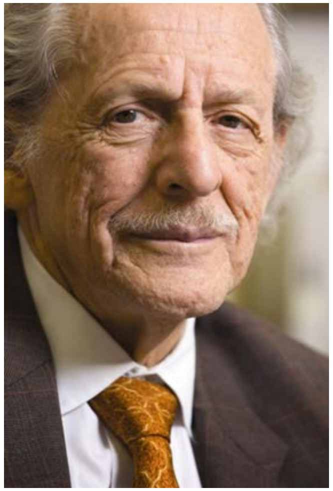


Eugene Garfield

Measuring Academic Impact

Svetla Baykoucheva
White Memorial Chemistry Library
sbaykouc@umd.edu

The Institute for Scientific Information (ISI)
at 3501 Market Street, Philadelphia

The Science Citation Index (SCI)

- The SCI was created by Eugene Garfield in the early 60s.
- He founded the Institute for Scientific Information (ISI), which was later acquired by Thomson-Reuters
- Web of Science is based on the SCI
- Journal Impact Factors (IFs) are published in *Journal Citation Reports*

The converted chicken coop in Thorofare, NJ, where ISI® began

Journal Impact Factor^{TM} (IF)

- The IF of a particular journal is the ratio between the number of times articles published in the journal were cited, divided by the number of **citable articles** published in this journal during the same period of time.

- The IF of a journal for the year 2010 is calculated as follows: the number of citations made in 2010 to papers published in a journal during the previous two years (2008 and 2009) is divided by the number of **citable articles** published in the same two-year period.

Drawbacks of IFs

- Concealed and flawed calculation
- Does not take into account self-citations or negative citations
- Includes limited number of journals
- English-language biased
- Can be misused by editors by publishing reviews as editorials
- Authors may avoid citing their competitors

Journal Citation Reports (JCR) (Chemistry)

Journal Citation Reports®

WELCOME HELP

2011 JCR Scienc

Journal Summary List

Journal Titl

Journals from: subject categories CHEMISTRY, ANALYTICAL; CHEMISTRY, APPLIED; CHEMISTRY, INORGANIC & NUCLEAR; CHEMISTRY, MEDICINAL; CHEMISTRY, MULTIDISCIPLINARY; CHE ORGANIC; CHEMISTRY, PHYSICAL VIEW CATEGORY SUMMARY LIST

Sorted by: Impact Factor SORT AGAIN

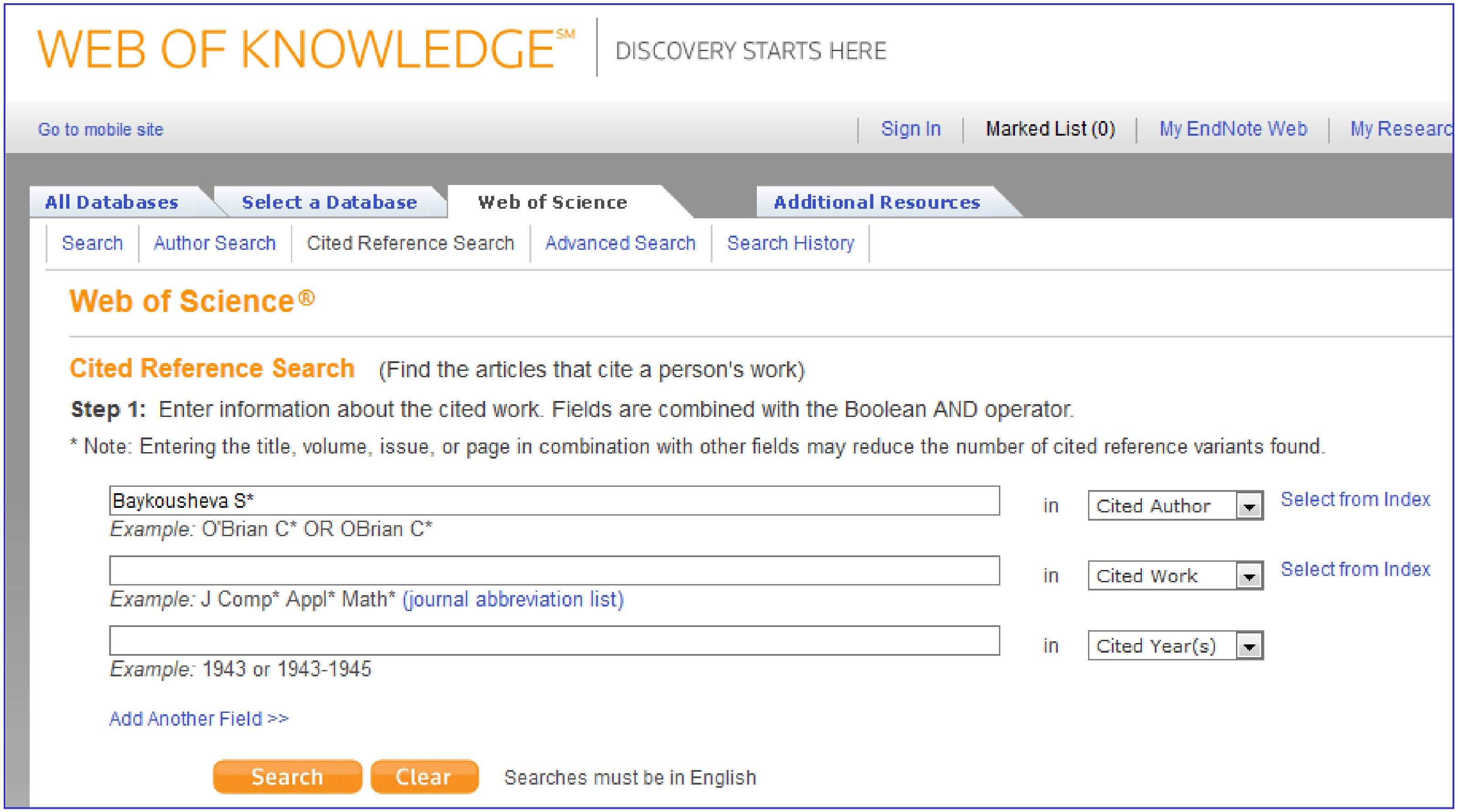
Journals 1 - 20 (of 514) [1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10] Pag

MARK ALL UPDATE MARKED LIST

Ranking is based on your journal and sort selections.

