To See and To Be Seen: Scopus

Peter Porosz
Solution Manager, Research Management

Elsevier
12th October 2015
Lead the way in advancing science, technology and health

Galileo’s last and greatest work, published in 1638 by Elzevir, Discorsi e Dimostrazioni Matematiche

Lead the way in advancing science, technology and health

Marie Curie (Physics, Chemistry)

Louis Pasteur (Chemistry)

Alexander Fleming (Medicine)

Albert Einstein (Physics)

Shinya Yamanaka (Medicine)

John C. Mather (Physics)

Francoise Barre-Sinoussi (Medicine)

Craig C Mello (Medicine)
Content + Technology and Analytics = Improved Outcomes
Decisions by “triangulating” information

Reliable data

Strategic Planning for Research

Your Scientists

Expert opinion

External Review

Peer review
Elsevier Research Intelligence

**SciVal**
- External view
- Ready-to-use tools to analyze the world of research, and to establish, execute and evaluate optimized strategies for the research organization.

**Pure**
- Internal view
- Comparative research information management system to enable evidence-based decisions, promote collaboration, simplify administration and optimize impact.

**Analytical Services**
- Customized analysis, reports and services to meet your research management needs.

**Scopus**
- Rich data assets
- The largest abstract and citation database of peer-reviewed literature; the broadest source of global scientific research. Includes content from 5,000 publishers with tools to easily track, analyze and visualize research.

**Mendeley**
- A free reference manager and academic social network that can help researchers organize, research, collaborate with others online, discover the latest research, and see meaningful trends in global research activity.

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Inform research strategy

Supports research activity
One common database with different applications on top

- Scopus
- SciVal
- Analytical Services & Custom Data
- API’s

SCOPUS DATABASE
What content does Scopus include?

58.3M records from 22,245 serial titles and over 94,900 books
21.6M pre 1996 records | 36.7M post 1995 records

- Content from > 5,000 publishers
- “Articles in Press” from >5,000 titles
- Titles from 105 different countries in all geographical regions
- 40 “local” languages covered
- More than 3,780 Gold Open Access journals indexed

Scopus is ideal compared to other products because it has the broadest coverage of global, curated, relevant research, with smart, simple tools to help track, analyze and visualize research.

Source: Scopus (August 2015)
Different source types are added to ensure that coverage, discoverability, profiles and impact measurement for research in all subject fields is accounted for in Scopus.

Source: Scopus title list (August 2015)
Ratio of titles per Publisher in Scopus

Other 60%

10% ELSEVIER

8% Springer

5% Wiley-Blackwell

5% Taylor & Francis

2% SAGE

1% Wolters Kluwer

1% Oxford University Press

1% Emerald

1% InderScience Publishers

1% Cambridge University Press

1% Bentham Science

1% IEEE

Source: Scopus title list (February 2015)
High quality journals due to selection by the independent Content Selection & Advisory Board (CSAB)

The CSAB is chosen for their expertise in specific subject areas; many have (journal) Editor experience

Focus on quality through content selection by the independent CSAB, because:

- Provide accurate and relevant search results for users
- No dilution of search results by irrelevant or low quality content
- Support that Scopus is recognized as authoritative
- Support confidence that Scopus “reflects the truth”
Transparent Scopus selection criteria for serial content

1. **All** titles should meet **all** minimum criteria in order to be considered for Scopus review:
   - Peer-review
   - English abstracts
   - Regular publication
   - Roman script references
   - Pub. ethics statement

2. Eligible titles are reviewed by the **Content Selection & Advisory Board** according to a combination of 14 quantitative & qualitative selection criteria grouped in 5 categories:
   - Journal Policy
   - Quality of Content
   - Journal Standing
   - Regularity
   - Online Availability

3. As a primary publisher and information aggregator, Elsevier understands the needs of Authors, Editors and Publishers and provides resources to support the community:
   - Review comments from CSAB
   - FAQs
   - Publication ethics resources
   - Publishing services
   - Research Trends, Editor Update newsletters

**Continuous review process** using the online Scopus Title Evaluation Platform (STEP)
Info: [http://www.elsevier.com/online-tools/scopus/content-overview](http://www.elsevier.com/online-tools/scopus/content-overview)
Questions: titlesuggestion@scopus.com
How to keep track of your suggested title?

Via the unique Title Tracking ID journal suggestors can monitor the evaluation of their title(s):
[Scopus Title Suggestion Tracker](#)
Scopus title review results and resources

In total 4,593 titles reviewed (2011 –2014) of which 2,080 (31%) accepted for Scopus.

