June 2012

Make an Impact! Assessing Scholarly Research and Output while Connecting to your Faculty

Anne Rauh
Syracuse University

Linda Galloway
Syracuse University

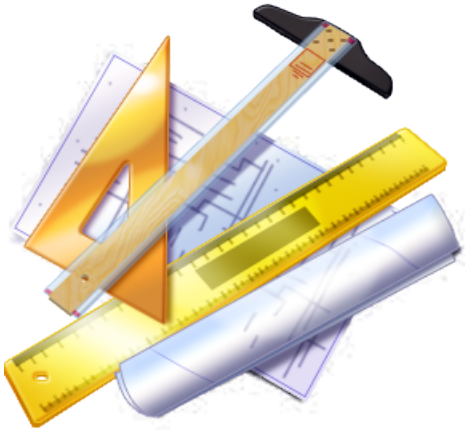
Make an Impact!

Assessing scholarly research and output while connecting to your faculty

Anne Rauh and Linda Galloway

Syracuse University Library

How do we measure scholarly research and output?

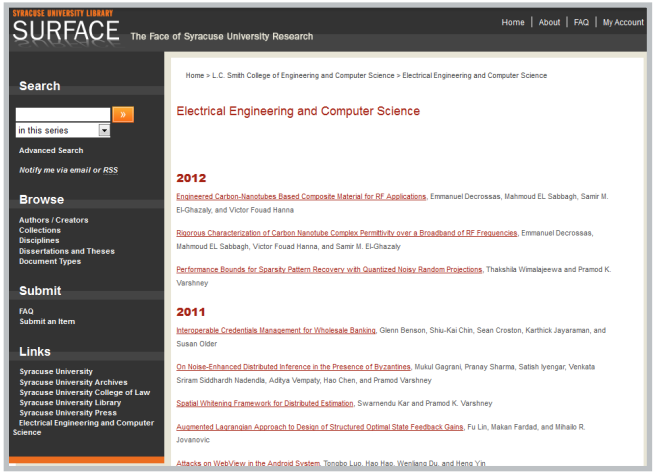


- Quantity
  - Publications
- Quality
  - Citations
- Funding
  - Research funds
- Technology transfer
  - Patents, start-ups, etc.

Why do we offer this service?

- Build relationships with faculty
- Learn about faculty research interests
- Assist in evaluation of departments, programs, and faculty
- Accreditation efforts
- Marketing for academic programs

Examples of Connections



What do you want to assess?

- Institutions
- Departments
- Centers or Groups
- Individuals

What type of data do you need?

- Qualitative
- Quantitative
  - Publications
  - Citations to pubs
  - Publication influence
  - “Other”
    - Social media buzz

Our focus will be on individual, quantitative data.

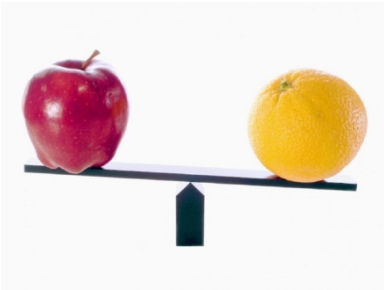
What tools will we discuss?

- Scopus
- Web of Science
- Google Scholar
- Journal Citation Reports & Journal Analyzer
- altmetrics

Conventional Tools

Consider Before Beginning:

- Cost of subscription databases
- Ease of use
- Time frames
  - Citations to past year's work (2011),
  - Citations to author's work in past 5 years (07-11)
  - Citations to author's work in past 10 years (02-11)
- Skewed towards STM fields
- Don't compare across databases!



Scopus or Web of Science?

Scopus

SciVerse Scopus is the world's largest abstract and citation database of peer-reviewed literature.

- Contains 46 million records, 70% with abstracts
- Nearly **19,500** titles from 5,000 publishers worldwide
- Includes over 4.6 million conference papers
- Provides 100% Medline coverage

Subscription includes:

- 23 million records with references back to 1996 (of which 78% include references).
- 21 million records pre-1996 which go back as far as 1823.

Web of Science

Web of Science consists of nine databases containing information gathered from thousands of scholarly journals, books, book series, reports, conferences, and more.

- It fully covers over **12,000** major journals.
- Create a visual representation of citation relationships with Citation Mapping
- Capture citation activity and trends graphically with Citation Report
- Use the Analyze Tool to identify trends and patterns

Our subscription:

- Science Citation Index Expanded (1899-present)
- Social Sciences Citation Index (1898-present)
- Arts & Humanities Citation Index (1975-present)

Citation Metrics for Individual Faculty Members

Assess scholarly impact by looking at:

- Works published
- Citations to works published
- Publication influence (Journal Citation Reports)

Susan Parks

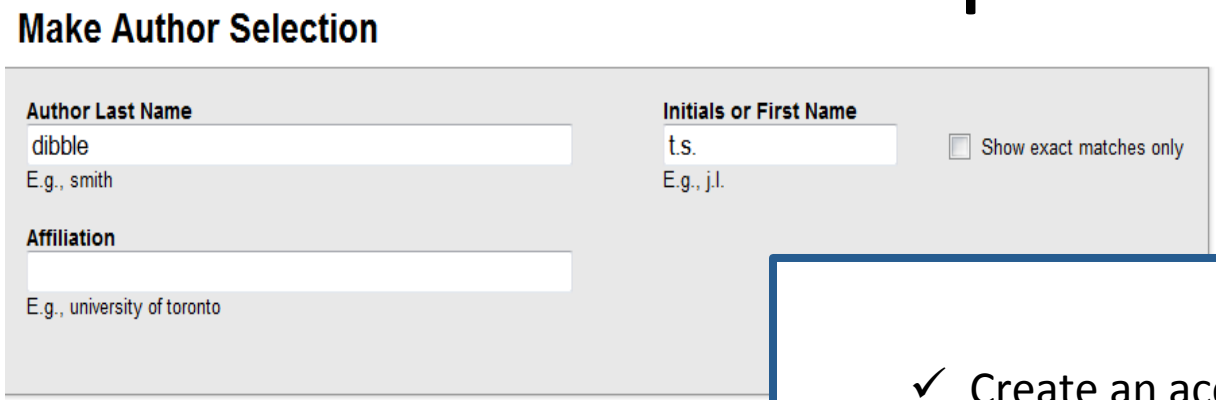
Assistant Professor of Biology, Syracuse University

