

## Scopus: Empower Your Research at Every Step

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#### Scopus: Empower Your Research at Every Step



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- Introducing Scopus
- What Content is in Scopus
- Searching Scopus
- Source Browser and Journal Analyser
- Research Excellence
- Scopus Help & Resources



## **Exploring Literature**



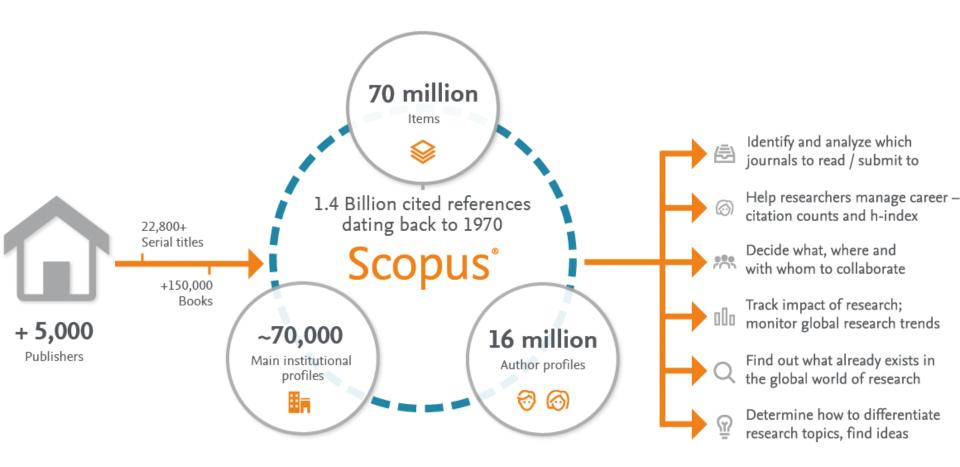
- 2. Keeping up-to-date with your field
- 3. Searching online scientific literature
- 4. Obtaining in-depth knowledge on a subject

The researchers' challenge is in these use cases

Source: Researcher Behaviour, June 2014, Customer Insights

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

## What is Scopus?





## The Bibliographic Indexing Leader

**Scopus** is the largest abstract and citation database of peer-reviewed scholarly literature, making it a highly recommended resource for discovering the world of research

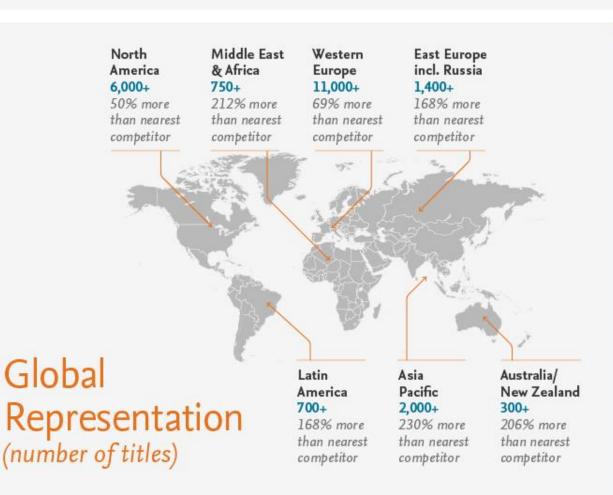
Get to know

## Scopus

Scopus
delivers a
comprehensive
view on the
world of
research.

No packages, no add-ons.

One all-inclusive subscription.





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## Historical Depth



TODAY



1788

Records back to

1788

References are included on records back to

1970

recently added
195 million
references and
now covers
11.5 million
records between

1970-1995

In total:

69+ M records

1.4 B cited



## The Bibliographic Indexing Leader

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## **Expert Curation**

There are 100,750\* active scholarly titles

Of which 43,947\* are peerreviewed



Scopus indexes 22,800+



>Titles on Scopus are rigorously reviewed and selected by an independent board of subject matter experts to include 52% of the world's peer-reviewed scholarly literature.

\* Source: Ulrich's Web Global Serials Directory, August 1, 2017





#### The Premier Source of Profiles

Scopus includes over 12M author profiles, which are automatically created whenever new data is uploaded. We offer a feedback feature to ensure each author's profile is distinct and kept up-to-date. No other A&I database matches Scopus for precision and recall.

Get to know

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# The Scopus Data Model

The data that goes into **Scopus** follows the model that **articles** are written by **authors** who are affiliated with **institutions**.

This relational data model means that Scopus can tell you who is researching what in global literature and where they are doing it with higher accuracy than anyone else.





## Quiz

How many items are there in Scopus?



## What content is in Scopus?



### Global Representation means global discovery

Across all subjects and content types

## Scopus includes content from more than 5,000 publishers and 105 different countries

- 40 different languages covered
- Updated daily
- Multiple regional content types covered (journals, conferences, books, book series)

Number of Journals by subject area	Journals	Conference	Books
Physical Sciences 12,263	23,507 Peer-reviewed journals	106K Conference events	613 Book series
Health Sciences 13,819	<b>301</b> Trade journals	8.3M Conference papers	38K Volumes
	3,784 Active Gold Open Access journals >8,000 Articles in Press Full metadata, abstracts and cited references	Mainly Engineering and Computer Sciences	1.5M Items
Social Sciences 10,905 Life Sciences 6,809			165,768 Stand-alone books
			1.34M Items
			Focus on Social Sciences and A&H

Source: Scopus.com, January 30, 2018



## World university rankings – QS

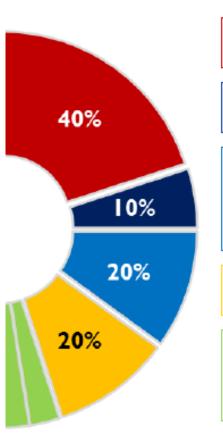
University Rankings use a combination of expert opinion (surveys) and objective data (including from Scopus)

QS

QS World University Rankings - http://www.topuniversities.com/university-rankings/world-university-rankings

Published since 2004 by Quacquarelli Symonds

Formerly (until 2009) produced with Times Higher Education as THE-QS World University Rankings



#### Academic reputation (40%)

From QS Global Academic Survey with almost 63,700 responses for 2014/15

#### Employer reputation (10%)

From QS Global Employer Survey with 28,800 responses for 2014/15

Publication and citation data from Scopus is used

#### Citations per faculty (20%)

Citation counts from last five years considered

Citation data source: Scopus Author self-citations excluded Normalised by staff FTE figures Scopus

#### Faculty/student ratio (20%)

FTE values used for faculty and students

#### International students (5%)

Proportion of students that are international

#### International faculty (5%)

Proportion of faculty that are international

## **QS World University Rankings**



- Teaching and research outputs are key pillars of an institution's mission. Institutional research
  quality is measured using the *Citations per Faculty* metric. To calculate it, the total number of
  citations received by all papers produced by an institution is calculated across a five-year period by
  the number of faculty members at that institution.
- To account for the fact that different fields have very different publishing cultures papers concerning the Life Sciences are responsible nearly half of all research citations as of 2015 citations are normalized. This means that a citation received for a paper in Philosophy is measured differently to one received for a paper on Anatomy and Physiology, ensuring that, in evaluating an institution's true research impact, both citations are given equal weight.
- All citations data is sourced using Elsevier's Scopus database, the world's largest repository of academic journal data. This year, QS assessed 99 million citations from 10.3 million papers once self-citations were excluded.

## World university rankings – THE

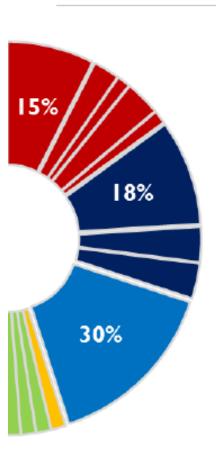
University Rankings use a combination of expert opinion (surveys) and objective data (including from Scopus)

THE

THE World University Rankings - http://www.timeshighereducation.co.uk/world-university-rankings/

Published since 2010 by the Times Higher Education

Broke away from the QS-partnered rankings prior to 2010 edition



#### Teaching: the learning environment (30%)

Academic reputation survey: reputation for teaching (15%)

Staff to student ratio (4.5%)

Ratio of doctoral to bachelor's degrees awarded (2.25%)

(Field-weighted) number of doctorates awarded per staff FTE (6%)

Institutional income per staff FTE (2.25)

Publication and citation data from Scopus is used

#### Research: volume, income and reputation (30%)

Academic reputation survey: reputation for research excellence (18%)

(Field-weighted) research income per staff FTE (6%)

(Field-weighted) research output per staff FTE (6%)

#### Citations: research influence (30%)

(Field-weighted) citations in 2006-11 to papers published 2006-10

Scopus

#### Industry income: innovation (2.5%)

Income from industry per staff FTE

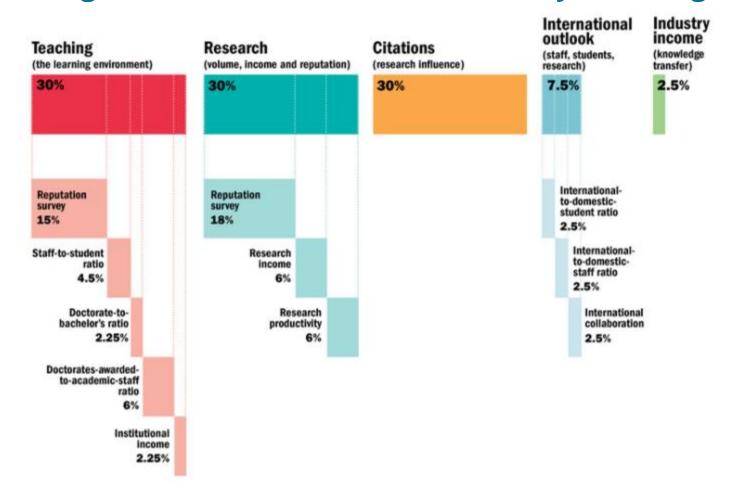
#### International outlook: staff, students and research (7.5%)

Ratio of international to domestic students (2.5%)

Ratio of international to domestic staff (2.5%)

(Field-weighted) proportion of research papers with international co-authors (2.5%)

## **Times Higher Education World University Rankings**





## **Times Higher Education World University Rankings**

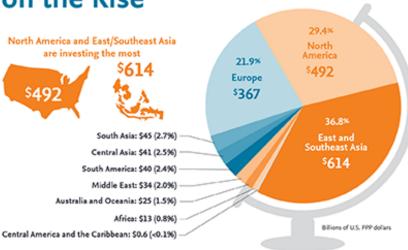
- THE examines research influence by capturing the number of times a university's published work is cited by scholars globally. Elsevier provides bibliometric data for this, and examines more than 56 million citations from 11.9 million journal articles, conference proceedings and books and book chapters published over five years. The data include the 23,000 academic journals indexed by Elsevier's Scopus database and all indexed publications between 2011 and 2015. Citations to these publications made in the six years from 2011 to 2016 are also collected.
- The data is normalised to reflect variations in citation volume between different subject areas. This means that institutions with high levels of research activity in subjects with traditionally high citation counts do not gain an unfair advantage.
- Country-adjusted and non-country-adjusted raw measure of citations scores are blended
- In 2015-16, THE excluded papers with more than 1,000 authors because they were having a disproportionate impact on the citation scores of a small number of universities. This year, these papers were incorporated. THE has worked with Elsevier to develop a new fractional counting approach that ensures that all universities where academics are authors of these papers will receive at least 5 per cent of the value of the paper, and where those that provide the most contributors to the paper receive a proportionately larger contribution.

# The power of Scopus data & National Science Foundation (NSF)

Elsevier Research Intelligence

Elsevier's Scopus Supports the NSF SEI 2016

Global Investment in R&D on the Rise



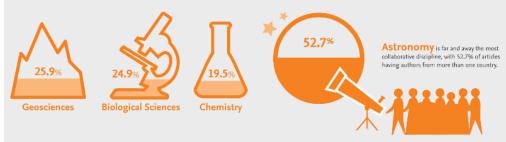
Source: National Science Board. 2016. Science and Engineering Indicators 2016. Arlington, VA: National Science Foundation (NSB-2016-1)

https://www.elsevier.com/research-intelligence/promo/nsf-sei



#### Research without Borders

The highest levels of international collaboration takes place in the Geosciences, Biological Sciences, and Chemistry.



"The use of the Scopus database represents a substantial increase in the global coverage of bibliometric data compared to prior years. The change...allows NSF to present data on the most highly cited S&E publications as well as on a broader set of publications that provide insight into trends in emerging and developing countries."

Science and Engineering Indicators 2016



## Leading in Quality & Quantity

**Scopus** continually processes, enriches and makes available a vast quantity of data, with rigorous quality-control standards to maintain the integrity of the database.

Get to know

## Scopus

Scopus
delivers a
comprehensive
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# The Gold Standard







Scopus is recognized for its excellence by

4,000 universities







150 leading research organizations

who continue to choose Scopus for research assessment and evaluation purposes over any other competitor.









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Get to know

## Scopus

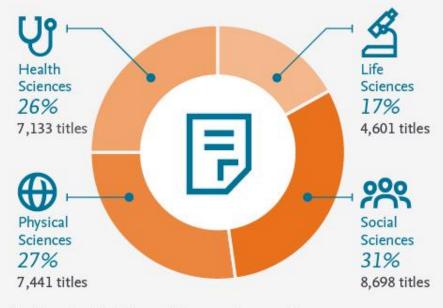
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# Complete Coverage Across the Sciences

Scopus integrates broad and deep coverage of quality peer-reviewed literature and web resources across science, technology, health, the social sciences and the humanities. Titles on Scopus are classified under four subject clusters.



