



WELCOME! WEBINAR ON

*“Strengthening research planning skills
using Elsevier's ScienceDirect & Scopus”*

STARTS AT 11:30 AM



- ✓ Please note that upon joining, you will be automatically muted, which means, you can hear what the Speaker/hosts say but you will not be able to speak. We will start at 11:30 AM.
- ✓ Please do not raise hands unnecessarily.
- ✓ If you wish to ask any question, please type in the Q&A Tab which will be visible on your screens.
(Request you to not type Hi, Hello, Good morning etc)
- ✓ For best experience, use headphones
- ✓ Information regarding certificates will be emailed to you TOMORROW. Please stay attentive. Please do not ask any questions regarding certificates in Q&A Box.

Indian Statistical Institute

Research Performance

Indian Statistical Institute- Research Snapshot (2015-2020)

Overall research performance

4,386 ▼

Scholarly Output

33.1% All Open Access

1,312

Authors

0.95

Field-Weighted Citation Impact

27,179

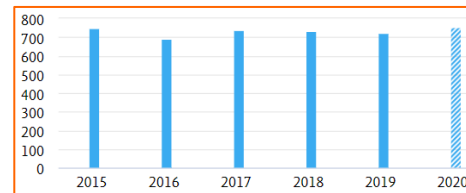
Citation Count

6.2

Citations per Publication

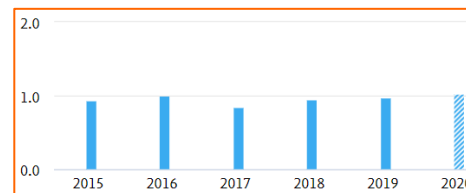
40

h5-index

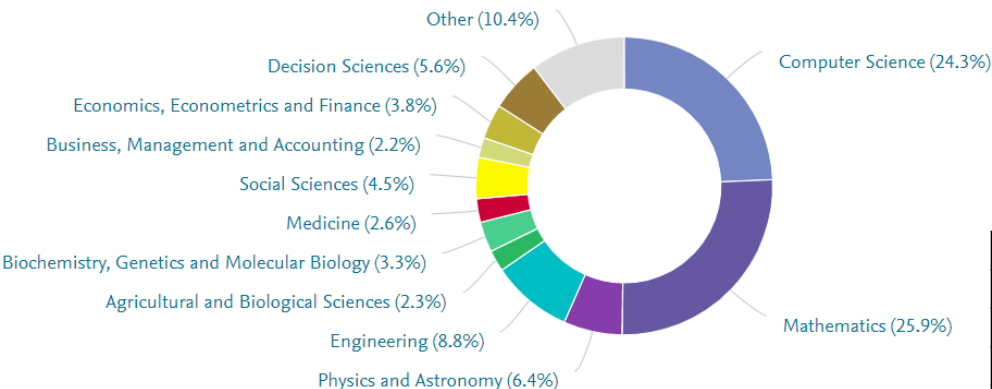


PUBLICATIONS ARE GROWING AT A CAGR OF 2.1%

BUT



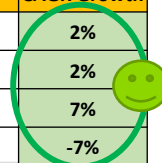
FWCI OR QUALITY IS GROWING AT A CAGR OF 1.86%



CiteScore quartile	Overall	% contribution
Q1 (top 25%)	1398	38%
Q2 (top 26% - 50%)	1212	33%
Q3 (top 51% - 75%)	673	18%
Q4 (top 76% - 100%)	383	10%
Total	3666	



CiteScore quartile	2015	2016	2017	2018	2019	2020	CAGR Growth
Q1 (top 25%)	237	190	223	229	254	265	2%
Q2 (top 26% - 50%)	193	178	210	204	209	218	2%
Q3 (top 51% - 75%)	91	113	112	116	105	136	7%
Q4 (top 76% - 100%)	78	62	68	57	66	52	-7%
Total	599	543	613	606	634	671	2%



Elsevier at a Glance- Academic & Government



140

Elsevier has 140 years of experience in curation and verification.



75,382

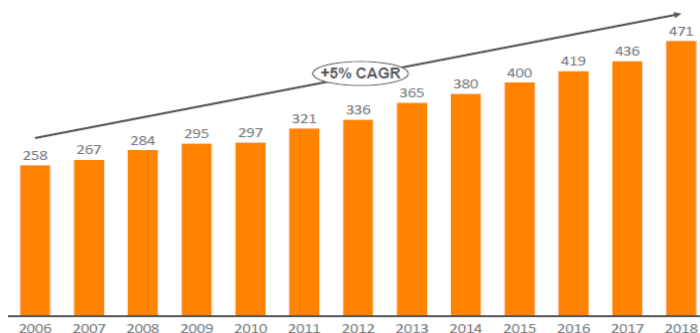
editorial board members and more than 20,000 editors in academia



1.3m+

and over 1.3m reviewers covering hundreds of disciplines

Elsevier Published Articles ('000)



25,000+

Our Elsevier products are used at more than 25,000 academic and government Institutions around the world.



16 m

ScienceDirect, the world's largest database dedicated to peer-reviewed primary scientific and medical research, has 16 million monthly unique visitors.



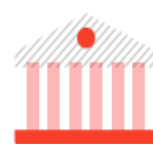
1 billion

1 billion articles were downloaded by researchers.



5,000+

Scopus is a leading abstract and citation database of research literature, with over 73 million records across 24,000 journals, sourced from more than 5,000 publishers.



10,000+

SciVal offers insights into the research performance of over 10,000 research institutions.



11+ m

Mendeley enables over 11 million users worldwide, from undergraduates to professionals, to organize, write, collaborate and promote their research.



