REPORT | The Annual G20 Scorecard - Research Performance 2021

The G20 economies are a leading force in the global research system. Together, they represent more than 80% of Gross Domestic Product (GDP) and two-thirds of the global population. This annual report from the Institute for Scientific Information (ISI)™, released ahead of the G20 Summit, gives a visual comparative snapshot for each of the 19 member nations of the G20 (the EU is the 20th member), covering a wide range of research performance metrics.

Special analysis in this year's report focuses on the relationship between G20 nations' research responses to COVID-19 and the research subject diversity of their portfolios. It finds that regions with more even research bases tend to support a response across a wider range of COVID-19 topics, while those with less even research bases tend toward a more specialized response.

https://clarivate.com/lp/the-annual-g20-scorecard-research-performance-2021/

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Ediția 2021 a Journal Citation Reports

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Octombrie 2021

Web of Science Journal Citation Reports (JCR)

Make confident decisions with objective, unbiased journal statistics from publisher-neutral experts

Selectivity

Quickly find a list of the most influential and best quality journals in the sciences, social sciences and arts and humanities. Each journal profiled in JCR has met the **rigorous quality** documented in the Web of Science Core Collection editorial selection process.

Quality control

Work with credible metrics derived from accurate and complete data. Journals displaying evidence of **excessive self-citation and citation stacking are suppressed** from Journal Citation Reports to support research integrity in scholarly publishing.

Transparency

Easily uncover the **relationship between article and journal citations** to better understand a journal's role in the network of scholarly communications. Access to article data helps you follow best practices for research evaluation.

Multiple ways to view impact

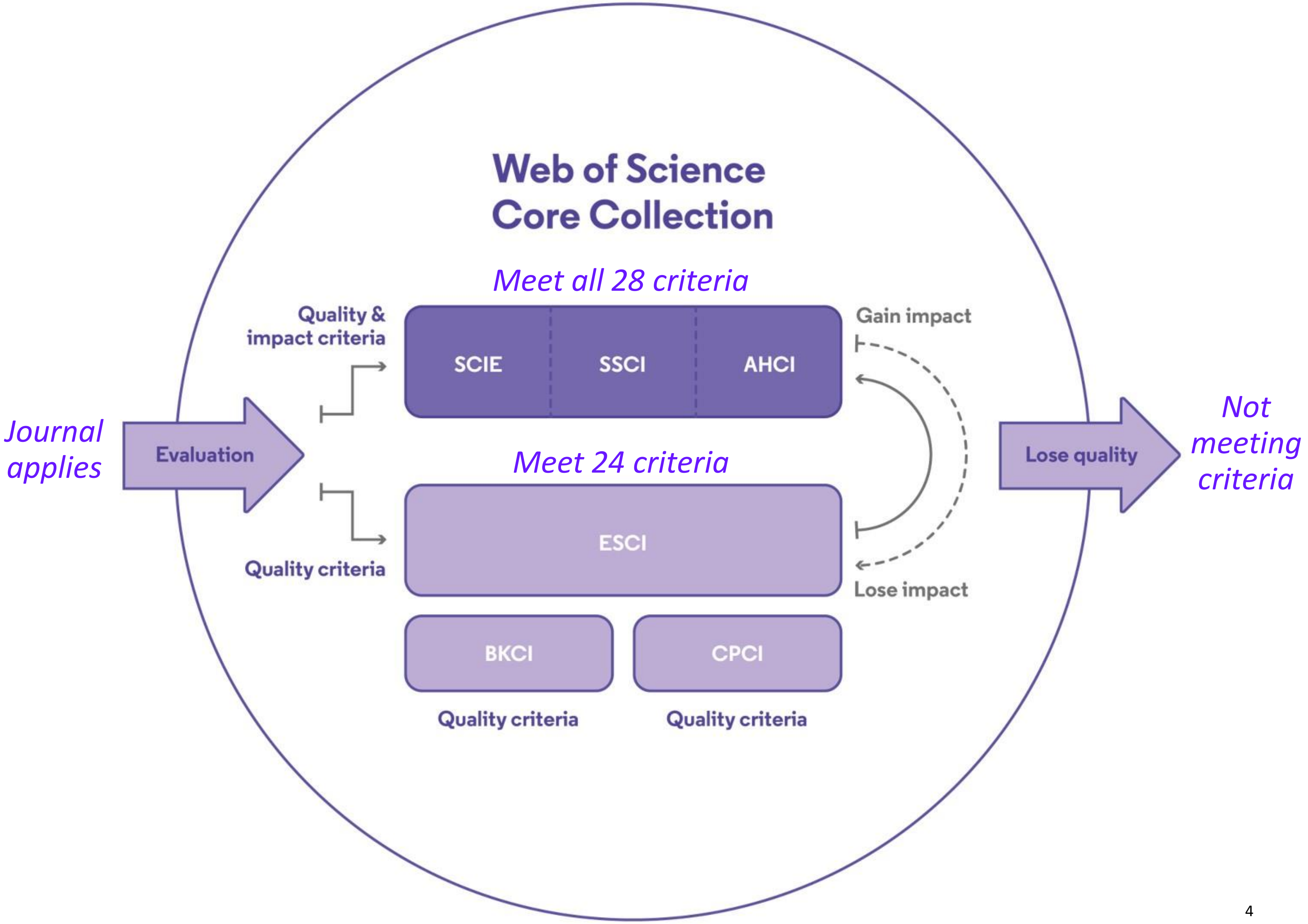
Evaluate journals with a multidimensional view of a journal's impact and influence. View citation metrics alongside **descriptive open access statistics and contributor information** that provide a holistic picture of each journal.

