Web of Science Group

A Clarivate Analytics company

Web of Science: Discovery begins here!

Vishav Sharma
Subhasree Nag

Web of Science Group
Clarivate

The Web of Science Group

The Web of Science Group has been pioneering the world of research for more than 60 years, and powering innovation across the research ecosystem with best-in-class data, discovery, analytics, and tools

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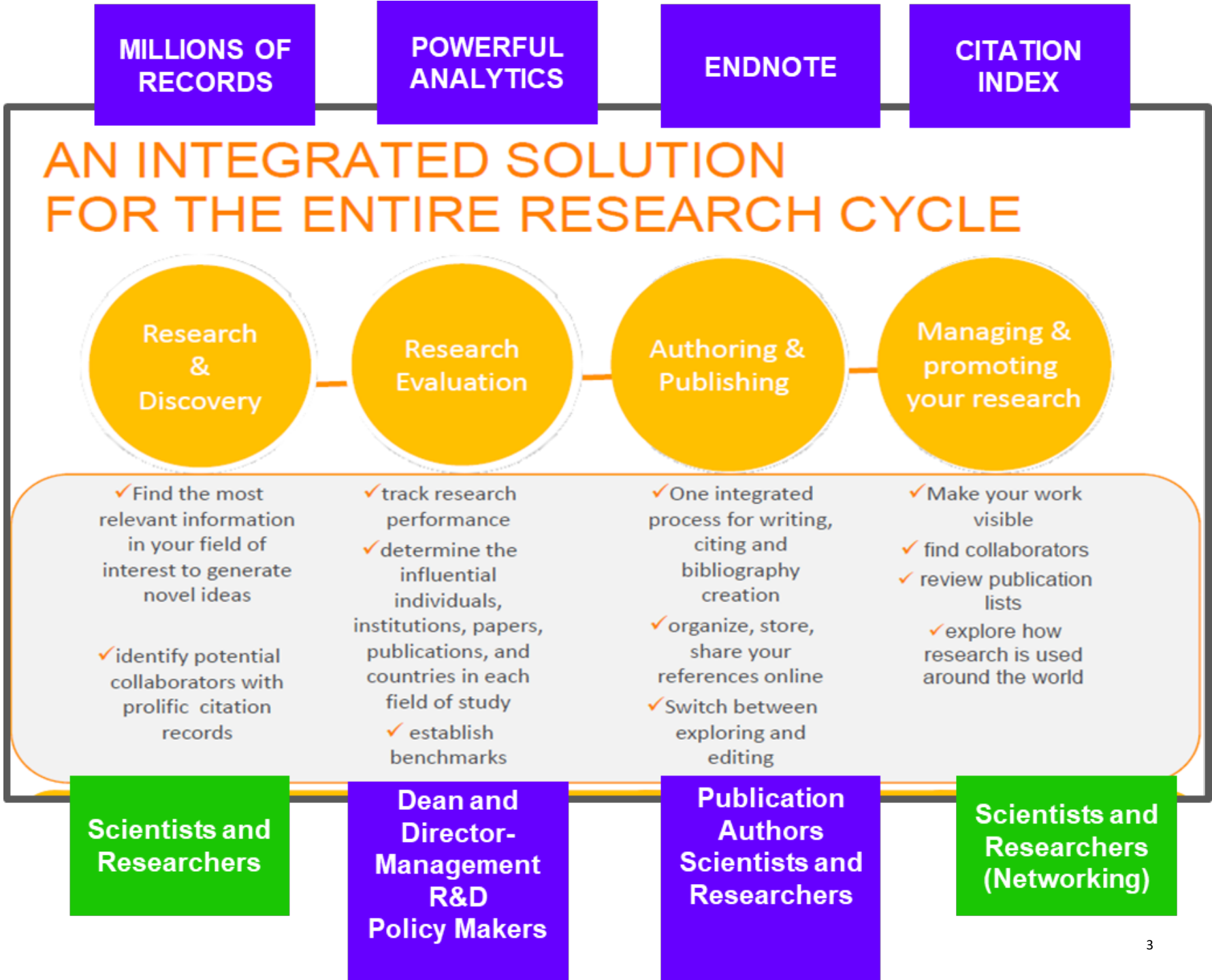
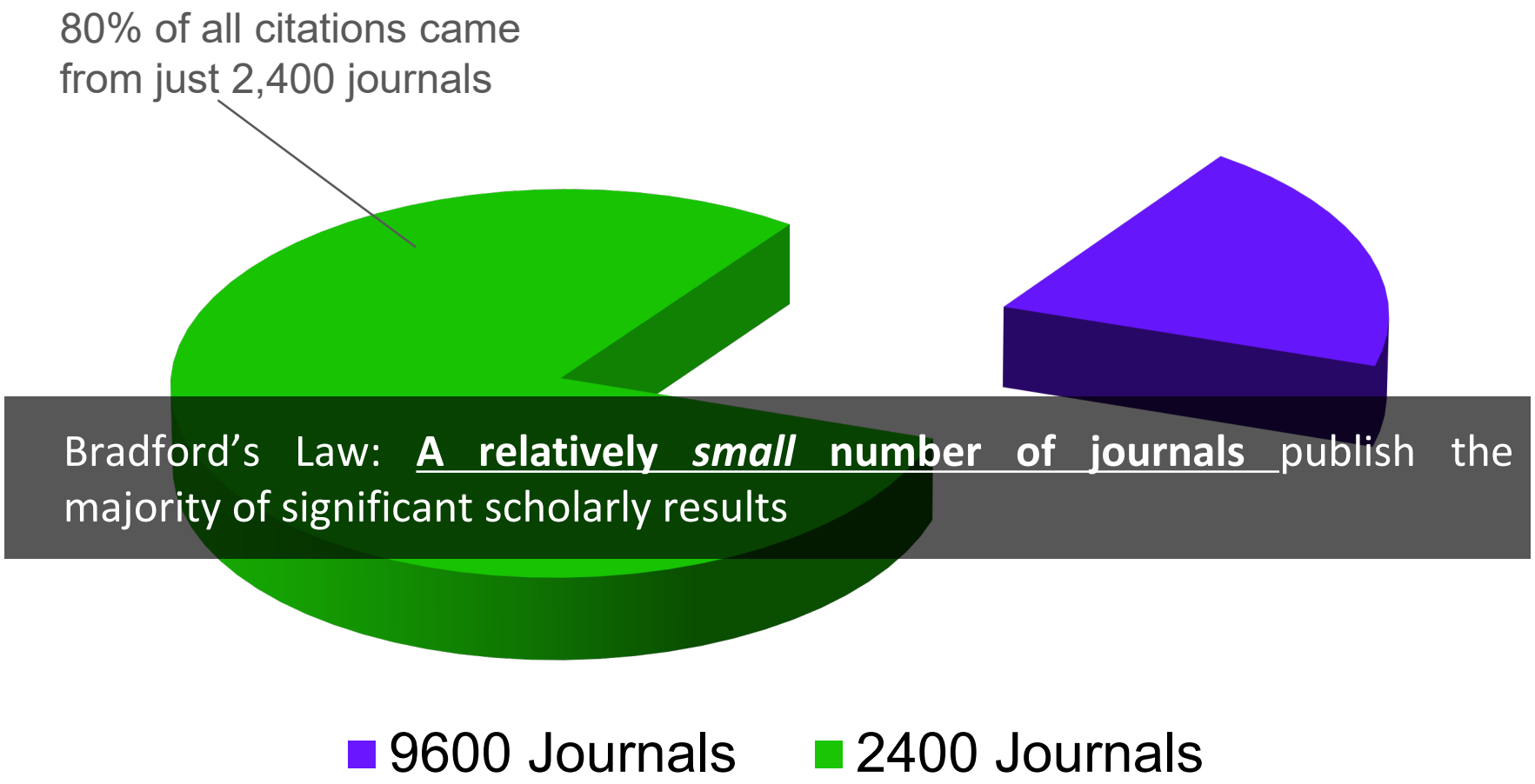
Why Web of Science?