Source: www.elsevier.com

Elsevier products are integral to the research workflow

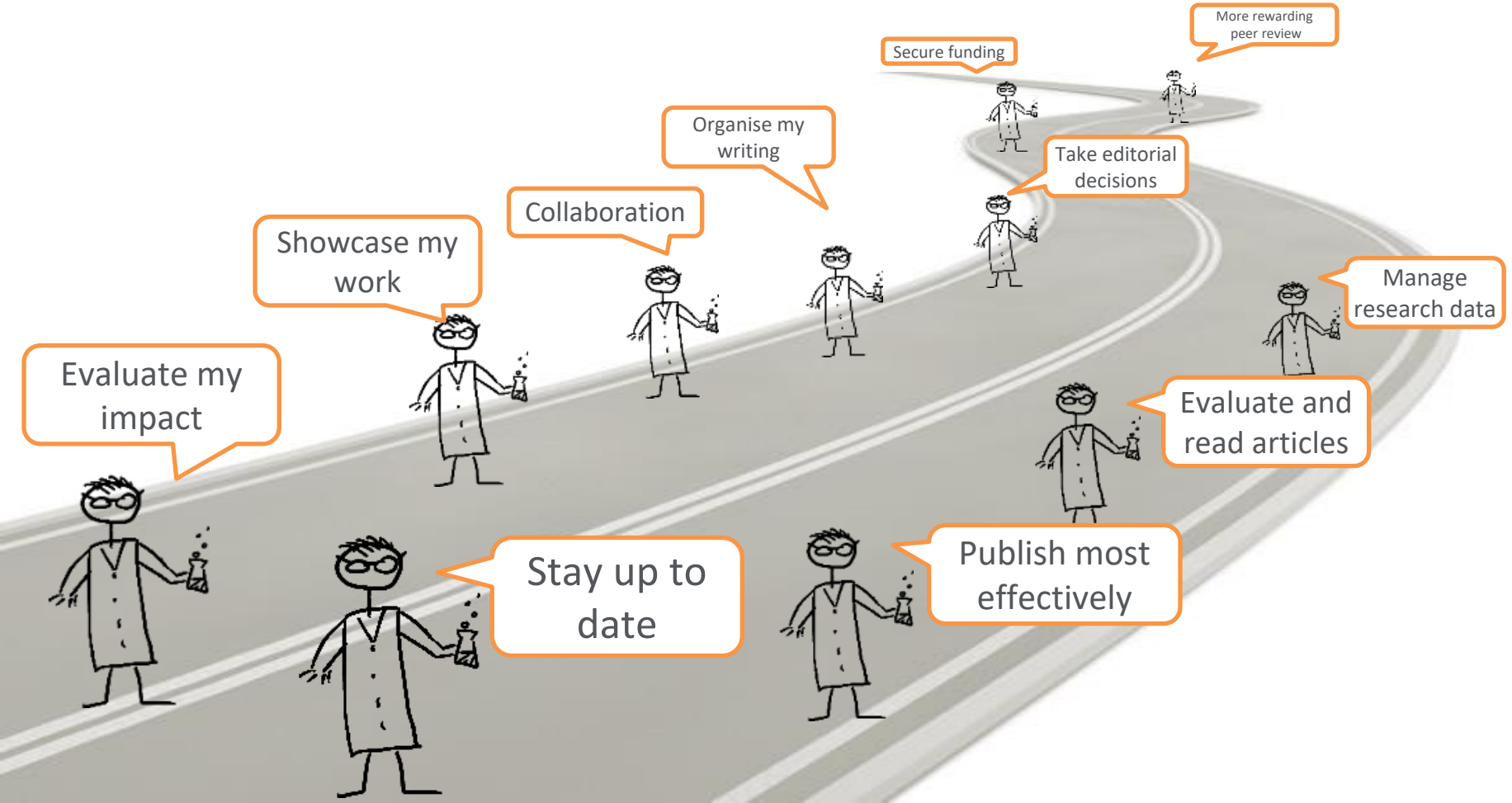
Researcher-centricity as the key concept behind our activities and products – looking at the whole picture of the researcher's workflow!



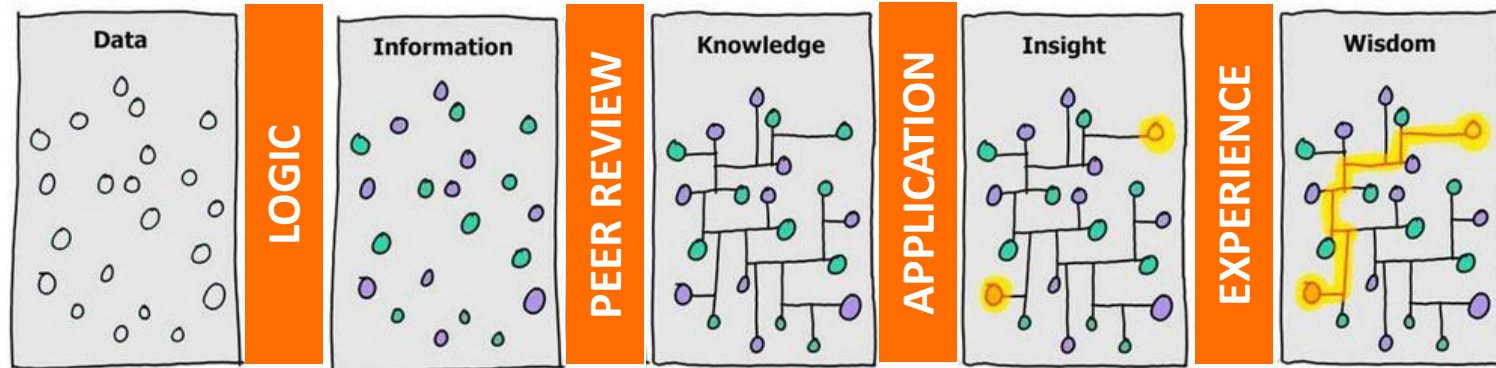
Researcher-centricity is the key concept behind our activities and products – looking at the whole picture of the researcher's workflow!