Bioacoustics

Verified email at syr.edu

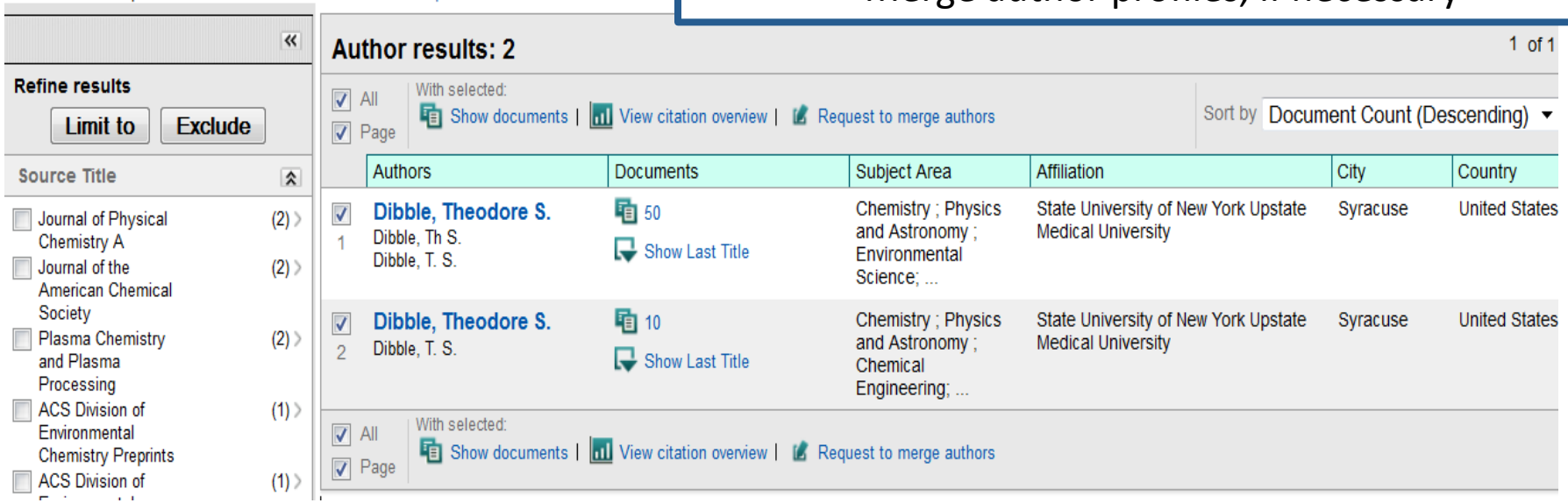
Homepage

Cited Reference Search in Scopus



Tips:

- ✓ Create an account to save your work
- ✓ Check within each author group for publications
- ✓ Merge author profiles, if necessary



Authors: Dibble, Theodore S.; Dibble, Theodore S.

Export | Print

Overview options

Hide

Exclude from citation overview: Self citations of selected authors Self citations of all authors

Sort documents

Year descending

Date range

2007 to 2012

Update overview

h index = 12

60 Cited Documents

Save list

Delete

		Total	Citations								
			<2007	2007	2008	2009	2010	2011	2012	Subtotal	>2012	Total
			399	38	38	34	49	63	19	241	0	640
1	2011 Impact of tunneling on hydrogen-...							1	2	3		3
2	2011 Effects of olefin group and its ...							3	1	4		4
3	2011 Understanding OH yields in elect...									0		0
4	2010 Potential energy profiles for th...							1		1		1
5	2010 Atmospheric chemistry of isoprop...								1	1		1
6	2009 Characterization of a low temper...									0		0
7	2009 Towards a consistent chemical ki...						1	1		2		2
8	2009 Observation and quantification o...						2	4		6		6
9	2009 Optical diagnostics of a low pow...					1	1	3		5		5
10	2009 A study of OH radicals in an atm...					1		1		2		2