Web of Science is a curated database

Will that satisfy my literature needs?



Bradford, S.C., *Sources of information on specific subjects.* Engineering: An Illustrated Weekly Journal 1934. **137**: p. 85-86.

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The Web of Science Core Collection

21,200+

Total journals in *Core Collection*

76 Million+

Source Items

218,000+

Conference Proceedings

1.6 Billion+

Cited References

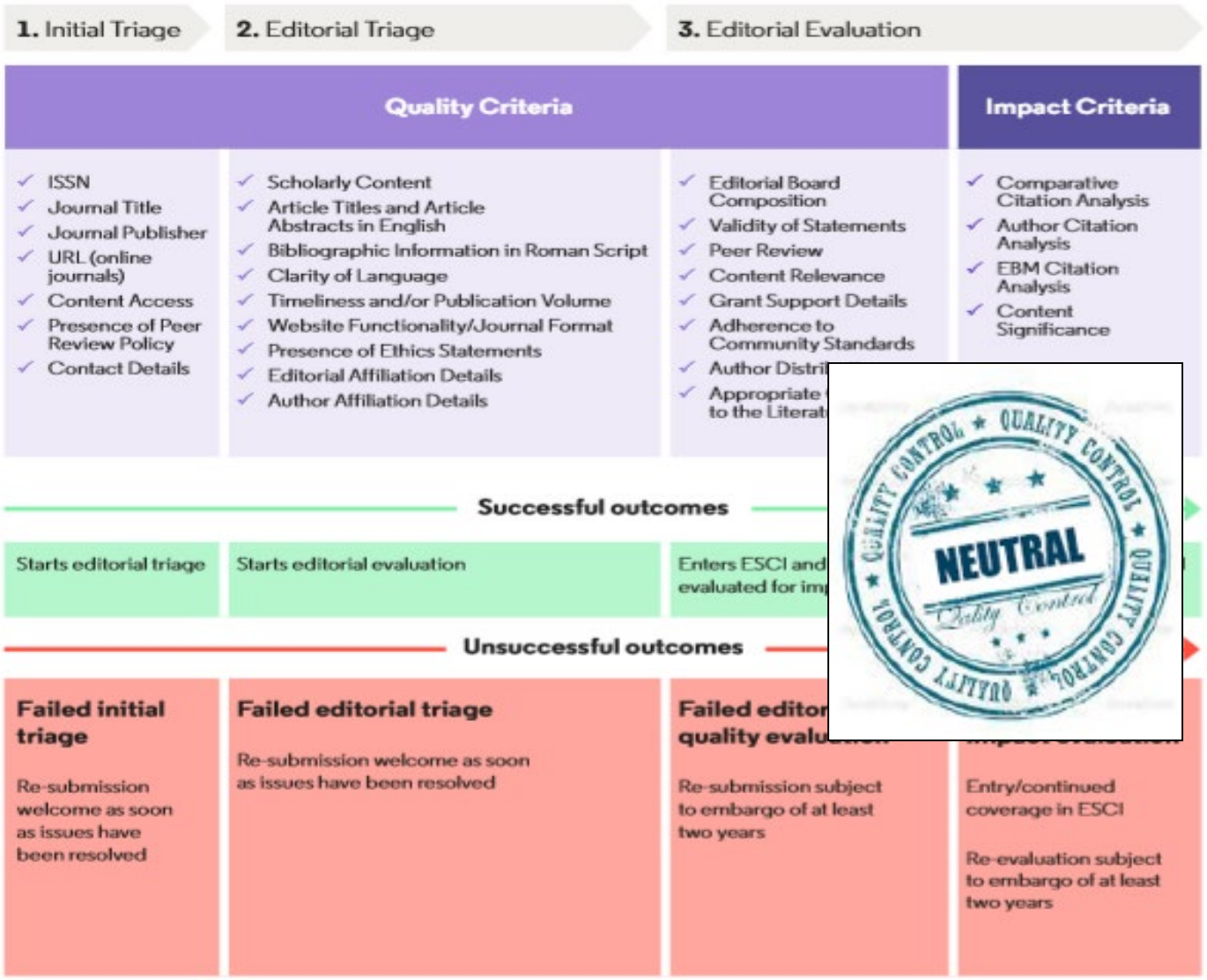
111,000+

Books

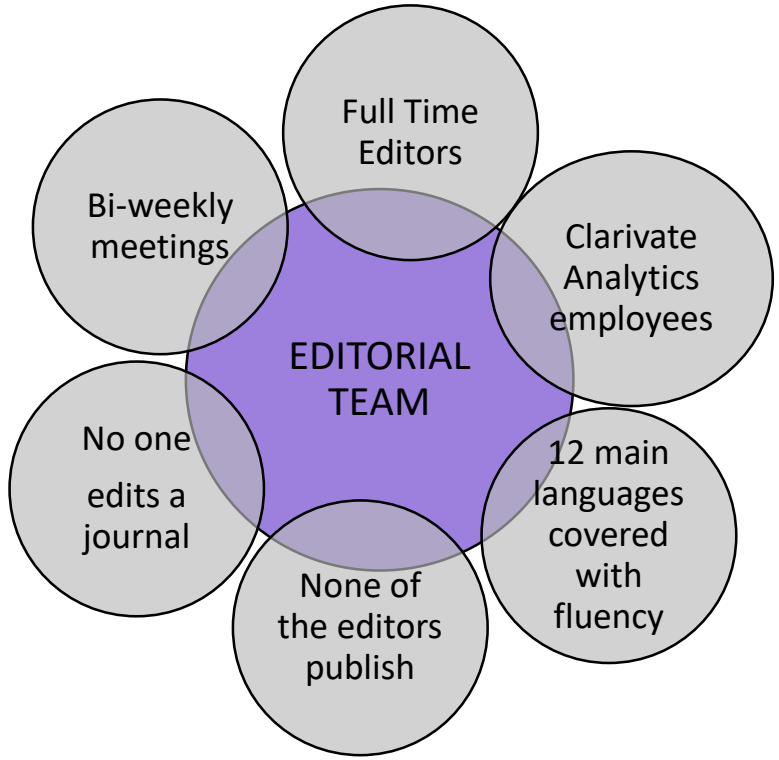
Backfiles to 1900

With cover-to-cover indexing

Journal Selection Process and Editorial Board



- Around 150 years of experience in their roles
- Full time positions

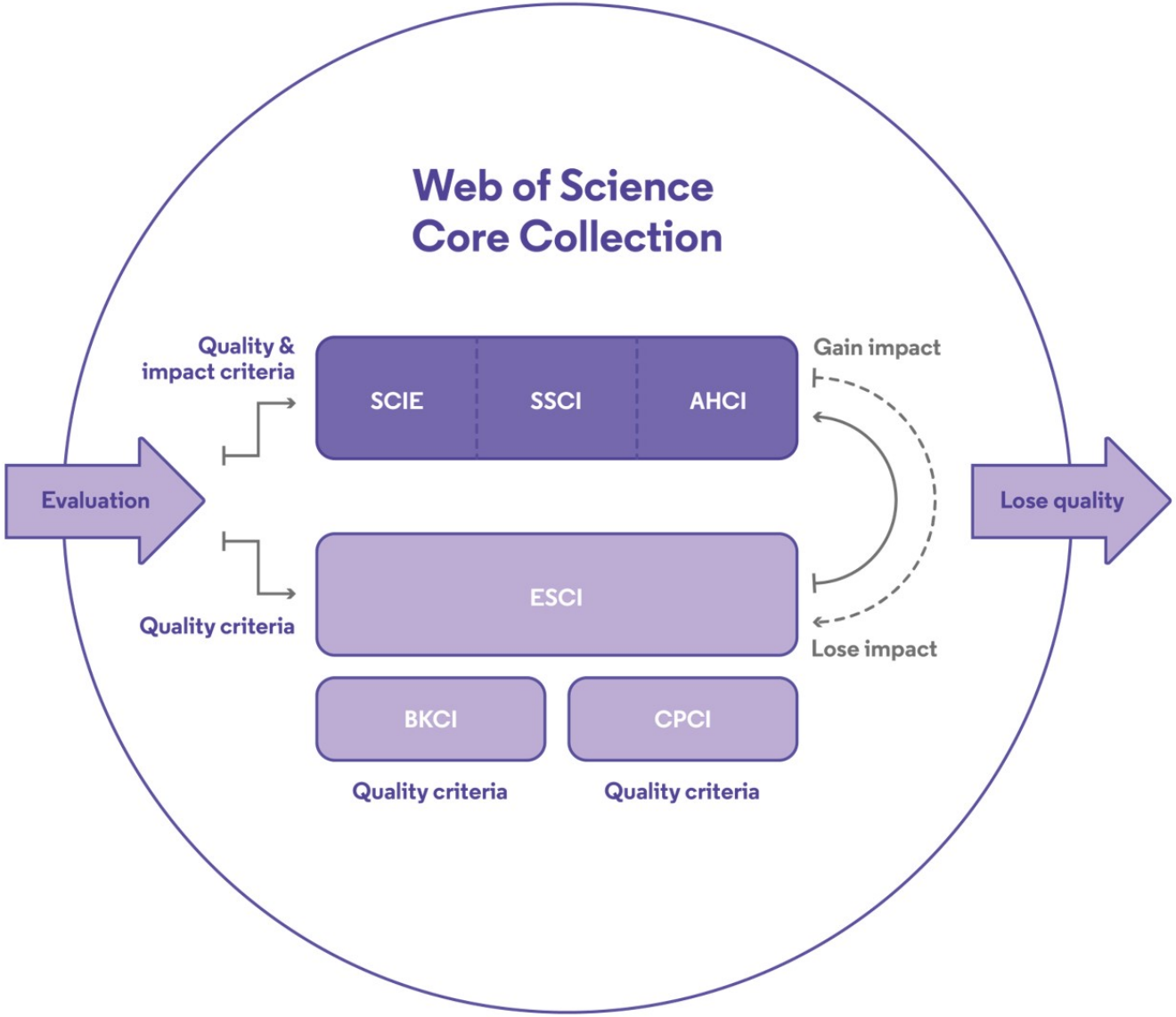


No conflicts of interest

The Web of Science Core Collection

The Heart of the Web of Science Platform