Mark	Rank	Abbreviated Journal Title *(linked to journal information)*	ISSN	JCR Data						*Eigenfactor*® Metrics	
				Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	Articles	Cited Half-life	*Eigenfactor*® Score	*Article Influence*® Score
☐	1	CHEM REV	0009-2665	103702	40.197	42.054	7.158	196	7.9	0.21470	13.333
☐	2	NAT MATER	1476-1122	39242	32.841	36.732	6.246	134	4.7	0.22091	17.925
☐	3	CHEM SOC REV	0306-0012	35918	28.760	28.098	5.471	314	3.2	0.13678	8.089
☐	4	ACCOUNTS CHEM RES	0001-4842	39664	21.640	22.507	3.460	126	7.0	0.10120	7.299
☐	5	NAT CHEM	1755-4330	5260	20.524	20.533	5.308	120	1.8	0.03284	7.957
☐	6	ALDRICHIM ACTA	0002-5100	1100	16.091	16.882	7.000	2	5.7	0.00328	5.252
☐	7	NANO TODAY	1748-0132	2170	15.355	16.078	2.324	37	2.8	0.01213	5.167
☐	8	ANNU REV PHYS CHEM	0066-426X	6657	14.130	17.480	3.267	30	9.7	0.01686	7.474
☐	9	ADV MATER	0935-9648	79860	13.877	12.813	2.155	789	5.0	0.26241	4.071
☐	10	ANGEW CHEM INT EDIT	1433-7851	209862	13.455	13.195	2.898	2002	5.4	0.51421	3.378
☐	11	NANO LETT	1530-6984	75287	13.198	13.843	2.082	955	4.2	0.34591	5.070

Web of Science: Cited Reference Search



Web of Science Citations

(0) | Save to: ENDNOTE® WEB ENDNOTE® I Wrote These Publications R more options

Analyze Results
Create Citation Report

1. Title: Regulation of the biosynthesis of 4,7,10,13,16-docosapentaenoic acid
Author(s): Mohammed, BS; Luthria, DL; Baykousheva, SP; et al.
Source: BIOCHEMICAL JOURNAL Volume: 326 Pages: 425-430 Part: Part 2 Published: SEP 1 1997
Times Cited: 16 (from Web of Science)
find it [View abstract]

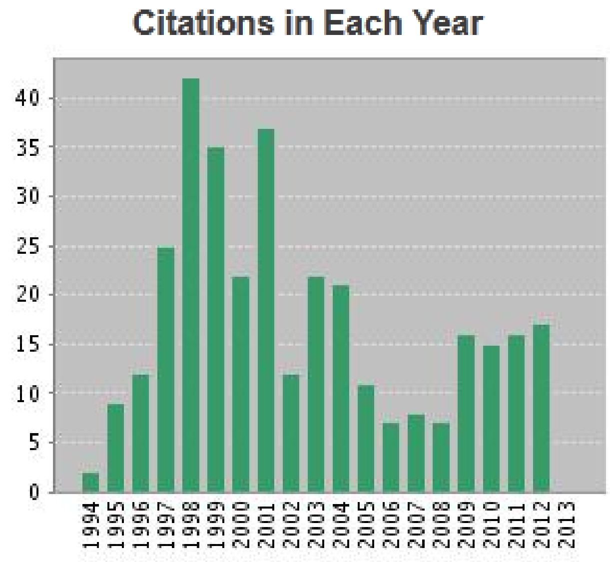
2. Title: Reevaluation of the pathways for the biosynthesis of polyunsaturated fatty acids
Author(s): Sprecher, H; Luthria, DL; Mohammed, BS; et al.
Source: JOURNAL OF LIPID RESEARCH Volume: 36 Issue: 12 Pages: 2471-2477 Published: DEC 1995
Times Cited: 239 (from Web of Science)
find it [View abstract]

3. Title: PEROXISOMAL-MICROSOMAL COMMUNICATION IN UNSATURATED FATTY-ACID METABOLISM
Author(s): BAYKOUSHEVA, SP; LUTHRIA, DL; SPRECHER, H
Source: FEBS LETTERS Volume: 367 Issue: 2 Pages: 198-200 DOI: 10.1016/0014-5793(95)00565-Q Published: JUN 26 1995
Times Cited: 18 (from Web of Science)
find it [View abstract]

4. Title: DOUBLE-BOND REMOVAL FROM ODD-NUMBERED CARBONS DURING PEROXISOMAL BETA-OXIDATION OF ARACHIDONIC-ACID REQUIRES BOTH 2,4-DIENOYL-COA REDUCTASE AND DELTA(3,5),DELTA(2,4)-DIENOYL-COA ISOMERASE
Author(s): LUTHRIA, DL; BAYKOUSHEVA, SP; SPRECHER, H
Source: JOURNAL OF BIOLOGICAL CHEMISTRY Volume: 270 Issue: 23 Pages: 13771-13776 Published: JUN 9 1995
Times Cited: 34 (from Web of Science)
find it [View abstract]

5. Title: DIFFERENCES IN THE REGULATION OF BIOSYNTHESIS OF 20-CARBON VERSUS 22-CARBON POLYUNSATURATED FATTY-ACIDS
Author(s): SPRECHER, HW; BAYKOUSHEVA, SP; LUTHRIA, DL; et al.
Source: PROSTAGLANDINS LEUKOTRIENES AND ESSENTIAL FATTY ACIDS Volume: 52 Issue: 2-3 Pages: 99-101 DOI: 10.1016/0952-3278(95)90005-5 Published: FEB-MAR 1995
Times Cited: 5 (from Web of Science)
find it

Web of Science Citations/h-index



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

Results found:	17
Sum of the Times Cited [?] :	342
Sum of Times Cited without self-citations [?] :	333
Citing Articles[?] :	292
Citing Articles without self-citations [?] :	287
Average Citations per Item [?] :	20.12
h-index [?] :	5

The *h-index*

- The value of h is equal to the number of papers (N) in the list that have N or more citations.
- An h-index of 20 means there are 20 items that have 20 citations or more.
- This metric is useful because it discounts the disproportionate weight of highly cited papers or papers that have not yet been cited.
- Favors academics that publish a continuous stream of papers with lasting and above-average impact
- Developed by J.E. Hirsch in 2005

Google Scholar Citations

- Sign to your Google account
- The Citations sign up form will ask you to confirm the spelling of your name, and to enter your affiliation, interests, etc.
- On the next page, you'll see groups of articles written by people with names similar to yours. Click "Add all articles" next to each article group that is yours, or "See all articles" to add specific articles from that group.
- If you don't see your articles in these groups, click "Search articles" to do a regular Google Scholar search, and then add your articles one at a time. Feel free to do as many searches as you like.