Understanding Researcher Needs

Researchers today are more demanding than ever before



Information Discovery



With an ocean of data surrounding you.. It takes logic, peer review, application and experience to achieve wisdom



Researchers today are faced with ever growing volumes of information they need to search, evaluate and incorporate into their work

Keeping up with scientific literature has been described as the single most important skill throughout a researcher's career.*

But it's no easy task, as there are 28,100 active peer-reviewed journals and 2.5 million new articles published each year, according to The STM Report.**

This information overload can cause researchers to:

- Lose time combing through resources
- Get frustrated with dead ends
- Become unsure of their next steps

*Source: <http://www.sciencemag.org/careers/2016/11/how-keep-scientific-literature>

**Source: The STM Report, <http://www.sciencemag.org/careers/2016/11/how-keep-scientific-literature>, 2016.



Scientific Publishing nowadays

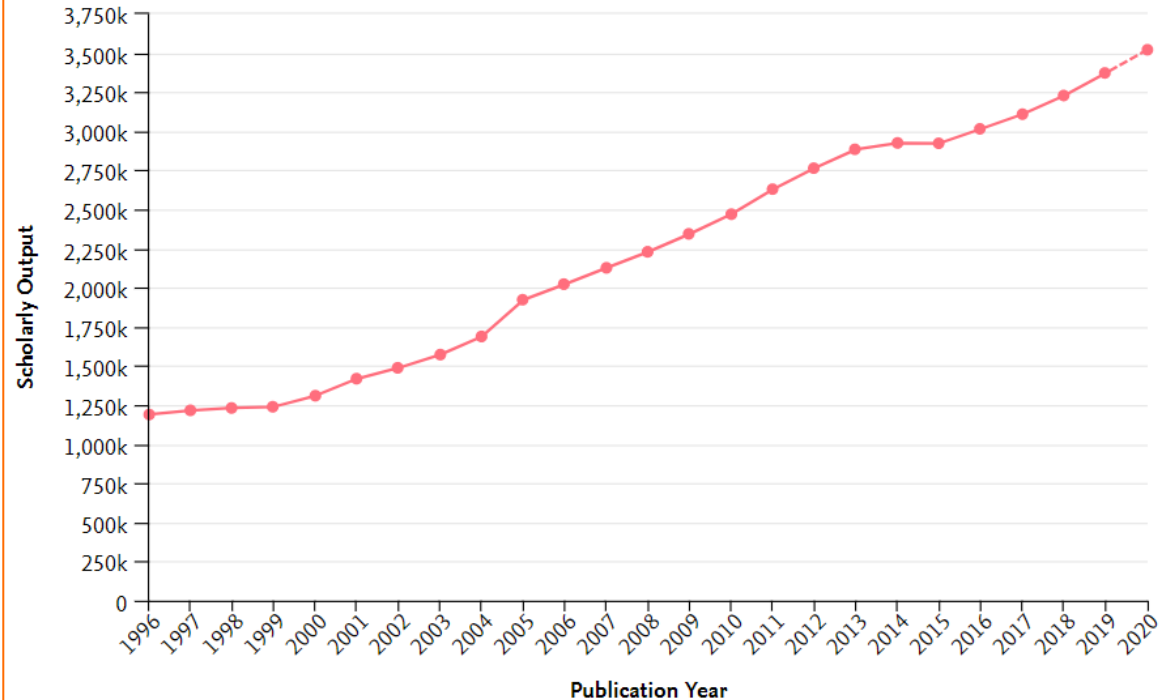
~**6,000** scientific journal publishers

~**45,000** peer-reviewed scholarly journals

~**3 Million** published articles per year
(increases @ ~3% per year)

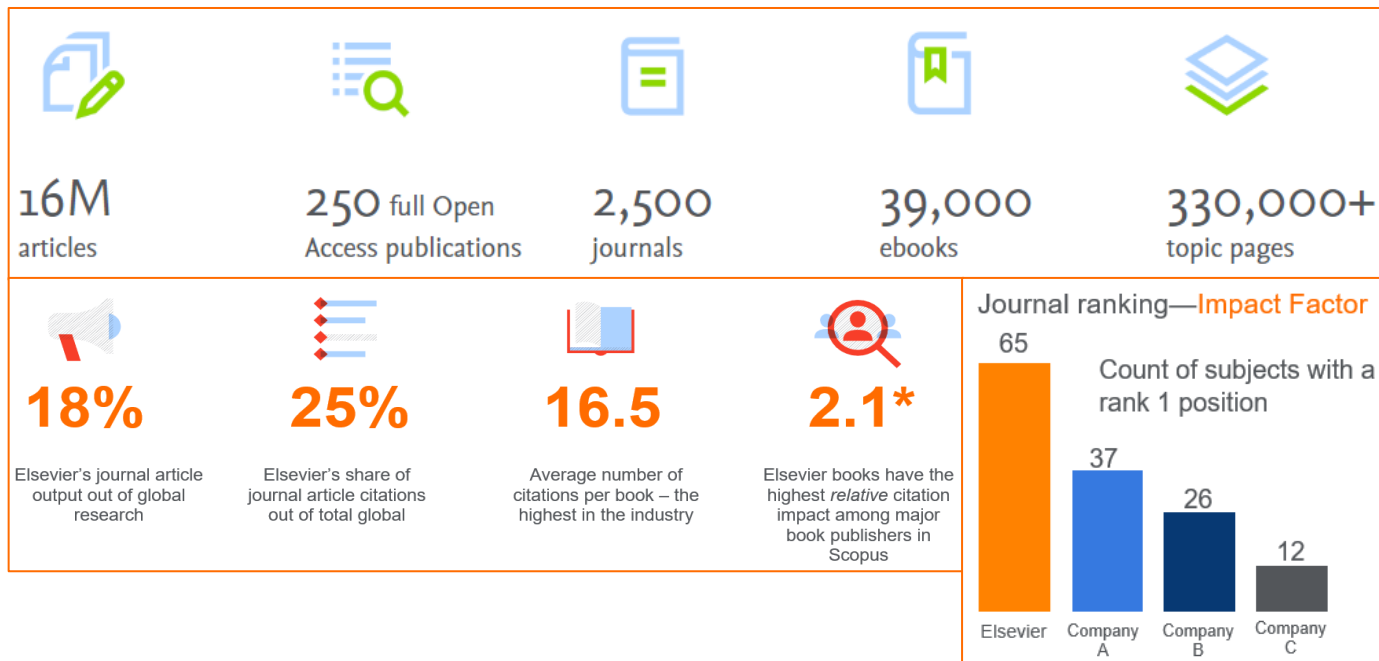
~**4 Million** unique authors in a year
(increases @ ~3% per year)

Research output growth 1996-2020



Source: <https://scival.com>

ScienceDirect is Elsevier's leading platform of peer-reviewed literature that helps you move your research forward.