Author *h* index

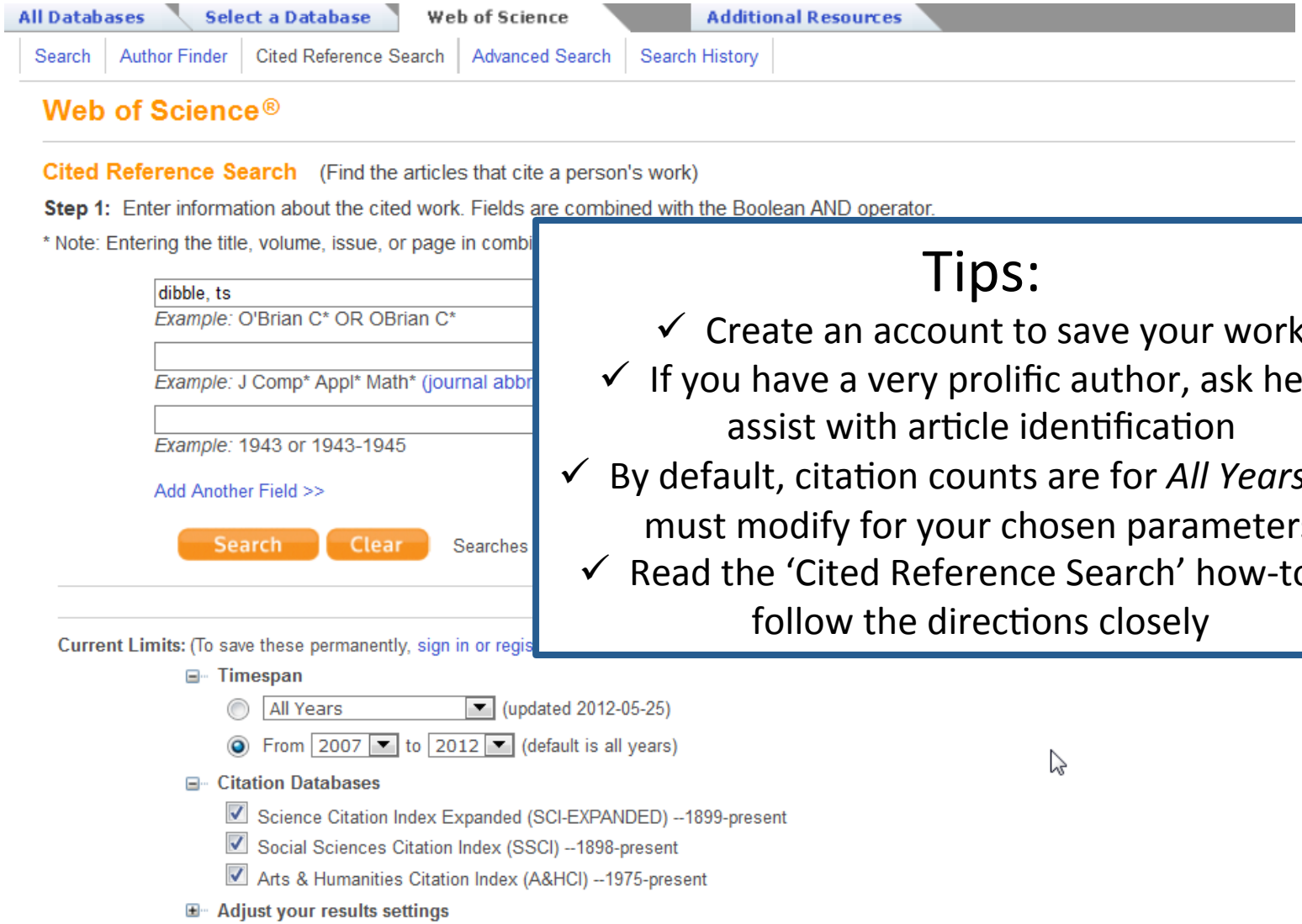
View h-Graph

Of the 40 documents consid for the *h* index, 12 have bee cited at least 12 times.

Note: The *h* index considers Scopus documents publishe after 1995.

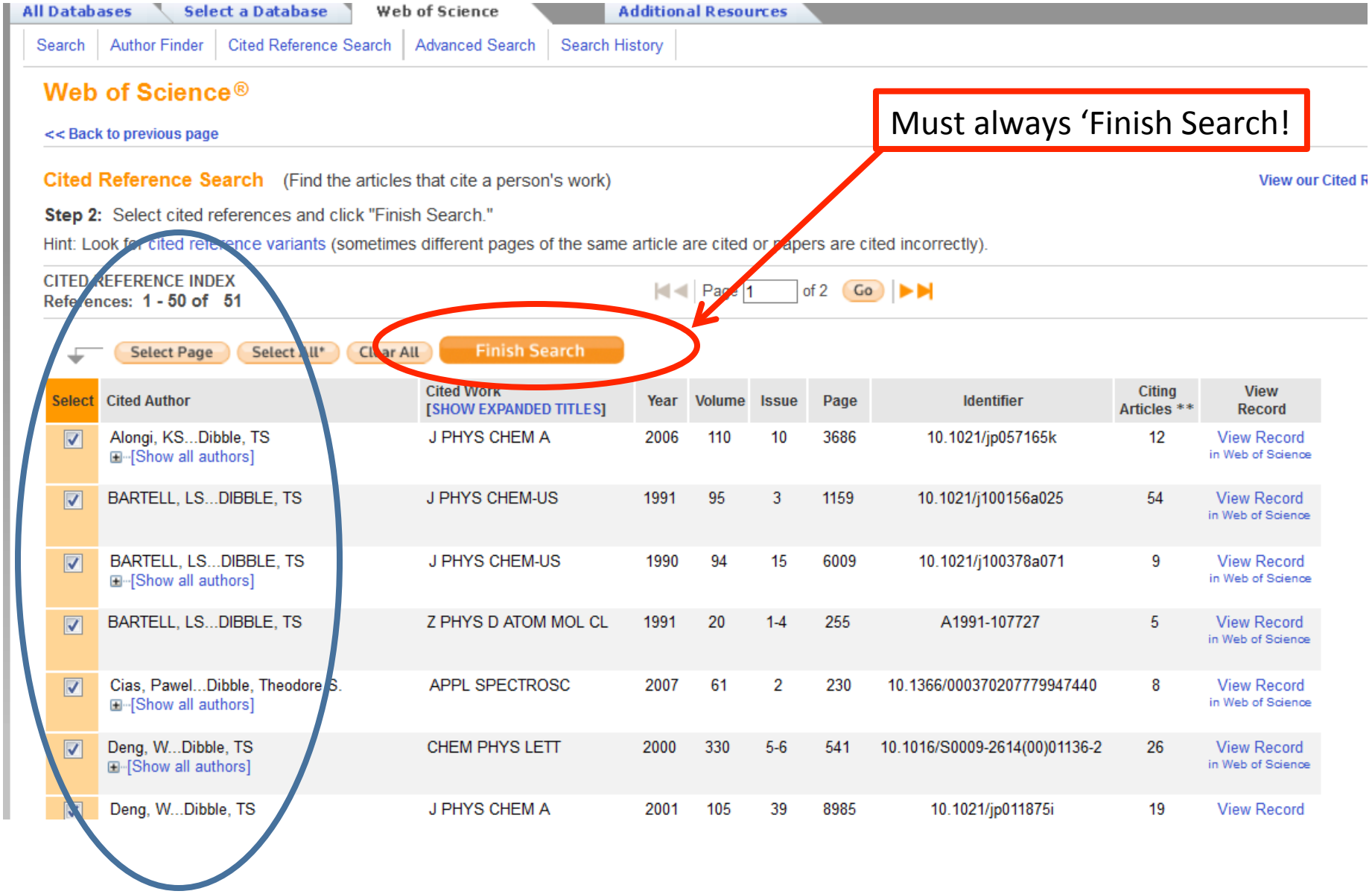
About h-Graph

Cited Reference Search in Web of Science



Tips:

- ✓ Create an account to save your work
- ✓ If you have a very prolific author, ask her to assist with article identification
- ✓ By default, citation counts are for *All Years* – you must modify for your chosen parameters
- ✓ Read the 'Cited Reference Search' how-to and follow the directions closely


All Databases
Select a Database
Web of Science
Additional Resources
Search
Author Finder
Cited Reference Search
Advanced Search
Search History
Web of Science®
<< Back to previous page
Must always 'Finish Search!
Cited Reference Search (Find the articles that cite a person's work)
View our Cited R
Step 2: Select cited references and click "Finish Search."
Hint: Look for cited reference variants (sometimes different pages of the same article are cited or papers are cited incorrectly).
CITED REFERENCE INDEX
References: 1 - 50 of 51
Page 1 of 2 Go
Select Page
Select All*
Clear All
Finish Search
Select
Cited Author
Cited Work [SHOW EXPANDED TITLES]
Year
Volume
Issue
Page
Identifier
Citing Articles **
View Record
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J PHYS CHEM A
2006
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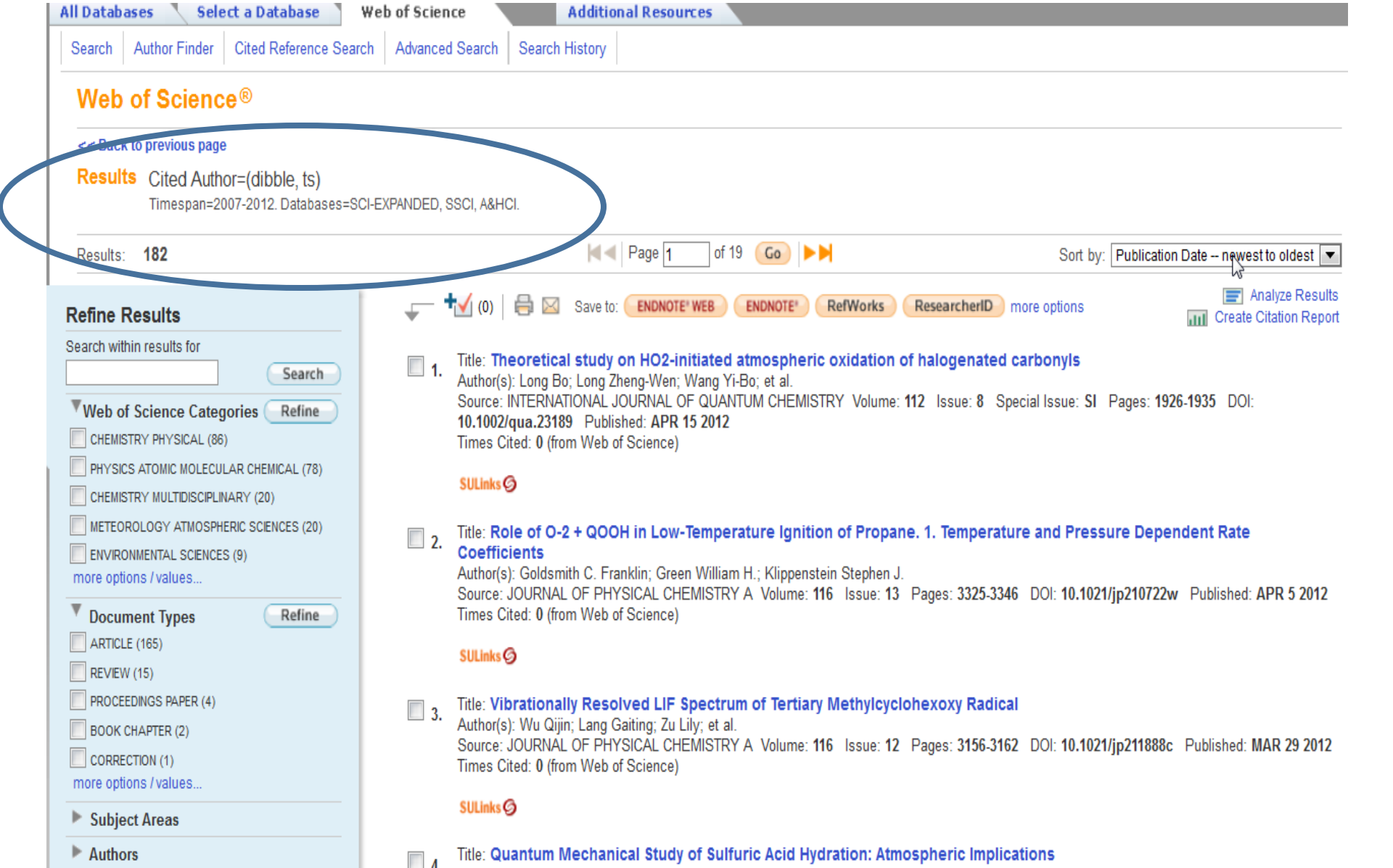
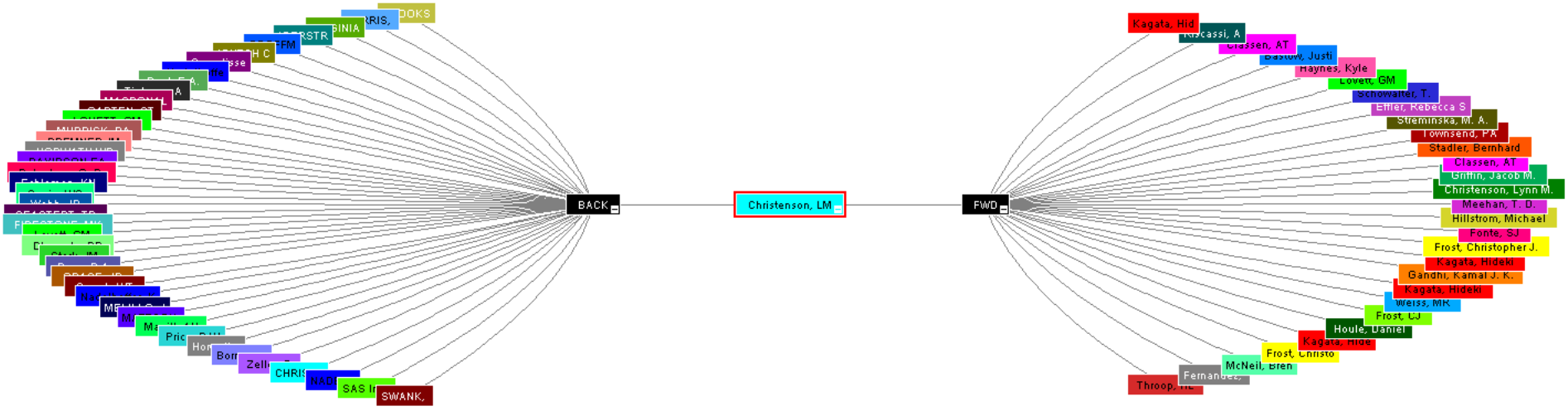
View Record