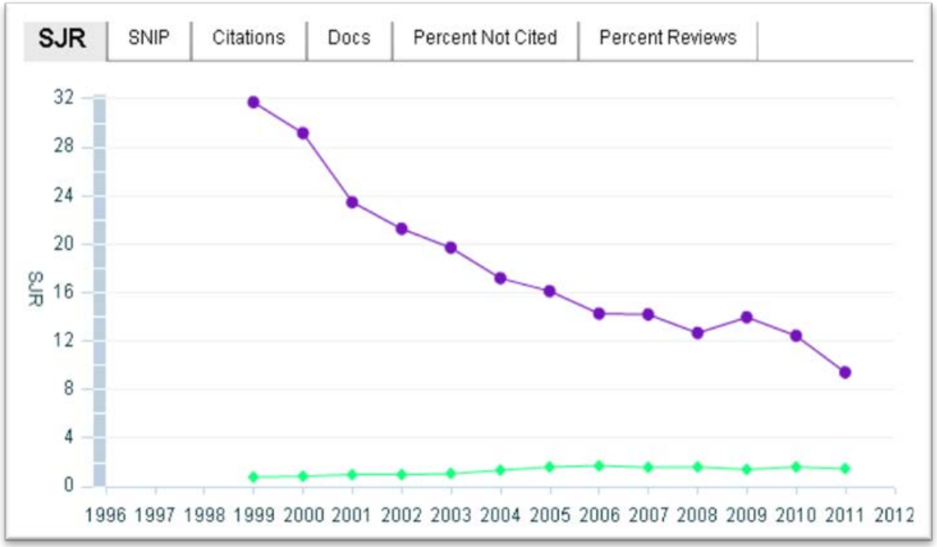
Example of Google Scholar Citations

Scopus Journal Analyzer

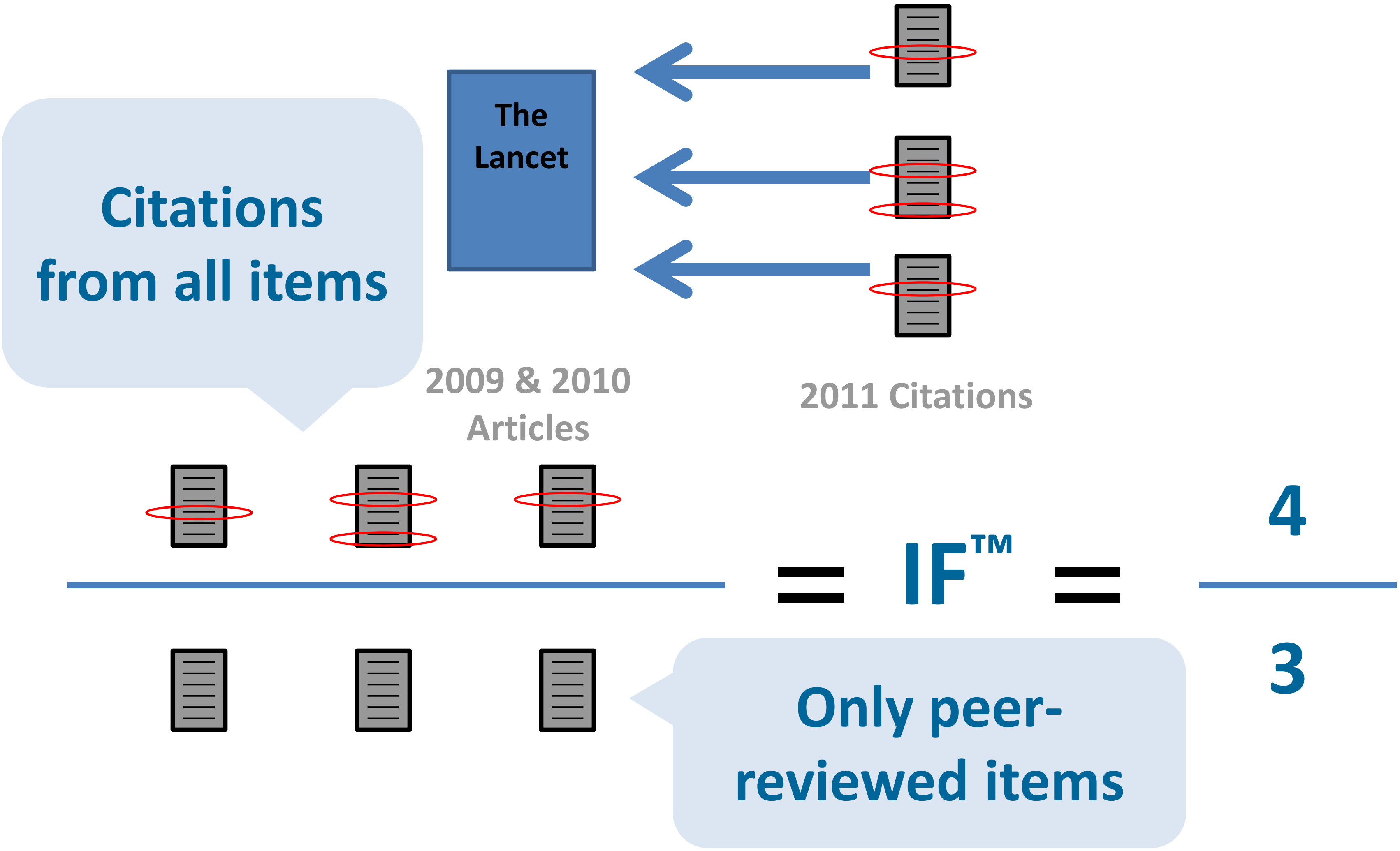
Multiple Metrics. One Place.

Using the metrics in the Journal Analyzer, Librarians and Researchers can objectively assess all of the journals which are indexed in Scopus to make informed decisions on collection development and article submissions.

- SJR
- SNIP
- Documents
- Percent Review
- Percent not cited
- Number of citations



Impact Factor™



SNIP: Balancing the scales

Created by Professor Henk Moed at CTWS, University of Leiden, Source-Normalized Impact per Paper (SNIP) measures contextual citation impact by weighting citations based on the total number of citations in given subject field. The impact of a single citation is given a higher value in subject areas where citations are less likely, and vice versa.

About SNIP

- Measures contextual citation impact by 'normalizing' citation values
- Takes a research field's citation frequency into account
- Considers immediacy - how quickly a paper is likely to have an impact in a given field
- Accounts for how well the field is covered by the underlying database
- Calculates without use of a journal's subject classification to avoid delimitation

SJR: The power of prestige

Developed by Professor Félix de Moya, SCImago Journal Rank (SJR) is a prestige metric based on the idea that 'all citations are not created equal'. With SJR, the subject field, quality and reputation of the journal has a direct impact on the value of a citation. This means that a citation from a source with a relatively high SJR is worth more than a citation from a source with a lower SJR.

About SJR

- Is weighted by the prestige of the journal, thereby 'leveling the playing field' among journals.
- Eliminates manipulation: the only way to raise the SJR ranking is to be published in more reputable journals.
- 'Shares' a journal's prestige equally over the total number of citations in that journal.

