Web of Science Database: Introduction

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Dec-20

Citation Databases

- **Citation databases** are **databases** that have been developed for evaluating publications. The **citation databases** enable you to count citations and check, for example, which articles or journals are the most cited ones

- In a citation database you get information about who has cited an article and how many times an author has been cited. You can also list all articles citing the same source.

- Most important citation database are
- "***Web of Science***",
- "***Scopus***"
- "***Google Scholar***"

Web of Sciences

- **Web of Science is owned and produced by Clarivate Analytics. WoS is composed of three databases containing citations from international scientific journals:**
  - Emerging Source Citation Index- ESCI
  - Arts & Humanities Citation Index - AHCI
  - Social Sciences Citation Index - SSCI
  - Science Citation Index – SCI

- **Journal Coverage:**
  - Aims to include the best journals of all fields. Included journals are for example: European Journal of Marketing, Journal of Finance, Strategic Management Journal

- **Citation Coverage:**
  - Includes citations starting from the year 1945
  - Citations can be counted in a simple or complex manner, with different results

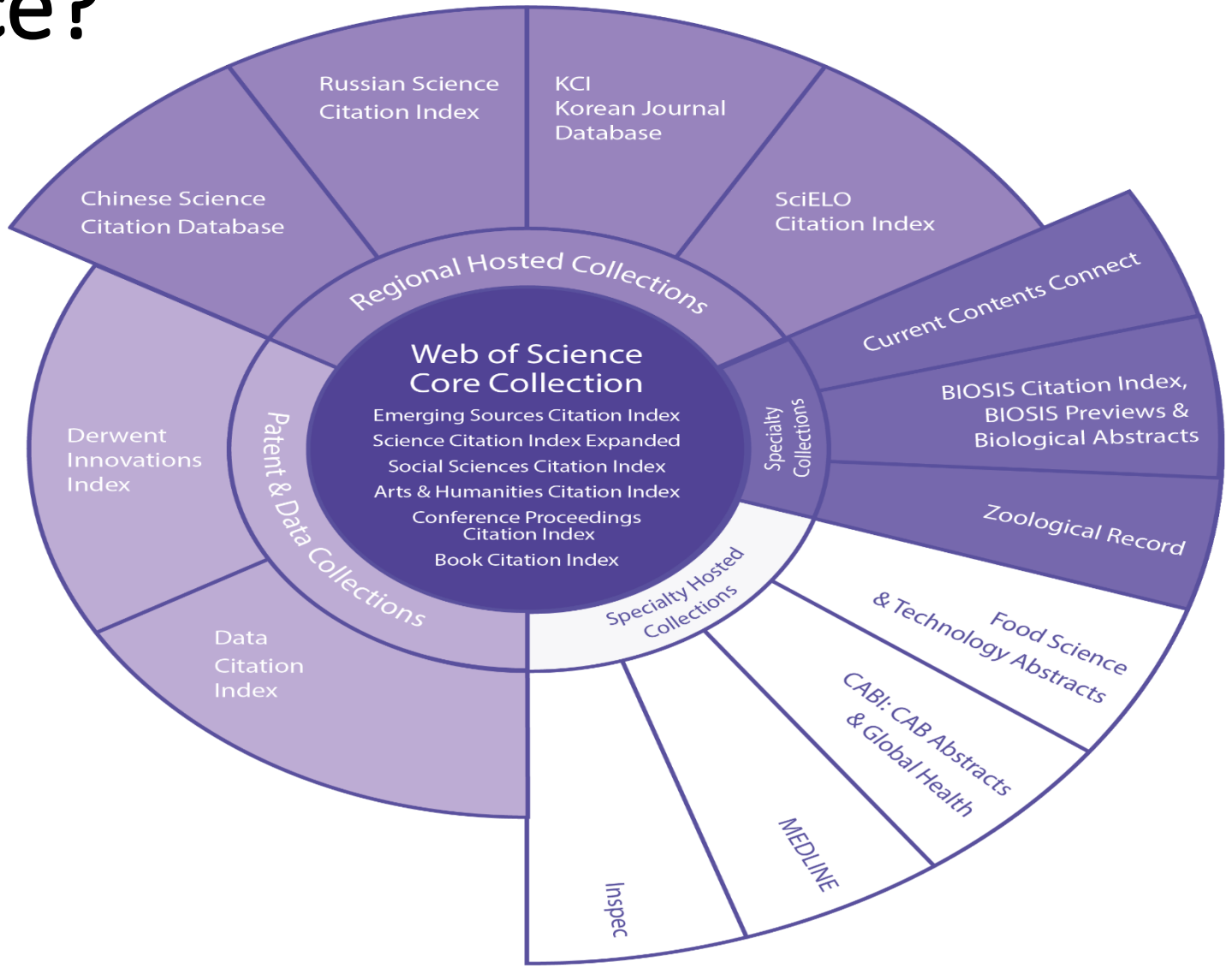
What is Web of Science?

- *Web of Science* is a platform consisting of several literature search databases designed to support scientific and scholarly research.

- **Web of Science Core Collection** is premier resource on the platform and includes over 21,000 peer-reviewed, high-quality scholarly journals published worldwide (including Open Access journals); over 205,000 conference proceedings; and over 104,000 editorially selected books.

- Search across all databases on the platform to find content spanning multiple disciplines, document types, and formats. Discover the citation connections between these diverse content sets. Explore the more than one billion searchable cited references in Web of Science.

- *Note: Your institution's entitlement to the Web of Science platform may not include all these databases.*



Basic search

1

Choose a search option:

- Basic Search
- Author Search
- Cited Reference Search
- Advanced Search
- Structure Search

2

Limit your search:

Change your timespan limits or limit the indexes you wish to search. Click **More Settings** to see the list of all the indexes included in your *Web of Science Core Collection* subscription.

3

Tools

Use **Tools** and **Searches & Alerts** to move to your Saved Searches, *EndNote* online account, *Kopernio* or *Publons*.

4

Search

Combine words and phrases to search across the source records in the *Web of Science Core Collection.*

5

Select a database

Use the dropdown to select another content set on the *Web of Science*

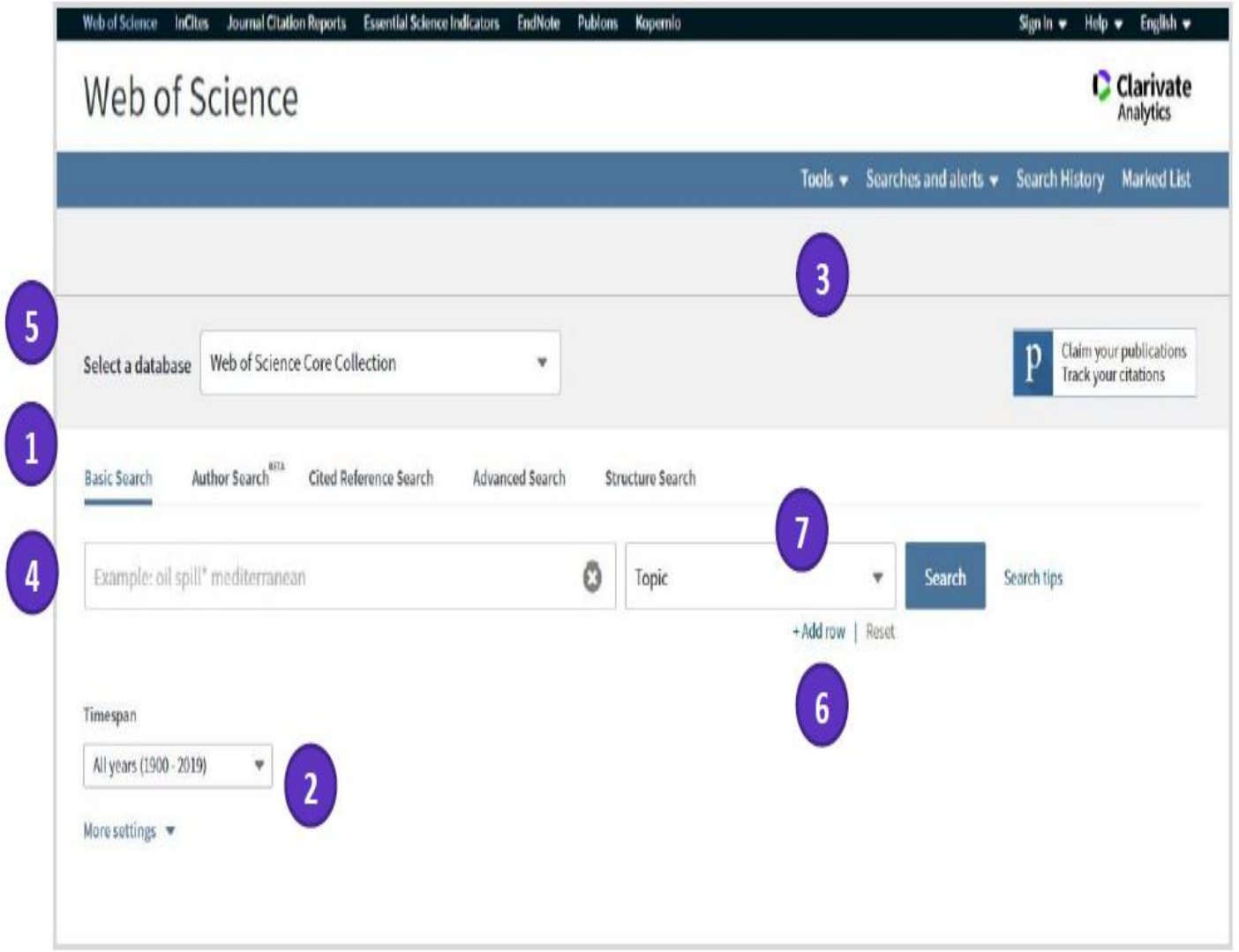
6

Add another search field

7

Select your search field

Use the drop down to select your search field or choose **All Fields** to search any field in the *Web of Science Core Collection* record.



Search operators

- Use **AND** to find records containing all of your search terms
- Use **OR** to find records containing any of your search terms
- Use **NOT** to exclude records containing certain words from your search
- Use **NEAR/n** to find records containing all terms within a certain number of words (n) of each other (stress NEAR/3 sleep)
- Use **SAME** in an Address search to find terms in the same line of the address (Tulane SAME Chem)

Wild card characters

Use truncation for more control of the retrieval of plurals and variant spellings

***** zero to many characters

? one character

$ zero or one character

Phrase Searching

To search exact phrases in Topic or Title searches, enclose a phrase in quotation marks. For example, the query "energy conservation" finds records containing the exact phrase energy conservation.