Widest range of trusted, high-quality, interdisciplinary research



Journal ranking by Journal Impact Factor across 236 subjects per Clarivate's Journal Citation Reports database; source: Clarivate data (2018)

ScienceDirect

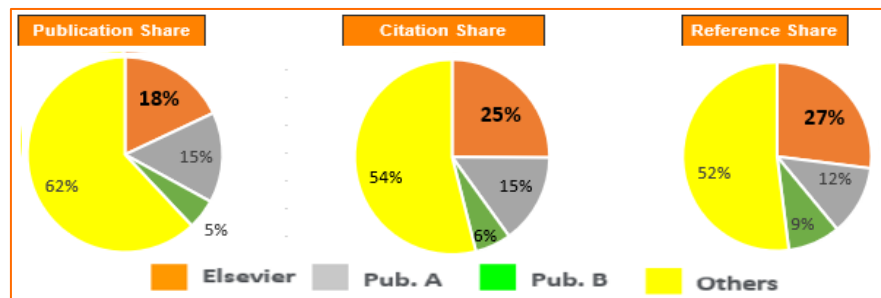
ScienceDirect: *Read Quality.. Publish Quality*

Built on the widest range of trusted, high-quality, interdisciplinary research, ScienceDirect helps you find answers to your most pressing research questions, stay on top of your field, and gain in-depth insights into trending research topics as you take your next steps in discovery.

- ✓ 2,500 journals, 16 million articles
- ✓ 39,000 e-books, including books, book series and major reference works
- ✓ Digital archives that reach as far back as 1823.
- ✓ The content on ScienceDirect has been categorized into 23 Subject Collections

Subject Collections on ScienceDirect		
Agricultural and Biological Sciences	Economics, Econometrics and Finance	Neuroscience
Biochemistry, Genetics and Molecular Biology	Energy	Nursing and Health Professions
Business, Management and Accounting	Engineering	Pharmacology, Toxicology and Pharmaceutical Science
Chemical Engineering	Environmental Science	Physics and Astronomy
Chemistry	Health Sciences	Psychology
Computer Science	Immunology and Microbiology	Social Sciences
Decision Sciences	Materials Science	Veterinary Science and Veterinary Medicine
Earth and Planetary Sciences	Mathematics	

Over the years, Elsevier has become a ubiquitous part of the research workflow especially with tools like **ScienceDirect** and **Scopus**. It is a common saying that ***“If you read quality articles, you publish Quality articles”***. Elsevier Journals are ranked No.1 across 65 Subject areas as per Impact factor Journal Ranking 2018.



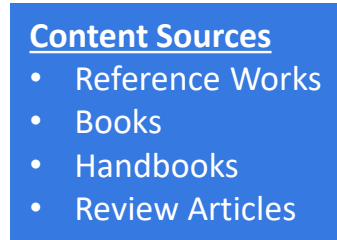
The research community across the world acknowledge and prefer Elsevier over other publishers for reading, citing and certifying their research.

- ✓ 18% of all articles published are in Elsevier Journals & Books on ScienceDirect.
- ✓ 25% of the total citations are received by articles published in Elsevier Journals & Books on ScienceDirect.
- ✓ 27% of the total references used by researchers come from Elsevier Journals & Books on ScienceDirect.

To build knowledge, researchers and students need both Foundational Content and Original Research

- Established facts
- Baseline knowledge
- Multifaceted/Multidisciplinary
- Written by leaders in their field

- Latest research / new results
- Specialised knowledge
- Narrow focus, extreme depth
- Applying techniques



Get up to Speed



Stay up to Date

Topic pages are making critical answers for students even more discoverable and accessible

330k

Topic Pages across...

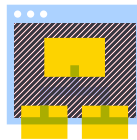


~13M

Avg. visits per month

20

subject areas Hyperlinked from...



2nd

Most traffic on ScienceDirect
(after journal article)

4.8M

journal articles



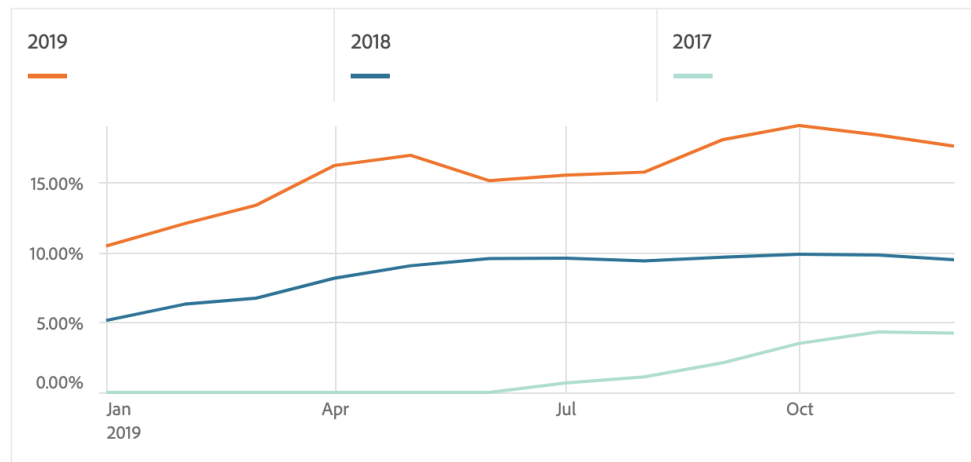
17%

Of all traffic on ScienceDirect



As Interdisciplinary Research Increases, the Demand for Fundamental Knowledge Increases

 % of Science Direct Unique Visitors viewing a topic page



2,530,896

Topic page views in 2017

18,238,315

Topic page views in 2018

39,457,917

Topic page views in 2019

Past knowledge empowers today's research: Backfiles

High-quality scholarly research published before 1995 is essential for the science of the future. ScienceDirect users say access to back issues helps them validate findings, prevent unnecessarily replicating research, and fuel new research ideas.