The Web of Science Core Collection is a trusted, high quality collection of journals, books and conference proceedings



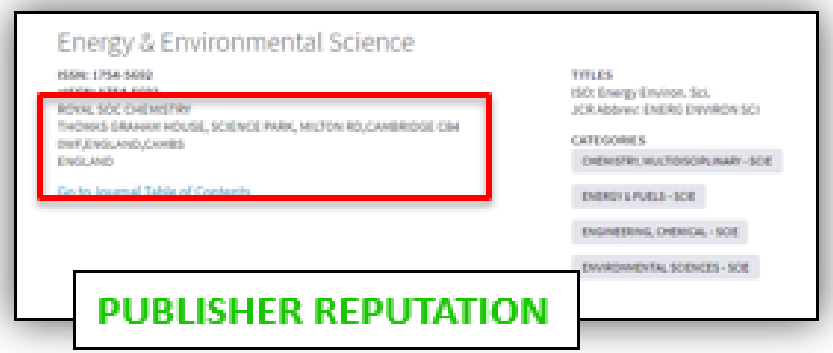
expert team of in-house Web of Science editors

COMMONLY USED CRITERIA FOR SELECTING THE RIGHT JOURNAL

The scope is intentionally broad and the journal recognises the complexity of issues and challenges relating to energy conversion and storage, alternative fuel technologies and environmental science. For work to be published it must be linked to the energy-environment nexus and be of significant general interest to our community-spanning readership. All scales of studies and analysis, from impactful fundamental advances, to interdisciplinary research across the (bio)chemical, (bio/geo)physical sciences and chemical engineering disciplines are welcomed.

SCOPE

JOURNAL IMPACT FACTOR



PUBLISHER REPUTATION

Article types

Energy & Environmental Science publishes:

- Communications
- Full papers
- Reviews
- Perspectives
- Minireviews
- Opinions
- Analysis articles
- Comments

TYPES OF ARTICLES PUBLISHED

In this presentation, we will focus on Journal Impact Factor and additional citation based metrics

WHAT IS JOURNAL IMPACT FACTOR (JIF) ?

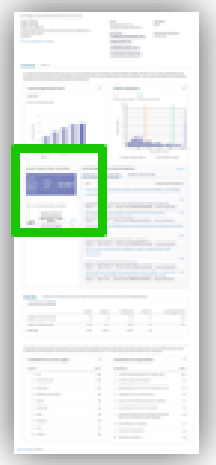
Journal Impact Factor Calculation

$$\text{2017 Journal Impact Factor} = \frac{19303}{642} = 30.067$$

How is Journal Impact Factor Calculated?

$$\text{JIF} = \frac{\text{Citations in 2017 to items published in } \mathbf{2015\ (10324) + 2016\ (8979)}}{\text{Number of citable items in } \mathbf{2015\ (317) + 2016\ (325)}} = \frac{19303}{642}$$

- The Impact Factor calculation is fully transparent to all users. Prior versions of the JCR interface required you to click the number to view the math behind the metric.