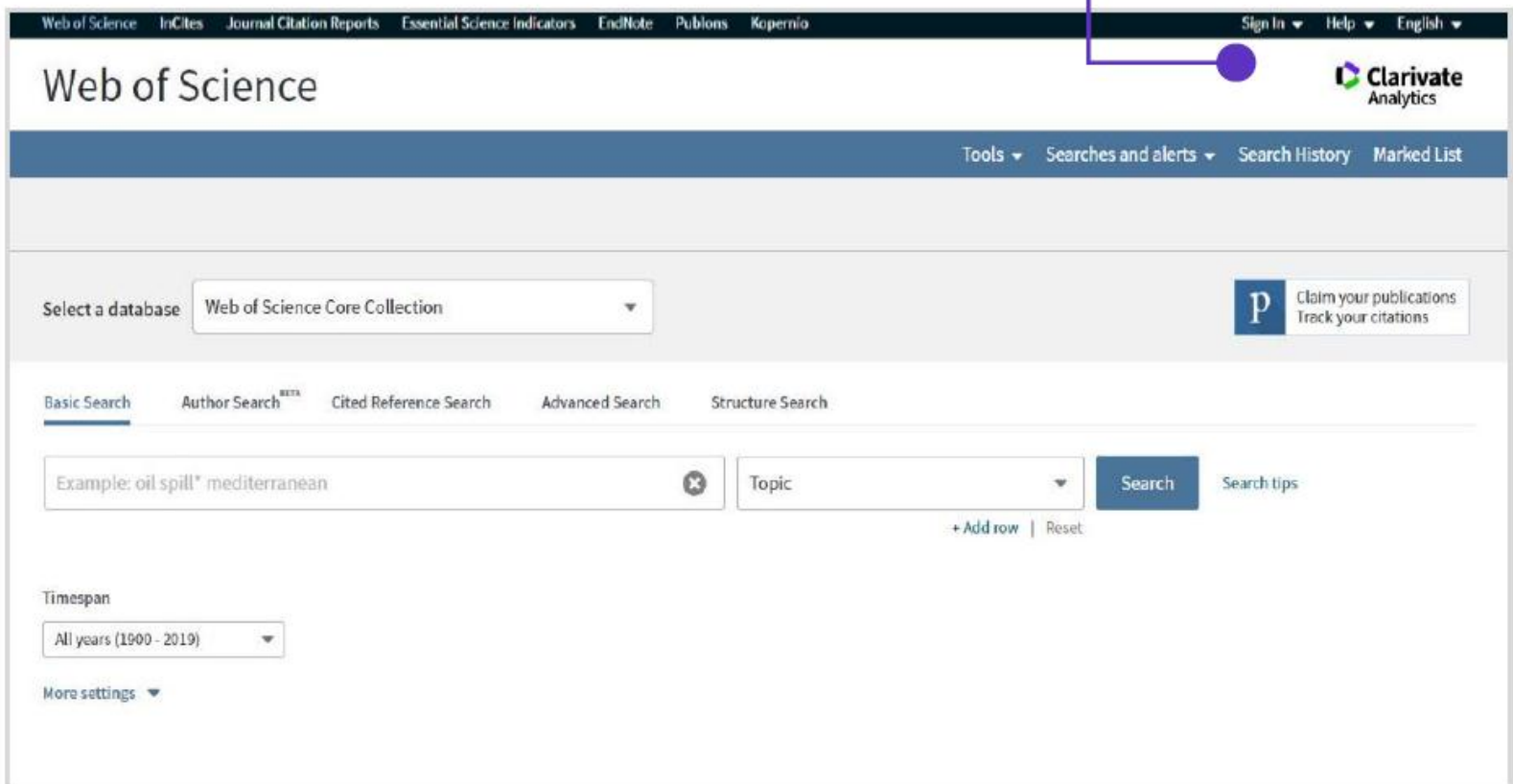
Author name

Enter the last name first, followed by a space and up to five initials.

- Use truncation and search alternative spelling to find name variants:
- Driscoll C finds Driscoll C, Driscoll CM, Driscoll Charles, and so on.
- Driscoll finds all authors with the last name Driscoll.
- Search variant forms of names containing particles. For example, De la Cruz F OR Delacruz F finds Delacruz FM, De La Cruz FM, and so on.

Your Web of Science Profile

- Save records to EndNote online
- Integrate with Publons
- Claim your Author Records and provide author feedback
- Save search histories and alerts
- Save your custom search settings
- Save Marked Lists



1

Article title

Click the article title to move to the full record. Links to full text may also be available (subscription required).

2

Results

Click **More** to view your full search statement. Click **Create Alert** to save this search statement as a search alert.

3

Sort results

By Publication Date (default), Times Cited, Usage Count, Recently Added, Source, First Author or Conference name.

4

View Abstract

Click **View Abstract** to open the abstract on this page.

5

Refine your results

Use Refine Results to mine your full set of results to find Hot & Highly Cited Papers, top Subject Categories, Publication Years, and more. Click **View All Options** to see the complete list of fields.

6

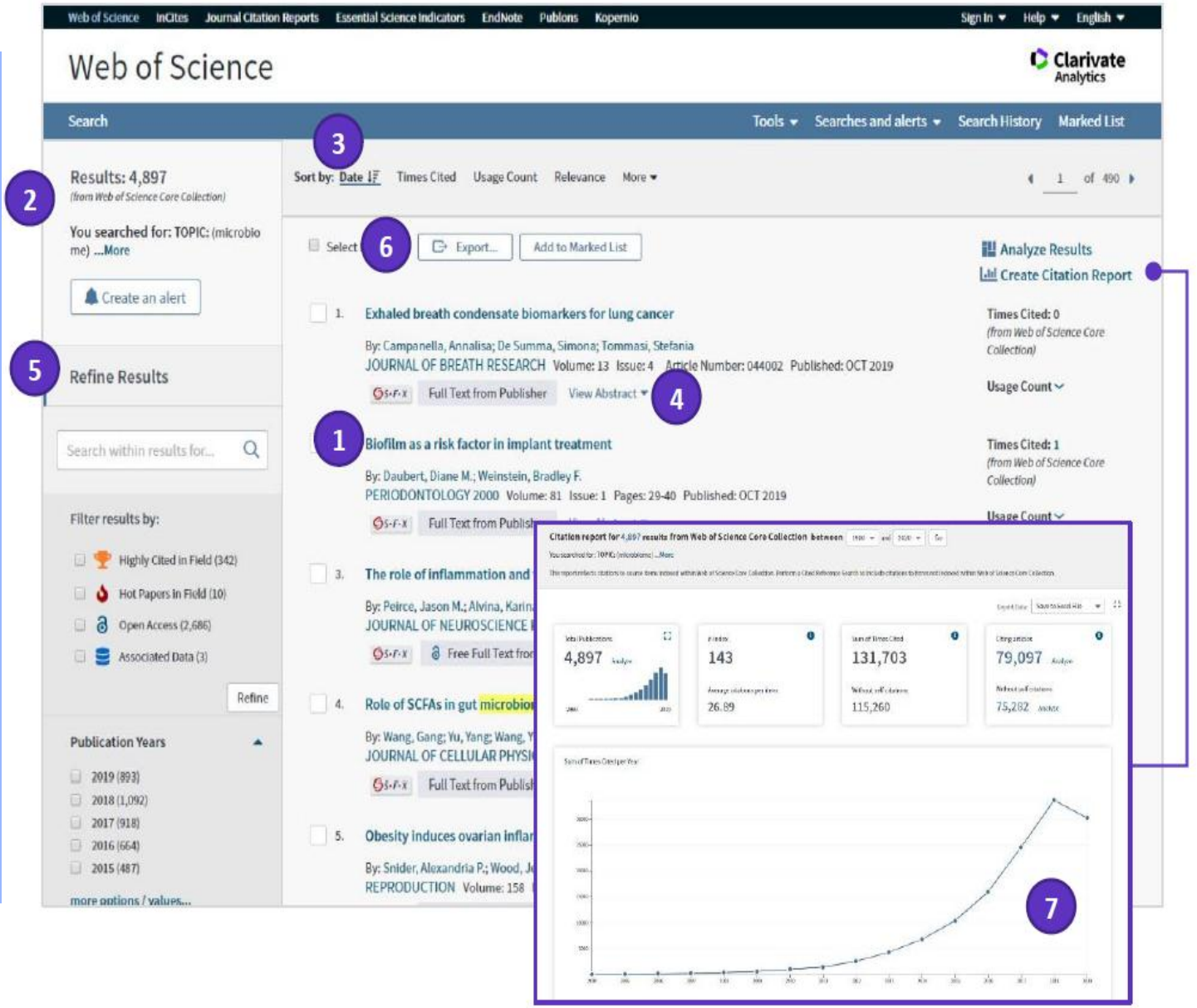
Export search results

Export to bibliographic management tools like *EndNote*, send to *InCites* for analysis, save as text, email, or add up to 50,000 to Marked List. Save up to 50 Marked Lists containing up to 50,000 records per list.

7

Create Citation Report

Click **Create Citation Report** to see a citation overview for any set of results with fewer than 10,000 records.



1

Title

All titles are indexed as published. Foreign language titles are translated into US English.

2

Abstract

All abstracts are indexed as provided by the journal (1991 to present).

4

Author names

All authors are indexed. Search using last names and initials (e.g. Garfield e).

5

Author Identifiers

Web of Science ResearcherIDs and ORCID IDs are searchable and displayed when available. Web of Science ResearcherIDs are associated with *Publons* profiles at publons.com. ORCID data is harvested from orcid.org.

6

Addresses and Organization Enhanced Names

All author addresses are indexed and searchable. Reprint author e-mail addresses are listed when available. Organization Enhanced Names are used to help identify institutions with complex names, or with many address variations.

7

Funding Information

Funding agency, grant numbers, and the funding acknowledgement text is searchable (availability varies by index).

3

Author Keywords and KeyWords Plus

Author Keywords are indexed from the original article and are searchable. KeyWords Plus are words and phrases harvested from the titles of the cited articles. Click on the Keyword or Phrase to perform a search on the terms.

8

Citation Network

- Cited References
- Times Cited Counts
- Related Record Search
- Citation Alerts

Times cited counts for the *Web of Science Core Collection* and the *Web of Science* platform (including *Web of Science Core Collection, Biosis Citation Index, Chinese Science Citation Database, Data Citation Index, Russian Science Citation Index and SciELO Citation Index*) are displayed on each record. Counts reflect all correct citations and are not limited by your subscription.

9

Cited References

All cited references are indexed and searchable via Cited Reference Search. Click the "Cited References" link in the Citation Network to move to the cited reference view.