Backfiles on ScienceDirect can help researchers make groundbreaking research discoverable.

How ScienceDirect Backfiles benefit Researchers?

- ✓ A solid foundation for scholarly research through article access to historical precedents and groundbreaking research, including Nobel Prize winning research
- ✓ Premium content providing inspiration for new studies
- ✓ A head start on knowledge about their own field and for interdisciplinary research
- ✓ The complete picture, so they know they're on the right track



READ QUALITY.. PUBLISH QUALITY

Leveraging on ScienceDirect Platform for Maximum Impact

ScienceDirect: Quality Value Promise for Institute



What is Important for an Institute?



Receiving **High Ranking** in QS/THE rankings



Admissions

Increasing Number of Students Enrollments/**Admissions**



Pursuing continuous improvement & **Excellence** leading to increased **research grants**

Elsevier's ScienceDirect promise for Institute



Success in world rankings led by increased **impetus on R&D**



Number of Students Enrollments/Admissions increase as **ranks go up**



Quality of enrollments & sanction of grants increase as **affinity to research** increases

ScienceDirect: Quality Value Promise for Faculty



What is Important for a Faculty?



Pursuing **academic excellence** by leveraging high-quality content



Enriching research experience and credibility, **enhanced career prospects**



Staying relevant and up-to-date on the current research trends and insights

ScienceDirect fulfills promise for Faculty



Provides the **best research content** – stringent quality parameters



Exposure to highly-cited content and possibility of **receiving high citations**—win-win



Most up-to-date multi-disciplinary content; broadest coverage — spans 23 subject domains

ScienceDirect: Quality Value Promise for Student



What is Important for a Student/Researcher?



Improving problem-solving and conceptualization skills –
Research-based dissertation



Developing a competitive edge -
- Summer internship projects with corporates



Obtaining high-value roles in Corporates during Placements

ScienceDirect fulfills promise for Student



Provides the best multi-disciplinary research content



Provides research from highly cited international authors –
Always on top of your research needs



Core corporate R&D uses ScienceDirect – Enhanced employability prospects due to problem solving acumen

ScienceDirect: Quality Value Promise Delivered



How Indian Statistical Institute is benefitting from ScienceDirect?

Elsevier's contribution to research at Indian Statistical Institute

Affiliated Publications 2015 - 2019



References 2015 - 2019



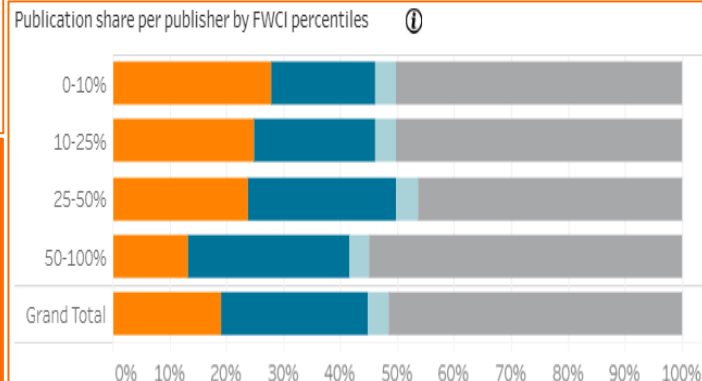
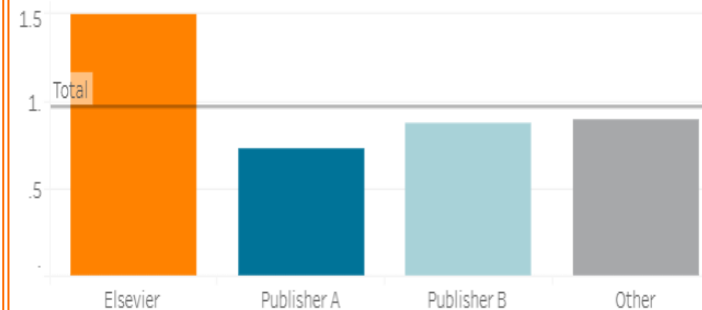
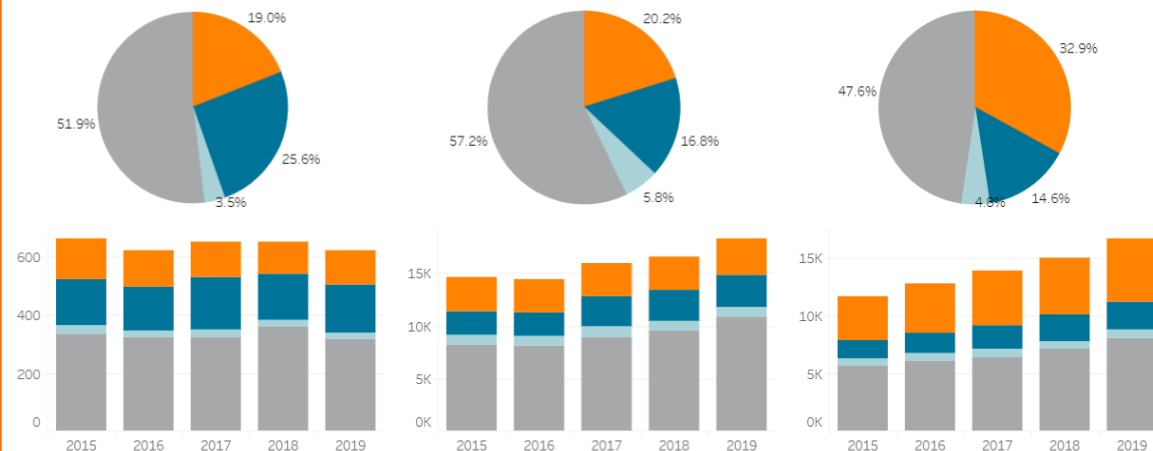
Citations received 2015 - 2019