- More information:
- Casting a wide net: the Journal Impact Factor numerator
- The Journal Impact Factor Denominator: Defining Citable (Counted) Items

New in 2018: Both the citations in the numerator and the citable items in the denominator link you to exportable lists of article data.

Analyze the papers in Web of Science to see which institutions, authors, and funders contribute most to the journal's impact.

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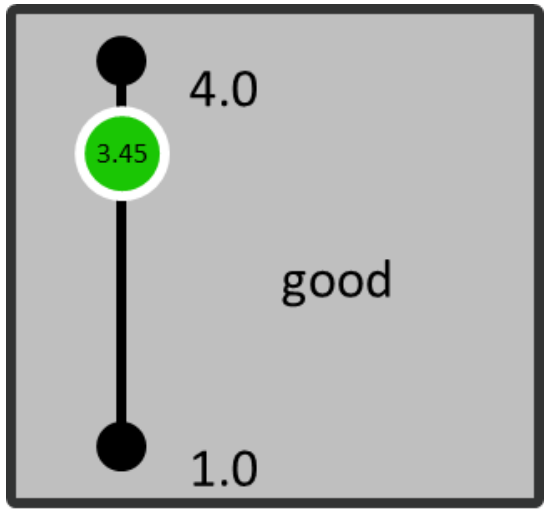
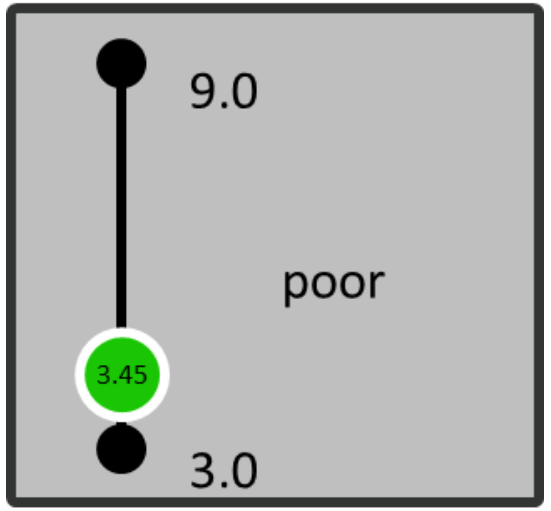
JOURNAL IMPACT FACTOR DEPENDS ON SUBJECT!

Is a JIF of 3.45 good or not?





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RANK IN CATEGORY/QUARTILE

IF= 3.858 (2017)

TOXICOLOGY LETTERS

JCR® Category	Rank in Category	Quartile in Category
TOXICOLOGY	14 of 92	Q1

Data from the 2016 edition of Journal Citation Reports

IF= 3.249 (2016)

CURRENT MEDICINAL CHEMISTRY

JCR® Category	Rank in Category	Quartile in Category
BIOCHEMISTRY & MOLECULAR BIOLOGY	109 of 286	Q2
CHEMISTRY, MEDICINAL	16 of 60	Q2
PHARMACOLOGY & PHARMACY	71 of 256	Q2

Data from the 2016 edition of Journal Citation Reports

IF= 5.168 (2017)

ONCOTARGET

JCR® Category	Rank in Category	Quartile in Category
CELL BIOLOGY	48 of 189	Q2
ONCOLOGY	44 of 217	Q1

CURRENT CANCER DRUG TARGETS

JCR® Category	Rank in Category	Quartile in Category
ONCOLOGY	110 of 217	Q3

Data from the 2016 edition of Journal Citation

IF= 2.992 (2017)