Bibliometrics

	Impact Factor™	SNIP & SJR
Metric	1st Generation	2nd & 3rd Generation
Equation	Concealed	Transparent
Coverage	10,000	19,500
Citation Window	2 & 5 years	3 years

SNIP – “Balancing the Scales”

Journal A

Journal B

100 Citations

50 Citations

Biomedical Engineering

Social Science

SNIP Normalization:
Life Sciences – high impact and high citation potential
Social Science – low impact and low citation potential

- **SNIP** normalizes for different citation patterns within subject areas, allowing for comparison between Journal A and Journal B
- When using **SNIP** you can be sure that differences are due to *journal quality* and not subject area citation behaviour

SNIP Key takeaways

- Ability to compare titles from different subject fields
- Only uses peer-reviewed items when calculating impact

SJR – "The power of prestige"

Journal A will have a higher SJR than Journal B

Journal A	Journal B
100 Citations	100 Citations
High Prestige Titles	Low Prestige Titles

- Impact Factor is a metric measuring popularity summing up all citations a journal receives regardless of the status of the citing journal
- When calculating the SJR quality and reputation of a citing journal has a direct effect on the value of citations

SJR Key takeaways

- Identifies a Journal's intricate citation networks

- Aims to limit excessive benefits derived from self citation by discounting journal self-citations once they exceed 1/3 of the total citations received by a journal

SJR Journal Ranking (Chemistry)

SJR SCImago Journal & Country Rank

EST MODUS IN REBUS
Horatio (Satire 1,1,106)

- Home
- Journal Rankings
- Journal Search
- Country Rankings
- Country Search
- Compare
- Map Generator
- Help
- About Us

How to cite this website?

SJR is developed by: SCIMAGO LAB

Powered by Scopus

Journal Rankings

Ranking Parameters

Subject Area: Chemistry
Subject Category: All categories of selected Area
Country: All Year: 2011
Order By: SJR
Display journals with at least: 0 Citable Docs. (3 years) Refresh

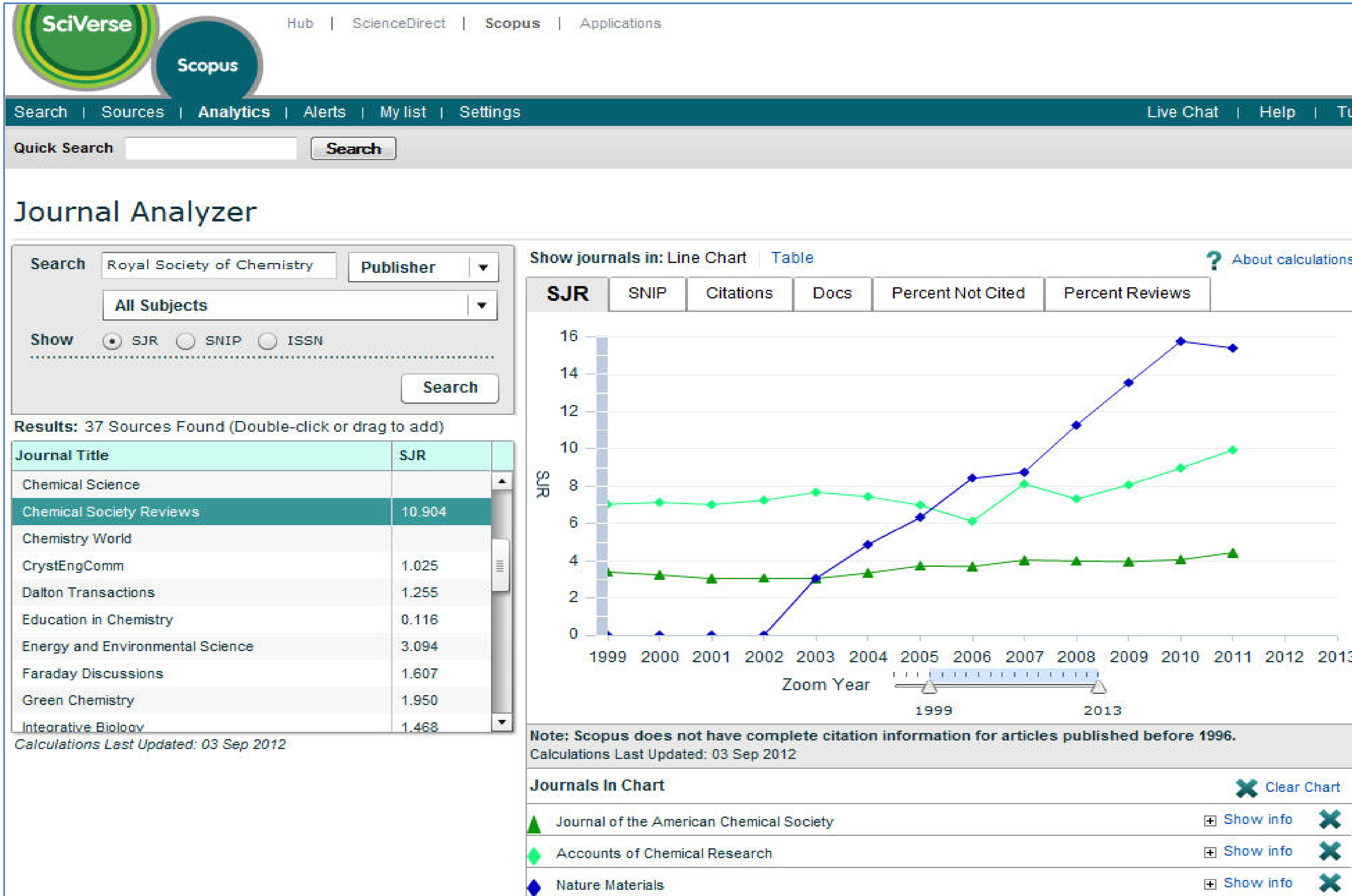
Subject Area: **Chemistry.**
Year: **2011.**

Download data in MS Excel format (118 Kb)

1 - 50 of 537 << First | < Previous | Next > | Last >>

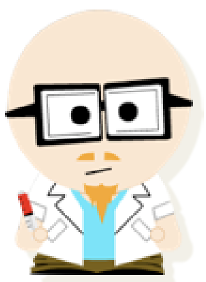
	Title	SJR	H index	Total Docs. (2011)	Total Docs. (3years)	Total Refs.	Total Cites (3years)	Citable Docs. (3years)	Cites / Doc. (2years)	Ref. / Doc.	Country
1	Chemical Reviews	15,866	382	207	560	69.169	21.856	528	39,73	334,15	
2	Chemical Society Reviews	10,904	179	321	718	42.147	19.904	700	28,32	131,30	
3	Accounts of Chemical Research	9,946	220	142	509	7.258	11.542	494	19,64	51,11	
4	Nano Letters	8,099	219	973	2.510	33.728	34.407	2.476	13,43	34,66	
5	Nature Chemistry	6,137	48	235	469	6.027	4.582	334	13,72	25,65	
6	Annual Review of Physical Chemistry	5,878	99	31	77	3.469	1.033	76	13,87	111,90	
7	Aldrichimica Acta	5,485	44	6	25	648	208	20	11,17	108,00	
8	Angewandte Chemie - International Edition	4,927	285	2.143	5.328	113.541	57.175	5.125	10,55	52,98	
9	Journal of the American Chemical Society	4,442	322	3.230	9.886	158.966	98.033	9.695	9,90	49,22	