FWCI by publisher



Publication share per publisher by FWCI percentiles



- ✓ The research community of ISI acknowledge and prefer Elsevier over other publishers for reading, citing and certifying their research.
- ✓ Articles published by researchers at ISI with Elsevier have an average FWCI of 1.49 which is highest amongst all publishers.
- ✓ Elsevier has highest publication share in top FWCI percentiles.



Publisher



The Publishing Workflow

A typical publishing workflow

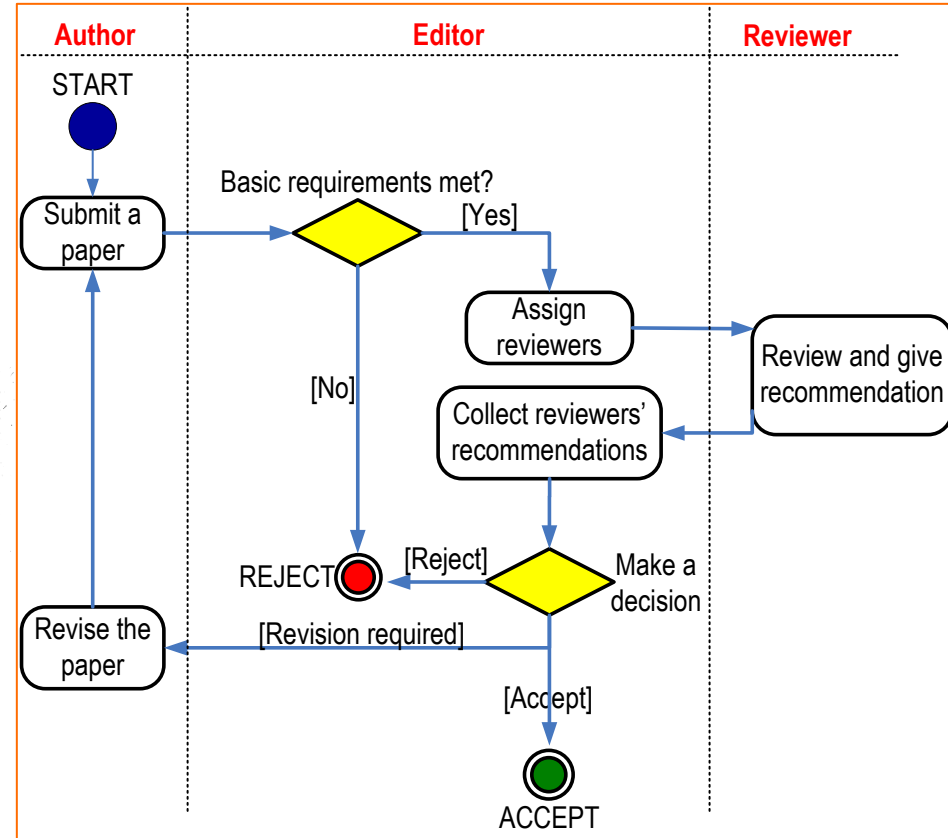
What Editors want?

1. Paper is scientifically correct
2. If it reports something new
3. If it reports something significant
4. If the paper is of interest to the readers



Top reasons for rejection by an Editor are:

1. Topic of research not trending/not impactful
2. Poorly written abstract: Language errors
3. Too many/irrelevant Self-cites
4. Poor geographical distribution of citations
5. Recent articles not cited
6. Leading scientists/top journal articles not cited



What is Scopus?

The largest abstract and citation database of
peer-reviewed literature.

Scopus Coverage Summary (April 2021)

Global representation means global discovery across all subjects and content types

82.5M records from **25.7K** serials, **101K+** conferences and **236K** books

from more than **7,000** publishers in **105** countries

- Updated daily—approximately **10,000** articles per day indexed
- **16.63M** open access documents
- “Articles in Press” from **>8,075** titles
- **744K** preprints from multiple preprint servers
- **6,324** active Gold Open Access journals indexed

Number of journals by subject area**	Journals	Conferences	Books	Patents
Physical sciences 8,529	24,610** active peer-reviewed journals 292 trade journals 6,324 Gold OA Journals (DOAJ/ROAD) 15.2M fully-indexed funding acknowledgements 744K preprints	101K conference events 10.47M conference papers Mainly Engineering and Computer Sciences	63.3K individual book series volumes 236K stand-alone books 1.97M total book items Focus on Social Sciences and A&H	46.4M patents 5 major patent offices: • WIPO • EPO • USPTO • JPO • UK IPO
Health sciences 7,136				
Social sciences 10,574				
Life sciences 4,915	• Full metadata, abstracts and cited references (refs post-1970 only) • Citations back to 1970			

*Journals may be classified in multiple subject areas: this count includes current actively indexed titles only

**Total number of Scopus journals in database including inactive titles is 40,804

Expert Curated content selection by the independent Content Selection & Advisory Board (CSAB)

Expert curation

There are
104,586*
active
scholarly
titles



Of which
47,519*
are peer-
reviewed



Scopus
indexes
24,600+



- › 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, February 15, 2019*

- The **CSAB** is an independent board of subject experts from all over the world.
- Comprised of 17 Subject Chairs.
- Board members are chosen for their expertise in specific subject areas; many have (journal) Editor experience.