<sup>\*</sup> Includes active titles. Titles may fall into more than one subject area





## Leading in Quality & Quantity

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## A World of Data to Mine

3.7 TB

Data stored in content repository





1.4 billion cited references



70,000 institutional profiles



2 12 million author profiles

Scopus delivers all metadata as provided by publishers, including: author(s), affiliation(s), document title, year, electronic identification (EID), source title, volume/issue/pages, citation count(s), source, document type and digital object identifier (DOI).



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No packages, no add-ons.

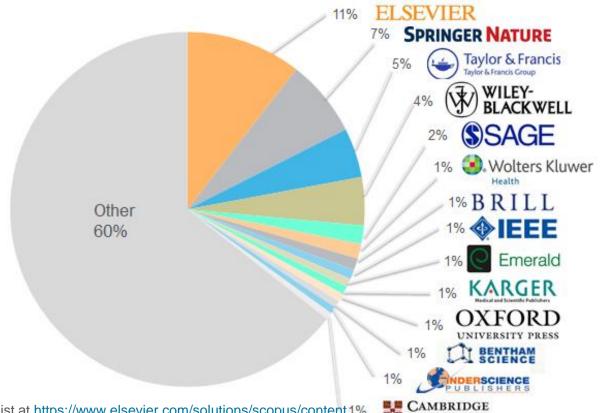
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## Scopus

#### The Bibliographic Index Leader

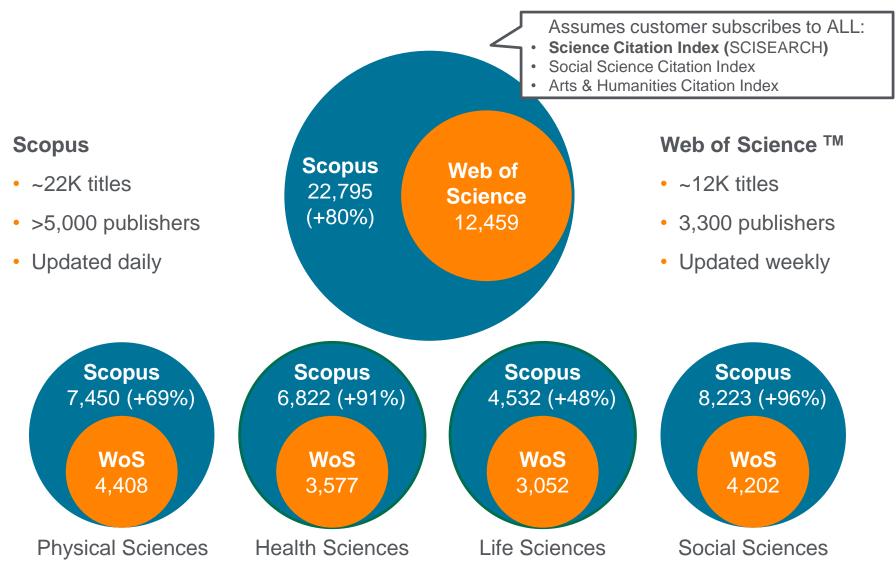
>70M records and over 23,500 active titles from more than 5K international publishers. More than 3,759 Gold Open Access journals indexed, 165K books and 8,3M conference proceedings\*

Unbiased, comprehensive journal coverage with titles from many reputable scholarly publishers:



Source: Feb 2018 title list at https://www.elsevier.com/solutions/scopus/content 1%

## **Overall Content Comparison with Web of Science**



Source: Web of Science Real Facts, Web of Science Core Collection title list and Scopus' own data (May 2016)

## **Broader coverage = higher citations**



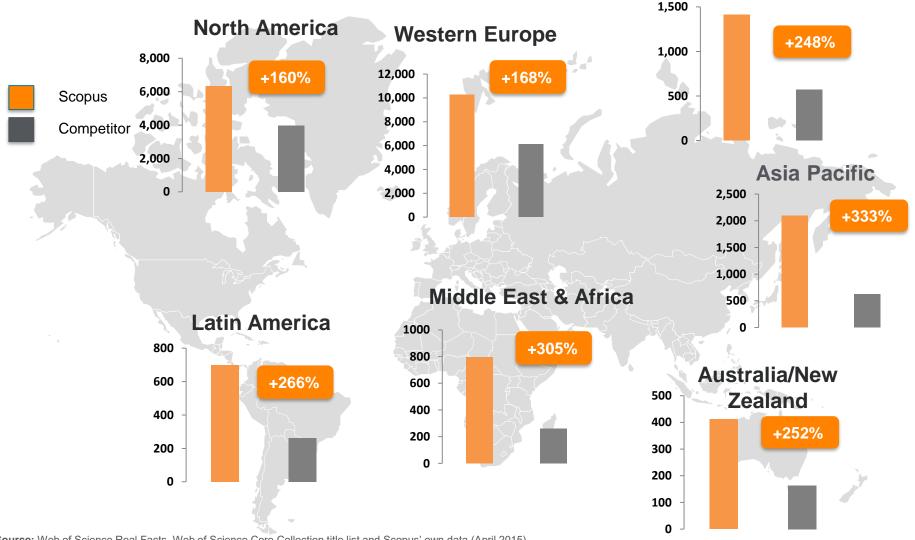
#### Web of Science®

Title: Initial sequencing and analysis of the human genome
Author(s): Lander ES; Linton LM; Birren B; et al.
Group Author(s): Int Human Genome Sequencing Conso
Source: NATURE Volume: 409 Issue: 6822 Pages: 860-921 DOI: 10.1038/35057062 Published: FEB 15 2001

8,870 h Web of Science

What does Scopus's content advantage mean for emerging countries?

Eastern Europe incl Russia



## Funding data being added to Scopus as we speak



 Add full text acknowledgement sections to Scopus

#### The Role of Gender in Scholarly Authorship

ınding

Jevin D. West 🗖, Jennifer Jacquet, Molly M. King, Shelley J. Correll, Carl T. Bergstrom

Published: July 22, 2013 • http://dx.doi.org/10.1371/journal.pone.0066212

#### Abstract

Gender disparities appear to be decreasing in academia according to a number of metrics, such as grant funding, hiring, acceptance at scholarly journals, and productivity, and it might be tempting to think that gender inequity will soon be a problem of the past. However, a large-scale analysis based on over eight million papers across the natural sciences, social sciences, and humanities reveals a number of understated and persistent ways in which gender inequities remain. For instance, even where raw publication counts seem to be equal between genders, close inspection reveals that, in certain fields, men predominate in the prestigious first and last author positions. Moreover, women are significantly underrepresented as authors of single-authored papers. Academics should be aware of the subtle ways that gender disparities can occur in scholarly authorship.

Copyright: © 2013 West et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Funding: This work was supported in part by NSF grant SBE-0915005 to CTB, NSF Graduate Research Fellowship grant DGE-1147470 to MMK, and a generous gift from JSTOR. The funders had no role in study design, data collection and analysis, decision to publish, or preparation of the manuscript.

Competing interests: The authors have declared that no competing interests exist.

PLoS ONE

Volume 8, Issue 7, 22 July 2013, Article number e66212

Open Acces

The Role of Gender in Scholarly Authorship (Article)

West, J.D.<sup>a</sup> M, Jacquet, J.<sup>b</sup>, King, M.M.<sup>c</sup>, Correll, S.J.<sup>c</sup>, Bergstrom, C.T.<sup>ad</sup>

**Funding:** This work was supported in part by NSF grant SBE-0915005 to CTB, NSF Graduate Research Fellowship grant DGE-1147470 to MMK, and a generous gift from JSTOR. The funders had no role in study design, data collection and analysis, decision to publish, or preparation of the manuscript.

Gender disparities appear to be decreasing in academia according to a number of metrics, such as grant funding, hiring, acceptance at scholarly journals, and productivity, and it might be tempting to think that gender inequity will soon be a problem of the past. However, a large-scale analysis based on over eight million papers across the natural sciences, social sciences, and humanities reveals a number of

#### **Funding Details**

Number; Acronym; Sponsor: SBE-0915005; NSF; National Science Foundation

EMTREE medical terms: article; author, classification algorithm; female; funding; gender bias; human; humanities; male; natural science; productivity; publishing; scholarly authorship; scientil literature; sex ratio; social discrimination; sociology; trend study; writing

MeSH: Authorship; Humans; Publications; Sex Factors; Sexism; Time Factors

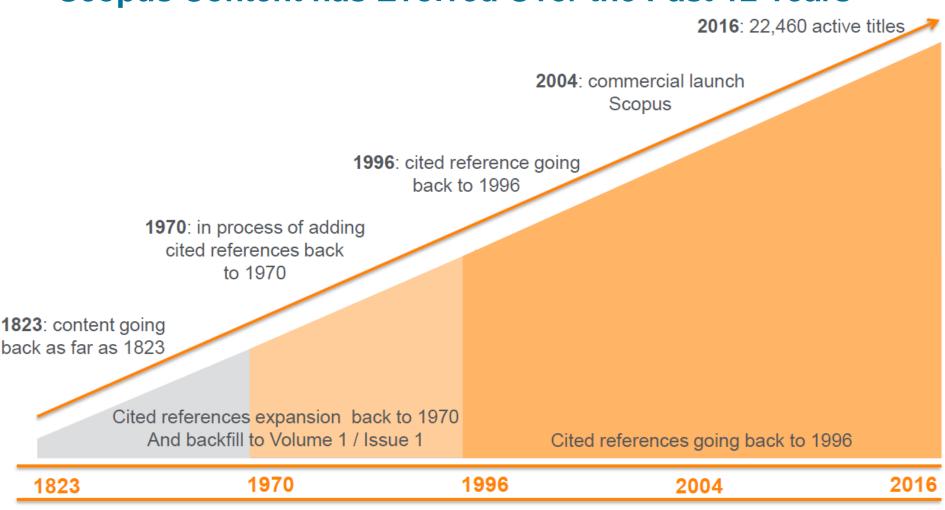
Medline is the source for the MeSH terms of this document.

ISSN: 19326203 CODEN: POLNC Source Type: Journal Original language: English
DOI: 10.1371/journal.pone.0068212 PubMed ID: 23894278 Document Type: Article

**Funding Details** 

Number; Acronym; Sponsor: SBE-0915005; NSF; National Science Foundation

## **Scopus Content has Evolved Over the Past 12 Years**











## **Ongoing Scopus Expansion Programs at No Extra Costs**



Pre-1996 Cited Reference Expansion Program Cited references going back to 1970, 8M+ articles



#### **Conference Expansion Program**

+1,000 new titles, +6,000 events, +400K papers and +5M references

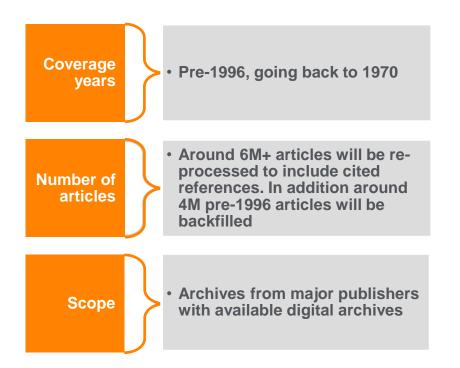


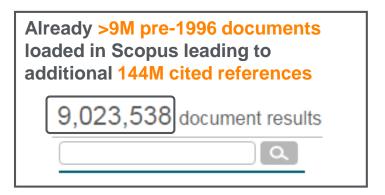
#### **Books Expansion Program**

120K books back to 2005. +20K every year

Already in Scopus: Elsevier, Springer, Wiley, Brill, De Gruyter, Woodhead, Karger, Oxford University Press, Edward Elgar, Maney, Intellect, IOS Press, Pan Stanford, University of California Press, Princeton University Press, Edinburgh University Press, Delft University Press, Duke University Press, McGill Queens University Press, Project Muse (60+ UPs), OECD and more...

## Adding cited references to pre-1996 items in Scopus





#### Impact this project has on Scopus and on you:

- 62 Full publisher archives were/are processed leading to >9M new/updated articles.
- Author profiles and accompanying h-indexes are more complete and at par or above the competition.
- >40% Of all pre-1996 content in Scopus has been updated or added via this initiative.

# *h*-index of researchers who started publishing before 1996 is increasing

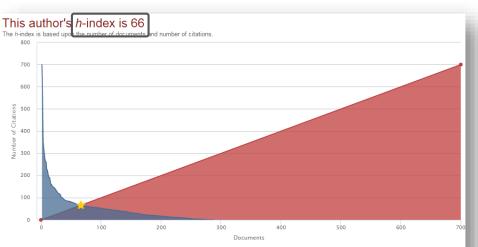
## Scopus

Jean Pierre Sauvage (Nobel prize in Chemistry, 2016)

Universite de Strasbourg, Institut de Science et d'Ingénierie Supramoléculaires

(ISIS), Strasbourg, France

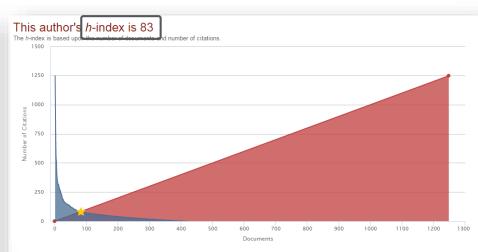
Author ID: 35515477700



Documents published between: 1996 - 2016

Number of publications: 292 Number of citations: 15,346

h-index: 66



Documents published between: 1971 - 2016

Number of publications: 418 Number of citations: 26,767

h-index: 83

# Increasing Coverage of Conference Papers with Focus on Engineering and Computer Sciences

Coverage years

• Backfill from 2005 - 2012 (8 years)

Number of conferences

 Around 1,000 new conference titles, 6,000 conference events, 400K conference papers and 5M references

Which conferences

 Serial and one-off conferences from authoritative, respected lists. Focus or engineering and engineering-related subject fields

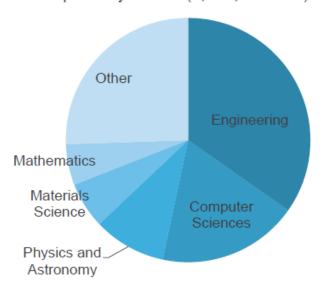


CRA
Computing Research

"Relying on journal publications as the sole demonstration of scholarly achievement,

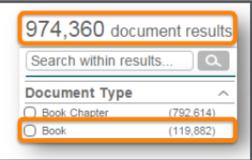
ignores significant evidence of accomplishment in computer science and engineering. CRA expresses appreciation for the steps Elsevier has taken to improve the coverage of Scopus in recent years."