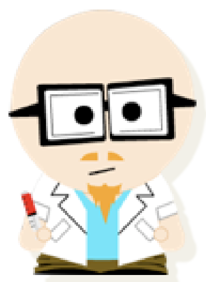
SJR (Chemistry)

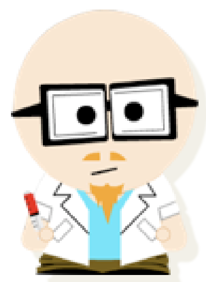


The Challenge: Scholarly Name Ambiguity

Many researchers that too closely resemble one another.

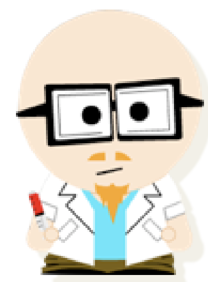






Dr. Smith Dr. Smith Dr. Smith

Researchers publish under name variations.



Dr. Smith
Dr. J. Smith
Dr. James Smith

Scopus Profile Organization

The Vast Universe of Research

The most powerful
ALGORITHMIC
data processing in the industry

+

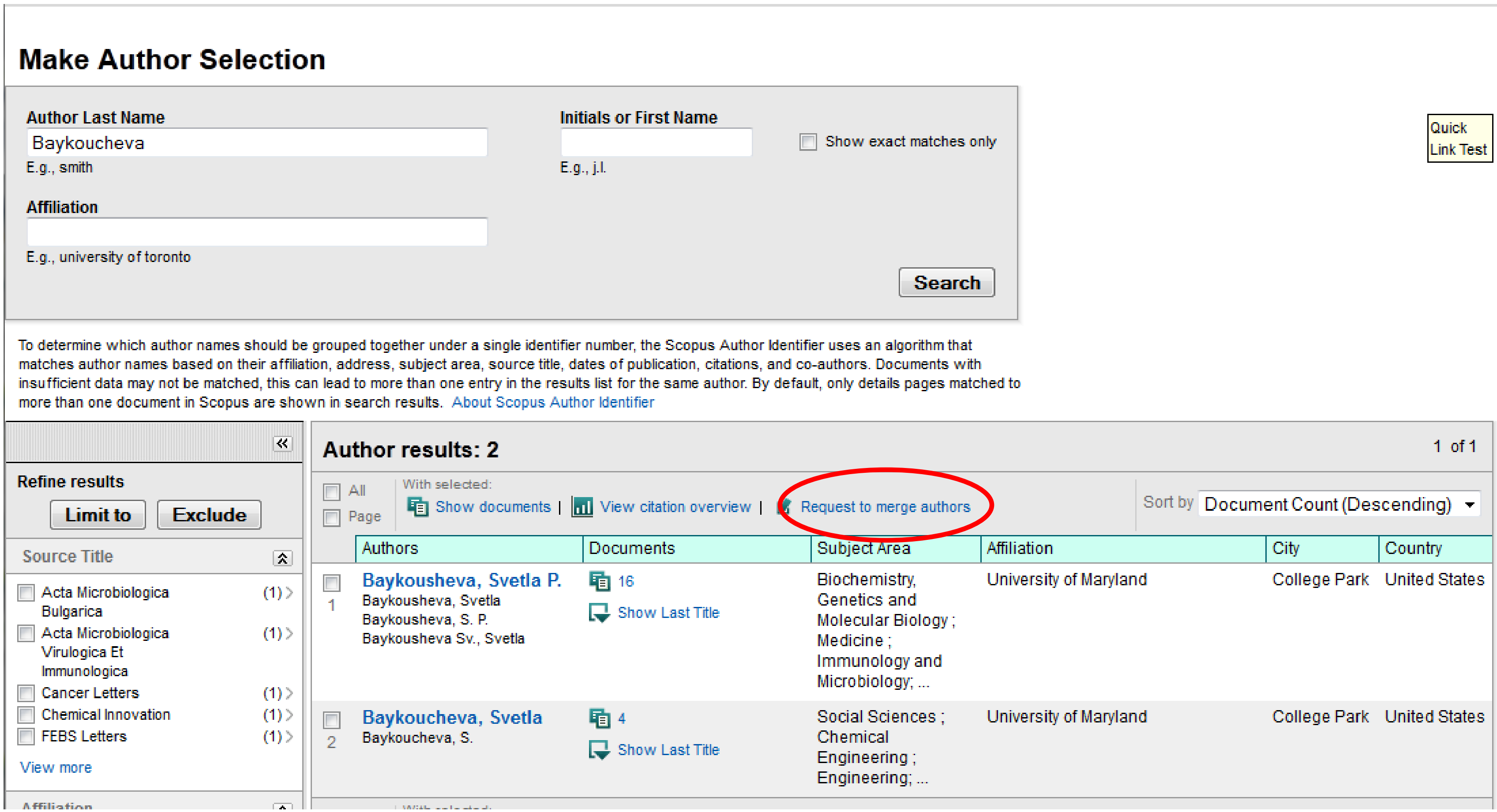
MANUAL feedback via the
Author Feedback Wizard

Groups papers to a profile with high degree of accuracy based on matching of name, email, affiliation, subject area, citations, co-authors,...