Scopus: Supporting Researchers

Combining content with Technology to turn information into
“Actionable Knowledge”

Scopus can help researchers

-  Find out what already exists in the global world of research output
-  Get topic specific funding insights: Target funding agencies
-  Decide what, where and with whom to partner or collaborate with
-  Track impact of research; monitor global research trends
-  Help researchers track their research performance through citation counts and the *h*-index
-  Identify and analyze which journals to read or where to submit an article

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33

Choose the right journal and article type

- Elsevier Tool: journalfinder.elsevier.com
- Simply insert your title and abstract and select the appropriate field-of-research for the best results.
- Suggests suitable journals and provides information on editorial times, acceptance rate, production speed, open access options,...
- Look for more information in Elsevier Journals Insight
- Compare/Look some of the relevant metrics in Scopus

Find journals

Enter title and abstract of your paper to easily find journals that could be best suited for publishing. JournalFinder uses smart search technology and field-of-research specific vocabularies to match your paper to scientific journals.

> More on how it works

Paper title

Paper abstract

[Don't have an abstract?](#)

Keywords

Field of research

Select field of research

Refine your search

E.g. Journal impact, Review and Time to publication

Refine the scope of your search to get more relevant journals

Publication type

An article can either be published gold open access or with Subscription. A publication fee is required when publishing gold OA, while subscription is free (an embargo period applies before authors can publish their manuscript to the public).

OA

Journals that offer gold OA

Subscription

Journals with subscription



ELSEVIER

Research Metrics Used in Scopus

Journal – Author - Article

Journal Metrics: *Impact Factor*

- Impact Factor (IF): average number of times articles from a journal published in the past two years/or 5 years have been cited in the current year

$$\text{Impact Factor of a Journal in 2020} = \frac{\text{All citations in 2020 to articles published in 2018 and 2019}}{\text{All articles published in 2018 and 2019*}}$$

Further normalized

1. All Journals DO NOT have Impact Factor including some very good upcoming journals.
2. *Conference Proceedings are not considered for Impact Factor
3. Impact factor is sometimes biased towards fast moving subjects and is strongly driven by number of citations. Eg. Medicine subject area receives higher citations, so many journals have higher impact factor.. whereas Mathematics subject area has lower citations, so lower number of journal with high impact factor.

Alternate Metrics: *CiteScore- 3 C's and Free*

CiteScore is based on the principles of 3 C's and the fact that it is freely available, empowering users to make well-informed decisions regarding portfolio management and where to publish.

Comprehensive

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

CiteScore metrics are available for **all serial titles, not just journals**

CiteScore metrics could be **calculated for portfolios**

Clear

CiteScore metrics are **transparent** and **easy to calculate for yourself**

The **underlying database is available** for you to interrogate

Current

CiteScore Tracker is **updated monthly**

New titles will have CiteScore metrics the year after they are published



CiteScore

citations to documents published in 4-year period
of documents in same 4-year period

This comprehensive, current and open metric for journal citation impact is available in a free layer of Scopus.com. It includes a yearly release and monthly CiteScore Tracker updates.

CiteScore calculations include citations from articles, reviews, conference papers, book chapters and data papers. See www.scopus.com/sources

330 disciplines

Linguistics and Language

Computer Science Applications

Geography, Planning and Development

Sociology and Political Science

Electrical and Electronic Engineering

Ecology, Evolution, Behavior and Systematics

Political Science and International Relations

Literature and Literary Theory

Mechanical Engineering

Cultural Studies

Economics and Econometrics

Computer Science Applications

Philosophy General Medicine

Psychiatry and Mental Health

Language and Linguistics

Education

Largest
Subject Area
1,259
titles

History

Law

Alternate metrics- SNIP & SJR

Source-Normalized Impact per Paper (SNIP)

- Developed by CWTS, University of Leiden Netherlands.
- Measures contextual citation impact by **weighting citations based on the total number of citations in a subject field**.
- The impact of a single citation is given higher value in subject areas where citations are less likely, and vice versa.



Source Normalized Impact Per Paper (SNIP)

journal's citation count per paper
citation potential in its subject field

The impact of a single citation will have a higher value in subject areas where citations are less likely, and vice versa. Stability intervals indicate the reliability of the score. Smaller journals tend to have wider stability intervals than larger journals.

Calculated by CWTS (www.journalindicators.com) based on Scopus data.

SCImago Journal Rank (SJR)

- Developed by SCImago, Spain.
- **SCImago measures the scientific influence of scholarly journals.** A **prestige metric** that can be applied to journals, book series and conference proceedings.
- **It takes into account: both the number of citations received by a journal and the importance/prestige of where the journal citations come from.** With SJR, the subject field, quality and reputation of the journal have a direct effect on the value of a citation.



SCImago Journal Rank (SJR)

average # of weighted citations received in a year
of documents published in previous 3 years

Citations are weighted—worth more or less—depending on the source they come from. The subject field, quality and reputation of the journal have a direct effect on the value of a citation. Can be applied to journals, book series and conference proceedings.

Calculated by SCImago Lab (www.scimagojr.com) based on Scopus data.

Using metrics on a case by case basis

Your selection should partly be based on your preferences, and partly on the characteristics the metric needs to help you answer your question. The table will help you to make your selection.

End in Mind	CiteScore	CiteScore Percentile	SNIP	SJR
Measures	Citations per document	Relative position within subject field based on CiteScore	Relative citations per document	Prestige of citing sources
Open to validation in Scopus?	Yes	Yes	No	No
Size-normalized?	Yes	Yes	Yes	Yes
Subject field-normalized?	No	Yes	Yes	Yes
Communicate magnitude	Yes	No	No	No
Update frequency	Annually, and CiteScore Tracker metrics monthly	Annually, and CiteScore Tracker metrics monthly	Annually	Annually

Use cases collection strategy

Across the Scopus CiteScore Metrics, a multitude of comparisons for serials can be made, helping you to manage your holdings.