10

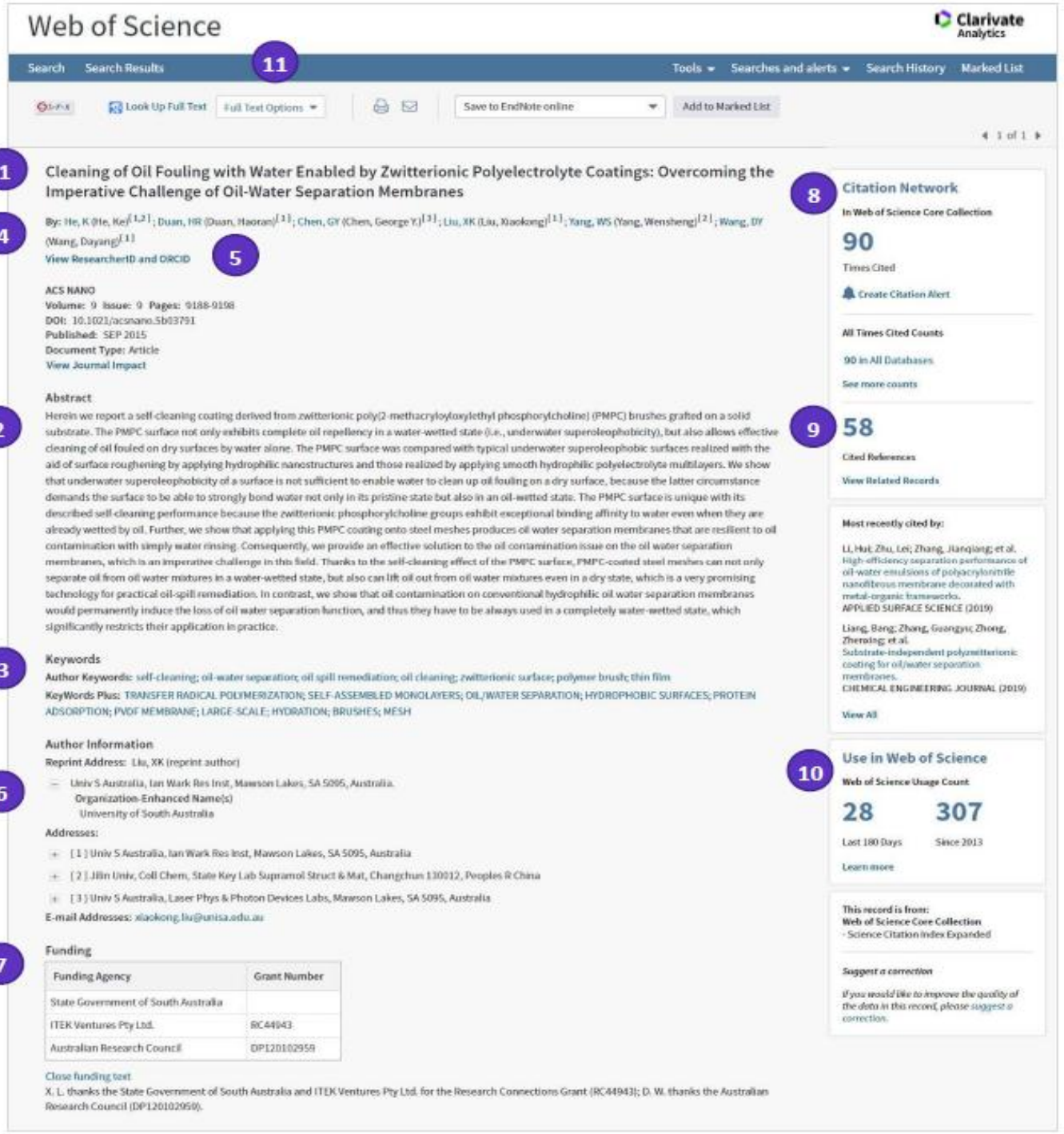
Usage count

See the number of full text click-throughs or bibliographic exports for this item in the last 180 days or since 2013.

11

Look Up Full Text

Link to full text, library holdings or Google Scholar. Or use Kopernio for one-click access to full text subscription and open access content from anywhere.



Cited Reference Search

Cited reference search tips:

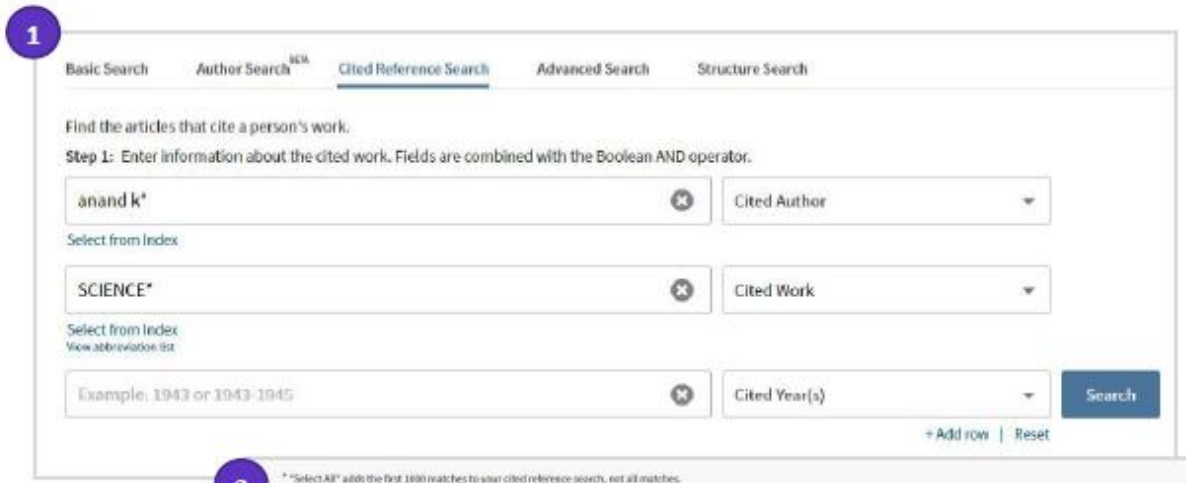
- Use wild card characters (see page 2) on Cited Authors and Cited Work.
- Look for variants (sometimes papers are cited incorrectly) before finishing your search.
- The "Citing Articles" count reflects citations from all years and all editions of the Web of Science Core Collection – even those years and editions you don't subscribe to.
- All cited references are indexed and searchable, including references to books, patents, government documents, etc. Secondary cited authors, full source titles, and non-standard source abbreviations are automatically searched across all source records in the Web of Science. Keep in mind that a search of this sort may only return partial results.
- Since 2012, all references to 'non source' items (books, newspaper items, etc.) are fully indexed (full list of authors, full title, etc.) as published. Click "Show Expanded Titles" to see the full reference information.

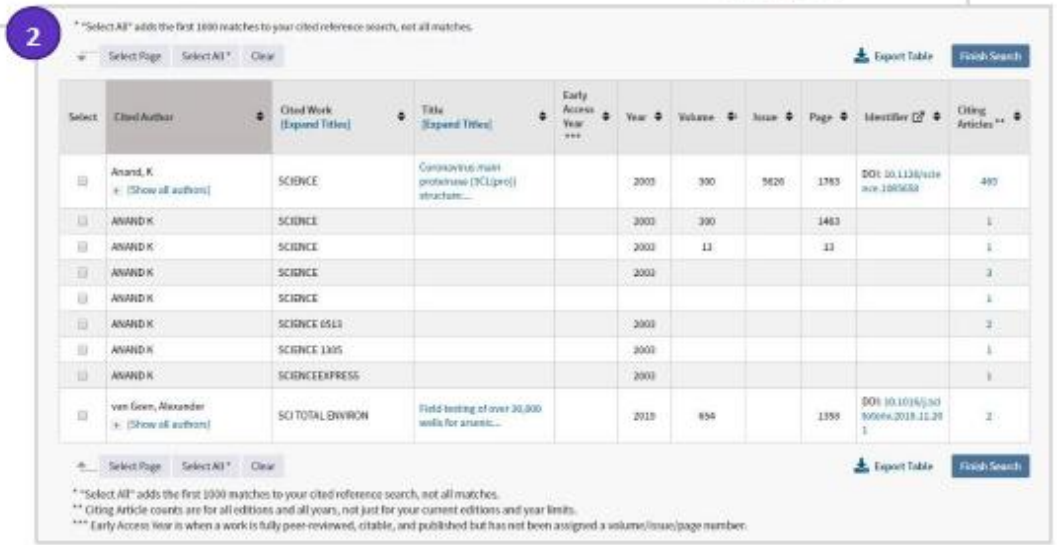
Step One

- Navigate to Cited Reference Search.
- Search by Cited Title, Cited Author, Cited Work, Cited Year, Volume, Issue, or Page.
- Use the Journal Abbreviations List for help with abbreviations.

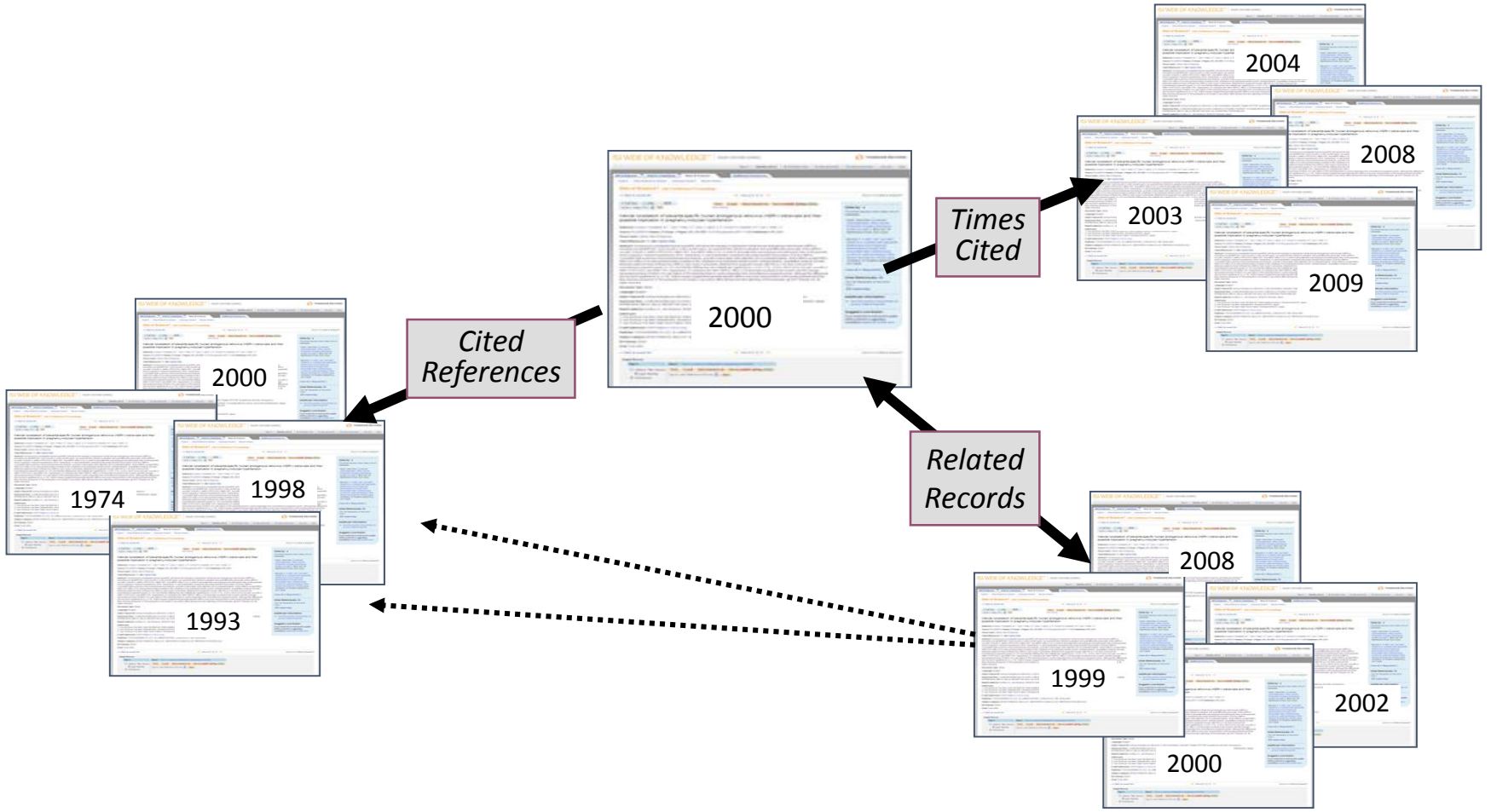
Step Two

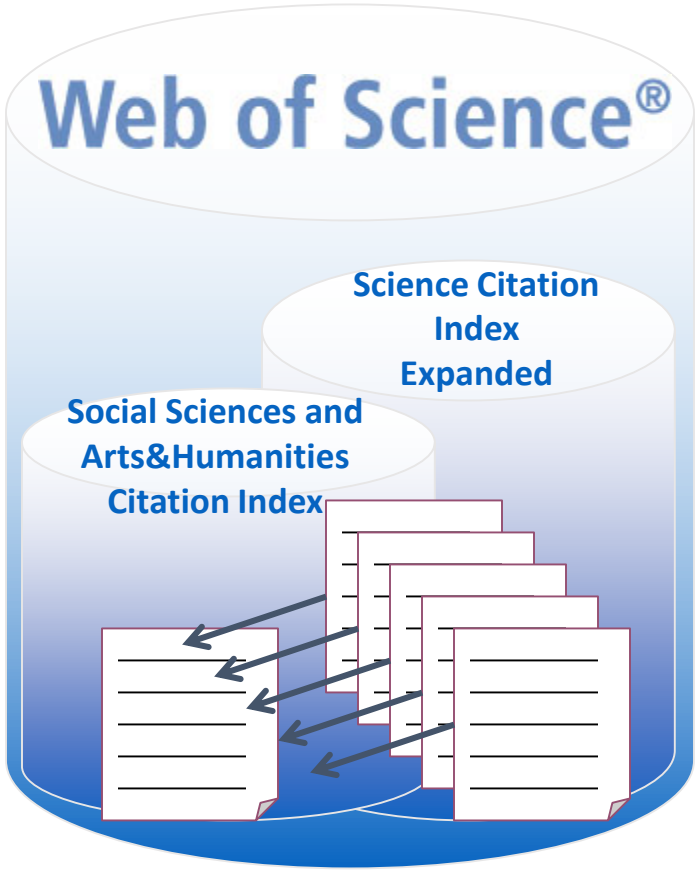
Select the references, including variants, to include in your search, then click "Finish Search" to display your search results.