Breakdown of conference papers in Scopus per subject field (7,285,226 total):



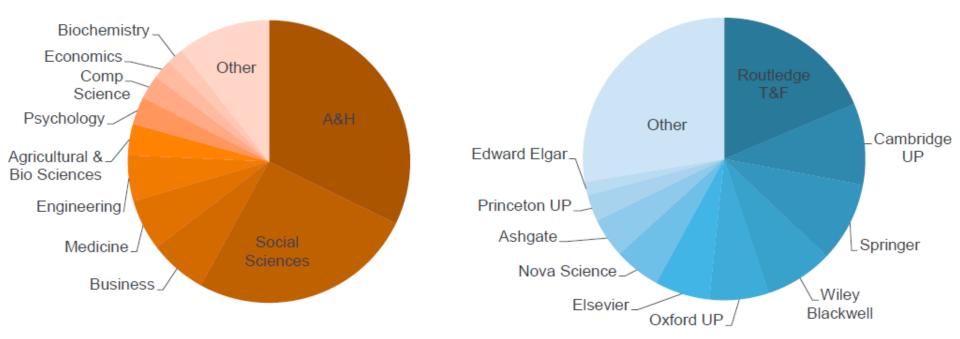
## Increasing Coverage of Books with Focus on Social Sciences and Arts & Humanities

In addition to 30K book volumes from series, 120K books loaded in Scopus. 15 – 20K new books per year going forward



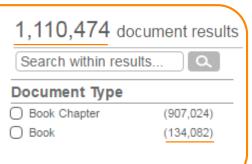
Scopus books coverage breakdown per subject field:

Scopus books coverage breakdown per publisher:



## Non-serial books in Scopus

More than 134K books are present in Scopus today. The main area of focus is non-serial books in Humanities and Social Sciences. This, next to the 34K book volumes already online, yield over 1.1M items in Scopus.com.



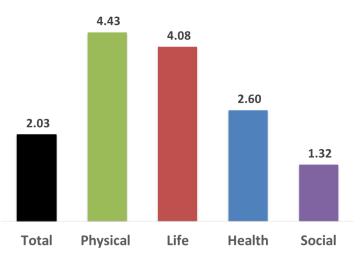


Books to be included in World University Rankings analysis for first time

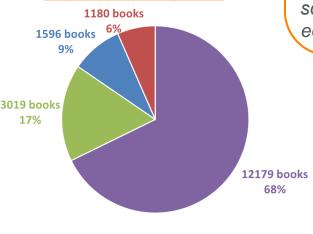
Arts and humanities research will be better represented in the 2016-17 global league table

'The addition of books ensures that the rankings go even further in capturing research excellence in the arts, humanities and social sciences', per THE rankings editor Phil Baty.

#### Average Citations per Book:



#### Top cited subjects:



■ Social Sciences ■ Physical Sciences ■ Health Sciences ■ Life Sciences

## **Transparent Scopus selection criteria for serial content**

All titles should meet all minimum criteria in order to be considered for Scopus review:

Peer-review

**English** abstracts

Regular publication

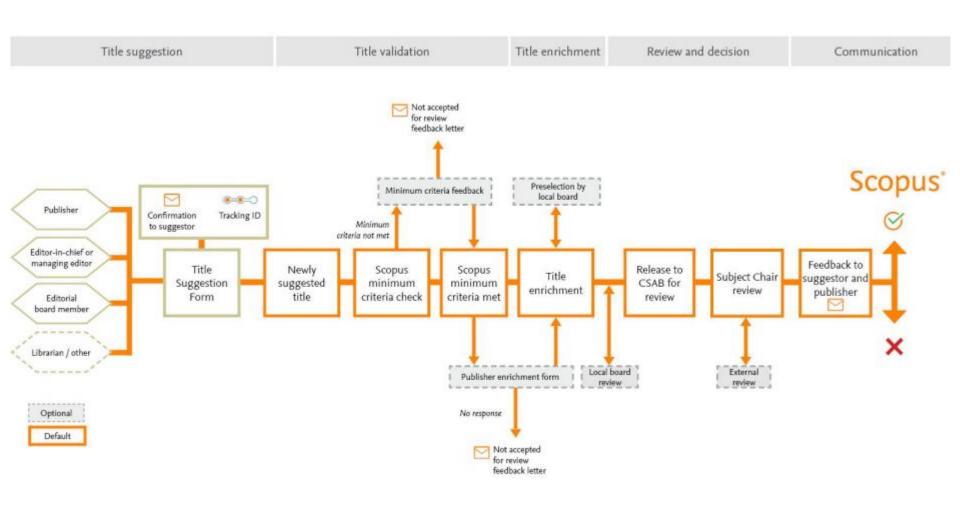
Roman script references

Pub. ethics statement

Eligible titles are reviewed by the Content Selection & Advisory Board according to a combination of 14 quantitative and qualitative selection criteria:

Journal Policy	<b>Quality of Content</b>	Journal Standing	Regularity	Online Availability
<ul> <li>Convincing editorial concept/policy</li> <li>Type of peer-review</li> <li>Diversity geographic distribution of editors</li> <li>Diversity geographic distribution of authors</li> </ul>	<ul> <li>Academic contribution to the field</li> <li>Clarity of abstracts</li> <li>Quality and conformity with stated aims &amp; scope</li> <li>Readability of articles</li> </ul>	<ul> <li>Citedness of journal articles in Scopus</li> <li>Editor standing</li> </ul>	No delay in publication schedule	<ul> <li>Content available online</li> <li>English-language journal home page</li> <li>Quality of home page</li> </ul>

# Continuous, online title review process for selecting new journals for Scopus coverage





## Objective, High-quality Resources

All titles on **Scopus** are selected by the independent Content Selection & Advisory Board, which is strict about quality and publishing ethics. Furthermore, we are transparent about our selection policy, criteria and title evaluation process: https://www.elsevier.com/solutions/scopus/content/content-policy-and-selection

Get to know

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Content
Selection &
Advisory Board
(CSAB)

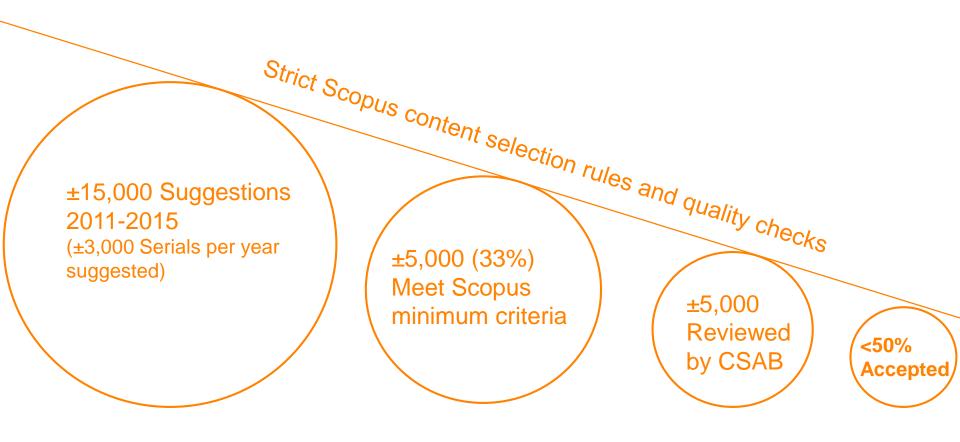
All journals covered by Scopus are approved by an independent Content Selection & Advisory Board (CSAB). CSAB members are subject experts from all over the world and chosen for their expertise in specific subject areas. Many have (journal) editor experience.





# Less than half of the reviewed titles are selected for Scopus coverage

The CSAB is selective and strict on quality: in total 5,411 **titles reviewed** (2011 –2015) of which 2,587 **(48%) accepted** for Scopus



# Ongoing content curation of the Scopus base to ensure continuous high quality content

Curation of the full journal base is essential and expected by our customers and users.



Direct feedback from users and stakeholders on poor performing journals

Identification of poor performing journals using metrics and benchmarks

"Radar" to predict journals with outlier performance

Review:

Re-evaluation by the Content Selection & Advisory Board (CSAB)

Curate:

**Content Curation** 

# Scopus

## Transparent, annual re-evaluation process to ensure titles continue to meet high quality standards

#### **Full Scopus Journal base**

Year 1

Analyze full Scopus journal corpus performance based on set metrics & benchmarks

Flag underperforming journals & inform journal publishers

Year 2

Analyze full Scopus journal corpus performance based on set metrics & benchmarks

Flag underperforming journals & inform journal publishers

**CSAB** review

If a journal underperforms for <u>2 consecutive years</u>, CSAB will re-evaluate the title based on Scopus selection criteria

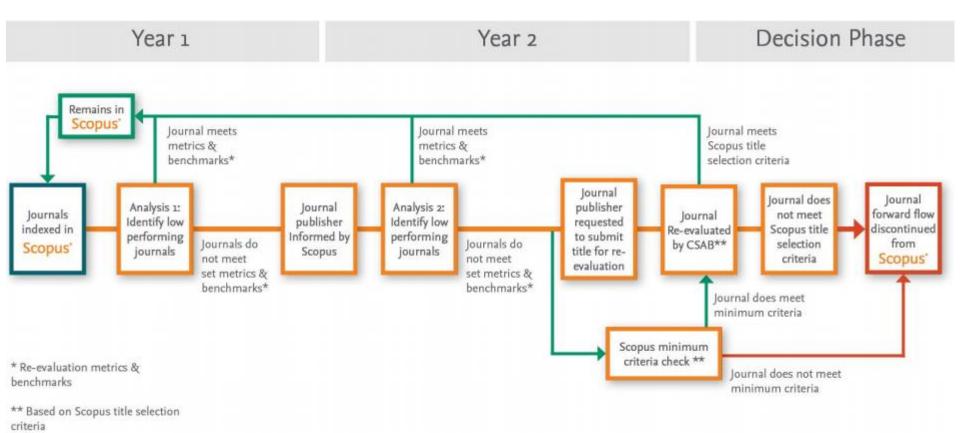
Flagged journals for which concerns are raised, CSAB will re-evaluate the title based on Scopus selection criteria

**CSAB** decision

Continue forward flow

or

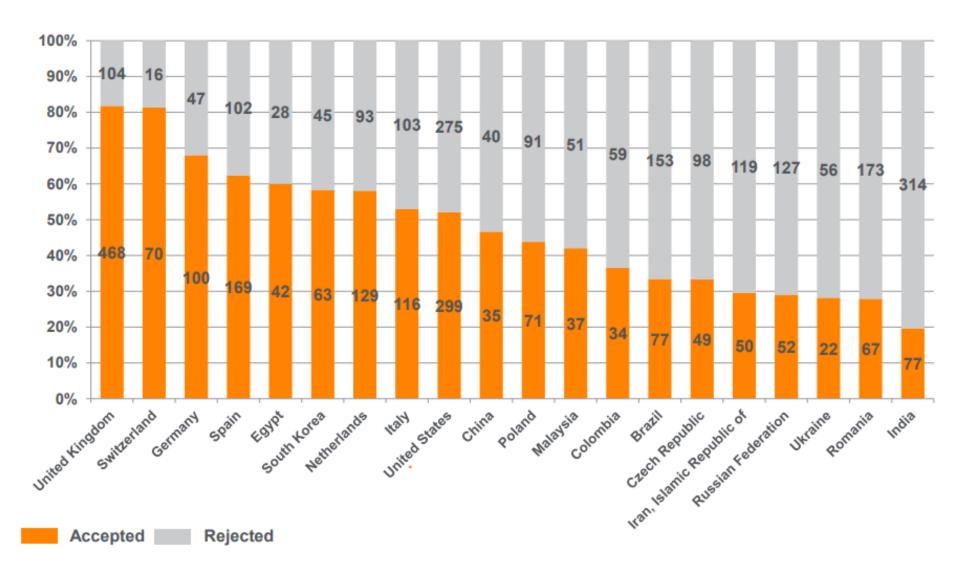
Discontinue forward flow



## "Radar" that identifies journals with outlier performance

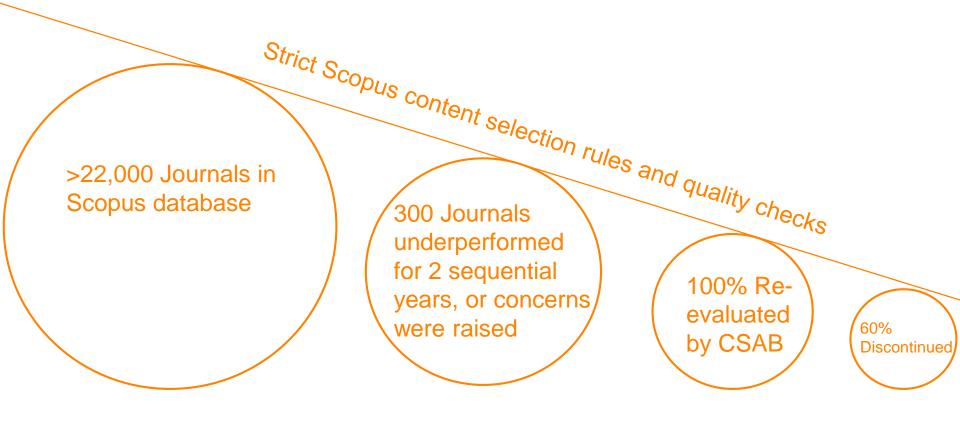


- Elsevier colleagues were challenged to create a "Radar" that can identify, flag and ultimately predict outlier performance of journals
- Examples of predicting behaviours:
  - Total article output and sudden article output growth
  - Geographical diversity among authors and editors
  - Shift in received citations and percentage of self-citations
- The "radar will be rolled out to flag outlier journals on a regular basis
- Flagged journals will be reviewed by the CSAB for continuation of Scopus coverage



#### 2016 Re-evaluation results

- All journal publishers were informed by Scopus of the Re-evaluation outcome of their journal in December 2016.
- If discontinued = Journal forward flow discontinued per January 1, 2017.



