review articles published in the current year (2008)

Also tallies the number of references published by the selected journal in the current year

Other Items = document types not included in the number of citable items published by this journal (e.g. letters, news items, editorials, etc



Journal Citation Reports®

Eigenfactor MetricsTM: EigenfactorTM and Article InfluenceTM:

To compliment Impact Factor and other JCR metrics by providing a broader perspective on Journal Influence through specific measures now widely accepted by the scholarly community.

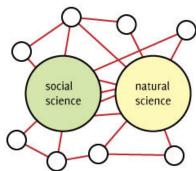
These metrics are developed through The Eigenfactor Project[™] -- a non-commercial academic research project sponsored by the Bergstrom lab in the Department of Biology at the University of Washington. — www.eigenfactor.org

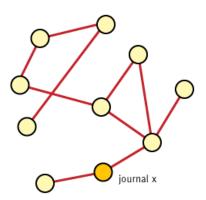
Abbussished January Title					JCF		Eigenfactor TM Metrics [®]			
Mark Rank (linked to journal information)	(linked to journal	ISSN	Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	Articles	Cited Half- life	Eigenfactor TM Score	Article Influence TM Score
1	EARTH PLANET SC LETT	0012- 821X	26488	3.873	4.445	0.563	503	8.3	0.12507	2.422
2	GEOCHIM COSMOCHIM AC	0016- 7037	32873	3.665	4.419	0.719	395	>10.0	0.08079	1.939
3	CHEM GEOL	0009- 2541	12562	3.231	4.146	0.500	254	8.5	0.04291	1.768
4	GEOPHYS J INT	0956- 540X	10960	2.112	2.370	0.438	402	9.5	0.04057	1.179
5	GEOCHEM GEOPHY GEOSY	1525- 2027	2926	2.354	2.933	0.401	172	4.:	0.03249	1.744
6	TECTONOPHYSICS	0040- 1951	12310	1.729	2.179	0.255	161	>10.0	0.03074	1.069
7	IEEE T GEOSCI REMOTE	0196- 2892	9167	2.344	2.598	0.283	375	6.8	0.03053	0.891
8	AM MINERAL	0003- 004X	10676	2.203	2.329	0.442	226	>10.0	0.02707	1.065
	1 2 3 4 5 6	information) 1 EARTH PLANET SC LETT 2 GEOCHIM COSMOCHIM AC 3 CHEM GEOL 4 GEOPHYS J INT 5 GEOCHEM GEOPHY GEOSY 6 TECTONOPHYSICS 7 IEEE T GEOSCI REMOTE	Rank (linked to journal information) ISSN 1 EARTH PLANET SC LETT 0012-821X 2 GEOCHIM COSMOCHIM AC 7037 0016-7037 3 CHEM GEOL 0009-2541 4 GEOPHYS J INT 0956-540X 5 GEOCHEM GEOPHY GEOSY 2027 1525-2027 6 TECTONOPHYSICS 0040-1951 7 IEEE T GEOSCI REMOTE 2892 0003- 8 AM MINIERAL 0003-	Rank (linked to journal information) ISSN Total Cites 1 EARTH PLANET SC LETT 0012-821X 26488 2 GEOCHIM COSMOCHIM AC 7037 32873 3 CHEM GEOL 0009-2541 12562 4 GEOPHYS J INT 0956-540X 10960 5 GEOCHEM GEOPHY GEOSY 2027 2926 6 TECTONOPHYSICS 0040-1951 12310 7 IEEE T GEOSCI REMOTE 2892 9167 8 AM MINERAL 0003-10676	Rank (linked to journal information) ISSN Total Cites Impact Factor 1 EARTH PLANET SC LETT 0012-821X 26488 3.873 2 GEOCHIM COSMOCHIM AC 7037 32873 3.665 3 CHEM GEOL 2541 12562 3.231 4 GEOPHYS J INT 9956-540X 10960 2.112 5 GEOCHEM GEOPHY GEOSY 2027 2926 2.354 6 TECTONOPHYSICS 1951 12310 1.729 7 IEEE T GEOSCI REMOTE 2892 9167 2.344 8 AM MINIERAL 9003-10676 2.203	Rank Abbreviated Journal (linked to journal information) ISSN Total Cites Impact Factor 5-Year Impact Factor 1 EARTH PLANET SC LETT 0012-821X 26488 3.873 4.445 2 GEOCHIM COSMOCHIM AC 7037 32873 3.665 4.419 3 CHEM GEOL 0009-2541 12562 3.231 4.146 4 GEOPHYS J INT 0956-540X 10960 2.112 2.370 5 GEOCHEM GEOPHY GEOSY 