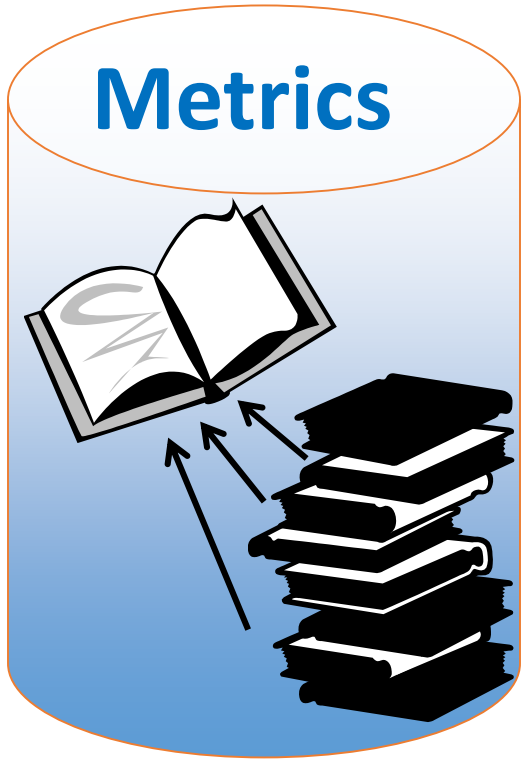


What is a citation?





Article-level data



Journal-level data
Researcher-level data
Institution-level data
Country/region-level data
Field/discipline-level data

Journal Citation Reports®

- Journal Citation Reports aggregates the meaningful connections of citations created by the research community through the delivery of a rich array of publisher-independent data, metrics and analysis of the world's most impactful journals included in the Science Citation Index Expanded (SCIE) and Social Sciences Citation Index (SSCI), part of the Web of Science Core Collection.

- Journal Citation Reports is the only journal report of its kind that is both complete and editorially selective; it contains all the data required to understand the components that index the value and impact of each journal. The structured data are curated by a global team of experts who continuously evaluate and select the collections of journals, books and conference proceedings covered in the Web of Science Core Collection to ensure accuracy in evaluating journal impact.

- These expert insights enable you to explore the key drivers of a journal's value, making better use of the wide body of data and metrics available in the Journal Citation Reports, including the Journal Impact Factor (JIF)

Key features in the Journal Citation Reports allow you to:

- **Focus on desired subject categories, enabling you to review journal titles and key performance indicators in the category;**
- **Compare multiple journals based on a chosen indicator;**
- **Evaluate the performance of journals in which you or your organization has published research;**
- **Recognize trending journals in key research categories;**
- **Identify the ideal journal in which to publish your forthcoming research;**

Journal Information Provided by JCR

- Total Cites
- Impact Factor
- 5-Year Impact Factor
- Immediacy Index
- Cited Half-Life
- Citing Half-Life
- Eigenfactor Score
- Article Influence

Below is only a simplified explanation of the metrics. For definitions and details, click the help in the JCR journal report pages

Total Cites	**Total number of citations for this journal in the JCR year**
Impact Factor	On average, how many times an article in this journal is being cited – based on articles published in the two previous years
5-Year Impact Factor	On average, how many times an article in this journal is being cited – based on articles published in the five previous years
Immediacy Index	On average, how many times an article in this journal is being cited in the same year – based on last year's data (reflects more about the nature of the subject than journal quality)
Cited Half-Life	Indicates how far back the older articles in this journal are still being cited (reflects more about the nature of the subject than journal quality)

Below is only a simplified explanation of the metrics. For definitions and details, click the help in the JCR journal report pages

Citing Half-Life	Indicates how recent or how old the bibliography referred by articles in this journal are (reflects more about the nature of the subject than journal quality)
Eigenfactor Score	The Eigenfactor Score is some kinds of enhanced 5-year impact factor – by giving higher score for getting cited in more influential journals and eliminates self-citation
Article Influence Score	The Article Influence Score is derived from the Eigenfactor Score based on matching the share of the journal's influence against the share of the journal's share of articles. The neutral influence score is 1.00 – thus a journal with article influence score greater than 1.00 indicates that each article in the journal has above-average influence and vice versa

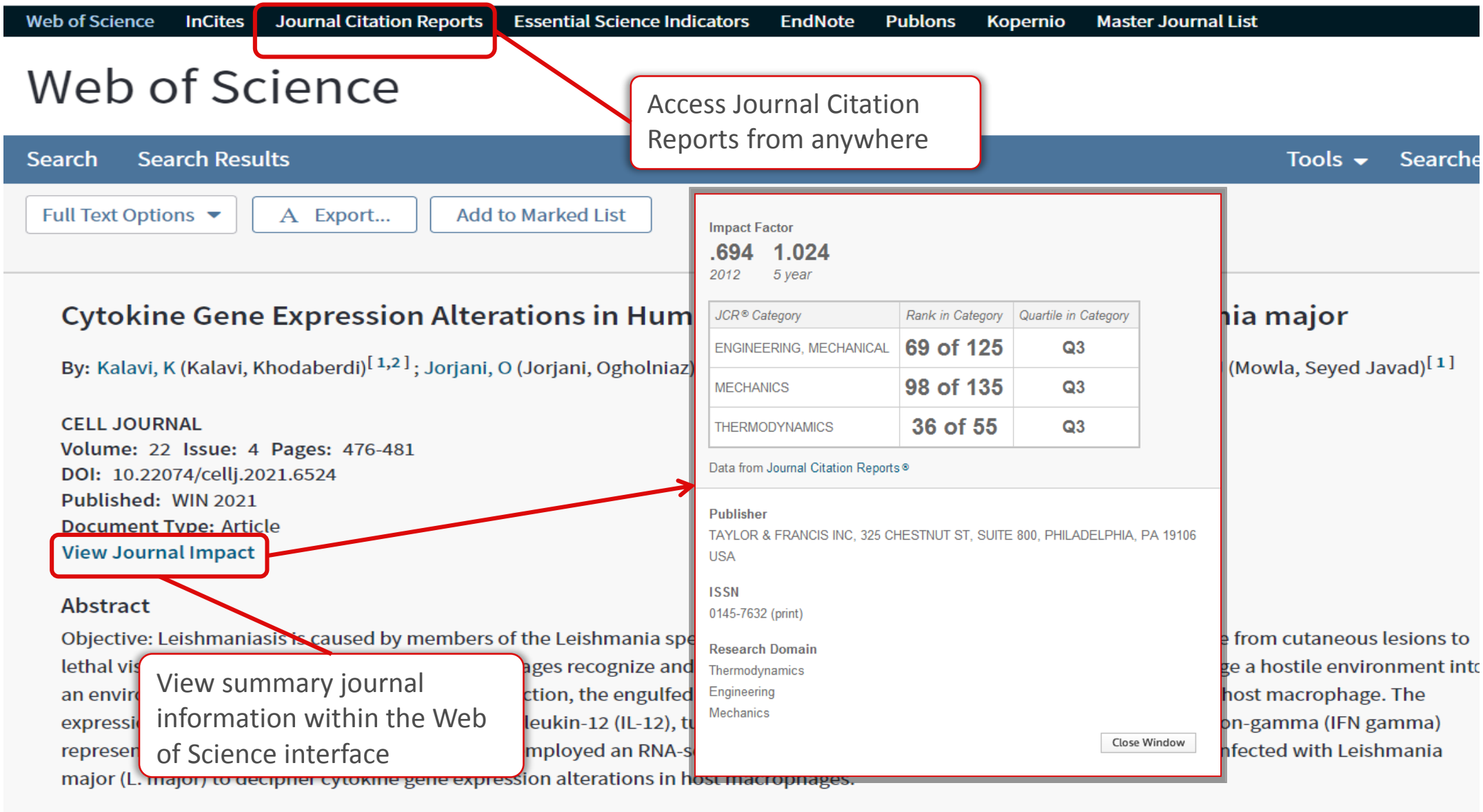
Quartile Comparison (Q)

- Quartile Comparisons enable users to compare various quartile ranks from metrics for chosen journals within a given subject category. Users can see how each journal ranks within a given quartile, compared with other journals of their choosing, so long as each is categorized within the same subject. The ability to select multiple quartile metrics simultaneously allows for a comprehensive view of how each journal ranks within metrics for a given year.

The following example surveys three journals categorized within Food Science & Technology and quartile rankings for each of the available metrics.

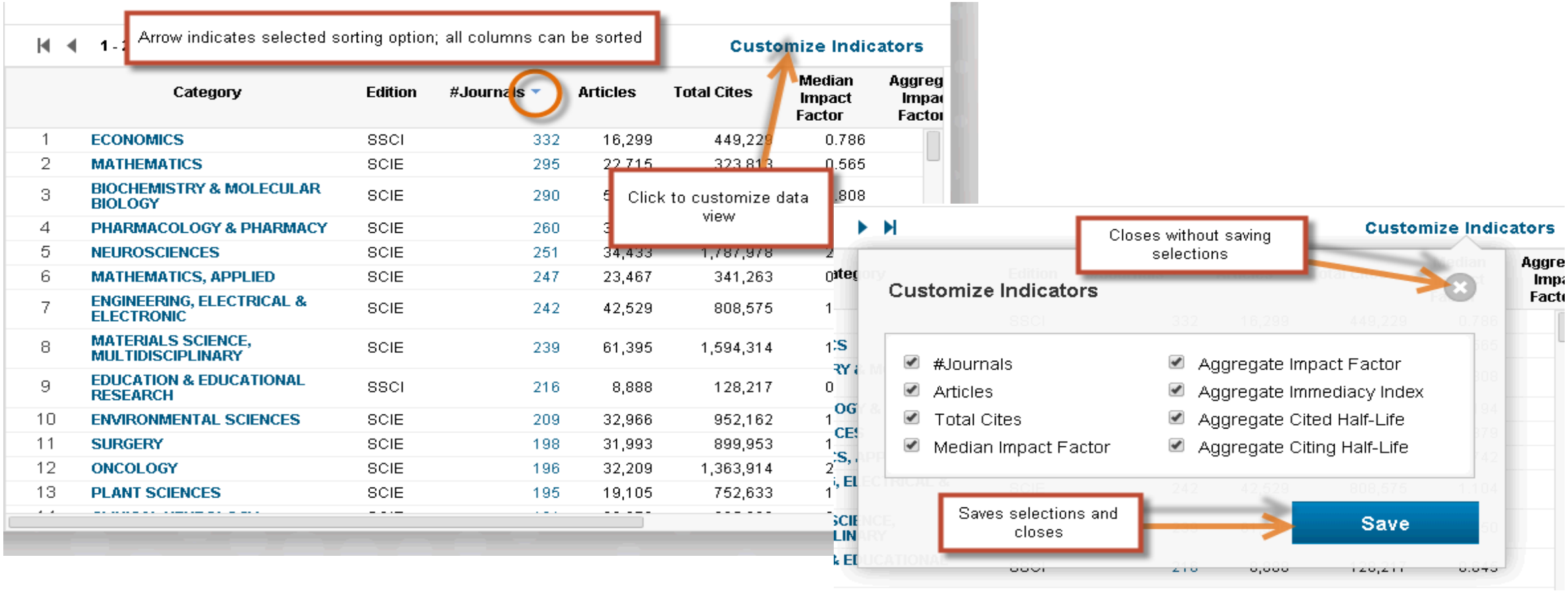
Journal	JIF Quartile	5 Year IF Quartile	Immediacy Index Quaritle	Eigenfactor Quartile	Article Influence Score
Critical Reviews in Food Science and Nutrition	Q1	Q1	Q1	Q1	Q1
Food Biotechnology	Q4	Q3	Q4	Q4	Q3
Food Chemistry	Q1	Q1	Q1	Q1	Q1