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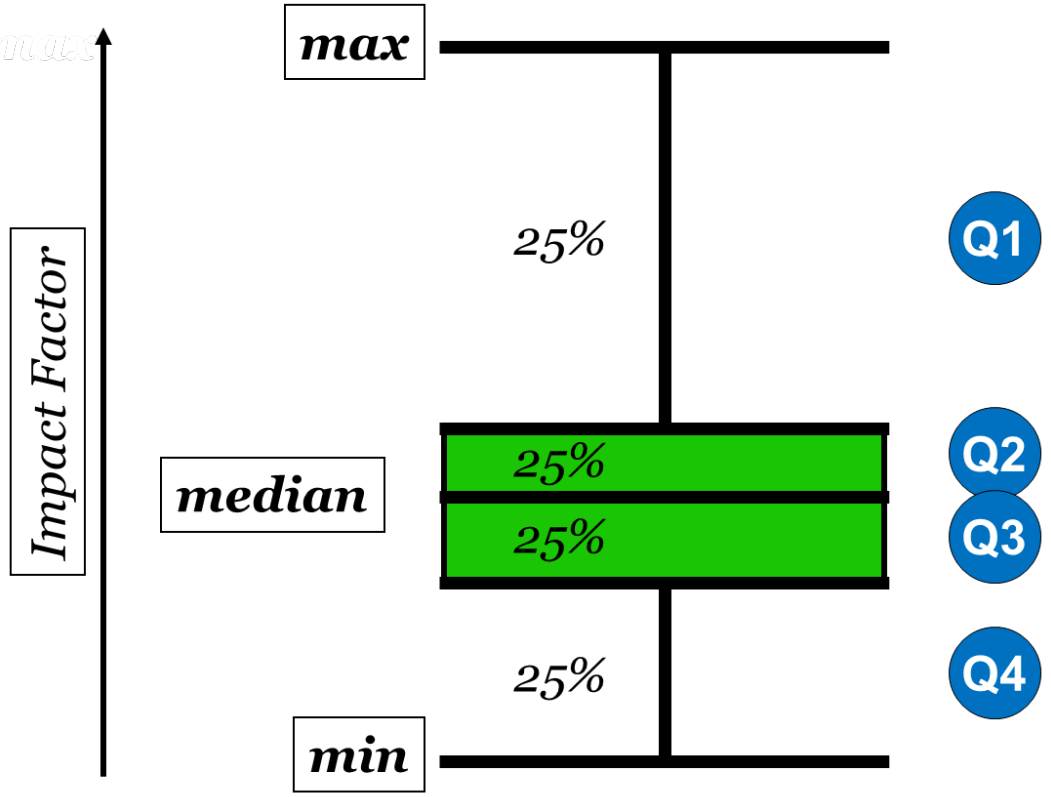
JOURNAL IMPACT FACTOR QUARTILES

- **Q1** -Top 25% of the JIF distribution
- **Q2** - Middle-high position
  (between top 50% and top 25%)
- **Q3** - Middle-low position
  (between top 75% to top 50%)
- **Q4** - Lowest position
  (bottom 25% of the IF distribution)



SELECTION OF BEST FIT JOURNALS

"I look for internationally recognized journals."	Use Web of Science or JCR to find high quality international journals
"I want to publish in journals with high rank and prestige"	Find journal ranking, percentile and quartiles in JCR
"I aim for journals that get cited very quickly"	Use "Immediacy Index" metric in JCR
"I want to publish in journals that gets cited for a long time"	Use "Cited Half Life" metric in JCR
"How can I find the related list of journals"	Use "Citing" or "Cited" journals