Collaborations for local content selection & advisory boards:

- **Thailand:**
  - TCI

- **Korea:**
  - NRF

**New local boards** in 2015:

- **Russia:**
  - MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN FEDERATION

- **China:**
  - ISTIC

Local pro-active content suggestion initiatives:

- **FECYT**
  - FUNDAÇÃO ESPANHOLA PARA LA CIENCIA Y LA TECNOLOGIA

- **UNAM**
  - ANVUR

- **ERA (Australia)**
  - ERUDIT
Curation matters: re-evaluation

Our customers demand it. Our business depends on it

- **Annual rolling initiative:**
  - **Identify** and notify **underperforming journals**
  - One year to improve quality based on **metrics** & set **benchmarks** (output, usage, citations, self-citations)
  - If red flag remains, the journal will be reviewed by the CSAB with the possible consequence of **discontinuation** in Scopus

- **Incentive** for continuous journal performance
- **Launch Q1 2015, re-evaluation to start Q1 2016**

The re-evaluation process is essentially a rigorous housekeeping exercise designed to ensure that the journal content in Scopus meets the high standards we and our customers now demand.
## Re-evaluation: metrics and benchmark

<table>
<thead>
<tr>
<th>Metric</th>
<th>Benchmark</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-citations</td>
<td>200%</td>
<td>The journal has a self-citation rate two times higher, or more, when compared to peer journals in its subject field.</td>
</tr>
<tr>
<td>Citations</td>
<td>50%</td>
<td>The journal received half the number of citations, when compared to peer journals in its subject field.</td>
</tr>
<tr>
<td>Impact Per Publication</td>
<td>50%</td>
<td>The journal has an IPP score half or less than the average IPP score, when compared to peer journals in its subject field.</td>
</tr>
<tr>
<td>Article Output</td>
<td>50%</td>
<td>The journal produced half, or less, the number of articles, when compared to peer journals in its subject field.</td>
</tr>
<tr>
<td>Abstract Usage</td>
<td>50%</td>
<td>The journal’s abstract are used half as much, or less, when compared to peer journals in its subject field.</td>
</tr>
<tr>
<td>Full Text Links</td>
<td>50%</td>
<td>The journal’s full text are used half as much, or less, when compared to peer journals in its subject field.</td>
</tr>
</tbody>
</table>

**Important**: Journals are only up for Re-evaluation if the journal underperforms in **all 6 metrics**. If 1 improves, journal will be taken off the Re-evaluation list.
Comparison with nearest peer

**Scopus**

~22K titles  
>5,000 publishers  
Updated daily

**WEB OF SCIENCE™**

~12K titles (Core Collection)  
3,300 publishers  
Updated weekly

### Subject Areas Comparison

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>Scopus</th>
<th>Scopus (%)</th>
<th>WoS</th>
<th>WoS (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Sciences</td>
<td>7,443 (+73%)</td>
<td>4,291</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Sciences</td>
<td>6,795 (+96%)</td>
<td>3,472</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life Sciences</td>
<td>4,492 (50%)</td>
<td>3,002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Sciences</td>
<td>8,086 (99%)</td>
<td>4,060</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Web of Science Real Facts, Web of Science title list and Scopus’ own data (April 2015)
Scopus article growth over years

Source: Scopus data March 2015
Comparison with nearest peer

**Scopus**

- ~22K titles
- >5,000 publishers
- Updated daily

**Web of Science**

- ~12K titles (Core Collection)
- 3,300 publishers
- Updated weekly

Source: Web of Science Real Facts, Web of Science title list and Scopus’ own data (April 2015)
Scopus is the Gold standard: more than 150 leading research organizations rely on Scopus data.
Books expansion program

Coverage years

- Back to 2005 (2003 for A&H)

Number of books

- 120,000 by the end of 2015; at least 20,000 each year thereafter

Book types

- Monographs, edited volumes, major reference works, graduate level text books

Books target in Scopus

Documents target in Scopus

- Social Sciences
- A&H
- Business & Economics
- Computer Science
- Psychology
- Medicine
- A&H and Social Sciences
- Other

All major publishing houses are part of the Books expansion program, adding up to a total of ±40 publishers who are contributing.
Journal and Article Level Metrics
More accuracy, transparency, more metrics

About SJR
SCImago Journal Rank is a prestige metric based on the idea that not all citations are the same.