JOURNAL CITATION REPORT



JOURNAL CITATION REPORTS CATEGORIES BY RANK

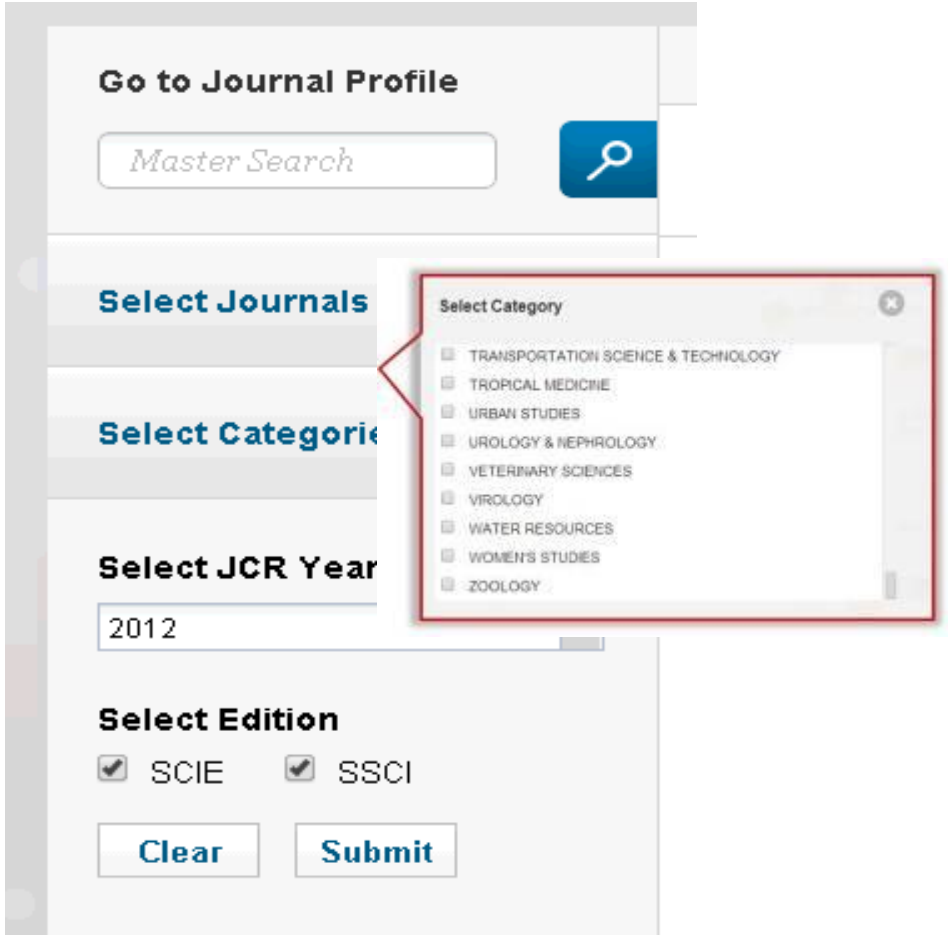
The data grid will always be the area that displays user's choices. The default view is the categories, ranked by number of journals (to correspond to the default visualization). This list can be sorted or customized. For users signed in with UNP, these selections are preserved from session to session.



	Category	Edition	#Journals	Articles	Total Cites	Median Impact Factor
1	ECONOMICS	SSCI	332	16,299	449,229	0.786
2	MATHEMATICS	SCIE	295	22,715	323,813	0.565
3	BIOCHEMISTRY & MOLECULAR BIOLOGY	SCIE	290	5		.808
4	PHARMACOLOGY & PHARMACY	SCIE	260	3		
5	NEUROSCIENCES	SCIE	251	34,433	1,787,978	2
6	MATHEMATICS, APPLIED	SCIE	247	23,467	341,263	0
7	ENGINEERING, ELECTRICAL & ELECTRONIC	SCIE	242	42,529	808,575	1
8	MATERIALS SCIENCE, MULTIDISCIPLINARY	SCIE	239	61,395	1,594,314	1
9	EDUCATION & EDUCATIONAL RESEARCH	SSCI	216	8,888	128,217	0
10	ENVIRONMENTAL SCIENCES	SCIE	209	32,966	952,162	1
11	SURGERY	SCIE	198	31,993	899,953	1
12	ONCOLOGY	SCIE	196	32,209	1,363,914	2
13	PLANT SCIENCES	SCIE	195	19,105	752,633	1

JOURNAL CITATION REPORTS. CATEGORIES BY RANK – filtering options

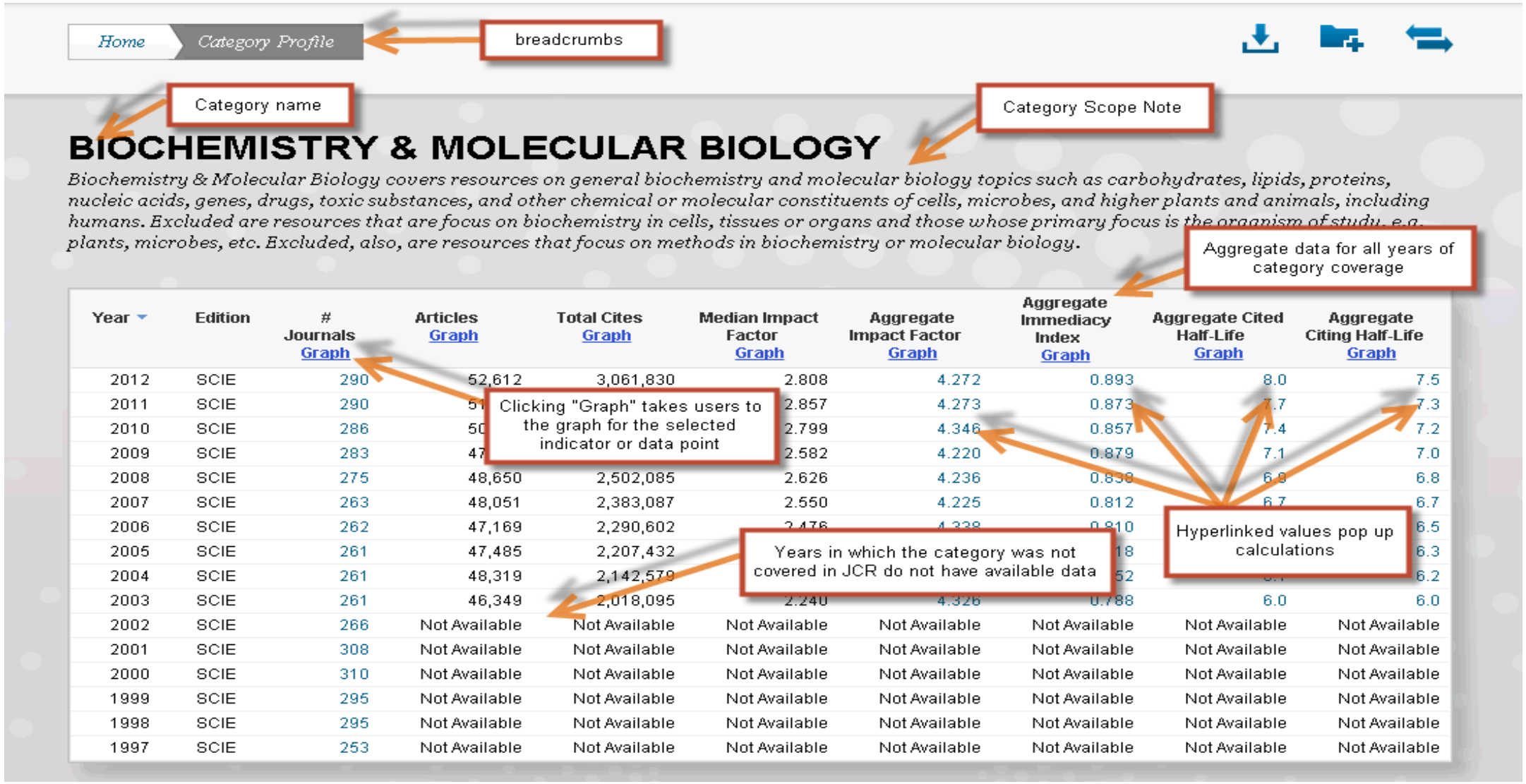
On Categories by Rank, this is the left navigation bar:



- **"Go to Journal Profile" is a master search tool.**
- **"Select Journals" and "Select Categories" allow the user to filter the data grid based on journal title or category name. Please note that in the Categories by Rank section, the resulting data grid will contain category-level data and the visualization will also display at the category level.**
- **"Select JCR Year" allows users to choose the year of the category-level data they wish to view.**
- **"Select Edition" allows users to choose which edition, Science Citation Index-Expanded or Social Science Citation Index, they wish to browse.**
- **Clicking "Clear" will restore the default view; clicking "Submit" will submit the selections and refresh the data grid.**

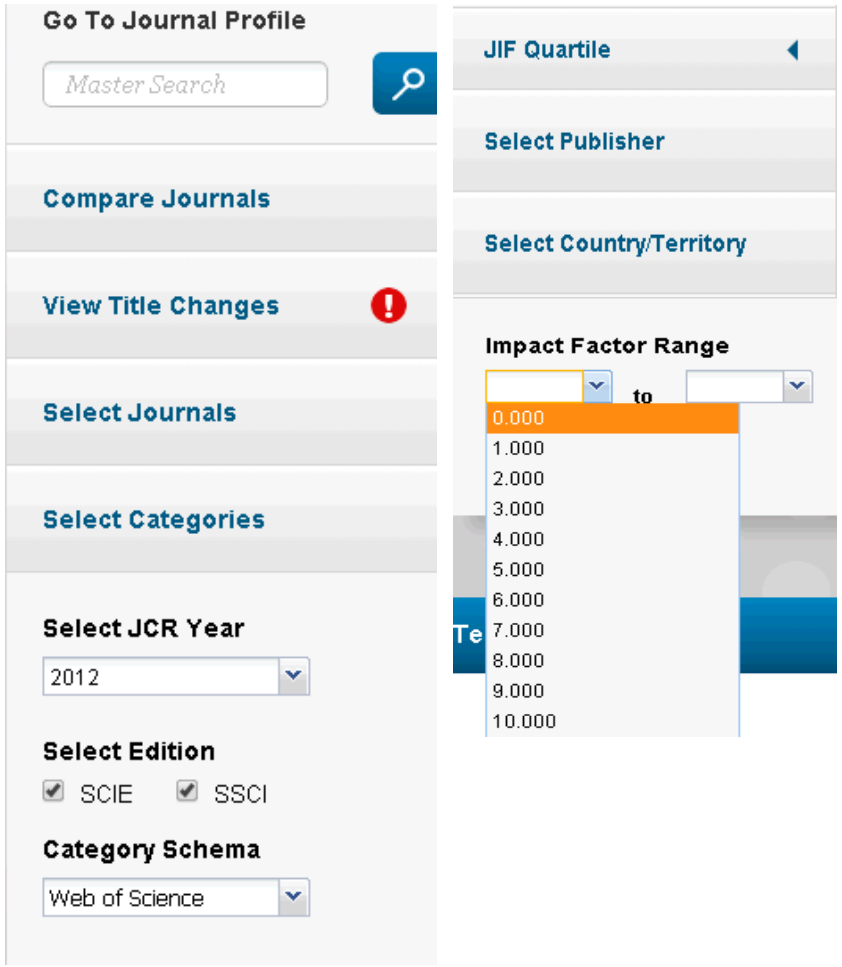
JOURNAL CITATION REPORTS CATEGORIES BY RANK

Clicking any hyperlinked value will pop up a window displaying the calculations behind that value. Clicking on "Graph" in any column will bring up a graph of the relevant indicator or data point in the space below the table.