Source Data
Web of Science Core Collection

The Journal Selection Process is based upon both quality and impact criteria.

Journals that meet the quality criteria enter Emerging Sources Citation Index (ESCI). Journals that meet the additional impact criteria enter Science Citation Index Expanded (SCIE), Social Sciences Citation Index (SSCI) or Arts & Humanities Citation Index (AHCI) depending on their subject area.

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



JCR Formats and Features Timeline

1975
First year for JCR—published as part of the SCI—included JIF and Immediacy Index covering 2,630 journals

1978
First year for **Social Science Citation Index Edition** with 1,285 journals. Source data listng also added.

1979
Cited half-life added

1980
Subject category rankings introduced in both editions

1990
JCR available on **microfiche** only

1995
JCR **CD-Rom** introduced

1998
JCR **Web** introduced

2004
Category-level median and **aggregated metrics** introduced

2008
5-year JIF, Eigenfactor, and **Article Influence Score** introduced

2014
JCR integration on InCites platform, now able to access both Science and Social Sciences, in all years

2015
% Articles in Citable Items, Journal Impact Factor Percentile, and Normalized Eigenfactor added

2017
11,459 journals In **236** Categories **Percent Citable Items** introduced

2018
Enhanced **Journal Profile Page Full transparency** on **Journal Impact Factor**

2020
Introduced **gold open access data** to show its contribution to journal content and citation

2021
Content expansion with the addition of all **AHCI and ESCI titles*** and the new **Journal Citation Indicator (JCI)**

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What's new in the 2021 Journal Citation Reports release?

2021 Journal Citation Reports

70% more content

This year's release includes expanded coverage of the journal literature to reflect the full breadth of research covered in all the journals in the Web of Science Core Collection™ – including journals covered in the **Arts & Humanities Citation Index (AHCI)™** and the **Emerging Sources Citation Index (ESCI)™**.

New normalized metric

The **Journal Citation Indicator** is a **field-normalized measurement** of journal citation impact, providing a single journal-level metric that can be easily interpreted and compared across disciplines. It will be calculated for all journals in the Web of Science Core Collection™ – including those that do not have a Journal Impact Factor™. You can find more information in **our blog post**.

Inclusion of Early Access content

We're including **Early Access** content in JCR to more accurately reflect the dynamic citation environment of rapid online publication. You can find more information in our **blog post series** published earlier this year.

Revamped user interface

New graphics will improve the user experience with simpler, more direct searching while providing a deeper look into the data – for example, a view of how a journal's metrics have evolved over time.

2021 Journal Citation Reports

20 942 journals

- 9 509 Science journals
- 3 511 Social Science journals
- 1 784 Arts & Humanities journals

ROMÂNIA
145 reviste
8 reviste AHCI
90 reviste ESCI

254 disciplines (research categories)

113 countries

28 journal evaluation criteria

207 titles with first time JIF

10 journal suppressed

In addition, 11 journals with EEoC issued.