#### Quiz

 How many criteria does the CSAB take into consideration when deciding if a journal qualifies to be indexed on Scopus?

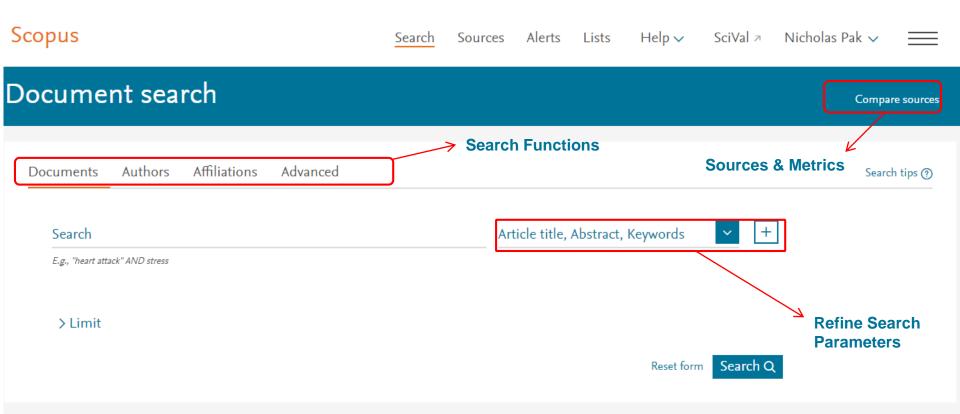


## **Searching Scopus - Demonstration**



## **Key Features & Functions - Scopus**

- Facilitates major tasks researchers have
  - Searching citations & indexes
  - Browsing & searching sources
  - Viewing & storing articles
  - Search History
  - Documents Download
  - Author Search
  - Affiliation Search
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AUTH

Help 🗸

SciVal *>* 

Nicholas Pak V

#### Advanced search

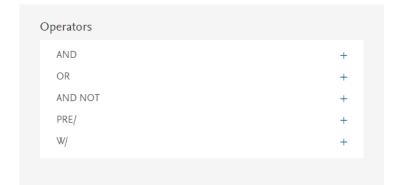
Compare sources

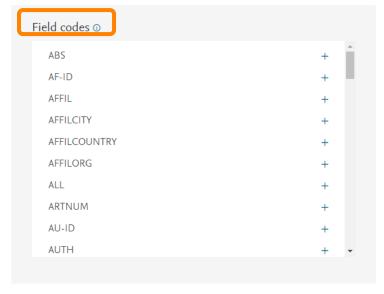
Authors **Affiliations** Advanced Documents Search tips (?) Enter query string ((Title-ABS-Key(adult\* OR "young adult\*" OR "middle\*age\*" OR inactiv\* OR sedentary)) AND ((TITLE-ABS-KEY(exerc\* OR "physical exercise\*" Operators ÖR aerobic\* ÓR intermittent OR accumulat\* OR interval\* OR "short bout\*" OR "multiple bout\*")) OR (TITLE-ABS-KEY(continu\* OR "long bout\*" OR "single bout\*)))) AND (TITLE-ABS-KEY(glucose OR "glucose intoleran\*" OR "blood glucose" OR \*insulin\* OR "insulin sensitivity" AND OR "insulin resistan\*" OR \*glyc\*mi\*)) OR ALL("heart attack") AND AUTHOR-NAME(smith) AND NOT TITLE-ABS-KEY(\*somatic complaint wom?n) AND PUBYEAR AFT 1993 SRCTITLE(\*field ornith\*) AND VOLUME(75) AND ISSUE(1) AND PAGES(53-66) PRE/ W/ Outline query Add Author name / Affiliation Clear form Search Q Outline query Operators and field breaks lines at codes can be Field codes ① logical points which selected here, or helps structure the ABS typed into the box search and identify AF-ID **AFFIL** errors **AFFILCITY AFFILCOUNTRY AFFILORG** Advanced search box ALL allows combining of ARTNUM many codes, using

operators – which

allows for complex searches

### **Advanced Search Field Codes – 64!!**





Operators and field codes can be added by typing it in the query field, clicking on the "+" icon or by clicking on the "add" button in the example pop out.

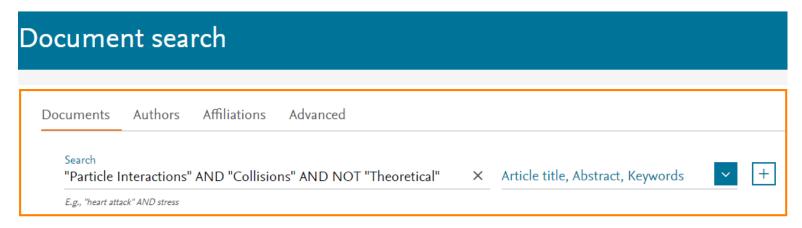
ALL
ABS
AF-ID
AFFIL
AFFILCITY
AFFILCOUNTRY
AFFILORG
ARTNUM
AU-ID
AUTH
AUTHFIRST
AUTHLASTNAME
AUTHCOLLAB
AUTHKEY
BOOKPUB
CASREGNUMBER
CHEM
CHEMNAME
CODEN
CONF
CONFLOC

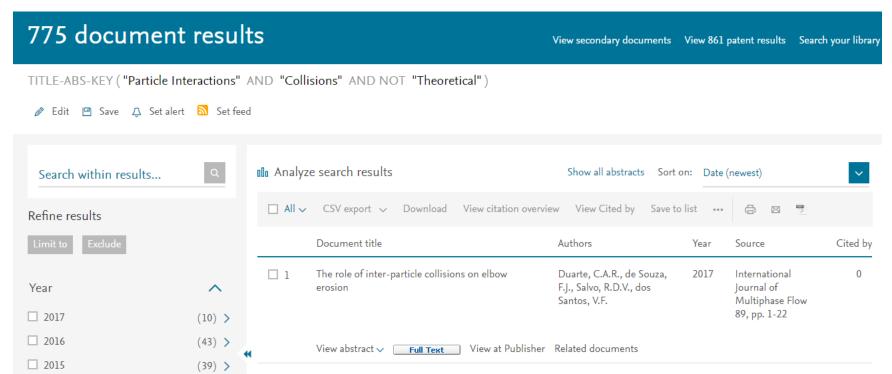
ALL

CONFNAME	
CONFSPONSORS	
DOCTYPE (XX)	
DOI	
EDFIRST	
EDITOR	
EDLASTNAME	
EISSN	
EXACTSRCTITLE	
FUND-ALL	
FIRSTAUTH	
FUND-SPONSOR	
FUND-ACR	
FUND-NO	
INDEX	
INDEXTERMS	
ISBN	
ISSN	
ISSNP	
ISSUE	
KEY	
LANGUAGE	

MANUFACTURER		
DRCID		
PAGEFIRST		
PAGELAST		
PAGES		
PMID		
PUBDATETXT		
PUBYEAR		
REF		
SEQBANK		
SEQNUMBER		
SRCTITLE		
SRCTYPE (XX)		
SUBJAREA(XX)		
TITLE		
TITLE-ABS		
TITLE-ABS-KEY		
TITLE-ABS-KEY-AUTH		
RADENAME		
/OLUME		
VEBSITE		

## Advanced search strings can be used in Document Search tab.





### **Search Functionality**

#### Choosing Search Terms

- Use specific search terms that are closely related to your research topic
- Include alternative words and abbreviations
- Avoid words that are too general

#### Use Boolean Operators

- AND
  - Finds documents that contain ALL of the terms
  - Use this when the terms must appear and may be far apart from each other
  - Example: "Programmable Logic Controller AND Elevator"
- OR
  - Finds documents that contain any of the terms
  - Use OR when at least one of the terms must appear (such as synonyms, alternate spellings, or abbreviations)
  - Example: micromouse OR picomouse

#### AND NOT

- Excludes documents that include the specified term from the search
- Use AND NOT to exclude specific terms. This connector must be used at the end of a search.
- Example: micromouse OR picomouse AND NOT rodent

### **Search Functionality**

#### Finding Variations of a Word

- To search for an exact phrase, including any stop words, spaces and punctuation, enclose the phrase in braces or inverted commas: {air con} or "air con"
- Special characters are included in the search
- Wildcards are searched as characters

#### Finding Phrases

- Use wildcard characters to search for variations of a word
- Question mark (?) replaces a single character anywhere in a word. Use
   1 question mark for each character you want to replace
- Asterisk (\*) replaces multiple characters anywhere in a word; it can be used to replace 0 and more characters.

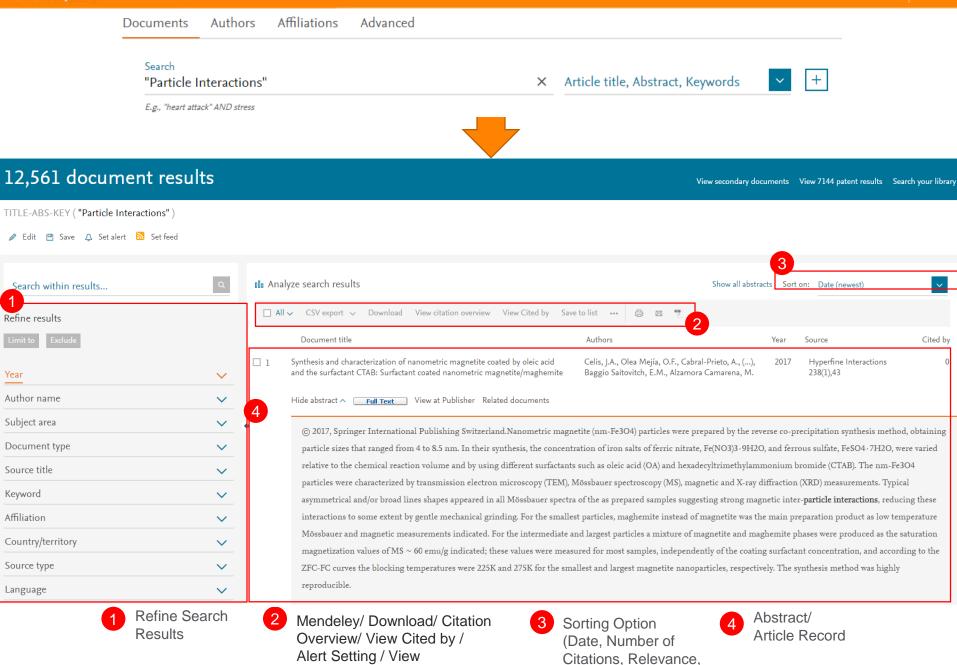
#### **Exercise**

#### Remote Control Automated Fire Ignition System

- 2 Document Results Search for "Fire Ignition System", add search field, use the AND Boolean modifier, and include "Automat\*"
- 113 Document Results Search for "Ignition System", add search field, use the AND Boolean modifier, and include "Automat\*"

#### Smart Controller for Air Conditioning System

- 2,121 Document Results Search for "controller", add search field, use the AND Boolean modifier, and include "air con\*"
- 4 Document Results Search for "smart controller", add search field, use the AND Boolean modifier, and include "air con\*"
- Interpretation of the deep cracking phenomenon of tungsten monoblock targets observed in high-heat-flux fatigue tests at 20 MW/m2
  - 1 Document Results Search for "deep cracking phenomenon", add search field, use the AND Boolean modifier, and include "tungsten monoblock"



First Author, Source Title)

References etc

Refine results

Author name

Subject area

Source title

Keyword

Affiliation

Source type

Language

Document type

View all metrics >

Author/Article Information

**Metrics** 

Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and As Volume 506, Issue 3, 1 July 2003, Pages 250-303

#### GEANT4 - A simulation toolkit (Article)

Agostinelli, S.ªe, Allison, J.ªs 💌, Amako, K.e, Apostolakis, J.ª, Araujo, H.ªi, Arce, P.ªimx, Asai, M.gai, Axen, D.u, Banerjee, S.lbh, Barrand, G.an, Behner, F.l, Bellagamba, L.e, Boudreau, J.bc, Broglia, L.ar, Brunengo, A.c, Burkhardt, H.a., Chauvie, S.bbk, Chuma, J.h, Chytracek, R.a., Cooperman, G.ay, Cosmo, G.a., Degtyarenko, P.d., Dell'Acqua, A.ai, Depaola, G.ty, Dietrich, D.af, Enami, R.ab, Feliciello, A.bi, Ferguson, C.bg, Fesefeldt, H.lo, Folger, G.a., Foppiano, F.ac, Forti, A.as, Garelli, S.ac, Gianni, S.a., Giannitrapani, R.bn, Gibin, D.mbb, Gomez Cadenas, J.J.mbb, Gonzalez, Lq, Gracia Abril, G.n., Greeniaus, G.pag, Greiner, W.af, Grichine, V.f.,

- a European Organization for Nuclear Research (CERN) Switzerland, United States
- b European Space Agency (ESA), ESTEC, Netherlands

stituto Nazionale di Fisica Nucleare (INFN), Italy

Abstract

▼ View references (

GEANT4 is a toolkit for simulating the passage of particles through matter. It includes a complete range of functionality including tracking, geometry, physics models and hits. The physics processes offered cover a comprehensive range, including electromagnetic, hadronic and optical processes, a large set of long-lived particles, materials and elements, over a wide energy range starting, in some cases, from 250 eV and extending in others to the TeV energy range. It has been designed and constructed to expose the physics models utilised, to handle complex geometries, and to enable its easy adaptation for optimal use in different sets of applications. The toolkit is the result of a worldwide collaboration of physicists and software engineers. It has been created exploiting software engineering and object-oriented technology and implemented in the C++ programming language. It has been used in applications in particle physics, nuclear physics, accelerator design, space engineering and medical physics. © 2003 Elsevier Science B.V. All rights reserved.