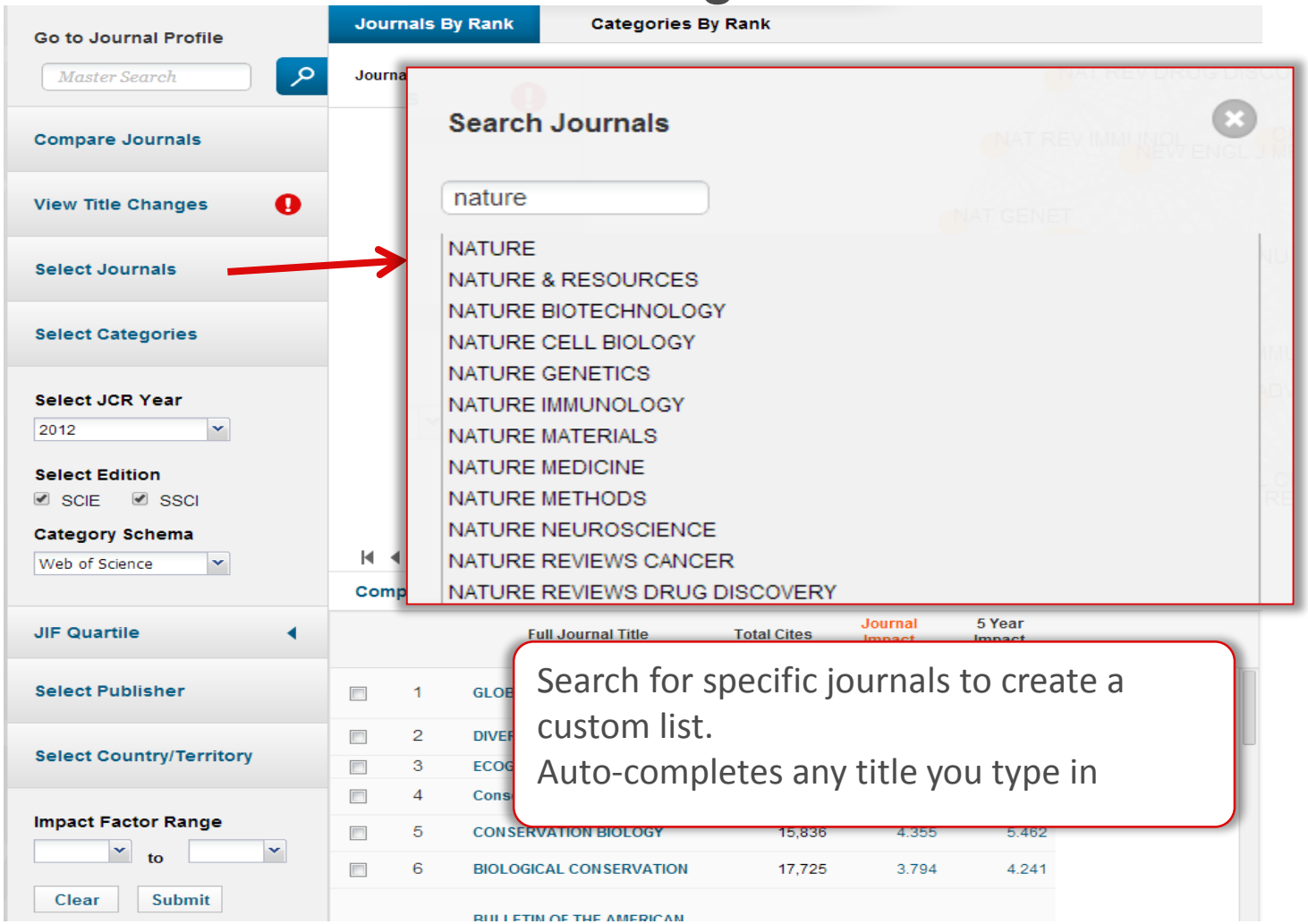
Year	Edition	# Journals Graph	Articles Graph	Total Cites Graph	Median Impact Factor Graph	Aggregate Impact Factor Graph	Aggregate Immediacy Index Graph	Aggregate Cited Half-Life Graph	Aggregate Citing Half-Life Graph
2012	SCIE	290	52,612	3,061,830	2.808	4.272	0.893	8.0	7.5
2011	SCIE	290	51		2.857	4.273	0.873	7.7	7.3
2010	SCIE	286	50		2.799	4.346	0.857	7.4	7.2
2009	SCIE	283	47		2.582	4.220	0.879	7.1	7.0
2008	SCIE	275	48,650	2,502,085	2.626	4.236	0.838	6.9	6.8
2007	SCIE	263	48,051	2,383,087	2.550	4.225	0.812	6.7	6.7
2006	SCIE	262	47,169	2,290,602	2.476	4.338	0.810		6.5
2005	SCIE	261	47,485	2,207,432			18		6.3
2004	SCIE	261	48,319	2,142,579			52		6.2
2003	SCIE	261	46,349	2,018,095	2.240	4.326	0.788	6.0	6.0
2002	SCIE	266	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
2001	SCIE	308	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
2000	SCIE	310	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
1999	SCIE	295	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
1998	SCIE	295	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
1997	SCIE	253	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

JOURNAL CITATION REPORTS. JOURNAL BY RANK – filtering



- **Many filtering options (Journal Profile, Journals, Categories, JCR Year, & Edition) are the same as on the Categories by Rank page.**
- **“Compare Journals” will take users to the Compare Journals component.**
- **“View Title Changes” shows the title changes for the selected JCR Year.**
- **“Select Category Scheme” allows users to view ranked lists of journal using either the WOS or ESI category scheme.**
- **“JIF Quartile” allows users to choose which quartile’s journals to view**
- **“Select Publisher” and “Select Country/Territory” allow users to filter based on publisher or country of origin.**
- **“Impact Factor Range” allows users to choose their preferred range of Impact Factor via a drop-down list.**

JOURNAL CITATION REPORTS
JOURNAL BY RANK – filtering



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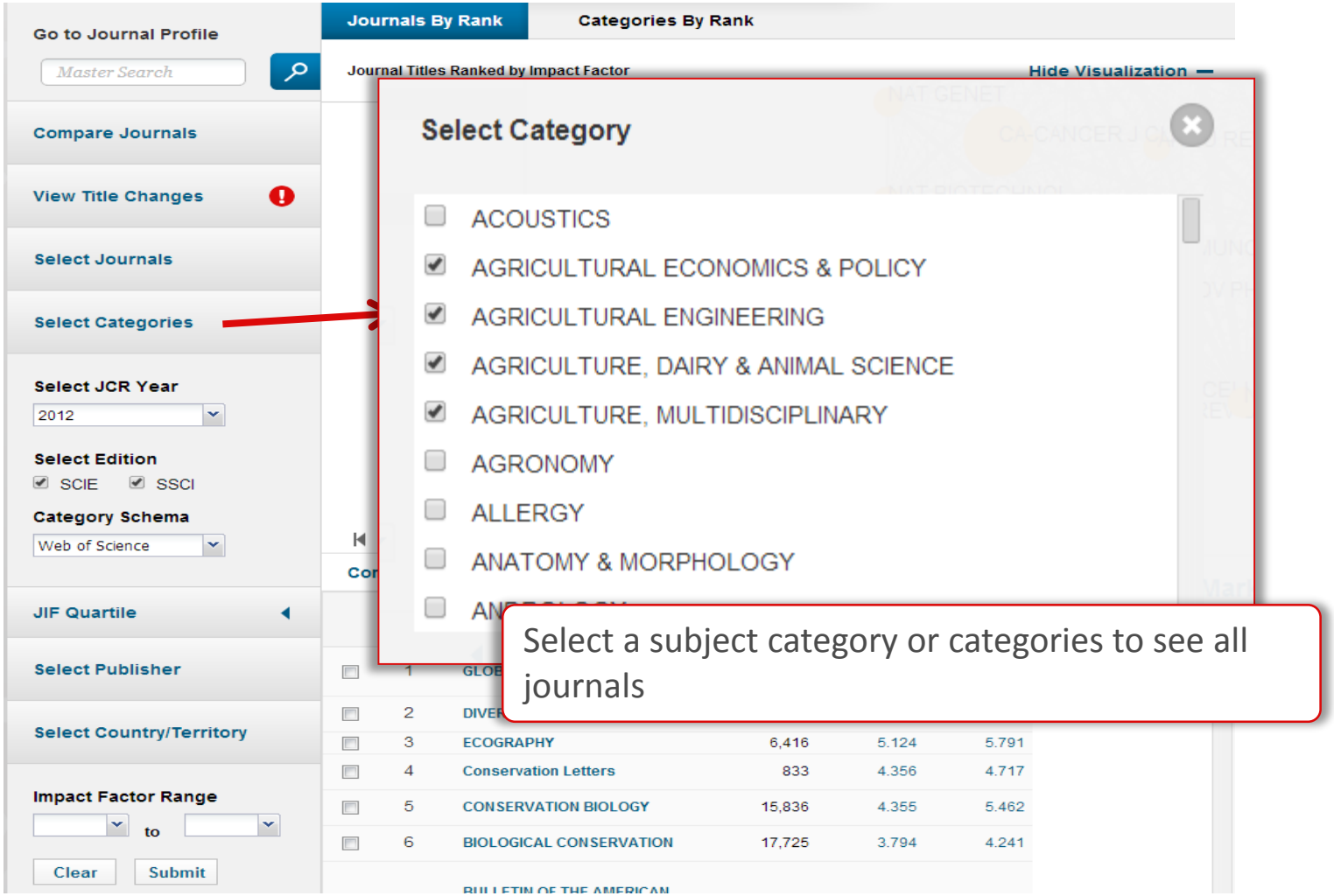
JOURNAL BY RANK – filtering