Learn more

About SNIP
Source Normalized Impact per Paper measures contextual citation impact by weighting citations based on the total number of citations in a subject field.

Learn more

About IPP
The Impact per Publication measures the ratio of citations per article published in the journal.

Learn more

Journal Metrics
www.journalmetrics.com/
## IPP: Impact per Publication

All journals have a **Impact per Publication** (IPP) measuring the ratio of citations per article published in the journal:

- Peer-reviewed papers (Article, Review and Conference Paper) only
- Three year citation window

### # Citations in Year Y to papers published in Y-1 to Y-3

### Papers published in Y-1 to Y-3

### Cites / publication

### Years after publication date

### Categories and Percentages:
- Immunology and Microbiology (67.9%)
- Biochemistry, Genetics and Molecular Biology (65.3%)
- Pharmacology, Toxicology and Pharmaceutics (63.6%)
- General (58.3%)
- Medicine (60.8%)
- Neuroscience (64.8%)
- Chemistry (55.4%)
- Health Professions (56.4%)
- Nursing (53.5%)
- Chemical Engineering (51.6%)
- Materials Science (52.6%)
- Dentistry (55.9%)
- Energy (42.1%)
- Physics and Astronomy (47.3%)
- Veterinary (47.9%)
- Agricultural and Biological Sciences (45.0%)
- Environmental Science (43.5%)
- Engineering (38.7%)
- Psychology (44.8%)
- Earth and Planetary Sciences (41.3%)
- Computer Science (33.7%)
- Mathematics (32.5%)
- Decision Sciences (32.4%)
- Economics, Econometrics and Finance (29.0%)
- Business, Management and Accounting (27.7%)
- Social Sciences (20.1%)
- Arts and Humanities (10.1%)
SNIP: Source-normalized impact per paper

All journals have a **Source-normalized impact per paper** (SNIP) measuring contextual citation impact by weighting citations per subject field.

- Peer-reviewed papers only
- Three year citation window
- Field’s frequency and immediacy of citation
- Database coverage
- Journal’s scope and focus
- Measured relative to database median

### Impact per Publication (IPP) vs. Citations potential in its subject field

<table>
<thead>
<tr>
<th>Journal</th>
<th>IIP</th>
<th>Citation Potential</th>
<th>SNIP (IIP/Citation Potential)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventiones Mathematicae</td>
<td>1.5</td>
<td>0.4</td>
<td>3.8</td>
</tr>
<tr>
<td>Molecular Cell</td>
<td>13.0</td>
<td>3.2</td>
<td>4.0</td>
</tr>
</tbody>
</table>
SJR: SCImago Journal Rank

All journals have a SCImago Journal Rank (SJR) a prestige metric based on the idea that not all citations are equal.

Prestige transferred when a journal cites
• Citations are weighted depending on where they come from
• A journal’s prestige is shared equally between its citations

SJR normalizes for differences in citation behaviour between subject fields.
Integration of article level metrics into Scopus

Spontaneous knotting of an agitated string (Article)

Raymer, D.M. *, Smith, D.E. **

Department of Physics, University of California at San Diego, Mail Code 0276, 9500 Gilman Drive, San Diego, CA 92093, United States

Abstract

It is well known that a jostled string tends to become knotted; yet the factors governing the "spontaneous" formation of various knots are unclear. We performed experiments inside a box and found that complex knots often form within seconds. We used mathematical knot theory to analyze the knots. Above a critical string length, the knots become more stable. We found that the string length increases with the number of crossings and the M"obius energy. The relative probability of forming a knot decreases exponentially with increasing string length. We propose a simple model to describe the knot formation based on the observation that long, stiff strings tend to form a helical structure when confined. We have analyzed the knots by calculating the number of crossings for the string. Remarkably, almost all the knots were identified as prime knots: 120 different types, having minimum crossing numbers up to 11, were observed. The probability of forming a knot decreases exponentially with increasing string length.

Mendeley readership

Statistics shows how many times Mendeley users have downloaded a specific article to their libraries.