More information here >

JCR expanded coverage

Since it's beginning in 1975, only journals from Science Citation Index & Social Science Citation Index were considered in JCR.

This year edition of JCR, for the first time in its history, will include also journals from Arts & Humanities Citation Index and Emerging Sources Citation Index.

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JCR expanded coverage

The JCR's coverage of journal literature will reflect the full breadth of research covered in all the journals in the Web of Science Core Collection™, including the Arts & Humanities Citation Index (AHCI)™ and the Emerging Sources Citation Index (ESCI)™.

The journals covered in AHCI and ESCI have met the same rigorous quality criteria, applied by our expert in-house editors, for coverage as the publications covered in the Science Citation Index™ and the Social Sciences Citation Index™. Therefore, AHCI and ESCI – and their content from trustworthy, Web of Science-selected journals – merit complete coverage in the JCR.

AHCI and ESCI journals *will not* be awarded a Journal Impact Factor, but a new metric, the Journal Citation Indicator

The *Journal Citation Indicator* will be calculated for all journals in the Web of Science Core Collection™ – including those that do not have a Journal Impact Factor (JIF)™ – and published in the 2021 JCR in June.

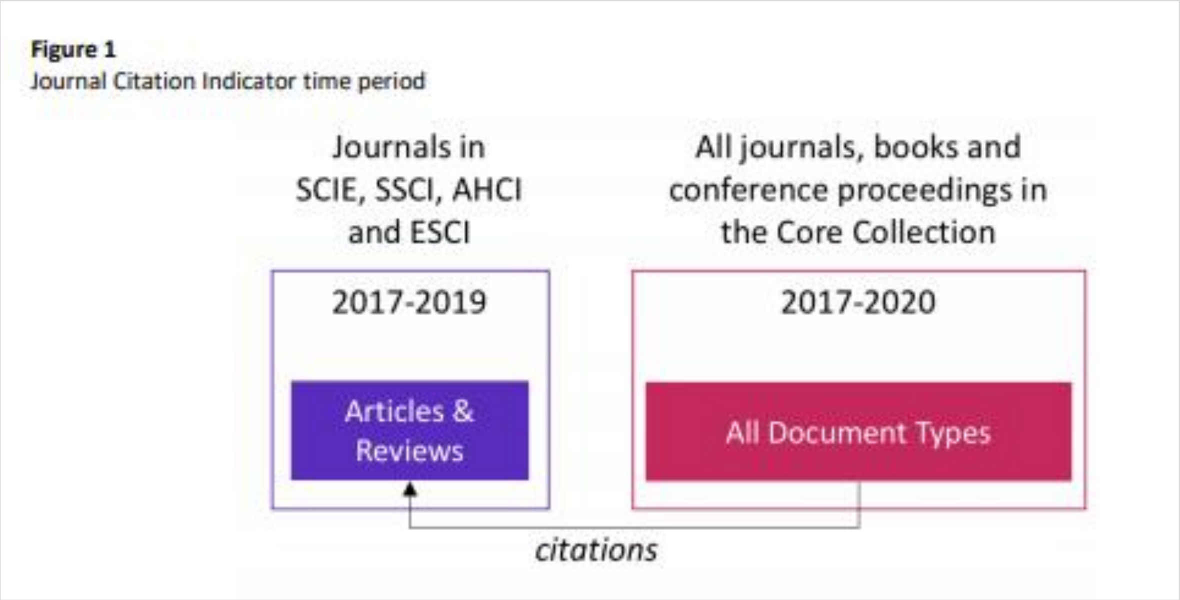
AHCI and ESCI journals will receive several metrics

Journals from **Arts & Humanities Citation Index** and **Emerging Sources Citation Index** will now receive new range of metrics, available for performance evaluation:

- ✓ **Journal Citation Indicator**
- ✓ **% of OA Gold**
- ✓ **Immediacy Index**
- ✓ **Eigenfactor Score**
- ✓ **Normalized Eigenfactor Score**
- ✓ **Article Influence Score**
- ✓ **Citing Half-Life**
- ✓ **Cited Half-Life**

Total Citations	2020 JCI	% of OA Gold	Eigenfactor	Normalized Eigenfactor	Article Influence Score	Citing Half-Life	Cited Half-Life	% of Articles in Citable items	Citable Items	Immediacy Index	Total Articles
17,761	1.94	11.67 %	0.01111	2.32878	1.349	12.3	10.6	99.24 %	132	1.015	131