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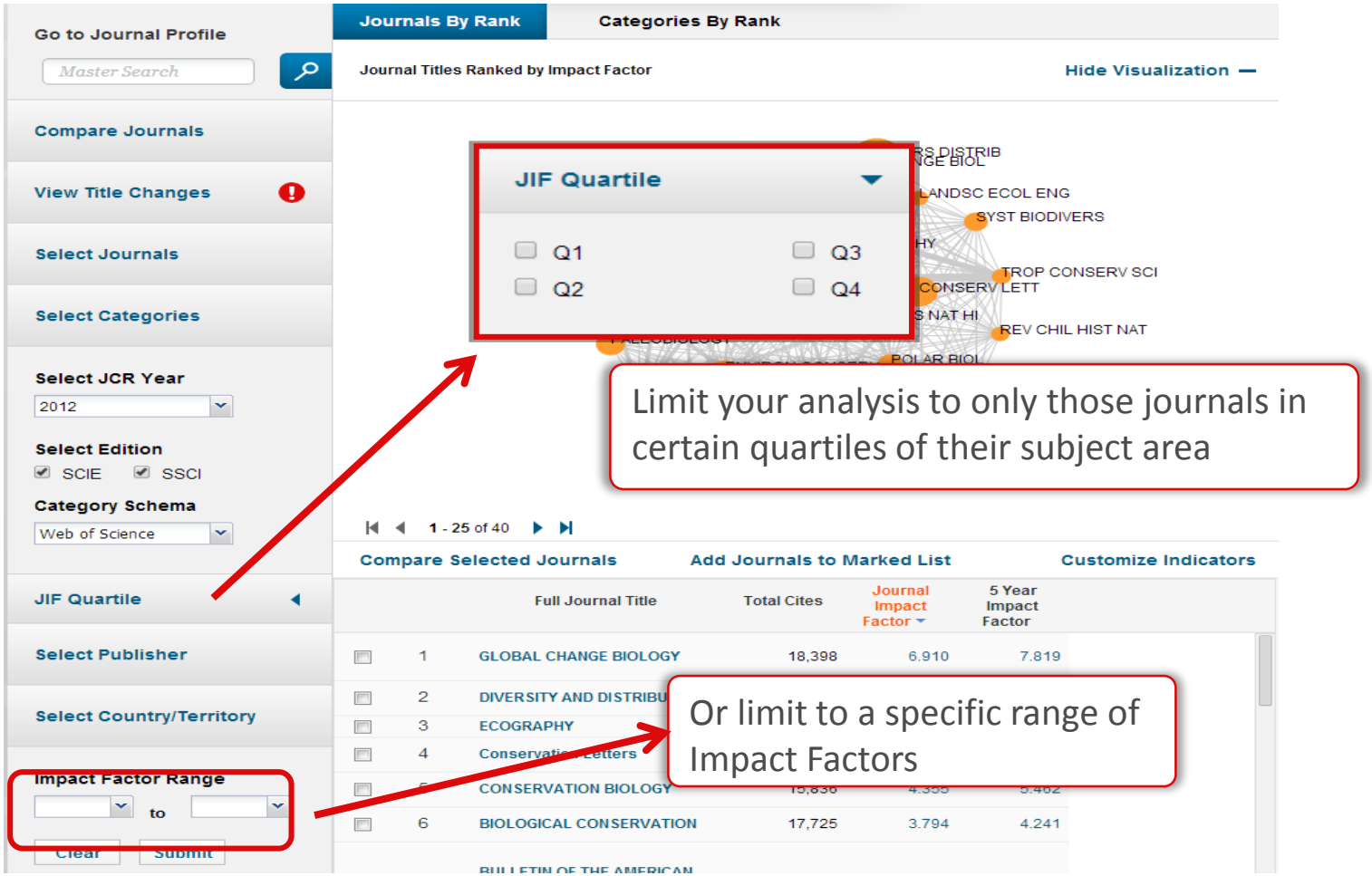
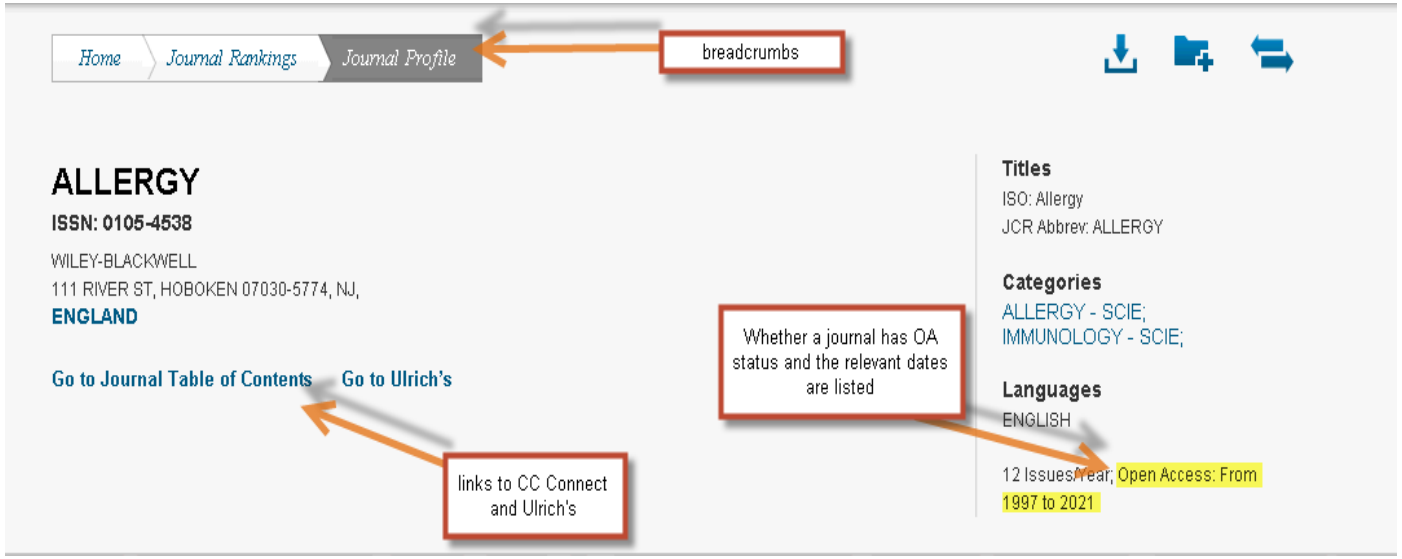
JOURNAL BY RANK – filtering



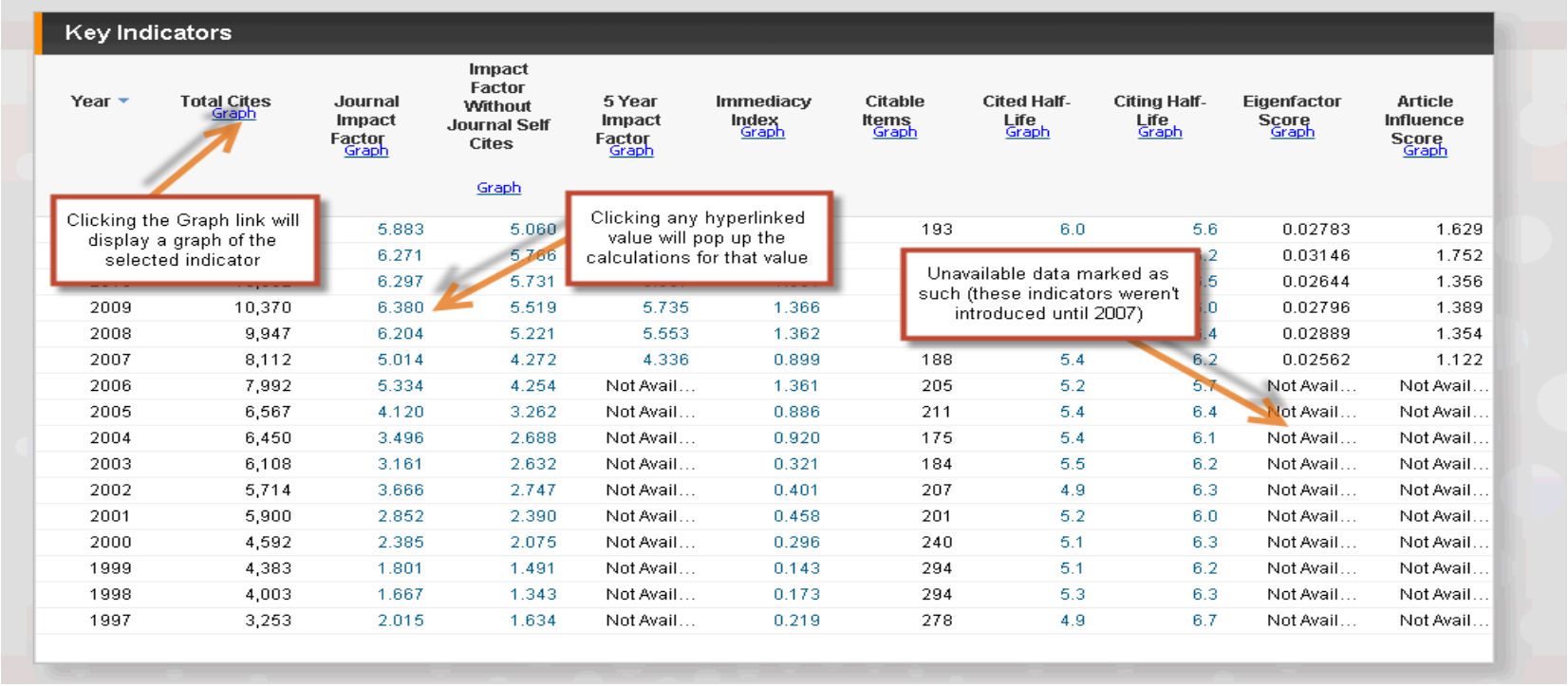
JOURNAL CITATION REPORTS
JOURNAL BY RANK – journal profile page

The top of the Journal Profile Page contains the name of the journal, publishing information, title information, category listings (hovering over the category name will pop up Scope Notes for that category), languages, publication frequency, and whether or not that journal is an Open Access (OA) title. Links to Current Contents Connect and Ulrich's also appear in this section.



JOURNAL CITATION REPORTS
JOURNAL BY RANK – key indicators

- Directly below the journal information is a table containing all of the key indicators for that journal. This table contains data for all the years of coverage. For years the journal was not covered or was suppressed, data columns are marked as "Not Available." Also, data columns may indicate "Not Available" if the particular indicator had not yet been included in JCR.