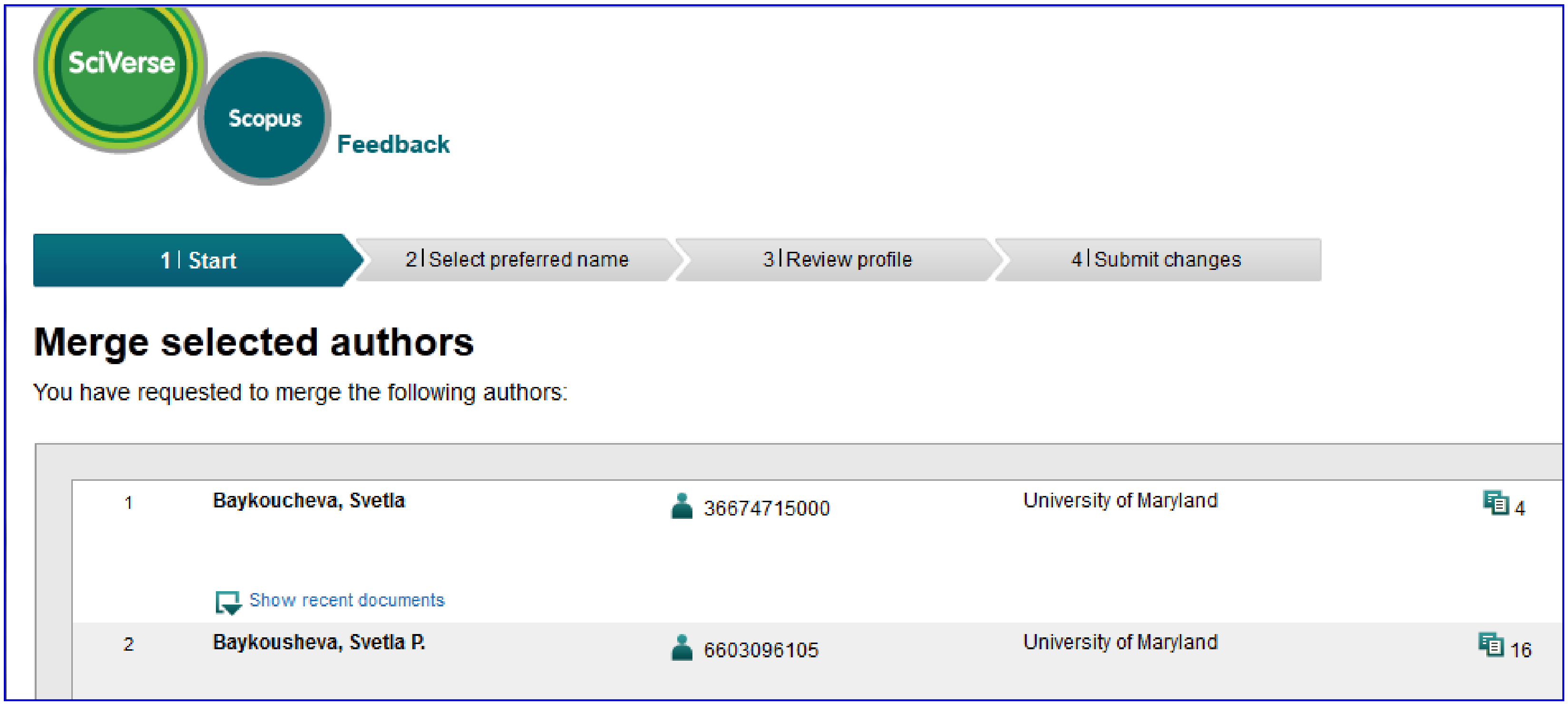
Combines the starting point from the algorithm profiles and the manual feedback to **create the most accurate profiles with the least effort.**

Scopus Author/Affiliation Profiles

Scopus Author Searching



Select the author profiles you'd like to merge and launch the Feedback Wizard



ORCID: Connecting Research & Researchers

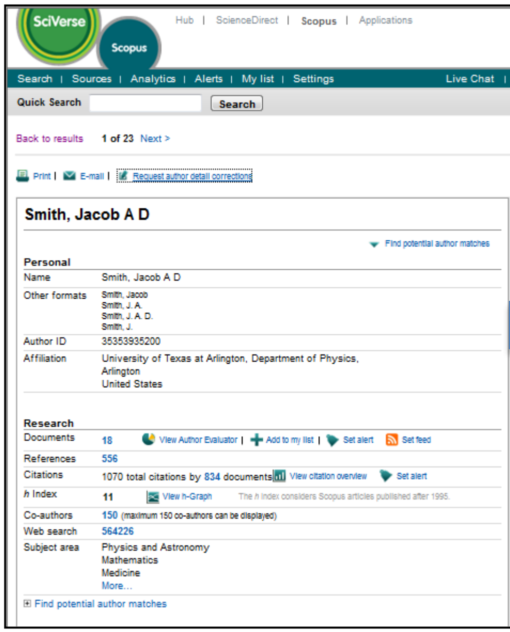
ORCID Mission:

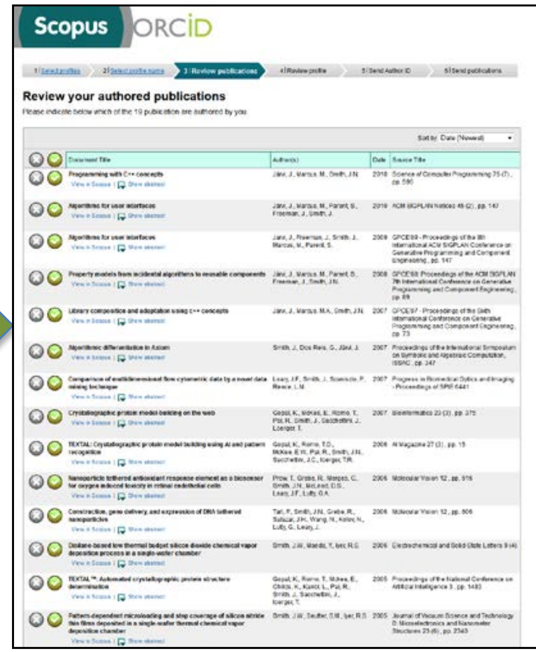
ORCID aims to solve the name ambiguity problem in research and scholarly communications by creating a central registry of unique identifiers for individual researchers