2027 2926 2.354 2.933 6 TECTONOPHYSICS 1951 0040-1951 12310 1.729 2.179 7 IEEE T GEOSCI REMOTE 2892 9167 2.344 2.598 8 AM MINIERAL 0003-10676 2.303 2.329	Rank (linked to journal information) ISSN Total Cites Impact Factor 5-Year Impact Factor Immediacy Index 1 EARTH PLANET SC LETT 0012-821X 26488 3.873 4.445 0.563 2 GEOCHIM COSMOCHIM AC 7037 32873 3.665 4.419 0.719 3 CHEM GEOL 0009-2541 12562 3.231 4.146 0.500 4 GEOPHYS J INT 0956-540X 10960 2.112 2.370 0.438 5 GEOCHEM GEOPHY GEOSY 2027 1525-2027 2926 2.354 2.933 0.401 6 TECTONOPHYSICS 0040-1951 12310 1.729 2.179 0.255 7 IEEE T GEOSCI REMOTE 0196-2892 9167 2.344 2.598 0.283 8 AM MINERAL 0003-10676 2.303 2.329 0.443	Rank Abbreviated Journal (linked to journal information) ISSN Total Cites Impact Factor Immediacy Impact Factor Immediacy Impact Impact Impact Factor Immediacy Index Articles 1 EARTH PLANET SC LETT 0012-821X 26488 3.873 4.445 0.563 503 2 GEOCHIM COSMOCHIM AC 7037 32873 3.665 4.419 0.719 395 3 CHEM GEOL 0009-2541 12562 3.231 4.146 0.500 254 4 GEOPHYS J INT 0956-540X 10960 2.112 2.370 0.438 402 5 GEOCHEM GEOPHY GEOSY 2027 2926 2.354 2.933 0.401 172 6 TECTONOPHYSICS 0040-1951 12310 1.729 2.179 0.255 161 7 IEEE T GEOSCI REMOTE 0196-2892 9167 2.344 2.598 0.283 375 8 AM MINERAL 0003- 10676 2.203 2.329 0.443 226	Rank Abbreviated Journal (linked to journal information) ISSN Total Cites Impact Factor Immediacy Impact Factor Articles Cited Half-life 1 EARTH PLANET SC LETT 821X 26488 3.873 4.445 0.563 503 8.3 2 GEOCHIM COSMOCHIM AC 7037 32873 3.665 4.419 0.719 395 >10.0 3 CHEM GEOL 0009- 2541 12562 3.231 4.146 0.500 254 8.5 4 GEOPHYS J INT 0956- 540X 10960 2.112 2.370 0.438 402 9.5 5 GEOCHEM GEOPHY GEOSY 2027 2926 2.354 2.933 0.401 172 4.3 6 TECTONOPHYSICS 0040- 1951 12310 1.729 2.179 0.255 161 >10.0 7 IEEE T GEOSCI REMOTE 2892 9167 2.344 2.598 0.283 375 6.8 8 AM MINISTRAL 0003- 10676 2.203 2.329 0.44	Rank Abbreviated Journal (linked to journal information) ISSN Total Cites Impact Factor Immediacy Index Articles Cited Half-Life Eigenfactor Score 1 EARTH PLANET SC LETT 821X 26488 3.873 4.445 0.563 503 8.3 0.12507 2 GEOCHIM COSMOCHIM AC 7037 32873 3.665 4.419 0.719 395 >10.0 0.08079 3 CHEM GEOL 2541 12562 3.231 4.146 0.500 254 8.5 0.04291 4 GEOPHYS J INT 0956-540X 10960 2.112 2.370 0.438 402 9.5 0.04057 5 GEOCHEM GEOPHY GEOSY 2027 1525-2027 2926 2.354 2.933 0.401 172 4.1 0.03249 6 TECTONOPHYSICS 1951 12310 1.729 2.179 0.255 161 >10.0 0.03074 7 IEEE T GEOSCI REMOTE 2892 9167 2.344 2.598 0.283 375

Journal Citation Reports®

Eigenfactor™ Score:

- Scholarly references join journals together in a vast network of citations. The Eigenfactor Score algorithm uses the structure of the entire network to evaluate the importance of each journal, cutting across all disciplines. Self-citations are excluded.
- This corresponds to a simple model of research in which readers follow chains of citations as they move from journal to journal.
- Eigenfactor calculations take into consideration a 5-year span of citation activity utilizing data from the *Journal Citation Reports*.
- Journals are considered to be influential if they are cited often by other *influential journals*.