All Databases
Select a Database
Web of Science
Additional Resources
Search
Author Finder
Cited Reference Search
Advanced Search
Search History
Web of Science®
<< Back to previous page
Results
Cited Author=(dibble, ts)
Timespan=2007-2012. Databases=SCI-EXPANDED, SSCI, A&HCI.
Results: 182
Page 1 of 19
Go
Sort by: Publication Date -- newest to oldest
Refine Results
Search within results for
Search
Web of Science Categories
Refine
CHEMISTRY PHYSICAL (86)
PHYSICS ATOMIC MOLECULAR CHEMICAL (78)
CHEMISTRY MULTIDISCIPLINARY (20)
METEOROLOGY ATMOSPHERIC SCIENCES (20)
ENVIRONMENTAL SCIENCES (9)
more options / values...
Document Types
Refine
ARTICLE (165)
REVIEW (15)
PROCEEDINGS PAPER (4)
BOOK CHAPTER (2)
CORRECTION (1)
more options / values...
Subject Areas
Authors
(0)
Save to:
ENDNOTE WEB
ENDNOTE
RefWorks
ResearcherID
more options
Analyze Results
Create Citation Report
1.
Title: Theoretical study on HO2-initiated atmospheric oxidation of halogenated carbonyls
Author(s): Long Bo; Long Zheng-Wen; Wang Yi-Bo; et al.
Source: INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY Volume: 112 Issue: 8 Special Issue: SI Pages: 1926-1935 DOI: 10.1002/qua.23189 Published: APR 15 2012
Times Cited: 0 (from Web of Science)
SULinks
2.
Title: Role of O-2 + QOOH in Low-Temperature Ignition of Propane. 1. Temperature and Pressure Dependent Rate Coefficients
Author(s): Goldsmith C. Franklin; Green William H.; Klippenstein Stephen J.
Source: JOURNAL OF PHYSICAL CHEMISTRY A Volume: 116 Issue: 13 Pages: 3325-3346 DOI: 10.1021/jp210722w Published: APR 5 2012
Times Cited: 0 (from Web of Science)
SULinks
3.
Title: Vibrationally Resolved LIF Spectrum of Tertiary Methylcyclohexoxy Radical
Author(s): Wu Qijin; Lang Gaiting; Zu Lily; et al.
Source: JOURNAL OF PHYSICAL CHEMISTRY A Volume: 116 Issue: 12 Pages: 3156-3162 DOI: 10.1021/jp211888c Published: MAR 29 2012
Times Cited: 0 (from Web of Science)
SULinks
4.
Title: Quantum Mechanical Study of Sulfuric Acid Hydration: Atmospheric Implications

Citation Mapping in Web of Science

Visually Demonstrate Author/Article Influence



Source:Web of Knowledge™, www.thomsonscientific.com

Record details for the nodes are displayed below (double-click a node to show its details). Click a checkbox below to locate that node above.

Primary Author	Journal Name	Article Title
Christenson, LM	2002-OECOLOGIA	The fate of nitrogen in gypsy ...
BREMNER JM	1966-USE ISOTOPES SOIL OR	(article title not available)
MATTSON WJ	1975-SCIENCE	(article title not available)
Bormann, F. H.	1979-Pattern and process in a forested ecosystem	(article title not available)

The fate of nitrogen in gypsy moth frass deposited to an oak forest floor

Number / Title	WOS:000175936300015 / The fate of nitrogen in gypsy moth frass deposited to an oak forest floor
Journal Title	OECOLOGIA
Publication Year	2002
Author	Christenson L, Lovett G, Mitchell M, et al
Source Abbreviation	OECOLOGIA

Google Scholar Citations

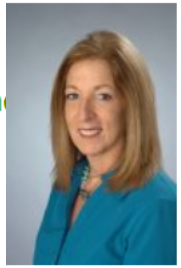
My Citations | Metrics | Alerts

Tips:

- ✓ Public profiles are available in Google
- ✓ Can search for an author from within your own profile page

Google scholar

Articles (include patents) Legal documents



Change photo

Linda M. Galloway Edit

Associate Librarian at Syracuse University Edit

Instruction - Assessment - Information Literacy Edit

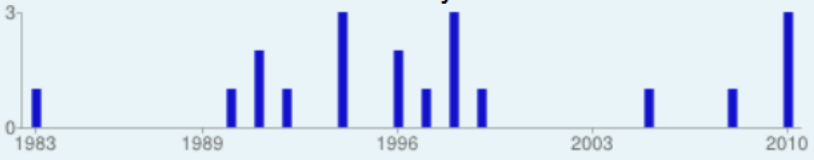
Verified email at syr.edu Edit

My profile is public Edit Link Homepage Edit

Citation indices

	All	Since 2007
Citations	20	4
h-index	2	1
i10-index	1	0

Citations to my articles



Select: All None Actions 1-6

Google scholar

Search Authors

My Citations - Help

Follow this author

Follow new articles

Follow new citations

Add co-authors

Anne Rauh Add -

View all co-authors

Co-authors

Cited Reference Search in Google Scholar Citations

- Author needs to set up their profile (using their Google account); Google Scholar will harvest related data.
- Authors can add articles, groups of articles, edit entries, etc.
- Profiles are private unless author elects to make public
- Quality control: "To be eligible for inclusion in Google Scholar search results, your profile needs to be public and needs to have a verified email address at your university"