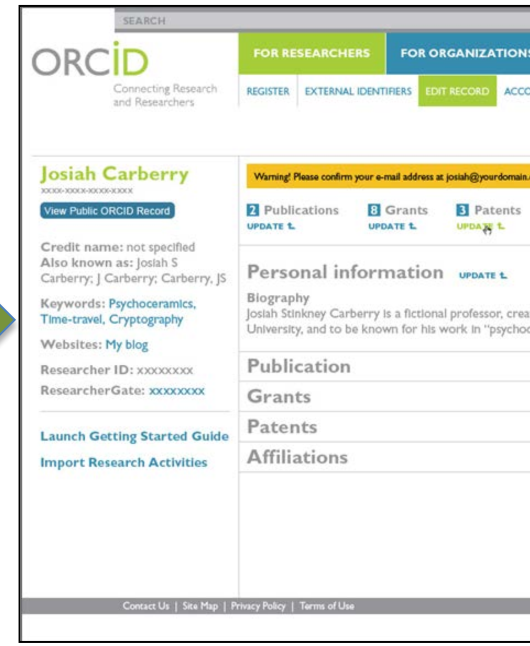
Open
Researcher &
Contributor
ID

Scopus2ORCID: Easy ORCID Set Up

orcid.scopusfeedback.com

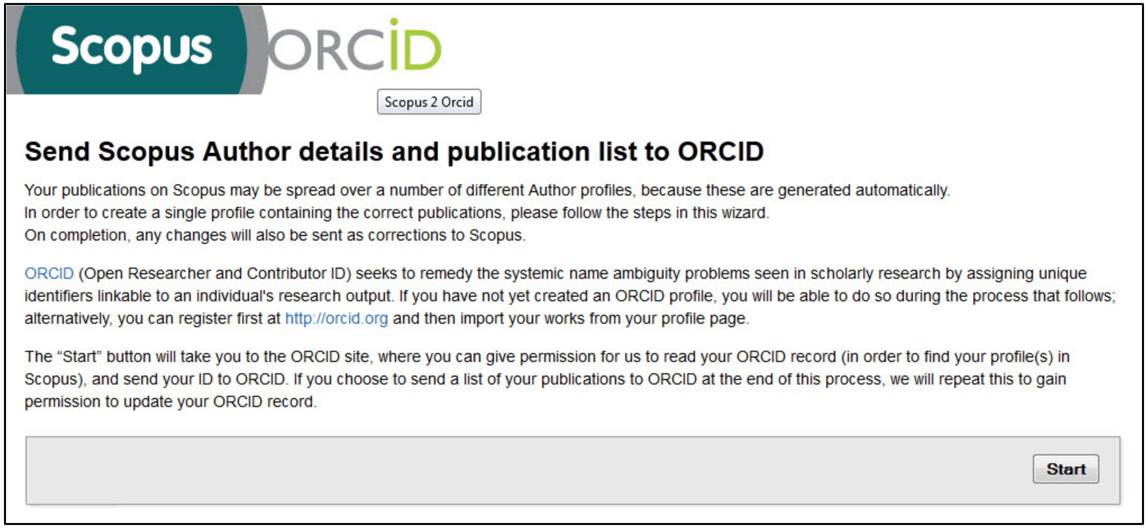






Enter via Scopus2ORCID Wizard **or** from ORCID!

Scpous2ORCID: Benefits



Save Time

Importing your authors' information from Scopus is faster and more accurate than manually entering information in ORCID.

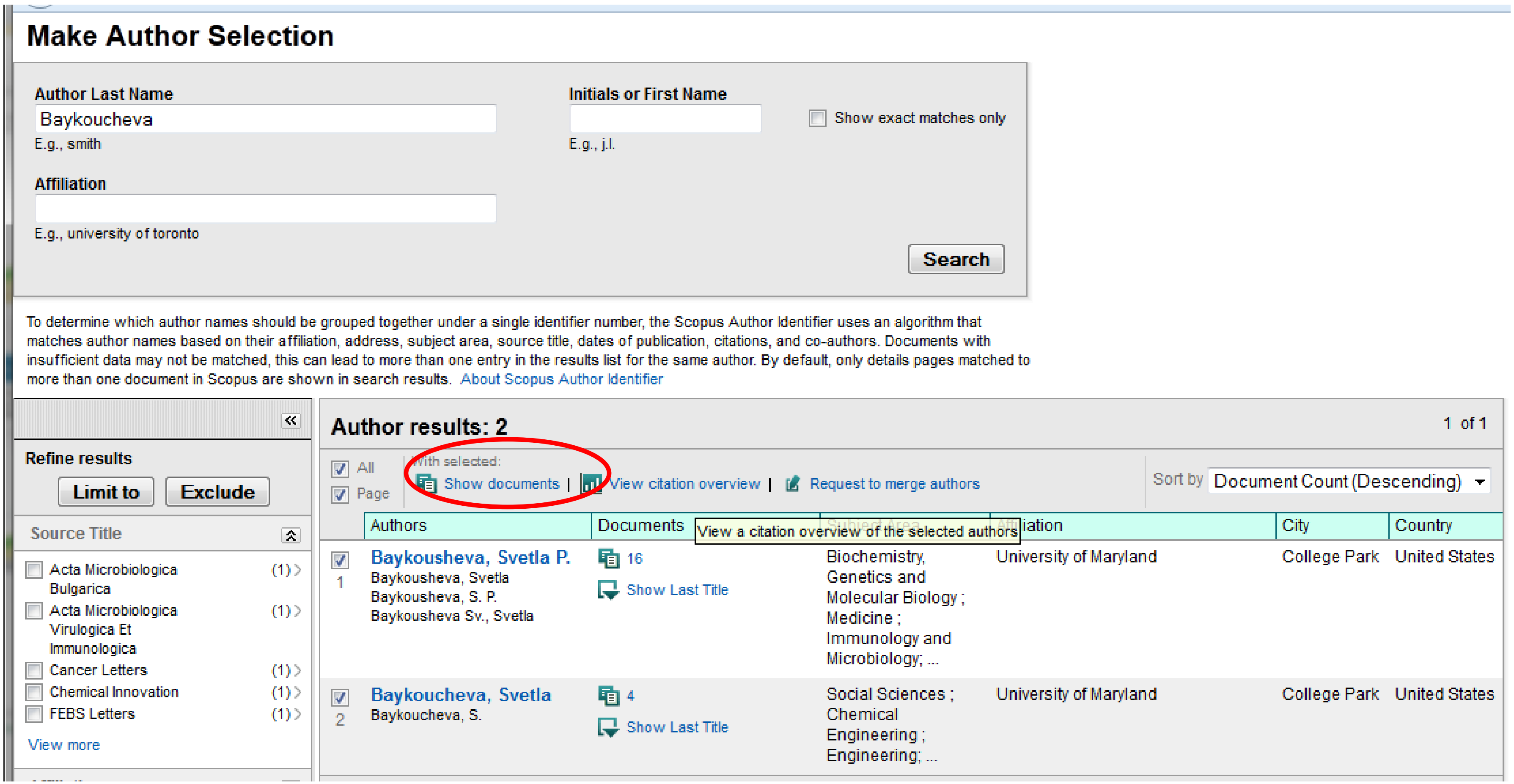
Improve Your Researchers' Scopus Author Profiles

Changes made while using the wizard will be processed in Scopus Author Profiles (approximate time: 8 weeks)

Scopus Tools & Features

- Scopus Profiles Feedback Wizard & ORCID
- Citation Tracker in Scopus
- Author Evaluator Tool

Select Show Documents



Analyze Citations Received for the Selected Group of Documents

Citation overview

Citations received since 1996

This is a citation overview for a set of 20 documents.