Altmetric is a way to see all of the social or mainstream media mentions gathered for a particular paper as well as reader counts on popular reference managers.
Integration of article level metrics into Scopus

Spontaneous knotting of an agitated string
Raymer D M, Smith D E

Overview

Citation Count
36
Cited by in Scopus

Field Weighted Citation Impact
0.65

Citation Benchmarking
74th percentile

Compared to Multidisciplinary articles of the same age

Mendeley
136 Readers

Mass Media
11 Items

Blogs
8 Posts

Q&A sites
1 Post to Q&A site

Twitter
1630 Mentions

Engagement highlights

❄ Scholarly Activity - 140 readers from 2 sources
Downloads and posts in common research tools

❄ Social Activity - 1713 mentions from 5 sources
Mentions characterized by rapid, brief engagement on platforms used by the general population, such as Twitter, Facebook, and Google +

- 1630 tweets from 1597 accounts
- 6 Reddit posts from 6 accounts
- 41 Facebook posts from 40 accounts
- 1 pin from 1 account
- 35 Google+ posts from 34 accounts

Benchmark highlights
Integration of article level metrics into Scopus

**Citations**

36 Cited by documents

- **Citation Count**
  - 36
  - Cited by in Scopus

- **Field-Weighted Citation Impact**
  - 0.65

- **Citation Benchmarking**
  - 74\(^{th}\) percentile
  - Compared to Multidisciplinary articles of the same age

**Cited by**

- 36 Citations
  - Date range: 2011 to 2015

**Benchmarking**

- Measures of activity relative to specific research domains, based on cited by in Scopus
- Compared to Multidisciplinary articles of same age

**All Citations**

- 74\(^{th}\) PERCENTILE
Integration of article level metrics into Scopus

**Scholarly Activity**

140 readers from 2 sources

Indirect measurement of activity by people using scholarly platforms such as Mendeley and CiteULike.

- **Mendeley**
  - 136 Readers
  - Save to Mendeley

- **CiteULike**
  - 4 Saves

**Mendeley Reader demographics**

View publication in Mendeley

- By discipline:
  - 20% Physics
  - 17% Biological Sciences
  - 9% Computer And Information Science

- By academic status:
  - 33% Ph D Student
  - 11% Post Doc
  - 9% Student Master

- By country:
  - 4% United States
  - 2% Brazil
  - 2% Germany

Map Legend:
1 Reader | 5 Readers
Open Access (OA) Journal indicator

Scopus

Only serial source titles are included in this list. For non-serial content such as books and monographs, please use Document Search.

Search

Browse

- OA in Scopus = **Gold Open Access** and registered at [DOAJ](https://doaj.org) / [ROAD](https://road.library.ubc.ca)
- Currently: out of >21,000 journals = **4,240 OA**
- OA list **updated 3-4x per year**
- Search via **Browse Sources** (journal page)
  - On **Journal level** only
  - Not present in Article Results page yet
- **Future** hopes: cover OA on **article level**
Journal Analyzer – Compare Journals

- Quick, easy access to an objective and transparent overview of the performance of your own and your competitors’ journals over time
  - Compare up to 10 sources on a variety of parameters (SNIP, SJR, Citations, Documents, Percentage Not-Cited, Percentage Review)
  - Provide access to a transparent and objective overview of the journal landscape going back to 1996
Journal Analyzer

Key take-away: Use the analyser to Benchmark and compare
Analyze results

- A tool launched in 2012, providing helpful graphics and table displays to gain more insight into search results
- Measures quantity: # documents on 7 parameters

**Key take-away**: Use Scopus to identify new and interesting areas of research
Analyze results

7 parameters to choose from: Year, Source title, Author name, Affiliation name, Country, Document type and Subject area

Key take-away: Analyse search results to provide high level detail
Scopus Author Profile Page – reviewers or potential authors

Key take-away: Use author searches to find reviewers and authors
**Key take-away:** Use the Author Evaluator to gain the best insight into a potential reviewer or author.
Citation Overview – Authors

Larsen, Trond H.
Science and Knowledge Division, Arlington, United States
Author ID: 8589341000

Documents: 20
Citations: 765 total citations by 530 documents
H Index: 10 The h Index considers Scopus articles published after 1996
Co-authors: 58
Subject area: Environmental Science, Agricultural and Biological Sciences

Citation frequency over time
Citation by journal
“Self citation”

Key take-away: Use the Citation Overview to track author output and output impacts over time.
Summary

• Scopus has **broad coverage** providing the most accurate view of the global research landscape.

• Scopus has a **transparent content selection** process executed by the independent Content Selection & Advisory Board.

• Scopus is working on **content expansion programs** to ensure that coverage, discoverability, profiles and impact measurement for research in all subject fields is accounted for in Scopus.

• **Journal and article level metrics** are available in Scopus and help researchers and research organizations to evaluate research and researchers.

• Scopus and Scopus data is being **used by researchers, publishers and leading institutions** to inform decisions about research output and research assessment.