Theodore S. Dibble

Professor of Chemistry, SUNY-Environmental Science and Forestry
Atmospheric Chemistry - Combustion - Physical Chemistry
Verified email at esf.edu
Homepage

Citation indices

	All	Since 2007
Citations	727	255
h-index	17	9
i10-index	30	8

Citations to my articles

Select: All, None Export Show: 20 **1-20** Next >

Title / Author	Cited by	Year
Electron diffraction studies of the kinetics of phase changes in molecular clusters: freezing of carbon tetrachloride in supersonic flow LS Bartell, TS Dibble The Journal of Physical Chemistry 95 (3), 1159-1167	43	1991
Isomerization of OH-isoprene adducts and hydroxyalkoxy isoprene radicals TS Dibble The Journal of Physical Chemistry A 106 (28), 6643-6650	43	2002
Reactions of the alkoxy radicals formed following OH-addition to α-pinene and β-pinene. CC bond scission reactions TS Dibble Journal of the American Chemical Society 123 (18), 4228-4234	34	2001
Electron diffraction studies of the kinetics of phase changes in molecular clusters. 3. Solid-state phase transitions in selenium hexafluoride and tert-butyl chloride TS Dibble, LS Bartell	32	1992

Comparison

	Times cited	H-Index
Scopus	241	12
Web of Science	182	16
Google Scholar	255	9

Times cited = number of documents published from 2007-2012 that have cited this author's work

H index = Number of author's articles that have been cited at least this many times (during time span indicated)

Searches performed 30 May 2012

Journal Assessment

Where to publish??

Metrics can help identify the most influential (i.e. most cited) journals in a field. This does not mean each article has the same influence…

- Journal Citation Reports (Thomson-Reuters)
- Journal Analyzer (Scopus)

Journal Citation Reports - WoS

Journal Citation Reports®

WELCOME HELP

2010 JCR Science

Journal Summary List

Journal Title

Journals from: subject categories BIOLOGY VIEW CATEGORY SUMMARY LIST

Sorted by: Impact Factor SORT AGAIN

Journals 1 - 20 (of 86) [1 | 2 | 3 | 4 | 5] 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	PLOS BIOL	1544-9173	18454	12.472	14.376	2.706	214	4.1	0.15993	8.211
☐	2	BIOL REV	1464-7931	5098	6.574	10.894	1.581	43	>10.0	0.01225	4.448
☐	3	FASEB J	0892-6638	38538	6.515	7.201	1.195	462	7.1	0.10353	2.521
☐	4	PHILOS T R SOC B	0962-8436	21141	6.053	6.977	3.019	317	7.3	0.06850	3.081
☐	5	Q REV BIOL	0033-5770	3117	5.818	6.400	0.857	14	>10.0	0.00339	3.495
☐	6	CHRONOBIOL INT	0742-0528	3009	5.576	3.937	0.276	116	4.8	0.00567	0.661
☐	7	BIOSCIENCE	0006-3568	9884	5.510	6.335	0.848	66	9.5	0.01837	2.580
☐	8	BMC BIOL	1741-7007	1709	5.203	5.479	1.500	96	3.0	0.01235	2.459
☐	9	P ROY SOC B-BIOL SCI	0962-8452	31791	5.064	5.443	1.100	452	7.8	0.09051	2.297
☐	10	PHYS LIFE REV	1571-0645	442	4.875	5.552	8.000	12	3.2	0.00235	2.085
☐	11	BIOESSAYS	0265-9247	8862	4.479	5.016	1.198	106	7.2	0.02876	2.203

Impact factor: The journal Impact Factor is the average number of times articles from the journal published in the past two years have been cited in the JCR year.

Journal Analyzer - Scopus

SJR: "SCImago Journal Rank is weighted by the prestige of a journal. Subject field, quality and reputation of the journal have a direct effect on the value of a citation."

Author Disambiguation

- **Scopus** – Scopus Author Identifier (53 author sets for M.J. Mitchell)
- **Web of Science** – Distinct Author Identification System (494 author sets for MJ Mitchell)
- Google Scholar Profiles
- Institutional ID

ORCID Open Researcher & Contributor ID

ORCID

- Not for profit
- Create registry of unique identifiers for individual researchers
- Open and transparent linking between ORCID and other ID schemes
- Many vendors, institutions are members

nature International weekly journal of science

Home | News & Comment | Research | Careers & Jobs | Current Issue | Archive | Audio & Video | Fo

Archive > Volume 485 > Issue 7400 > News > Article

NATURE | NEWS

Scientists: your number is up

ORCID scheme will give researchers unique identifiers to improve tracking of publications.

Declan Butler

30 May 2012

In 2011, Y. Wang was the world's most prolific author of scientific publications, with 3,926 to their name — a rate of more than 10 per day. Never heard of them? That's because they are a mixture of many different Y. Wangs, each indistinguishable in the scholarly record.

The list of the world's top 100 authors, all of whom show similarly impressive production rates, is a who's who of conflated Zhangs, Lis, Chens, Lees and other Wangs. But this confusing problem could be solved following the launch later this year of the Open Researcher and Contributor ID (ORCID), an identifier system that will distinguish between authors who share the same name.

Just as barcodes at the supermarket allow the till to distinguish a tomato from a turnip, ORCID aims to reliably attribute research outputs to their true author by assigning every scientist on the planet a machine-readable, 16-digit unique digital identifier. If ORCID takes off, it could revolutionize research management, vastly increase the precision and breadth of scientific metrics and help in developing new analyses of, for

Don't worry, the tattoo is optional.