Author keywords

Distributed software development; Geometrical modelling; Object-oriented technology; Particle interactions; Simulation; Software engineering

Indexed keywords

Particle interactions

Engineering controlled terms: Computer simulation; High energy physics; Nuclear physics; Object oriented programming; Particle accelerators; Software engineering

egineering main heading: Nuclear instrumentation

ISSN: 01689002 CODEN: NIMAE Source Type: Journal Original language: English

**Cited Documents** 

**Related Documents** 

View in search results format

References (131)

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Abstract and Keywords of the articles

- ) Giani, S.
- 1 (1998) GEANT4: An Object-oriented Toolkit for Simulation in HEP. Cited 21 tmm CERN/LHCC 98-44, GEANT4 Web page

http://cern.ch/qeant4

- Amako, K.
- 2 Proceedings of CHEP94

San Francisco, CA, USA, LBL-35822 CONF-940492

Citations in Scopus

9th Percentile

140.44 Field-Weighted Citation Impact

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Metrics ②

The design of JLAMT: An aided tool for large-scale complex physical modeling

Ma, Y., Fu, Y., Qin, G.M. (2019) Advances in Intelligent Systems and Computing

Geant4 simulation for commissioning of proton therapy centre

Tan, H.Q., Phua, J.H., Tan, L. (2019) IFMBE Proceedings

Quantifying the spatial and angular distribution of lethal neutrons for treating planning

Yeo, J.J.W., Tan, H.Q., Ang, K.W. (2019) IFMBE Proceedings

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The Geant4 toolkit: Simulation capabilities and application results Pia, M.G.

(2003) Nuclear Physics B - Proceedings Supplements

Simulation of antiproton-nuclear annihilation at rest

Kossov, N

(2004) IEEE Nuclear Science Symposium Conference Record

Hadronic shower models in GEANT4 - The frameworks Wellisch, I.P.

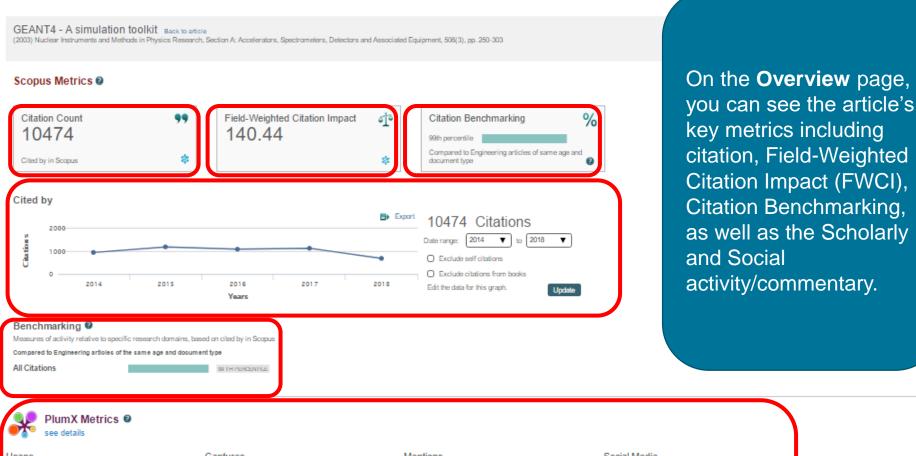
(2001) Computer Physics Communications

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Find more related documents in Scopus based on:

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#### Metric Details

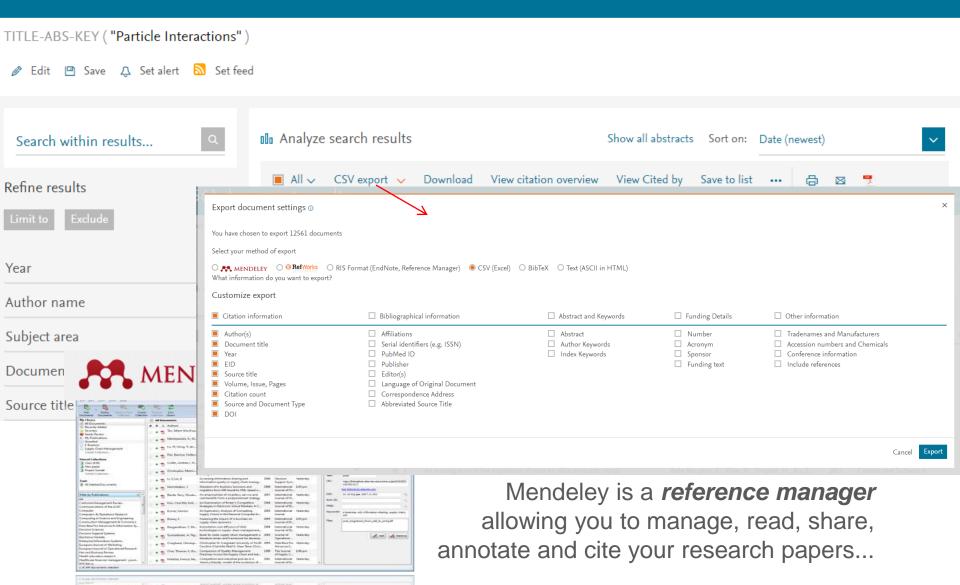


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### **Export to Mendeley**

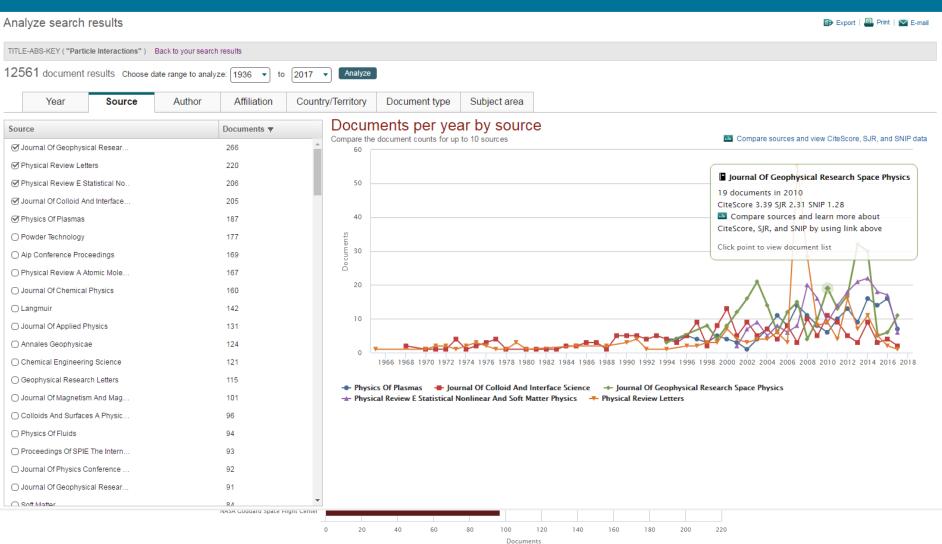
#### 12,561 document results

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## **Analyze Results**

#### Analyze search results

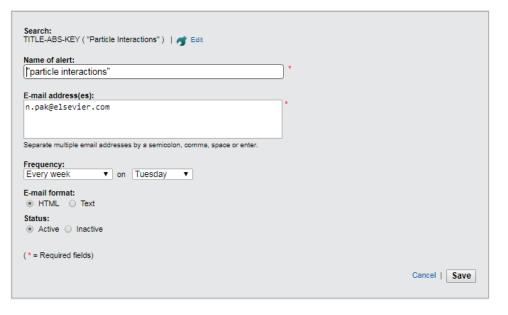


### **Setting up Search Alerts**

Scopus Search Sources Alerts Lists Help ✓ SciVal → Nicholas Pak ✓ ==

#### Set search alert

A Search Alert is a saved search that you can schedule to run at certain intervals. If any new results are found you will receive an e-mail with the first 25 results and a link into Scopus to access all new results. (Privacy Policy)



#### **Set Search Alert**

Set Alert - Search Alert is saved search that you can schedule to run at regular (daily/ weekly/ bi-weekly/ monthly) intervals. Search Results will be sent to your mailbox



## **ORCID**



Empowering Knowledge

### What is the Challenge? Scholarly Name Ambiguity

Many researchers that too closely resemble one another.

Researchers publish under name variations.







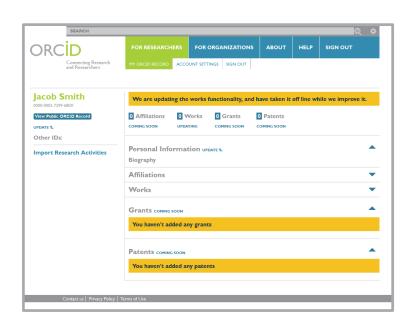
Dr. Smith Dr. Smith



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

#### What is the solution? ORCID!

ORCID, the Original Researcher Contributor ID, provides a persistent digital identifier that distinguishes you from every other researcher and, through integration in key research workflows such as manuscript and grant submission, supports automated linkages between you and your professional activities ensuring that your work is recognized.









Dr. J. Smith

Dr. James Smith



**Dr. James Smith** 46533489



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## **PlumX Metrics**



## **PLUMX**

## Metrics Categories



**USAGE** 

(clicks, downloads, views, library holdings, video plays)



**CAPTURES** 

(bookmarks, code forks, favorites, readers, watchers)



**MENTIONS** 

(blog posts, comments, reviews, Wikipedia links)



SOCIAL MEDIA

(+1s, likes, shares, tweets)



CITATIONS

(citation indexes, patent citations, clinical citations)

#### **Plum Print**

The five categories of metrics are displayed for quick and easy understanding in a data visualization known as the Plum Print. When you rollover the Plum Print, more detail for each of the categories is visible. You can also click on it to get to all the detail for the metrics.

- The Plum Print is dynamic, each circle in the Plum Print represents the metrics in the associated category by color.
- The larger the circle, the more metrics in that category.
- There is a variety of ways to represent the Plum Print on article pages or in result lists.
- Designed to communicate engagement without a score







### **Plum Print Examples**



An example of a Plum Print for an article that has metrics balanced in all categories. Link to article on PlumX.



An example of a Plum Print with a lot of Citations and Captures, a small amount of Usage, and no Mentions or Social Media. Link to article on PlumX.

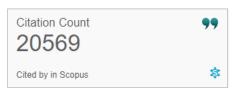


An example of a Plum Print with an outsized amount of Social Media.

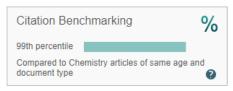
Link to article on PlumX.

#### The rise of graphene Back to article (2007) Nature Materials, 6(3), pp. 183-191

#### Scopus Metrics 2







#### Cited by



#### Benchmarking 2

Measures of activity relative to specific research domains, based on cited by in Scopus Compared to Chemistry articles of the same age and document type All Citations



#### Usage

Bitly - Clicks: 26 EBSCO - Abstract Views: 2731 EBSCO - PDF Views: 1577 EBSCO - HTML Views: 1073 EBSCO - Link-outs: 101

#### Captures

99 TH PERCENTILE

EBSCO - Exports-Saves: 193 Mendeley - Readers: 3

#### Mentions

3 Blogs: News: Wikipedia - Links: 7

#### Social Media

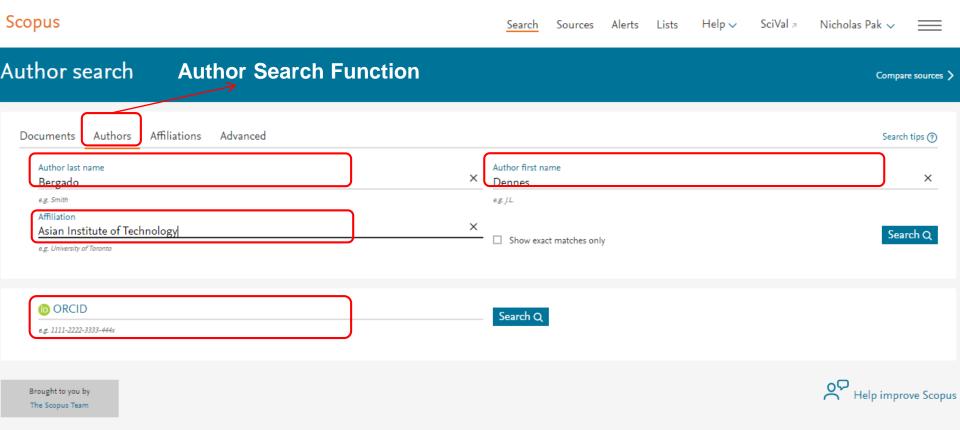
Facebook - Shares, Likes & 51 Comments: Twitter - Tweets: 6