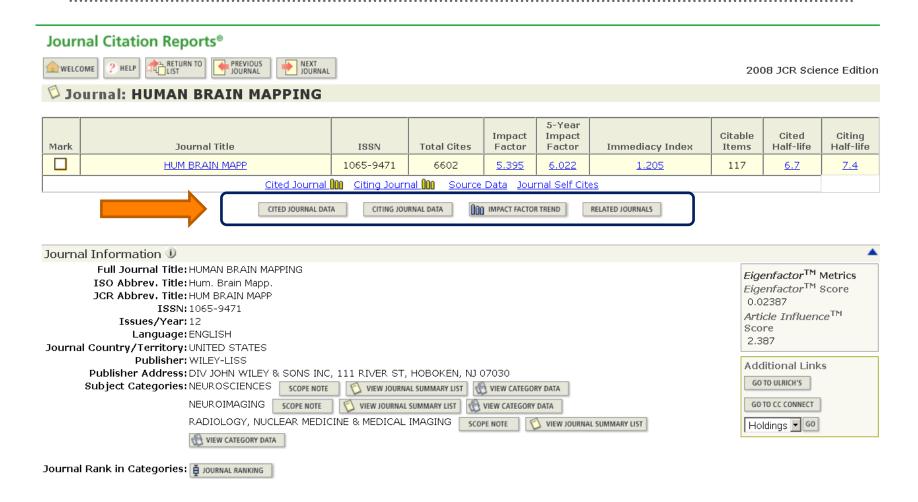
Journal Citation Reports® – Enhancements

Article Influence[™] Score:

- As with Eigenfactor Score, Article Influence Score:
- Uses the structure of the entire citation network to evaluate the importance of each journal, based on *JCR* data.
- Does not consider self-citations
- The calculation of Article Influence Score does in fact incorporate Eigenfactor Score.
- However, as Eigenfactor Score can be described as presenting the total collective value provided by all of the articles published in a journal in a year Article Influence Score measures the average influence of individual articles appearing in the same journal, translating to the importance of an article published in that journal.
- Because it does present an average for article-level influence, Article
 Influence is more like the Impact Factor than Eigenfactor Score though
 keep in mind the methodology is quite different and therefore provides a
 perspective different from but complimentary to Impact Factor.