Use case	Metrics to use
See the highest impact journals in a subject area?	CiteScore, CiteScore Percentile
Compare journals across different fields / subject areas?	CiteScore Percentile, SNIP or SJR
Communicate the value of a journal?	CiteScore
Need very latest impact measure?	CiteScore Tracker
Measure prestige rather than popularity?	SJR
Compare the citation performance of a set of serial titles that were recently accepted for indexing by Scopus	CiteScore, CiteScore Percentile

Author level metrics

Scopus

Google Scholar

Bandyopadhyay, Sanghamitra

[Indian Statistical Institute, Kolkata, Kolkata, India](#) [Show all author info](#)

[SC](#) 7402057893 [ORCID](#) [Connect to ORCID](#)



Prof. Sanghamitra Bandyopadhyay
Director
Indian Statistical Institute

Metrics overview

291

Documents by author

10569

Citations by 7434 documents

46

h-index: [View h-graph](#)

GOOGLE SCHOLAR:

- ☐ Covers not only journals but academic websites, grey literature, pre-prints, theses etc
- ☐ Also includes books from the Google Books project
- ☐ Results often contain duplicates of the same article (usually as pre-prints and post-prints) due to the wide range of sources

Sanghamitra Bandyopadhyay

Professor of Computer Science, [Indian Statistical Institute, Kolkata, India](#)

Cited by

[VIEW ALL](#)

	All	Since 2016
Citations	17450	7505
Documents	54	38
Books	195	126



- ✓ The H-Index is a numerical indicator of how productive and influential a researcher is
- ✓ It was invented by Jorge Hirsch in 2005, a physicist at the University of California.

Author level metrics in Scopus

ORCID

Connecting Research
and Researchers

- ✓ Open Researcher and Contributor ID
- ✓ Nonproprietary alphanumeric code
- ✓ Uniquely identifies scientific and academic authors /contributors.
- ✓ Integrated with Scopus

Article-level metrics in Scopus: *Compare Like with Like*

- ❑ **The Field-Weighted Citation Impact**
- ❑ (FWCI) score comes from the Scopus database and shows how the article's citation count compares to similar articles in the same field and timeframe.
- ❑ A score of 1.00 means the article is cited as it would be expected, greater than 1.00 the article is doing better than expected, and less than 1.00 the article is underperforming.
- ❑ Eg. FWCI of 6 indicates that the article received almost 6 times the number of citations as compared to the average article in this field received.

PlumX Metrics are comprehensive, item-level metrics that provide insights into the ways people interact with individual pieces of research output



How to use Scopus?

- ✓ Your institute must have access to Scopus
- ✓ If yes, then while working from home you institute must have arranged for remote access
- ✓ Log on to : www.scopus.com

Promoting Your Paper

Promote your own paper

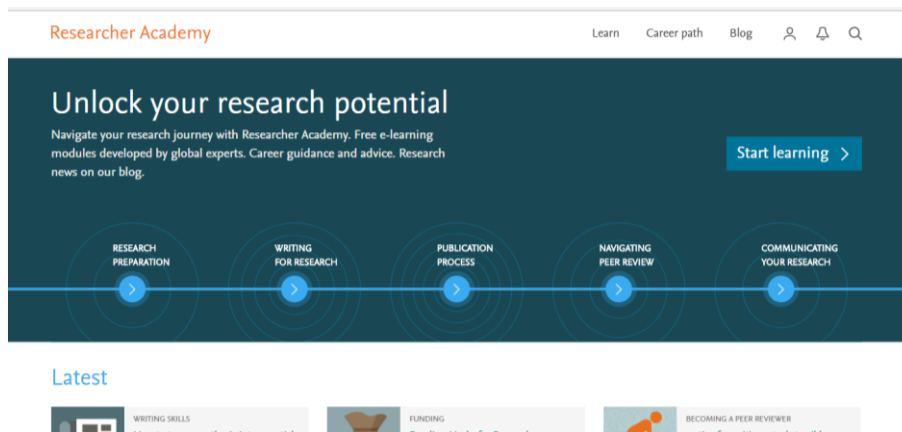
- More than 2.5 million scientific articles are published each year, and that number is rising. So it's increasingly important for you to find ways to make your article stand out.
- While there is much that publishers and editors can do to help, as the paper's author you are often best placed to explain why your findings are so important or novel.



Further Reading

<https://researcheracademy.elsevier.com/>

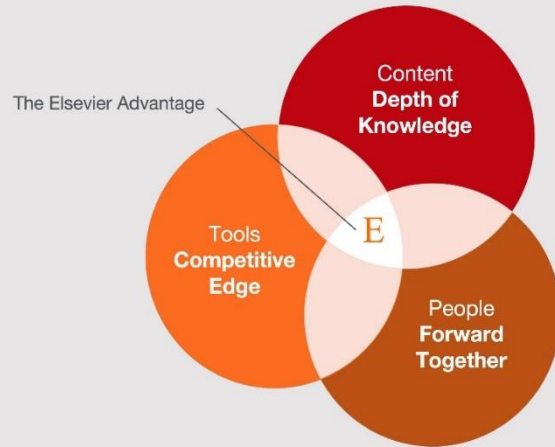
Navigate your research journey with Researcher Academy. Free e-learning modules developed by global experts
Career guidance and advice. Research news on our blog.



- | | | |
|--|--|---|
| ★ Certified Peer Reviewer Course | ★ Job search | ☐ Career planning |
| ☐ Ensuring visibility | ☐ Funding | ☐ The Lancet |
| ☐ Going through peer review | ★ Fundamentals of manuscript preparation | ★ Technical writing skills |
| ★ Finding the right journal | ★ Becoming a peer reviewer | ★ Ethics |
| ☐ Research collaborations | ★ Career guidance | ☐ Cell Press |
| ★ Book writing | ★ Writing skills | ☐ 释放您的研究潜能 |
| ☐ Social impact | ☐ Research data management | ☐ 认证同行评议课程 |
| ☐ Publishing in the Chemical Sciences | ★ Fundamentals of publishing | ☐ Societies Publishing |
| ☐ Open science | ☐ Fundamentals of peer review | |



ELSEVIER



Thank You