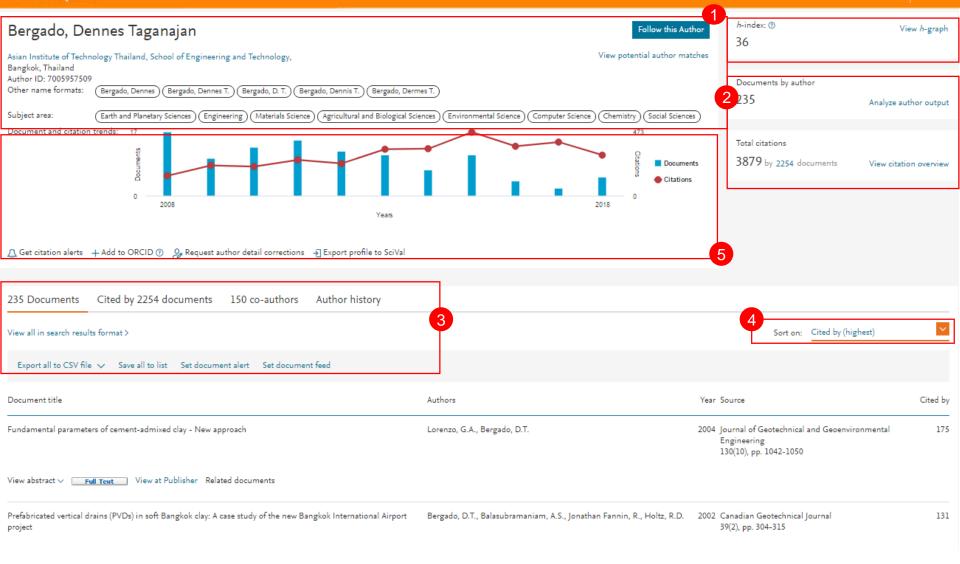




## **Author Search**

#### **Author Search**



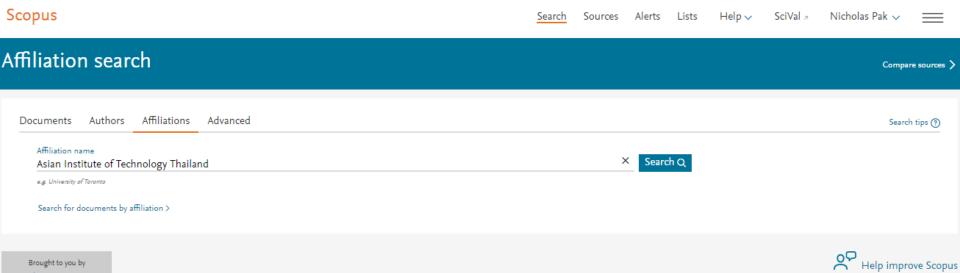


Author Details

- Sorting Option
  (Date or Number of Citations)
- 2 Author Publications 5 Author History
- 3 Search Functionality

### **Affiliation Search**

The Scopus Team

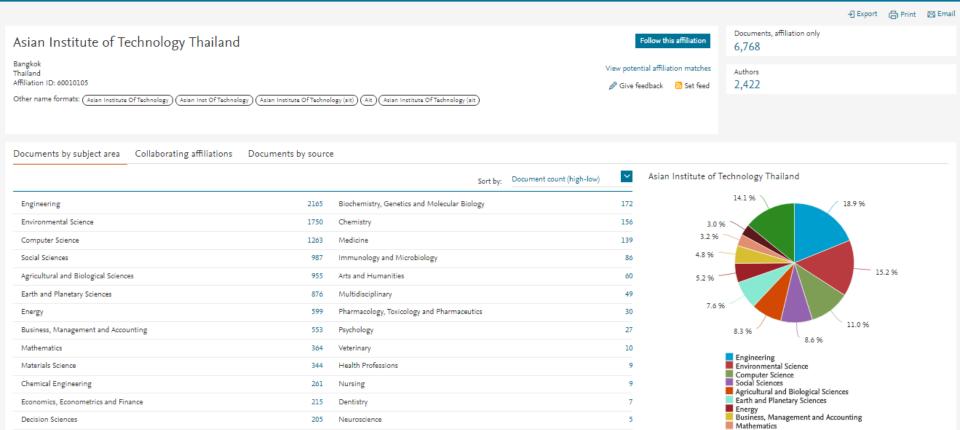


#### **Affiliation Search**

Physics and Astronomy

#### Affiliation details - Asian Institute of Technology Thailand

About Scopus Affiliation Identifier ①



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Materials Science

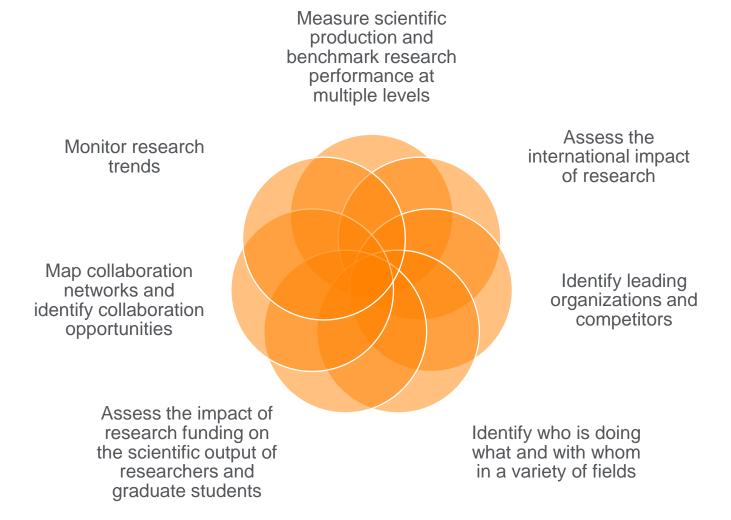
Other



# **Source Browser & Journal Analyser**



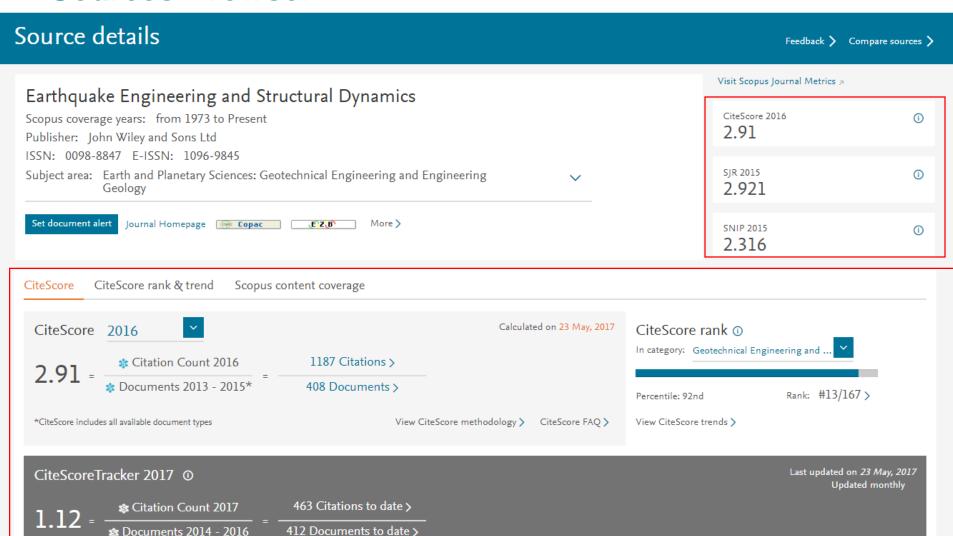
#### Metrics allow us to:



#### **Sources Browser**

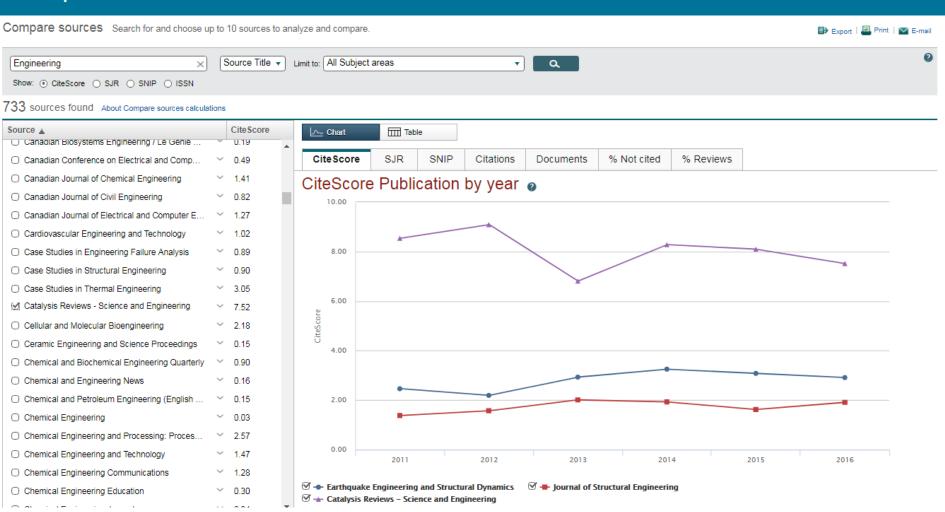
Scopus Sources Lists Nicholas Pak V Search Alerts Help 🗸 SciVal 7 Sources CiteScore metrics for serials Citations in 2016 CiteScore metrics from Scopus are comprehensive, transparent, current and free metrics for serial titles in Scopus. Search or browse below Documents from 3 years to find a source and see associated metrics. Use the annual metrics for reporting, and track the progress of 2017 metrics with CiteScore Tracker 2017. Be sure to use qualitative as well as the below quantitative inputs when presenting your research impact, and always use more 2013 2014 2015 2016 than one metric for the quantitative part. Search for a source Browse sources ◆ Download Scopus Source List (i) Q Search Publisher Display only Open Access journals (i) 37448 results Source title v (i) CiteScore > SJR ~ SNIP ~ Type 🗸 Ca-A Cancer Journal for Clinicians 89.23 32,242 50.569 Journal ∞ Copac EZB Chemical Reviews 42.79 19.143 11.241 Journal EZB Chemical Society Reviews 35.70 15.228 7.638 Journal 

#### **Sources Browser**



# **Journal Analyser**

#### Compare sources



#### How to choose a metric

Always use both qualitative and quantitative input into your decisions

Always use more than one research metric as the quantitative input

There are 6 factors, which can affect the value of a metric:

- Size
- Publicationtype
- Manipulation
- Discipline
- Database coverage
- Time

	Size- normalized?	Field- normalized?	Publication- type- normalized?	Resistant to database coverage?	Difficult to manipulate?	Time- independent?
Scholarly Output						
Journal Count						
Journal Category Count						
Citation Count						
Cited Publications						
Citations per Publication						
Number of Citing Countries						
Field-Weighted Citation Impact						
Collaboration						
Collaboration Impact						
Academic-Corporate Collaboration						
Academic-Corporate Collaboration Impact						
Outputs in Top Percentiles						
Publications in Top Journal Percentiles						
h-indices						

# Journal Metrics in Scopus: CiteScore, SNIP and SJR CiteScore

- A metric that gives a more comprehensive, transparent and current view of a journal's impact.
- A 3 year citation window
- CiteScore's numerator and denominator both include all document types. This includes articles, reviews, letters, notes, editorials, conference papers and other documents indexed by Scopus are included. The numerator and the denominator used in the CiteScore calculation are thus consistent.

# SNIP



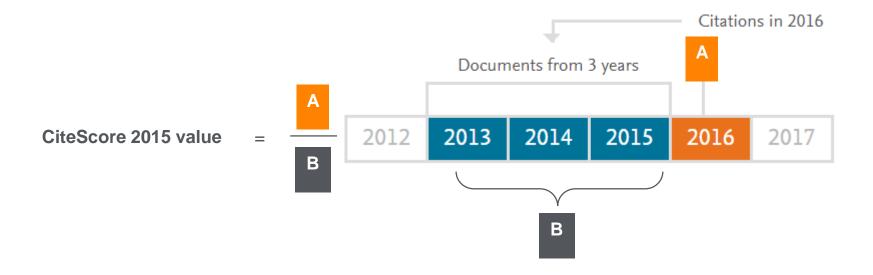
- SNIP = Sourced Normalized Impact per Paper
- Refined metric calculation, better corrects for field differences
- Outlier scores are closer to average
- Readily understandable scoring scale with an average of 1 for easy comparison

#### **SJR**



- SJR = SCImago Journal Rank
- More prestigious nature of citations that come from within the same, or a closely related field
- Overcome the tendency for prestige scores the quantity of journals increases
- Readily understandable scoring scale with an average of 1 for easy comparison

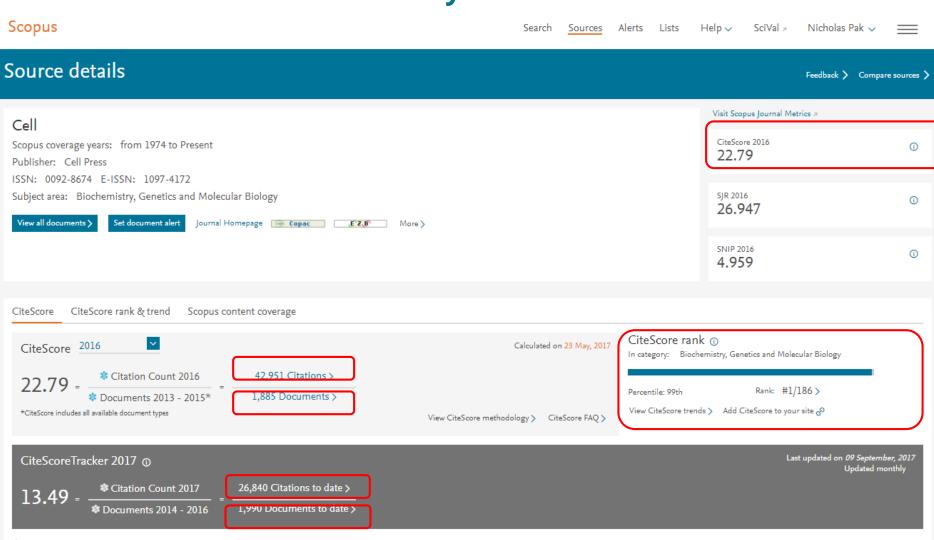
# CiteScore is a simple metric for all Scopus serial titles



CiteScore	Impact Factor
A = citations to 3 years of documents	A = citations to 2 or 5 years of documents
B = all documents indexed in Scopus, same as A	B = only citable items (articles and reviews), different from A

# CiteScore is one of a family of related metrics

🍀 Metrics displaying this icon are compiled according to Snowball Metrics 🗷 , a collaboration between industry and academia.