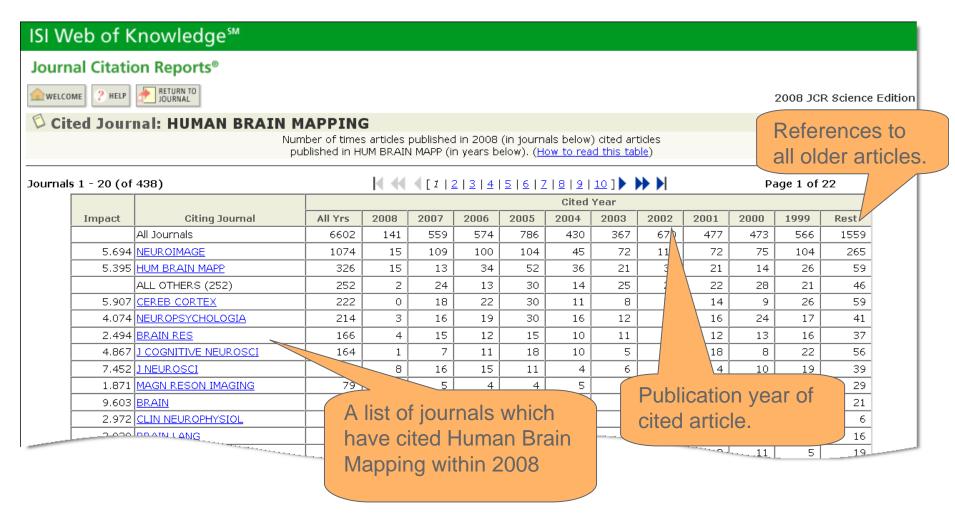


More data from the Full Record



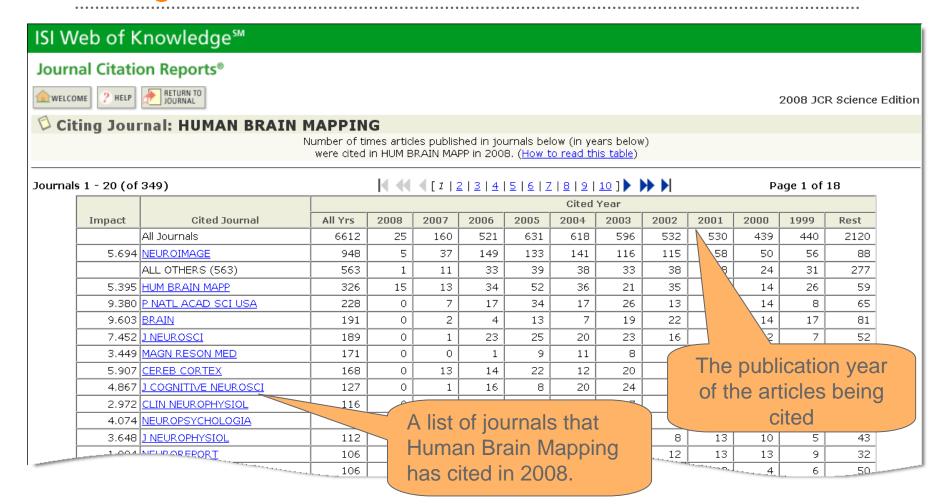


Cited Journal List



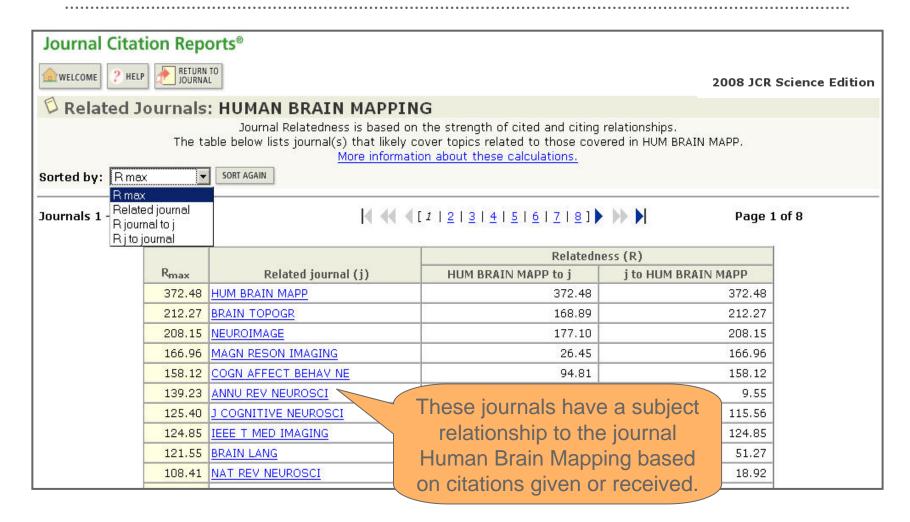


Citing Journal List





Related Journals





Relatedness: Journal Level

Considers bi-directional citation pairs:

Journal *i* cites Journal *j*AND

Journal *j* cites Journal *i*

• The specific relatedness calculation we are using was developed by Garfield and Pudovkin (2002). "Algorithmic procedure for finding semantically related journals." JASIST 53: 1113-1119.



Related Journals

 The Relatedness between journals is characterized by two calculations

$$R_i > j = H_i > j * 10^6$$

$$R_j > i = H_j > i * 10^6$$

$$(Pap_j * Ref_i)$$

$$(Pap_i * Ref_j)$$



What does "relatedness" mean?

- The relatedness calculation is like a measure of the "citation density" between two journals.
- H*i*>*j*

The numerator considers the number of citations going from journal *i* to journal *j*

 The denominator includes two factors that normalize for the size of the journals:

Papj: the number of papers in the cited journal

Refi: the total number of references given by journal i to any journal



Impact Factor Trend Graph

Journal Citation Reports®



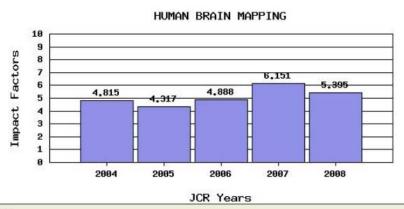




2008 JCR Science Edition

☐ Impact Factor Trend Graph: HUMAN BRAIN MAPPING

Click on the "Return to Journal" button to view the full journal information.