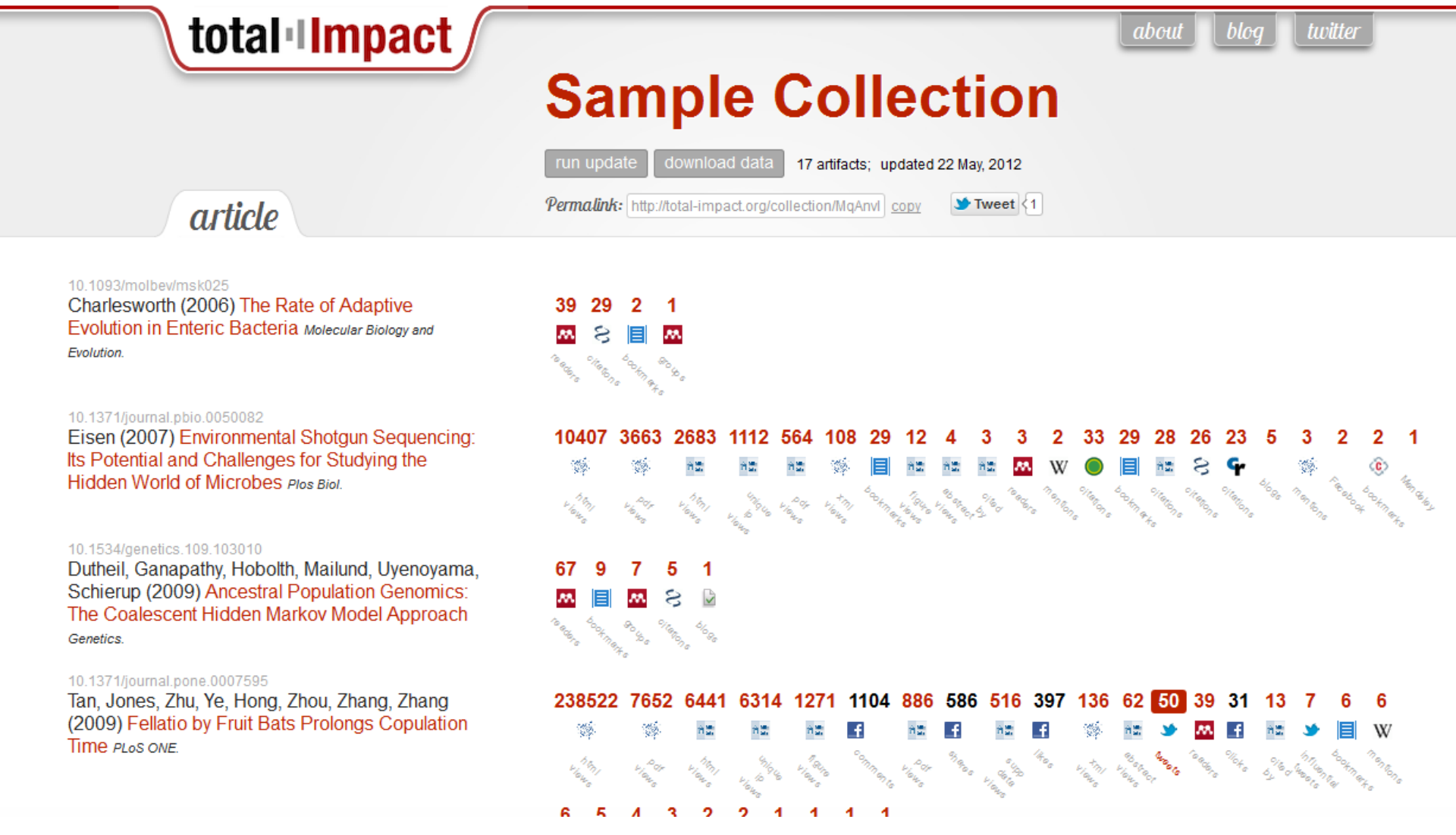
FREDRIK SKOLD/GETTY IMAGES

Alternative Tools

altmetrics

altmetrics is the creation and study of new metrics based on the Social Web for analyzing, and informing scholarship

total Impact



Reader Meter

ReaderMeter About FAQ News Contact

DUNCAN J WATTS

H_R-Index: 35

G_R-Index: 57

Most read publication: 173

Total number of publications: 139

Total bookmarks: 3681

[what's this?]

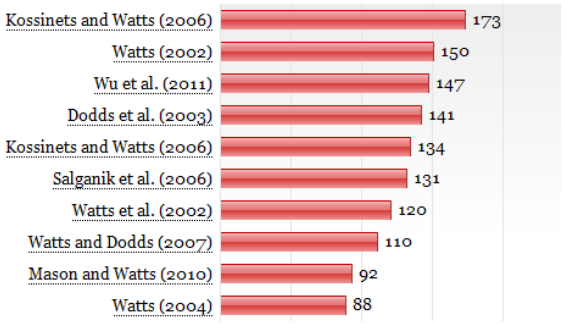
Permalinks

HTML: http://readermeter.org/Watts.Duncan_J

JSON: http://readermeter.org/Watts.Duncan_J/json

Powered by MENDELEY

Top 10 publications by readership (?)