# Each metric provides a complementary measure of performance

	Measures	Open to validation in Scopus?	Size- normalized?	Subject field- normalized?	Communicates magnitude?	Update frequency
CiteScore Citations per documen		Yes	Yes	No	Yes	
Percentile subject t	Relative position within subject field based on CiteScore	Yes	Yes	Yes	No	Annually,
Citation Count	Raw impact of a journal on the research community	Yes	Yes	No	Yes	and monthly for CiteScore
Count Raw scale of a serial within the research community		Yes	Yes	No	Yes	Tracker metrics
% cited	Consistency with which a serial title's contents are reliably cited	Yes	Yes	No	No	
SNIP	Relative citations per document	No	Yes	Yes	No	Annually
SJR	Prestige of citing sources	No	Yes	Yes	No	7 till dally

# The main advantages of CiteScore metrics

#### Comprehensive

Based on Scopus, the world's broadest abstract and citation database

CiteScore metrics will be available for all serial titles, not just journals

CiteScore metrics could be calculated for portfolios

#### **Transparent**

CiteScore metrics will be available for **free** 

CiteScore metrics are easy to calculate for yourself

The underlying database is available for you to interrogate

#### Current

**Current values** are provided on a regular basis

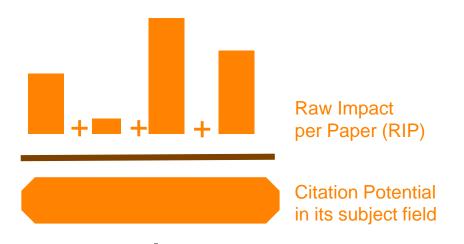
New serial titles will have
CiteScore metrics the year
after they are indexed in
Scopus

# **SNIP – Source Normalized Impact per Paper**



All 22K journals have a Source-Normalized Impact per Paper (SNIP) measuring contextual citation impact by weighting citations per subject field

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



Includes a Field's Frequency and Immediacy of Citation, Database Coverage, Journal's Scope and Focus, Measured Relative to Database Median

Journal	RIP	Cit. Pot.	SNIP (RIP/Cit. Pot.)
Inventiones Mathematicae	1.5	0.4	3.8
Molecular Cell	13.0	3.2	4.0

# SJR – SCIMago Journal Rank



- Prestige Per Article Metric prestige is transferred when a journal cites
- Citations are weighted depending on which source it is from
- A journal's prestige is shared equally with its citations
- SJR normalizes for differences in citation behaviour between subject fields:



High impact, many citations

One citation represents lower value



Low impact, few on citations

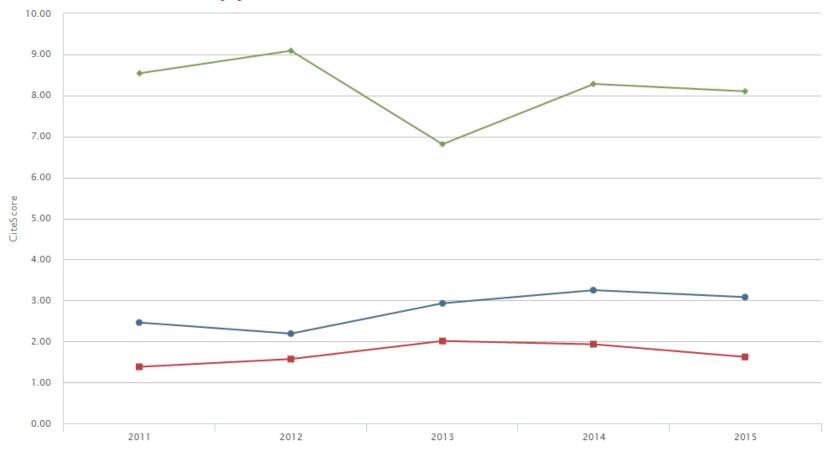
One citation represents higher value

# **CiteScore Publication by year**



#### CiteScore Publication by year o

✓ ◆ Earthquake Engineering and Structural Dynamics

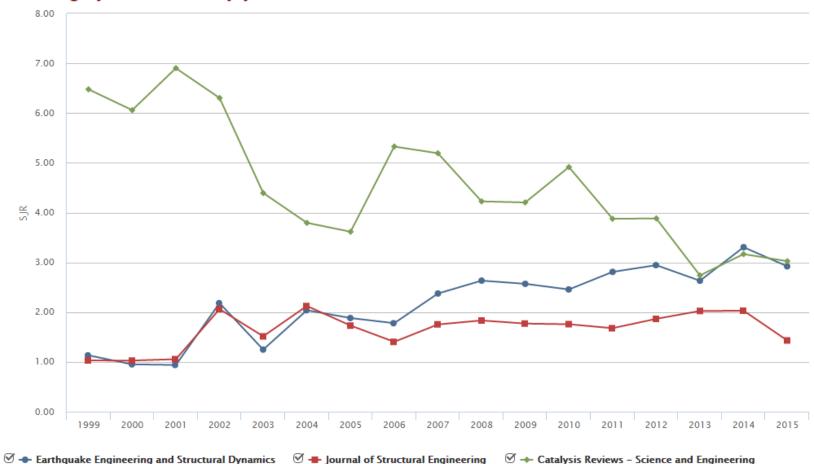


Journal of Structural Engineering

# SJR – SCIMago Journal Rank

CiteScore	SJR	SNIP	Citations	Documents	% Not cited	% Reviews

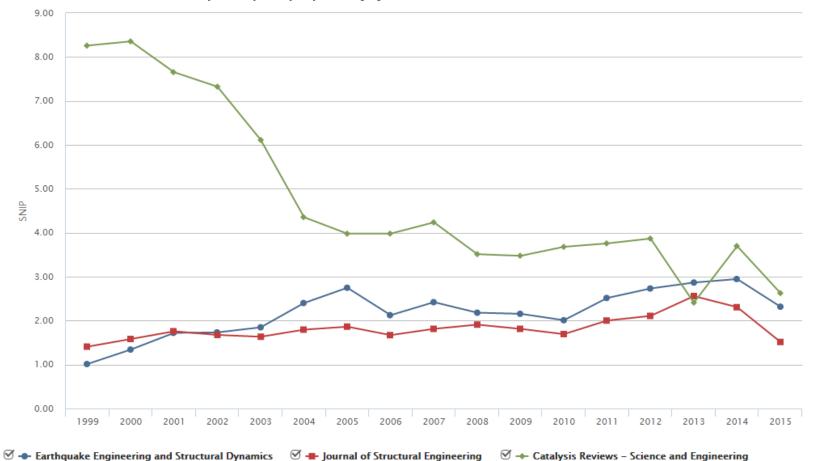
#### SCImago journal rank by year o



# **SNIP – Source Normalized Impact per Paper**

CiteScore SJR SNIP Citations Documents % Not cited % Reviews

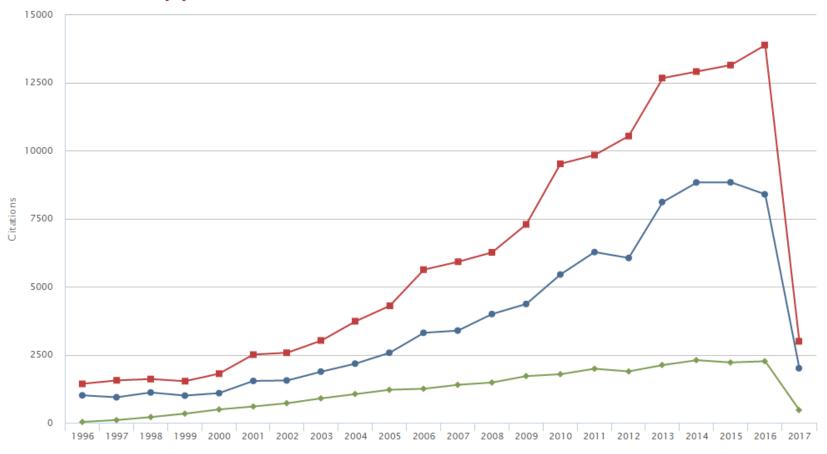
#### Source normalized impact per paper by year o



# **Citations**

CiteScore	SJR	SNIP	Citations	Documents	% Not cited	% Reviews

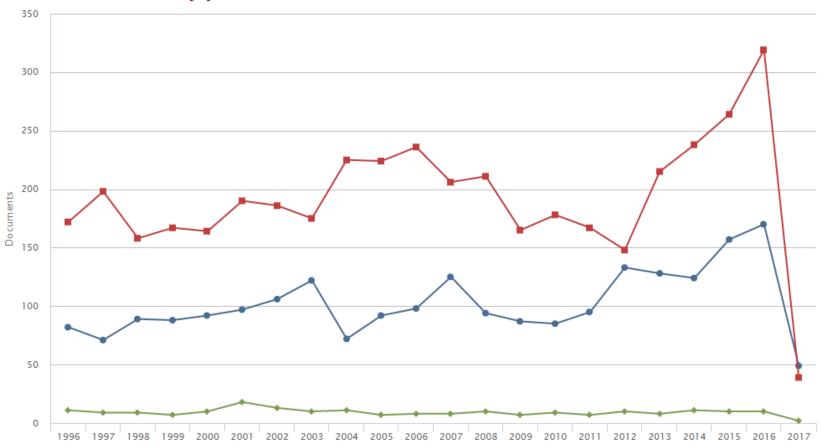
#### Source citations by year O Exclude source self citations



### **Documents**

CiteScore	SJR	SNIP	Citations	Documents	% Not cited	% Reviews

#### Source documents by year

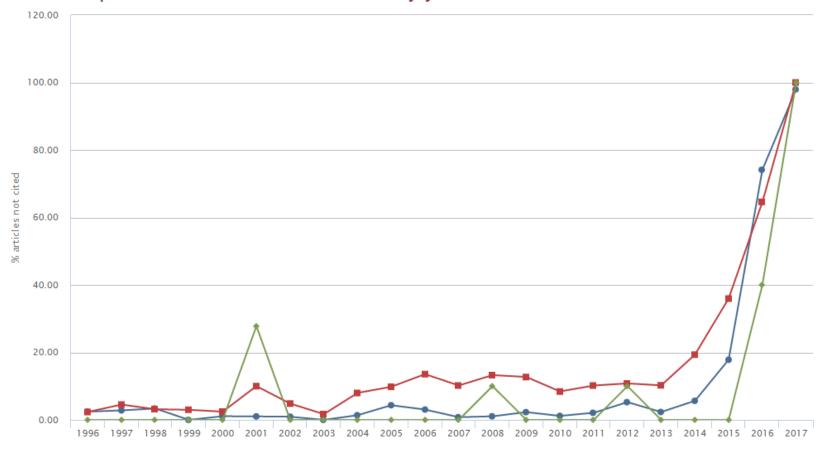


🗹 📤 Earthquake Engineering and Structural Dynamics 💮 🖶 Journal of Structural Engineering 💮 🔶 Catalysis Reviews – Science and Engineering

# **Percent not Cited**



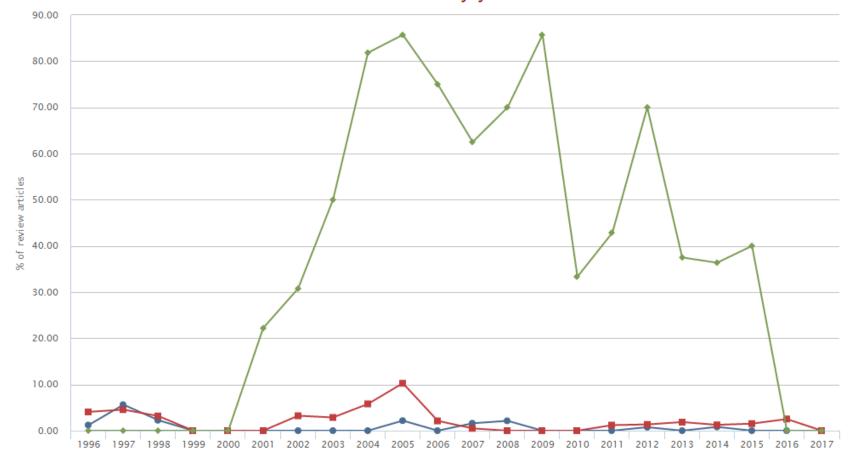
#### Percent of published documents not cited by year O Exclude source self citations