*Impact Factor -- see below for calculations

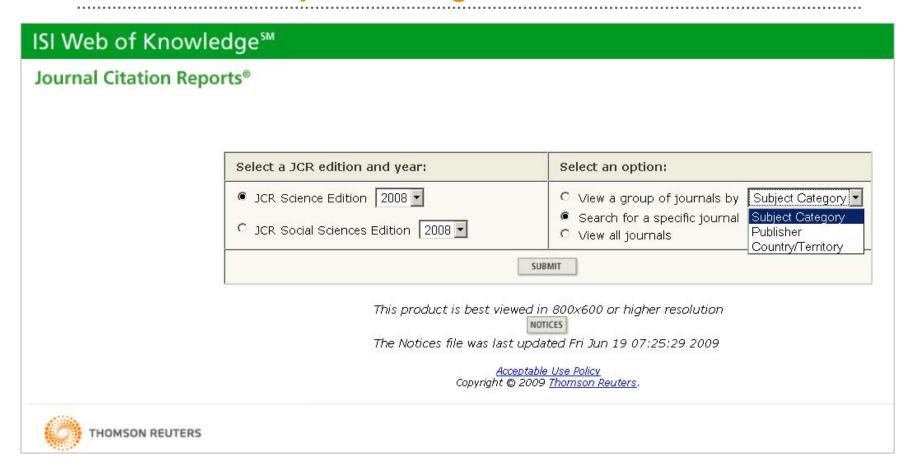
The journal impact factor is a measure of the frequency with which the "average article" in a journal has been cited in a particular year. The impact factor will help you evaluate a journal's relative importance, especially when you compare it to others in the same field. For more bibliometric data and information on this and other journal titles click on the "Return to Journal" button.

NOTE: Title changes and coverage changes may result in no impact factor for one or more years in the above graph.

- •Indicates Impact Factor over a period of five years
- Entry point into JCR from Web of Science