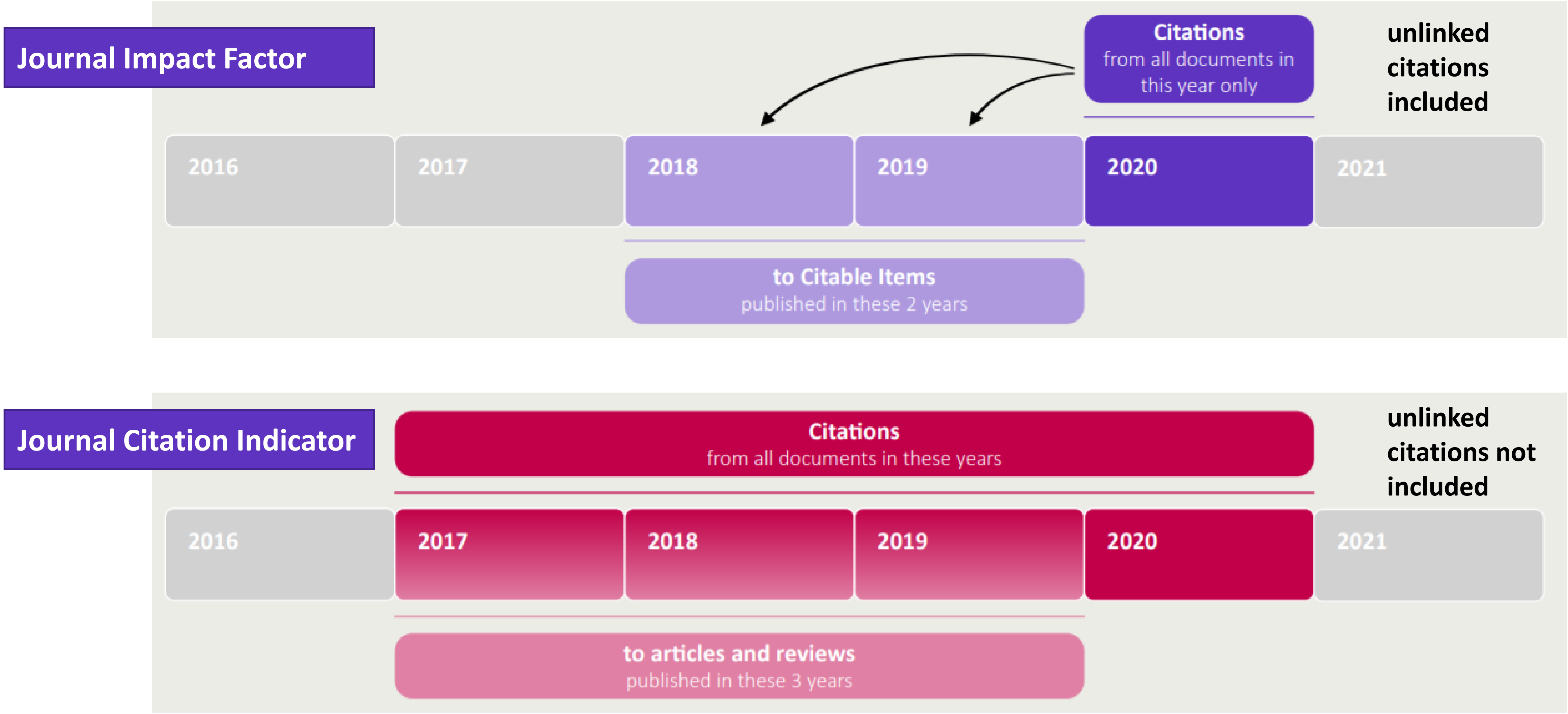
New metric, new context



Journal Citation Indicator is a new field-normalized metric that will be calculated for all journals in the Web of Science Core Collection, which will be attributed to AHCI and ESCI journals.
The value represents the average category-normalized citation impact for papers published in the prior three-year period.

The JCI's calculation on three years of publications contrasts with the two-year window employed for the JIF. This three-year calculation enables the JCI to be as current as possible, while also allowing more time for publications to accrue citations.

