



REUTERS/Kim Kyung Hoon

ESSENTIAL SCIENCE INDICATORS(ESI)

Customer Relationship Manager

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THOMSON REUTERS

AGENDA

- What is ESI?
 - Intro
 - Category for ESI
 - ESI data
- Who is user?
- ESI metrics
- Live Demo



Introduction – What is ESI?

- Compilation of science performance statistics and science trends data derived from WoS data
- Ranks authors, institutions, countries and journals across 22 broad disciplines
- Used to conduct analyses of scientific literature
 - Identify top researchers or institutions in specific disciplines
 - Identify trends and emerging areas of research
 - Evaluate potential employees, collaborators, reviewers and peers
 - Who is publishing the ‘hottest’ papers in a field?

Category in ESI

- Multidisciplinary tool covering 22 discipline areas
- Each journal is assigned into one category
- Scope notes for each field can be found on ScienceWatch webpage at <http://sciencewatch.com/about/met/fidlddef>

Agricultural Sciences

Biology & Biochemistry

Chemistry

Clinical Medicine

Computer Science

Ecology/Environment

Economics & Business

Engineering

Geosciences

Immunology

Material Sciences

Mathematics

Microbiology

Molecular Biology & Genetics

Multidisciplinary

Neuroscience & Behavior

Pharmacology & Toxicology

Physics

Plant & Animal Science

Psychology/Psychiatry

Social Sciences, general

Space Science



4 PARTS of *Essential Science Indicators*

1. Citation Rankings

- Institutions, Scientists, Countries, Journals

2. Most Cited Papers(long-term vs. “hot”)

- Highly Cited Papers (last 10 years)
- Hot Papers (last 2 years)

3. Citation Analysis

- Baselines against which to measure your performance
- “*Research Fronts*” to track new trends

4. Editorial Commentary

- Science Watch

ISI Web of KnowledgeSM

Essential Science IndicatorsSM

Essential Science IndicatorsSM has been updated as of March 1, 2012 to cover an 11-year period, January 1, 2001-December 31, 2011.

[Information for New Users](#)

Citation Rankings:	- Scientists - Institutions - Countries/Territories - Journals	Commentary:
Most Cited Papers:	- Highly Cited Papers (last 10 years) - Hot Papers (last 2 years)	IN-CITES
Citation Analysis:	- Baselines - Research Fronts	SPECIAL TOPICS
		SCIENCE-WATCH

NOTICES

TUTORIAL

The Notices file was last updated Thu Mar 1 08:25:19 2012

ESI data

- Articles, reviews, proceedings papers, research notes
- All authors and institutions are included and carry equal weighting
- 10-year rolling file
- Updated every 2 months



Are you interested in?

- What are the **most cited papers** in your research ?
- What are the **emerging research areas** in particular field?
- What country has the **highest impact** in particular research?
- Who are the most **highly cited authors** in the field?

Deans
Universities
Librarians
Researchers/Authors
Publishers
Administrators
Other roles

Citation Thresholds

- Only the most highly cited individuals, institutions, journals, countries and papers will be found in the database
- Inclusion in ESI is dependent upon meeting the citation thresholds shown below

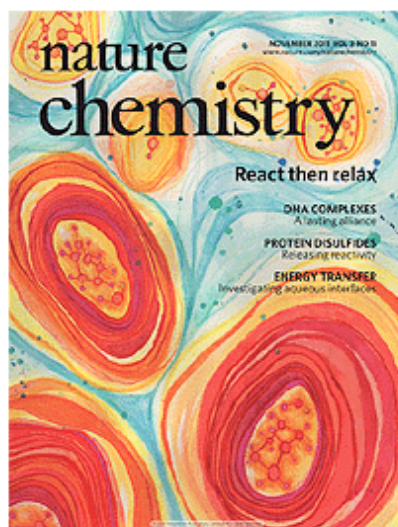
	Citation Percentile	Years of data examined
Scientists	1%	10
Institutions	1%	10
Countries	50%	10
Journals	50%	10
Highly Cited Papers	1%	10
Hot Papers	.1%	2

SCIENCEWATCH.COM

TRACKING TRENDS AND PERFORMANCE IN GLOBAL RESEARCH SINCE 1989

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STUART CANTRILL ON THE GROWING SUCCESS OF NATURE CHEMISTRY



Recently, an analysis of *Essential Science Indicators*SM data from Thomson Reuters showed that the journal *Nature Chemistry* is having a growing impact among journals in the field of Chemistry. The journal's record in this field includes 272 papers cited a total of 4,901 times between its 2009 launch and August 31, 2011. In this interview, *ScienceWatch.com* talks with *Nature Chemistry*'s Chief Editor, Dr. Stuart Cantrill, about the journal's history and citation achievements. [View Article >](#)

COMMENTARY FROM TRENDING SCIENTISTS & TOPICS



SHINICHI NAKAGAWA ON IMPROVING STATISTICAL REPORTING

Shinichi Nakagawa talks about his 2007 *BIOLOGICAL REVIEWS* paper, "Effect

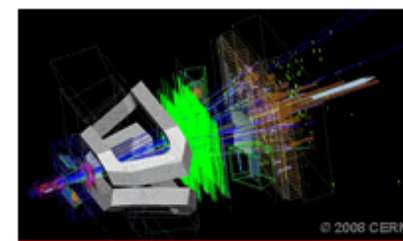
SCI-BYTES

- [Science in Finland, 2006-10](#)
- [Economics: High-Impact U.S. Institutions, 2005-09](#)
- [Hot Paper in Medicine](#)
- [Sci-Bytes Home](#)

ETCETERA

- [All RSS Feeds for ScienceWatch.com](#)
- [Global Research Reports](#)

CURRENT SPECIAL TOPIC



SUMMARY OF BENEFITS

- Rankings

- Use researchers' acknowledgements (citations) to quantify top research and rank a scientist, institution, country, or journal by influence and impact
- Find the productivity of an institution (number of papers) as well as its influence (number of citations)

- Benchmark analysis

- Use citation averages to measure the relative influence of your research against others in the same field

- Editorial commentary

- Gain a view of the scientific landscape through essays and articles; offering context and background, not just numbers

Question?

Thanks for your attention!

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