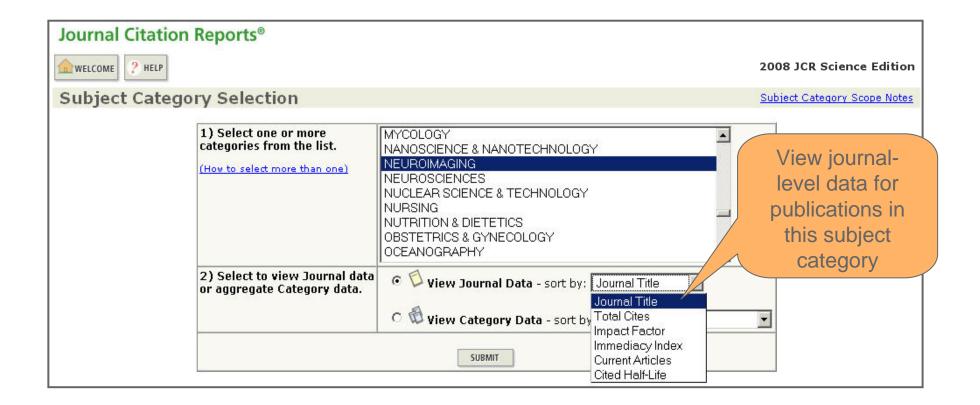


Examine Subject Categories



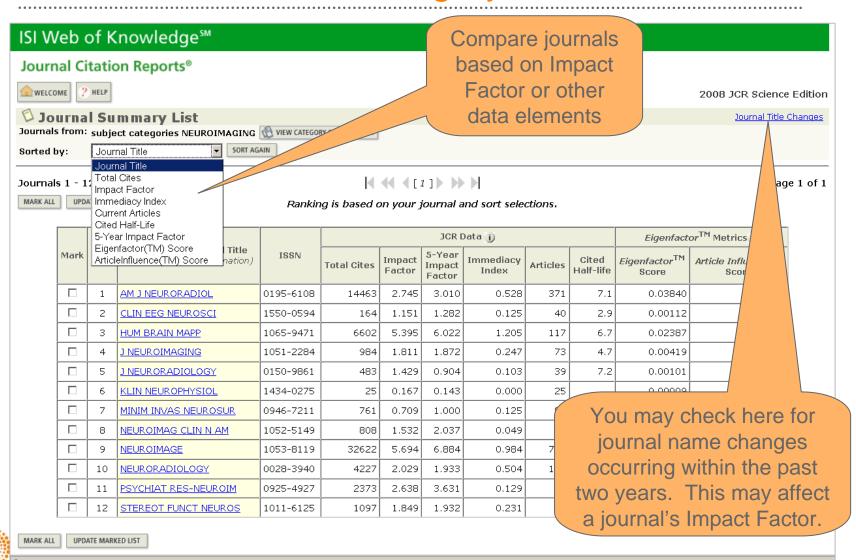


View Journal Data

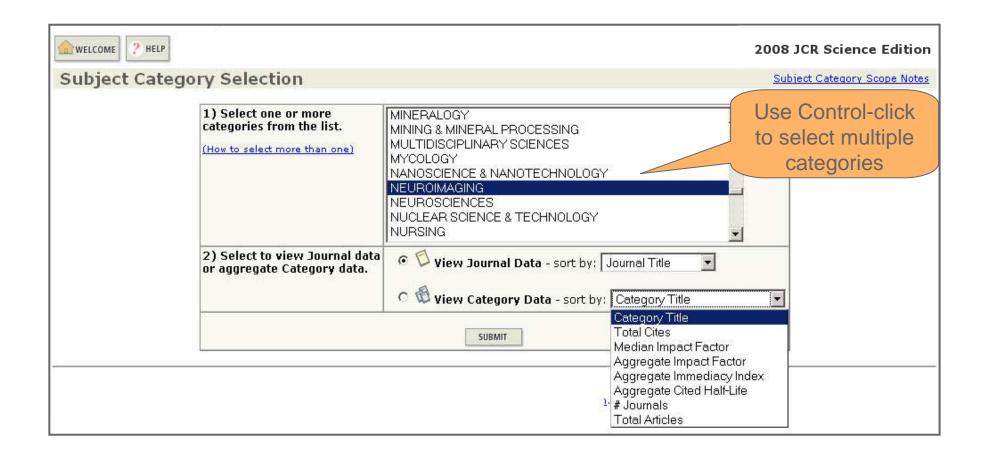




Sort Journals in the Category

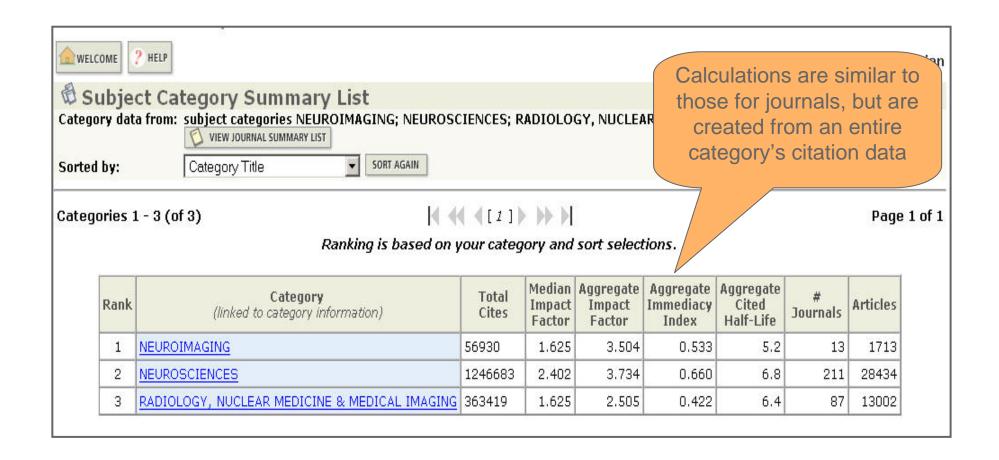


View Category Data in context





Aggregate Data



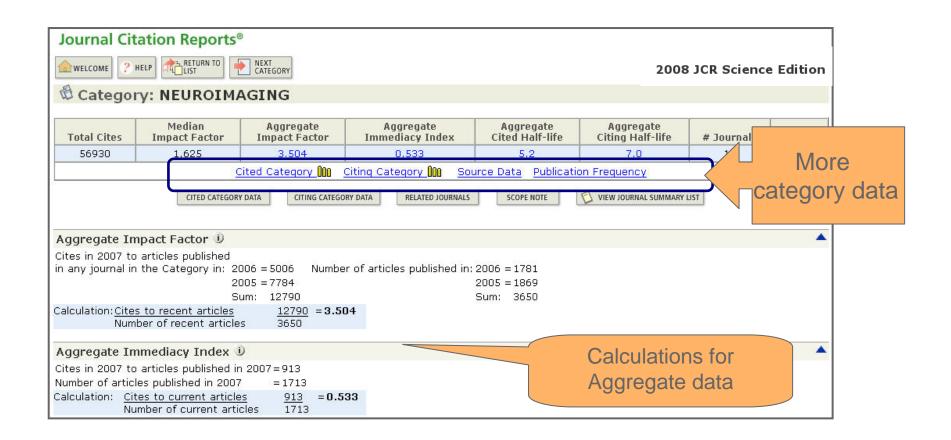


Category Level Data

- Median Impact Factor the Impact Factor mid-point for journals in the category. 50% of journals rank above, 50% rank below.
- Aggregate Impact Factor
- Citation rate of the "average" article in a subject category
- Use as benchmarking tool to compare a journal to its overall subject category.