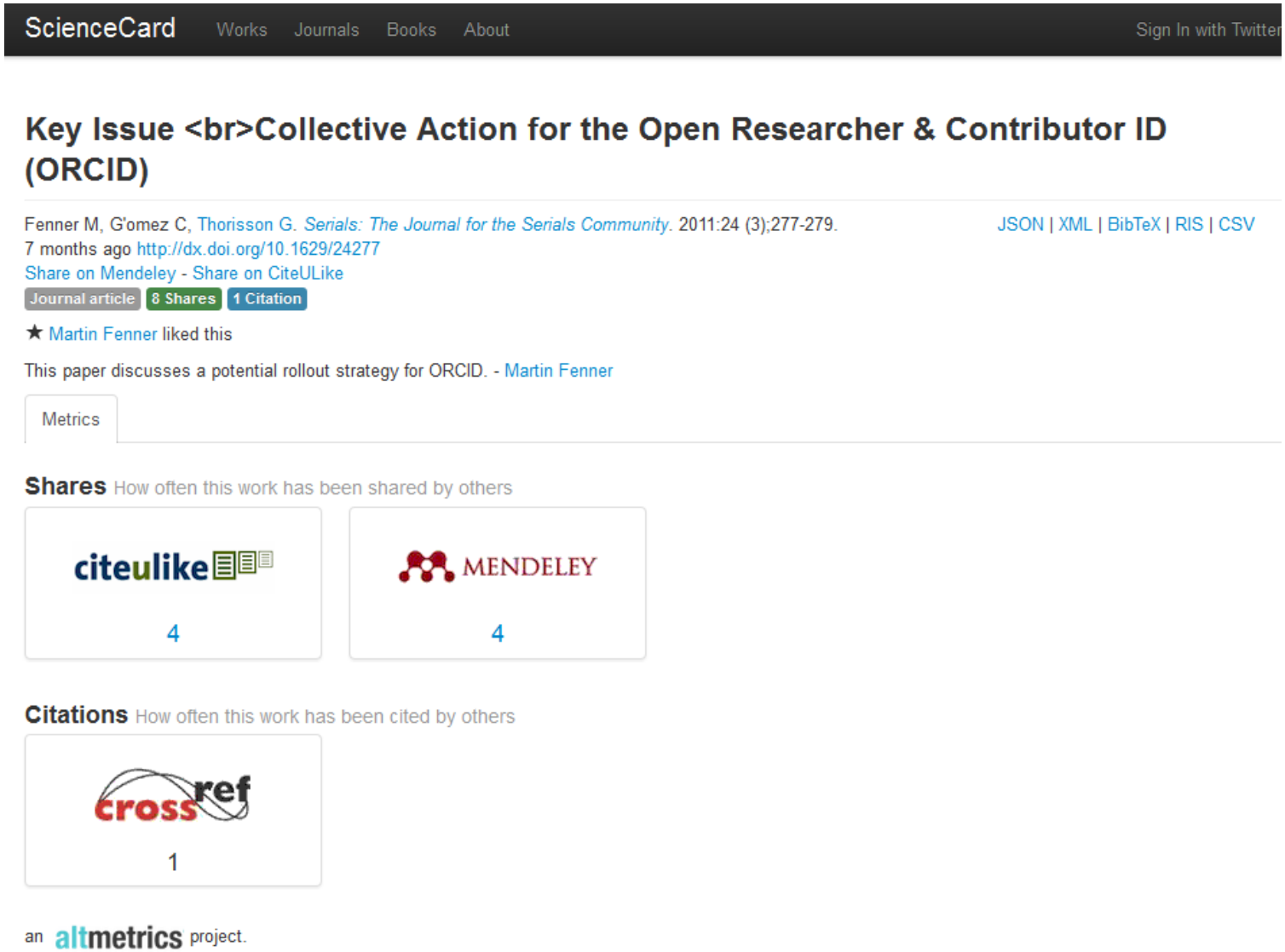


[show all]

Duncan J Watts's coauthors

Luis A N AMARAL | Luís A N AMARAL | Eytan BAKSHY
Albert-Laszlo BARABASI | Albert-László BARABÁSI | Albert-lászló BARABÁSI
Duncan S CALLAWAY | Munmun De CHOUDHURY | Frédéric DALSACE
Frederic DALSACE | Coralie DAMAY | Munmun DE CHOUDHURY
In DEFENSE | Ap DIJKSTERHUIS | Peter Sheridan DODDS | Peter S DODDS
Peter DODDS | David DUBOIS | Robert G ECCLES | Karen FRASER
Michael FRUMIN | Rashi GLAZER | Sharad GOEL | Daniel G GOLDSTEIN
Steve HASKER | Eric Von HIPPEL | Jake M HOFMAN | Yoshito HORI
Harry HUTSON | Yoko ISHIKURA | Jon KLEINBERG | Klaus KLEINFELD
G KOSSINETS | Gueorgi KOSSINETS | Marina KRAKOVSKY
Sébastien LAHAIE | The LEADER | Phillip LONGMAN | Brand MAGIC
R Dean MALMGREN | Michael C MANKINS | Winter A MASON
Winter MASON | Daniel C MEDINA | Christopher MEYER | Charles R MORRIS
Roby MUHAMAD | Mark NEWMAN | Mark E J NEWMAN | M E J NEWMAN
David M PENNOCK | Jonah PERETTI | Barbara PERRY | Harry POTTER

ScienceCard



Limitation to altmetrics

- New
- Time frame – some new tools cannot search old mentions, tweets, etc.
- Rely on user generate metadata
- Should social media mentions be given the same weight as scholarly article citations?
- Can these tools be easily manipulated to raise significance of an article?

Scholarly Metrics in Context

Assessing Output Using these Metrics

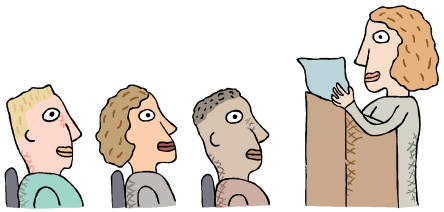
Strengths

- Quantitative information about output
- When used together, tools give a broad picture of the impact of journal publishing activity
- Widely used within academic departments to inform decisions of promotion and tenure

Weaknesses

- Two most popular tools only measure the work that they index
- Traditional tools don't capture grey literature and other informal scholarly communication
- Coverage does not always include lifespan of author's work due to date coverage of tools
- Developed to measure scientific scholarly publishing activity but now being applied to other disciplines where measures may not fit

Framing Discussions with Faculty



- Tools don't replace disciplinary knowledge
- Faculty need to check their publications and citations (citing errors, incorrect institutional affiliations, etc.)
- These tools can help you own your online presence

Criticism and Complaints

- Read and understand documentation and metrics provided by databases
- Define scope and limitations of your output before beginning
- Keep track of your methodology and pay attention to time frames
- Defend your work – you are the expert!

More Information

http://researchguides.library.syr.edu/citationmetrics

Questions?

Anne Rauh aerauh@syr.edu

Linda Galloway galloway@syr.edu