#### **Percent Reviews**

CiteScore SJR SNIP Citations Documents % Not cited % Reviews

#### Percent of documents that are review articles by year



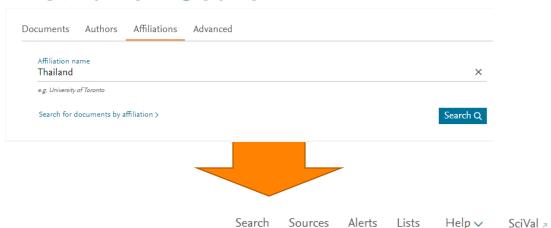
🗹 🔷 Earthquake Engineering and Structural Dynamics 🤍 🖶 Journal of Structural Engineering 💮 🔷 Catalysis Reviews – Science and Engineering



# **Research Excellence**



#### **Thailand – Institution Search**

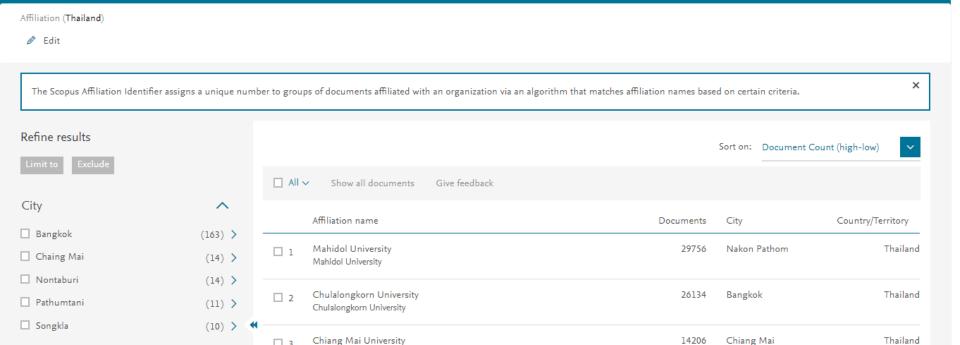


# 366 Affiliation results - Thailand

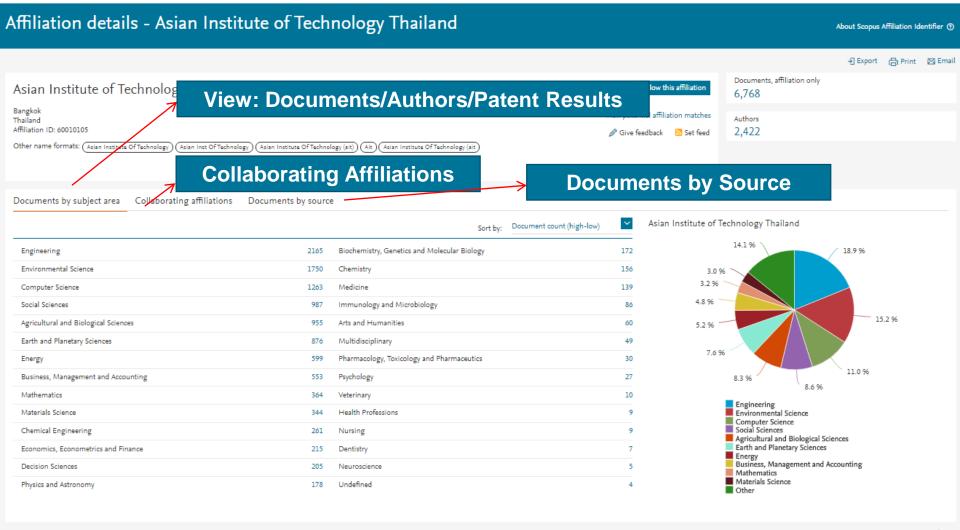
Scopus

About Scopus Affiliation Identifier

Nicholas Pak V



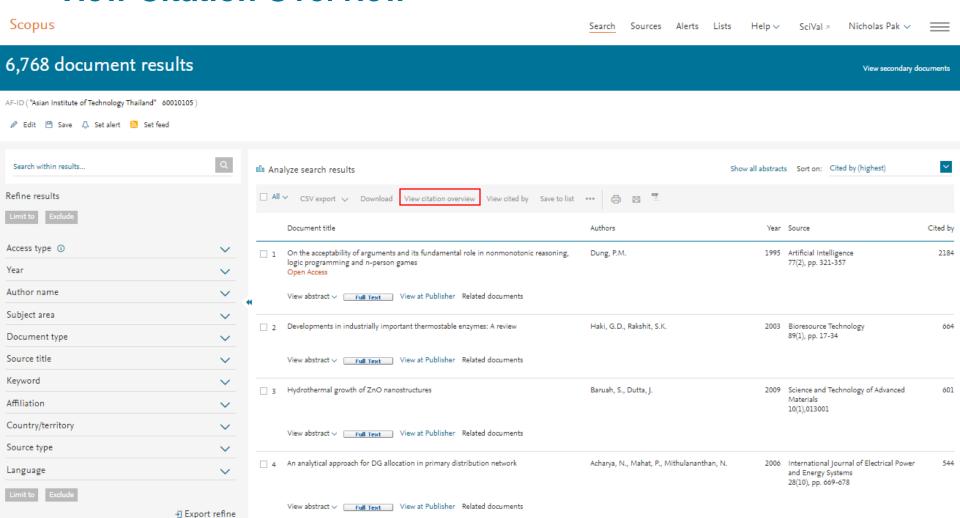
# Scopus Affiliation Profile – Asian Institute of Technology

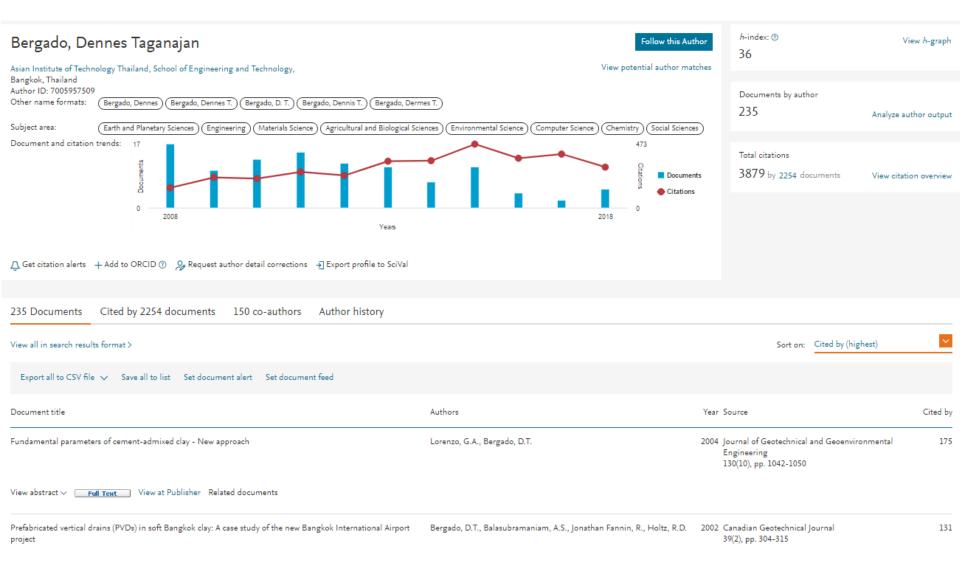


The data displayed above is compiled exclusively from articles published in the Scopus database. To request corrections to any inaccuracies or provide any further feedback, please contact us (registration required). The data displayed above is subject to the privacy conditions contained in the privacy policy.

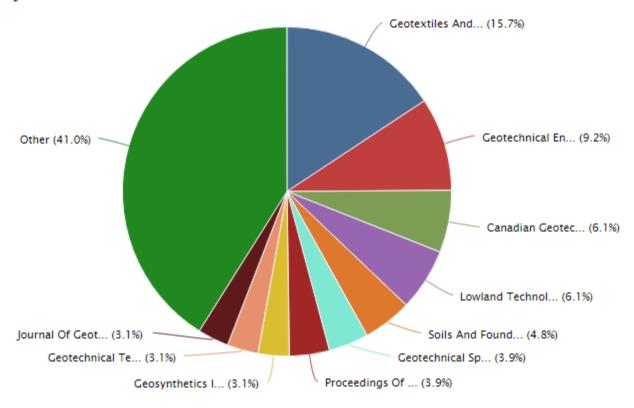
∧ Top of page

#### **View Citation Overview**

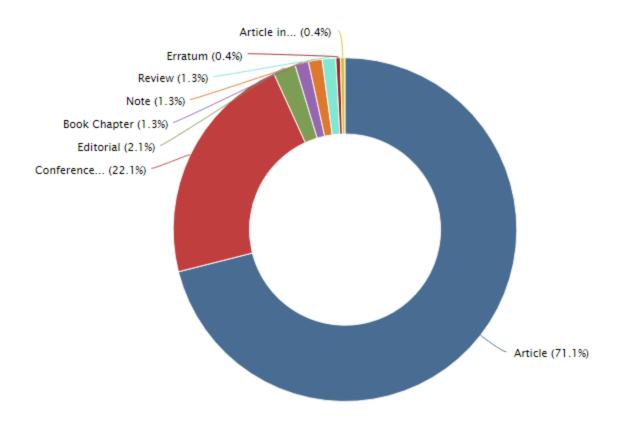




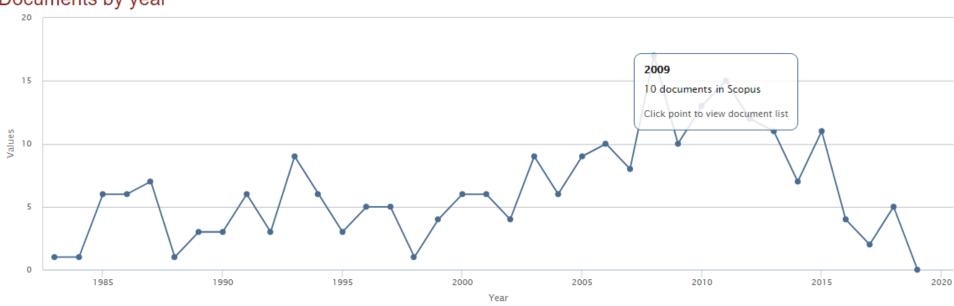
#### Documents by source



#### Documents by type



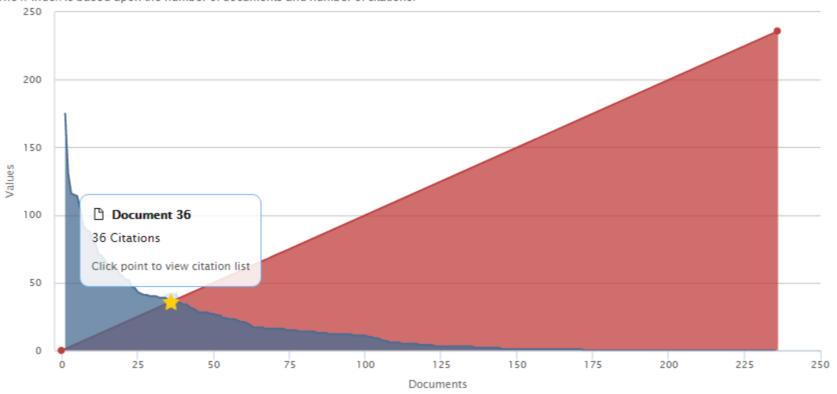
#### Documents by year



- Bergado, Dennes Taganajan

#### This author's *h*-index is 36

The h-index is based upon the number of documents and number of citations.



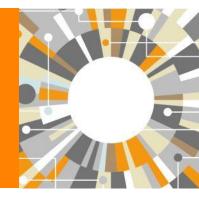
Note: Scopus is in progress of updating pre-1996 cited references going back to 1970. The h-index might increase over time.

# **Summary**

- Search: Scopus search Document, Author, Affiliation.
- Sources: Browse or search indexed sources or journals by title
- Analytics: Article Metrics, Results Analysis
- Alerts to manage previously saved search

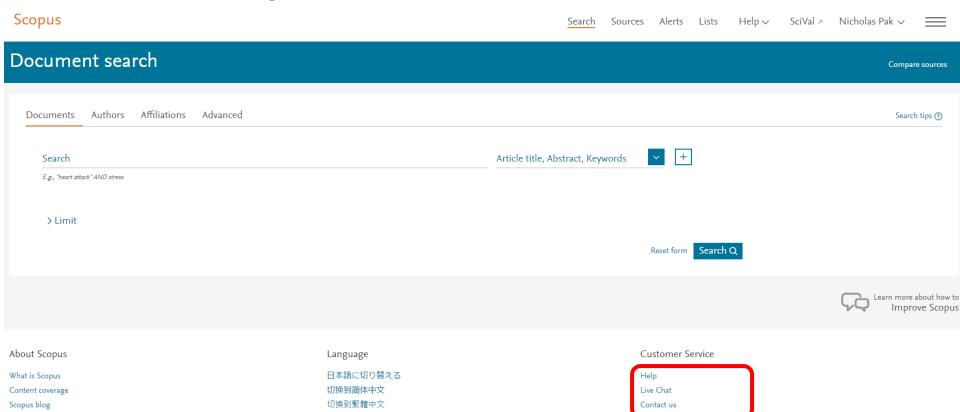


# Scopus Help & Resources



# **Live Chat, Help and Tutorials**

Scopus API Privacy matters



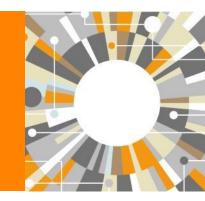
# Thank you!

# Important Scopus resources to stay up to date:

Site	URL
Scopus Info Site	https://www.elsevier.com/solutions/scopus
Scopus Blog	http://blog.scopus.com
Scopus newsletter	https://communications.elsevier.com/webApp/els_doubleOptInWA?do=0&srv=els_s copus&sid=71&uif=0&uvis=3
Twitter	www.twitter.com/scopus
Facebook	www.facebook.com/elsevierscopus
LinkedIn	https://www.linkedin.com/company/scopus-an-eye-on-global-research
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# **Q & A**







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