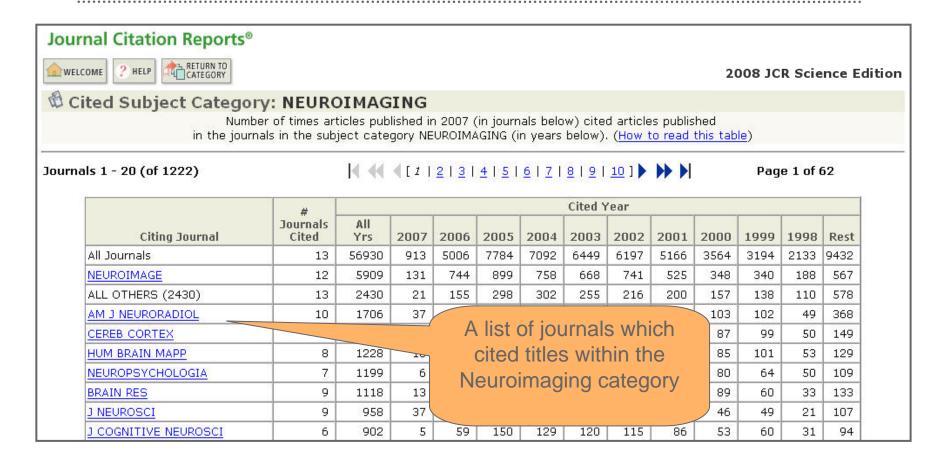


Category Data



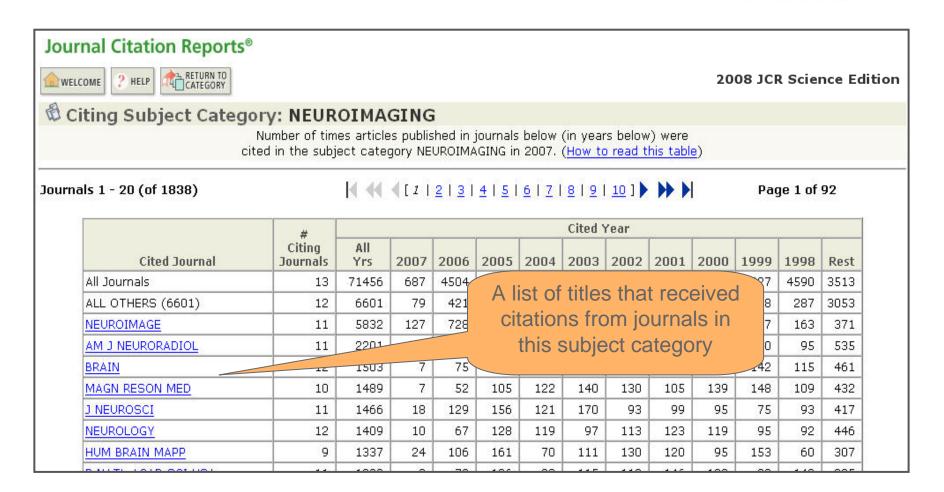


Cited Category Table



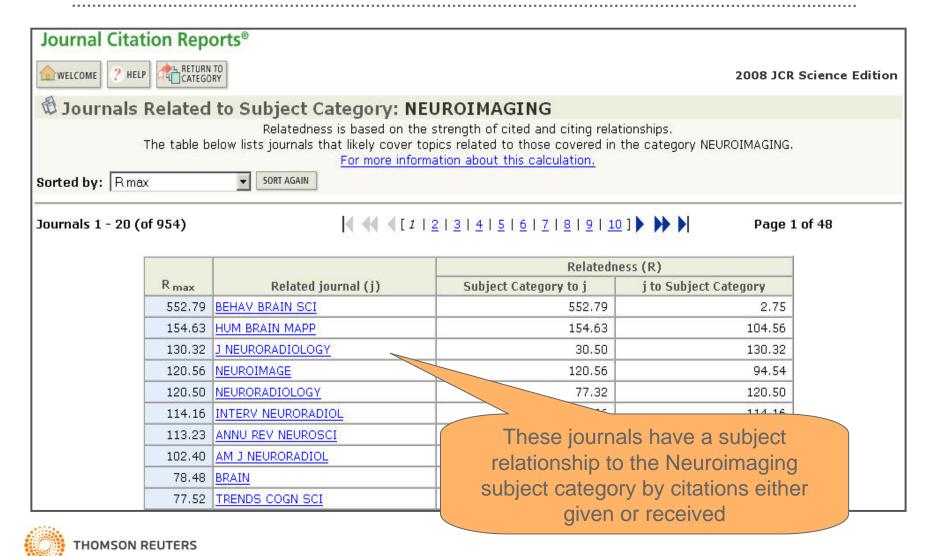


Citing Category Table

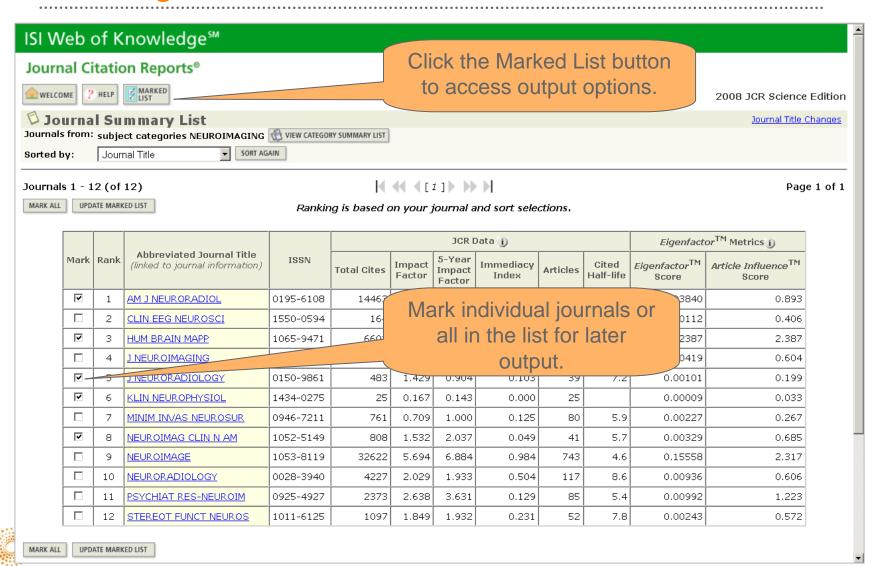




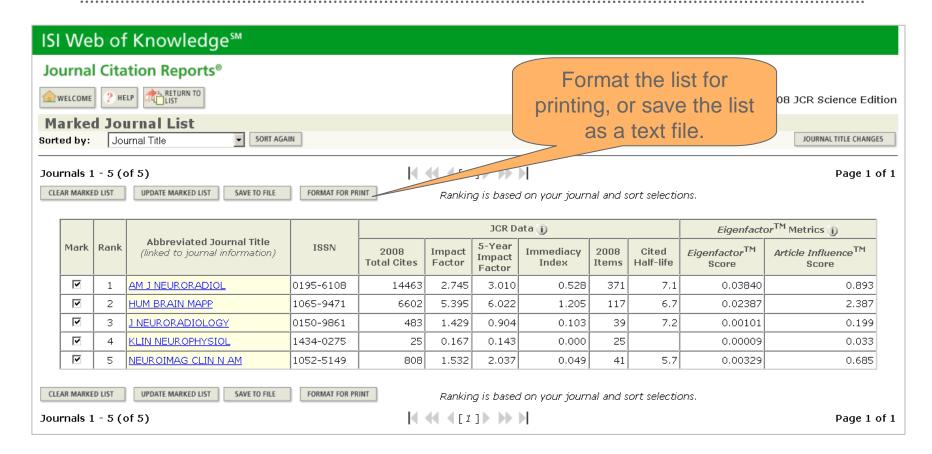