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ADDITIONAL METRICS-IMMEDIACY INDEX AND EIGEN FACTOR

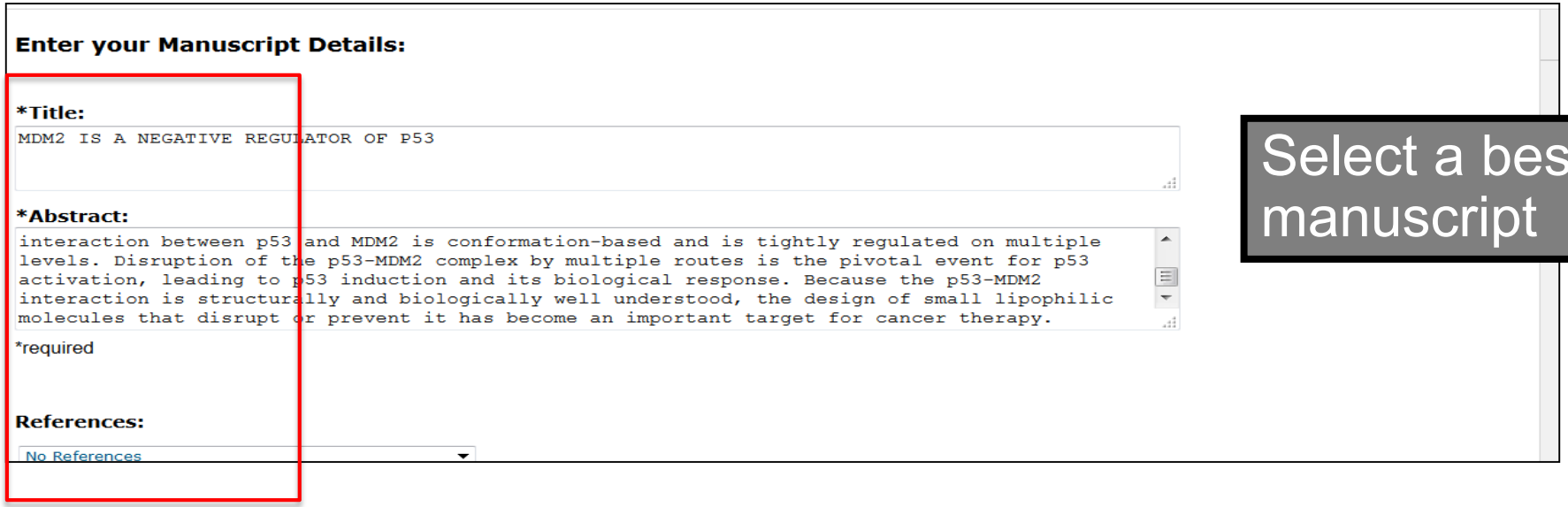
How quickly articles in a journal are cited???
Measure of "***cutting-edge***"-ness

How influential is the journal?
More higher impact journals cite its articles, more is the ***Eigenfactor***

Key Indicators

Year	Total Cites Graph	Journal Impact Factor Graph	Impact Factor Without Journal Self Cites Graph	5 Year Impact Factor Graph	Immediacy Index Graph	Citable Items Graph	Cited Half-Life Graph	Citing Half-Life Graph	Eigenfacto Score Graph	Article Influence Score Graph	% Articles in Citable Items Graph	Normalizec Eigenfacto Graph	Average JIF Percentile Graph
2016	84,383	7.504	6.753	7.823	1.146	4,057	2.6	4.8	0.21632	1.581	99.53	24.80...	89.482
2015	54,997	7.145	6.377	7.332	1.180	3,350	2.4	4.8	0.14766	1.462	99.37	16.83...	87.347
2014	32,234	6.723	5.867	6.813	0.991	2,762	2.3	4.9	0.09406	1.373	99.64	10.53...	88.486
2013	16,373	5.900	5.180	5.908	0.768	1,781	2.4	4.9	0.05402	1.279	99.38	5.95363	84.304
2012	8,635	5.008	4.539	5.040	0.683	953	2.3	5.2	0.03651	1.321	99.90	Not A...	82.028
2011	4,646	4.525	4.097	4.540	0.713	666	1.9	5.4	0.02145	1.277	100.00	Not A...	81.031
2010	1,482	2.925	2.492	2.925	0.597	516	1.4	5.5	0.00684	0.881	99.81	Not A...	73.307
2009	191	Not A...	Not A...	Not A...	0.455	400	0.5	5.5	0.00001	Not A...	98.25	Not A...	0.774

ADDITIONAL METRICS – ENDNOTE MANUSCRIPT MATCHER



Select a best-fit journal for your manuscript

Match feature takes you to the actual journal website

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PREDATORY PUBLISHERS AND JOURNALS

- Predatory publishers (journals) are those that **exploit the gold open-access model** for their own profit
- They take advantage of, exploit, and pander to scholarly authors
- They **pretend to be legitimate**, copying established and respected journals' websites and practices
- **Many do a poor or fake peer review**

HOW PREDATORY PUBLISHERS DAMAGE SCIENCE

- Increase in published research misconduct, such as plagiarism
- Pseudo-science published gets indexed in Google Scholar and other academic indexes
- They threaten demarcation between science and pseudo-science, the cumulative nature of research
- They feed bogus research to societal institutions that depend on authentic science
- Pharmaceutical entrepreneurs are using predatory publishers to make invented compounds appear efficacious
- Author fees may prevent some authors from being able to publish their work, especially in middle-income countries and for unaffiliated researchers

FAKE IMPACT FACTORS

- Companies make up and sell impact factors to open-access journal publishers
- Many publish articles mistakenly believing that their work is in an impact factor journal
- Predatory journals advertise their bogus impact factors in spam email and on their websites

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Thank you