Analysis Tools

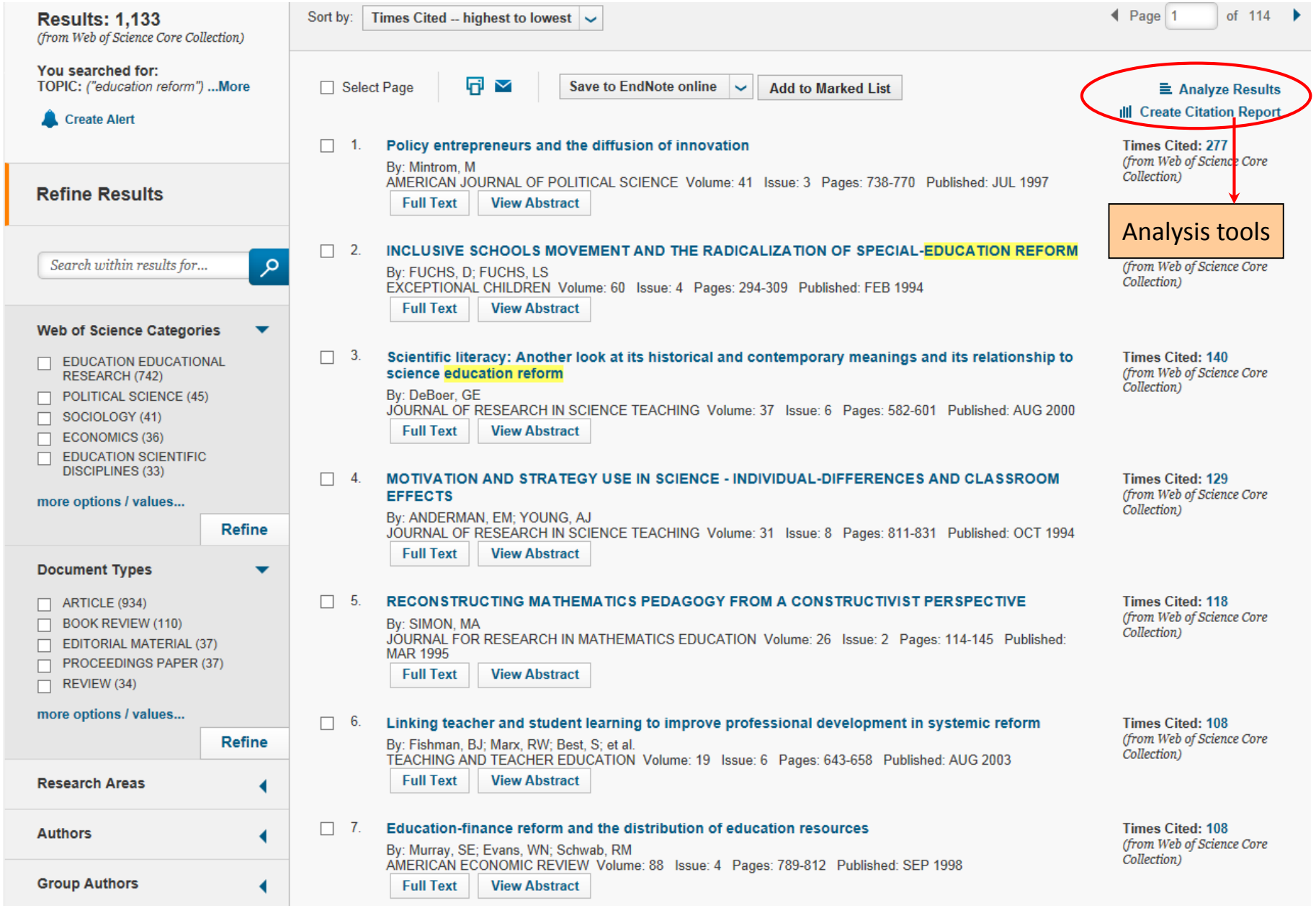
Analyze Results

- extract citation data from a selected field (e.g. source title, country, author), and produces a report showing the values in ranked order

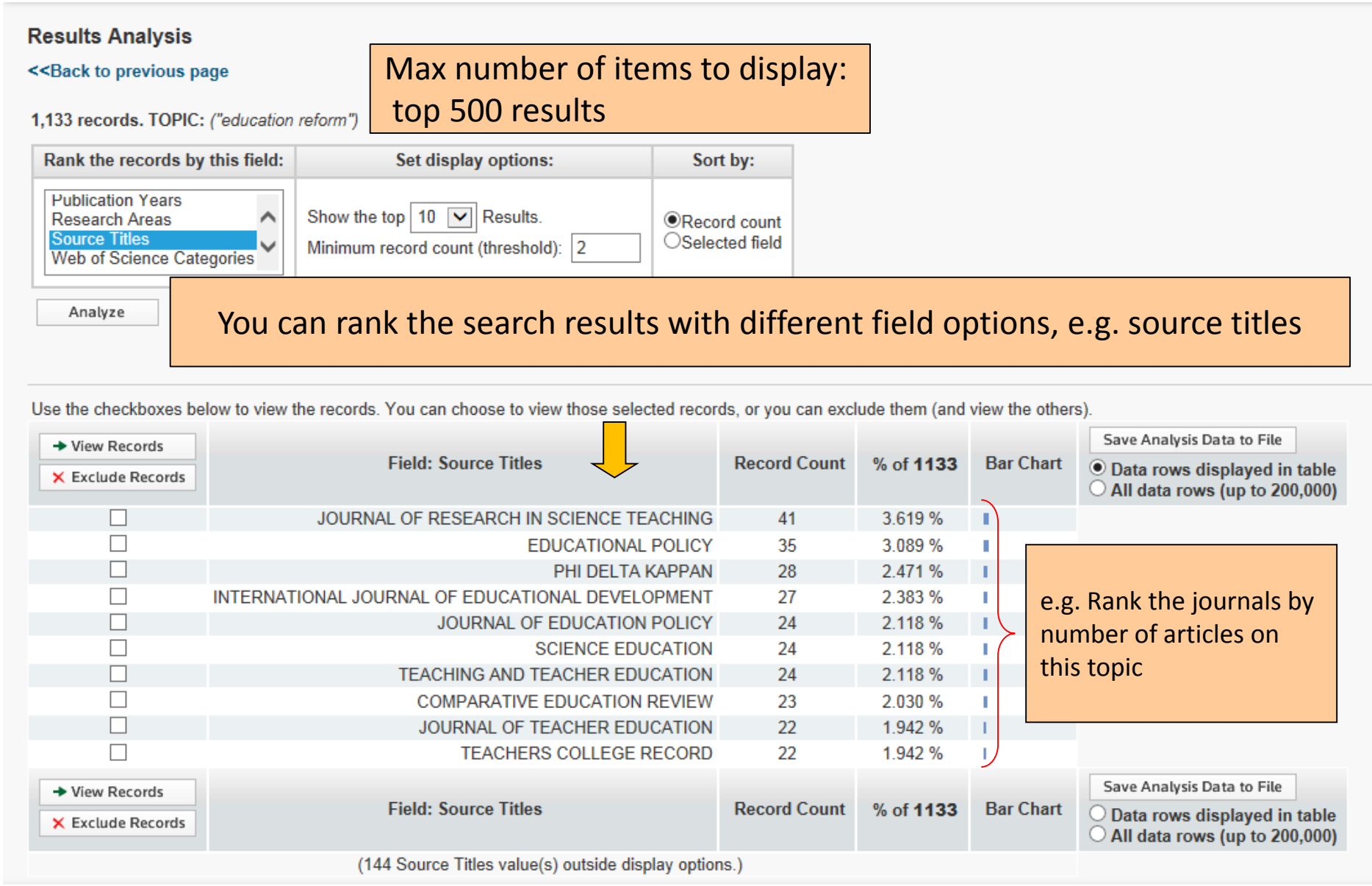
Create Citation Report

- view aggregate citation statistics for a set of search results
- e.g. breakdown of citations over years, average citations per year

Analysis Tools



1. Analyze Results



Results Analysis

<<Back to previous page

1,133 records. TOPIC: *("education reform")*

Max number of items to display: top 500 results

Rank the records by this field:	Set display options:	Sort by:
Publication Years Research Areas Source Titles Web of Science Categories	Show the top 10 Results. Minimum record count (threshold): 2	Record count Selected field

Analyze

You can rank the search results with different field options, e.g. source titles

Use the checkboxes below to view the records. You can choose to view those selected records, or you can exclude them (and view the others).

View Records / Exclude Records	Field: Source Titles	Record Count	% of 1133	Bar Chart	Save Analysis Data to File: Data rows displayed in table / All data rows (up to 200,000)
☐	JOURNAL OF RESEARCH IN SCIENCE TEACHING	41	3.619 %		
☐	EDUCATIONAL POLICY	35	3.089 %		
☐	PHI DELTA KAPPAN	28	2.471 %		
☐	INTERNATIONAL JOURNAL OF EDUCATIONAL DEVELOPMENT	27	2.383 %		
☐	JOURNAL OF EDUCATION POLICY	24	2.118 %		
☐	SCIENCE EDUCATION	24	2.118 %		
☐	TEACHING AND TEACHER EDUCATION	24	2.118 %		
☐	COMPARATIVE EDUCATION REVIEW	23	2.030 %		
☐	JOURNAL OF TEACHER EDUCATION	22	1.942 %		
☐	TEACHERS COLLEGE RECORD	22	1.942 %		

e.g. Rank the journals by number of articles on this topic

View Records / Exclude Records	Field: Source Titles	Record Count	% of 1133	Bar Chart	Save Analysis Data to File: Data rows displayed in table / All data rows (up to 200,000)

(144 Source Titles value(s) outside display options.)

2. Create Citation Report

Citation Report: 1133

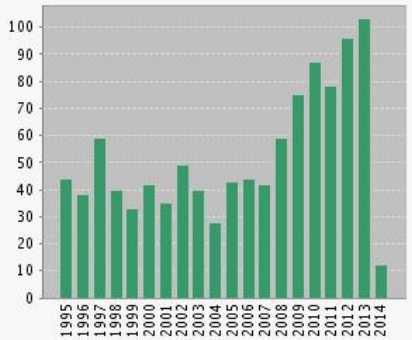
(from Web of Science Core Collection)

You searched for: **TOPIC:** *("education reform")* **...More**

This report reflects citations to source items indexed within Web of Science Core Collection. Perform a Cited Reference Search to include citations to items not indexed within Web of Science Core Collection.

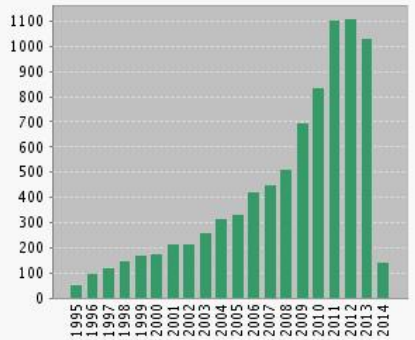
Citation statistics of records found

Published Items in Each Year



The latest 20 years are displayed.
View a graph with all years.

Citations in Each Year



The latest 20 years are displayed.
View a graph with all years.

Results found:	1133
Sum of the Times Cited [?] :	8476
Sum of Times Cited without self-citations [?] :	8108
Citing Articles: [?] :	7195
Citing Articles without self-citations [?] :	6982
Average Citations per Item [?] :	7.48
h-index [?] :	38

Sort by: **Times Cited -- highest to lowest** Page 1 of 114

Use the checkboxes to remove individual items from this Citation Report
or restrict to items published between 1992 and 2014 Go

Most highly cited article

	2010 ◀	2011	2012	2013	2014 ▶	Total	Average Citations per Year
	835	1107	1109	1033	144	8476	368.52
1. **Policy entrepreneurs and the diffusion of innovation** By: Mintrom, M AMERICAN JOURNAL OF POLITICAL SCIENCE Volume: 41 Issue: 3 Pages: 738-770 Published: JUL 1997	25	41	31	25	1	277	15.39
2. **INCLUSIVE SCHOOLS MOVEMENT AND THE RADICALIZATION OF SPECIAL-EDUCATION REFORM** By: FUCHS, D; FUCHS, LS EXCEPTIONAL CHILDREN Volume: 60 Issue: 4 Pages: 294-309 Published: FEB 1994	4	13	9	3	1	221	10.52
3. **Scientific literacy: Another look at its historical and contemporary meanings and its relationship to science education reform** By: DeBoer, GE JOURNAL OF RESEARCH IN SCIENCE TEACHING Volume: 37 Issue: 6 Pages: 582-601 Published: AUG 2000	16	22	18	14	1	140	9.33

Thanks for your attention

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