Related Journals – Subject Category



Marking Journals

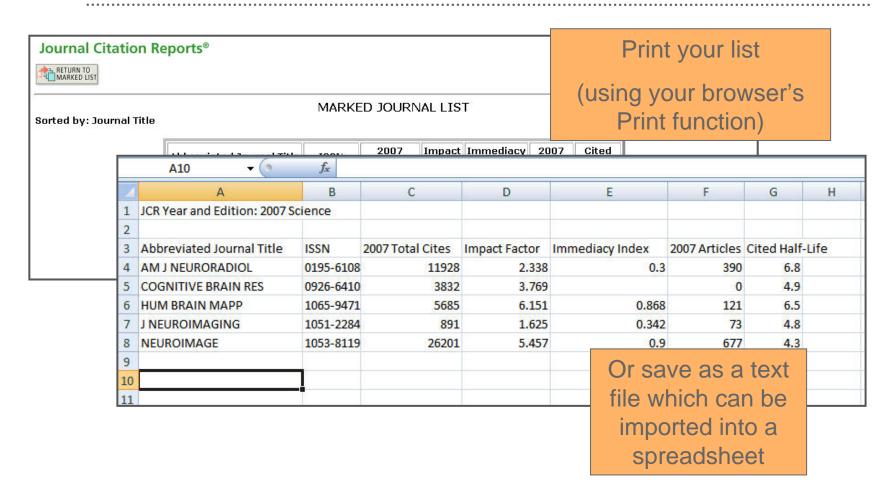


Output from Marked List





Output Options





Contacting Thomson Reuters

 Visit us on the web at: <u>http://www.science.thomsonreuters.com/support</u>