Journal Impact Factor & Journal Citation Indicator



Journal Impact Factor & Journal Citation Indicator

Feature	Journal Impact Factor	Journal Citation Indicator
All Web of Science Core Collection journals	N	Y
Field-normalized citation metric	N	Y
Fixed dataset	Y	Y
Counts citations from the entire Core Collection	Y	Y
Counts citations from the current year only	Y	N
Includes Early Access (EA) content from 2020 onward	Y	Y
Includes unlinked citations	Y	N
Fractional counting	N	N

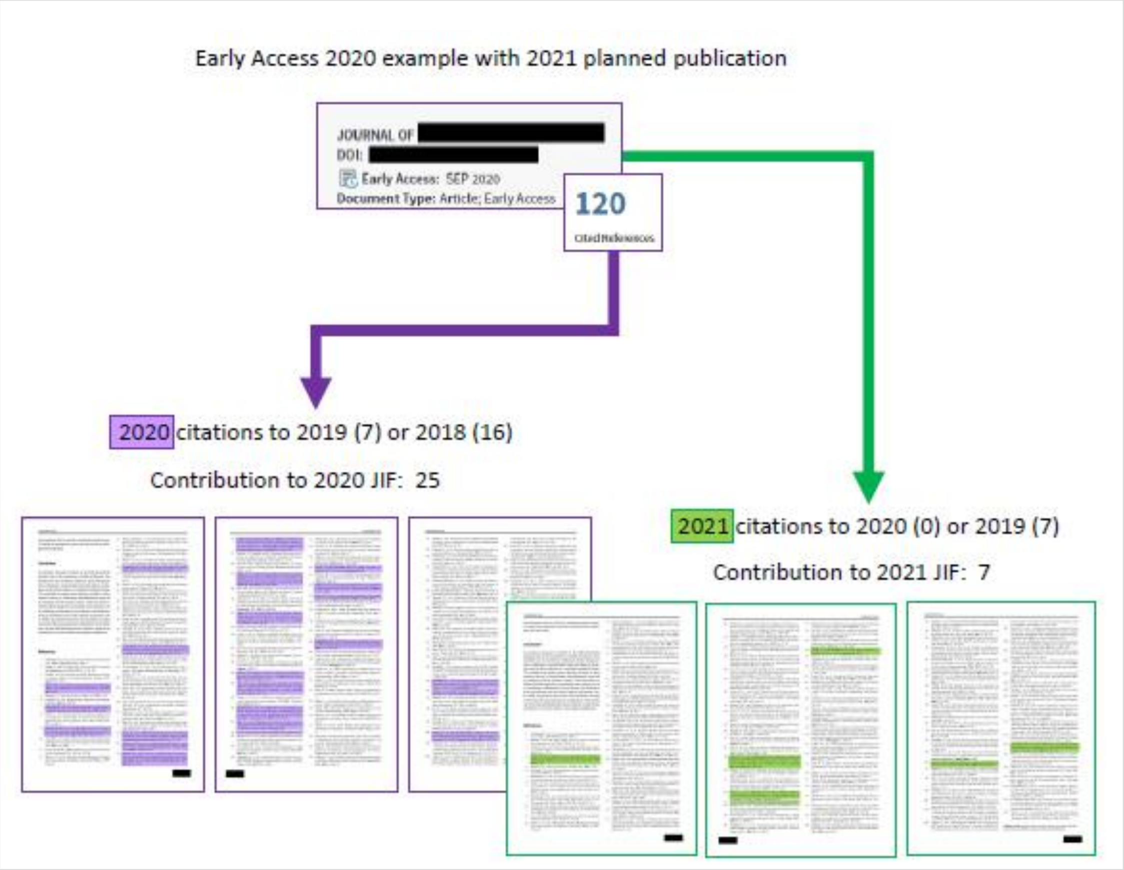
Table 1 – Comparison of Journal Citation Indicator to JIF

- ✓ The Journal Citation Indicator (JCI) is designed to complement the Journal Impact Factor - the original and longstanding metric for journal evaluation - and other metrics currently used in the research community.
- ✓ The JIF calculation is based on citations made in the current year, while the JCI counts citations from any time period following publication, up to the end of the current year.
- ✓ The JCI will bring citation impact metrics and providing this information will increase exposure to journals from all disciplines, helping users to understand how they compare to more established sources of scholarly content.