Overview options

Hide

Exclude from citation overview: ☐ Self citations of all authors

Sort documents: Citations descending

Date range: 2011 to 2013

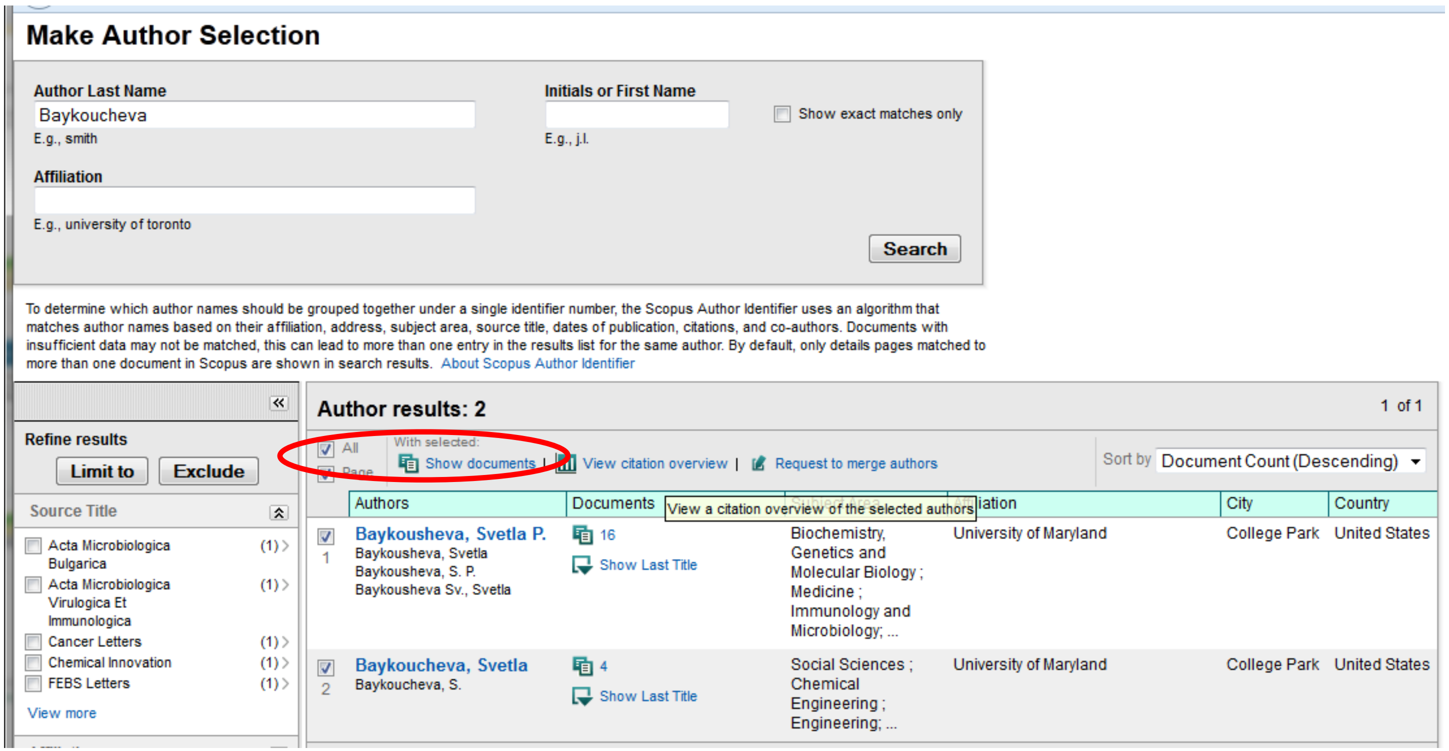
Update Overview

20 Cited Documents (Save list, Delete)	Citations						
	<2011	2011	2012	2013	Subtotal	>2013	Total
Total	282	18	19	1	38	0	320
1 ☐ 1995 Reevaluation of the pathways for...	207	15	15	1	**31**		**238**
2 ☐ 1995 Double bond removal from odd-num...	31				0		**31**
3 ☐ 1995 Peroxisomal-microsomal communica...	17		1		**1**		**18**
4 ☐ 1994 Arachidonic acid formed by perox...	13				0		**13**

Scopus Tools & Features

- Scopus Profiles Feedback Wizard & ORCID
- Citation Tracker in Scopus
- **Author Evaluator Tool**

Select author name to open Author Profile



Choose "find potential author matches" to group both profiles in real time

Baykousheva, Svetla P.

Find potential author matches

Personal

Name	Baykousheva, Svetla P.
Other formats	Baykousheva, Svetla Baykousheva, S. P. Baykousheva Sv. Baykousheva, S.
Author ID	6603096105
Affiliation	University of Maryland, White Memorial Chemistry Library, College Park United States

Research

Documents	16 View Author Evaluator | Add to my list | Set alert | Set feed
References	0
Citations	318 total citations by 283 documents View citation overview | Set alert
h Index	1 View h-Graph The *h* Index considers Scopus articles published after 1995.
Co-authors	13
Web search	10
Subject area	Biochemistry, Genetics and Molecular Biology Medicine Immunology and Microbiology More...

⊞ Find potential author matches

History

Publication range	1977-2008	
Source history	Prostaglandins Leukotrienes and Essential Fatty Acids	View documents
	Journal of Chromatography A	View documents
	Zeitschrift fur Allgemeine Mikrobiologie	View documents

Author Profile recalculates author stats based on grouped profiles

Baykousheva, Svetla P.

Find potential author matches

Personal

Name	Baykousheva, Svetla P.
Other formats	Baykousheva, Svetla Baykousheva, S. P. Baykousheva Sv. Baykousheva, S.
Author ID	6603096105
Affiliation	University of Maryland, White Memorial Chemistry Library, College Park United States

Research	Baykousheva, Svetla P.	Total including 1 grouped author
Documents	16 View Author Evaluator Add to my list | Set alert	20 View Author Evaluator Add to my list | Set alert
References	0	60
Citations	318 total citations by 283 documents View citation overview | Set alert	320 total citations by 284 documents View citation overview | Set alert
h Index	1 View h-Graph The *h* Index considers Scopus articles published after 1995.	2 View h-Graph
Co-authors	13	13
Web search	10	361
Subject area	Biochemistry, Genetics and Molecular Biology Medicine Immunology and Microbiology More...	
Grouped authors	**You have grouped 1 potential author matches with Baykousheva, Svetla P.** To store this group in Settings, click **Save group**.	

Altmetrics

www.altmetrics.org

"…the creation and study of new metrics based on the Social Web for analyzing and informing scholarship"

Takes into account a new environment:

- Sharing of "raw science" like datasets, code, and experimental designs
- Semantic publishing or "nanopublication," where the citeable unit is an argument or passage rather than entire article.
- Widespread self-publishing via blogging, microblogging, and comments or annotations on existing work.

Google Scholar Metrics

- Uses the Google's PageRank algorithm
- Uses the h-index to calculate the impact of journals
- One of the main advantages of Google Scholar is that it is more comprehensive in its scope than Thomson Reuters' Web of Science
- The h-index was created to evaluate individual scholar's impact; not reliable for journals