Early Access

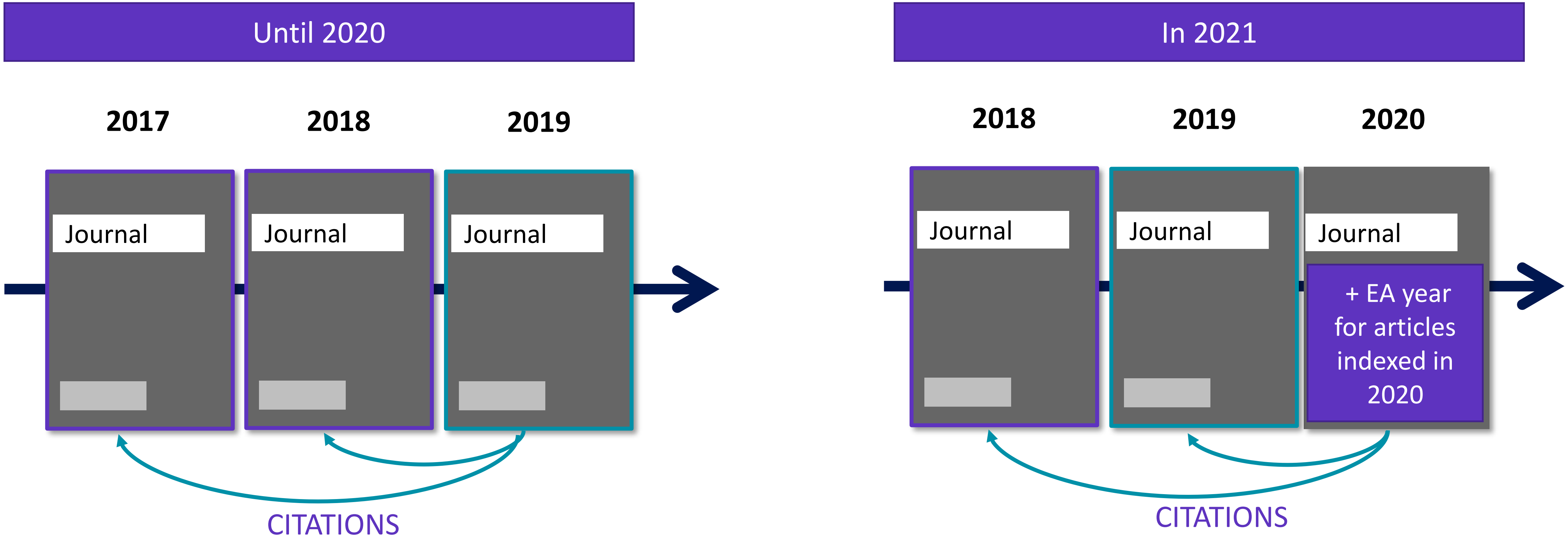
The expanded coverage in the 2021 JCR release will introduce [Early Access]() articles, reflecting the earliest availability of new research as it appears in the "version of record" prior to official publication.

- Most Early Access items have an early access date and final publication date within the same year.
- The treatment of these items in JCR will not change under the new policy.
- For items indexed where the early access date is in a different year from the final publication date, we will ***only*** use the early access date, starting with content indexed in 2020.



Early Access content typically has a higher contribution to JIF when counted by the early access date.

Journal Impact Factor calculation including early access content



Journal Impact Factor calculation including early access content

Prospective model:
The prospective model sets 2020 as the first year for which EA content is considered according to its EA date rather than its publication date and continues to incorporate new content using the EA date.

JIF calculation in 2021

2020 JIF =

Citations in:
- **Early Access items** with an early access year of **2020**
- **Early Access items with a final publication year** of **2020** and an Early Access year of 2019 or earlier (this applies to 2020 JIF calculation only)
- **Non-Early Access items** with a final publication year of **2020**

To items published in **2018** and **2019**

divided by

Number of articles&reviews with a final publication date of **2018** and **2019**.

JIF calculation in the next years

2021 JIF = **Citations in 2021** to items published in 2019 + **2020** / Number of articles & reviews published in 2019 & **2020**

2022 JIF = **Citations in 2022** to items published in **2020** + **2021** / Number of articles & reviews published in **2020** & **2021**

Years in purple already includes early access content

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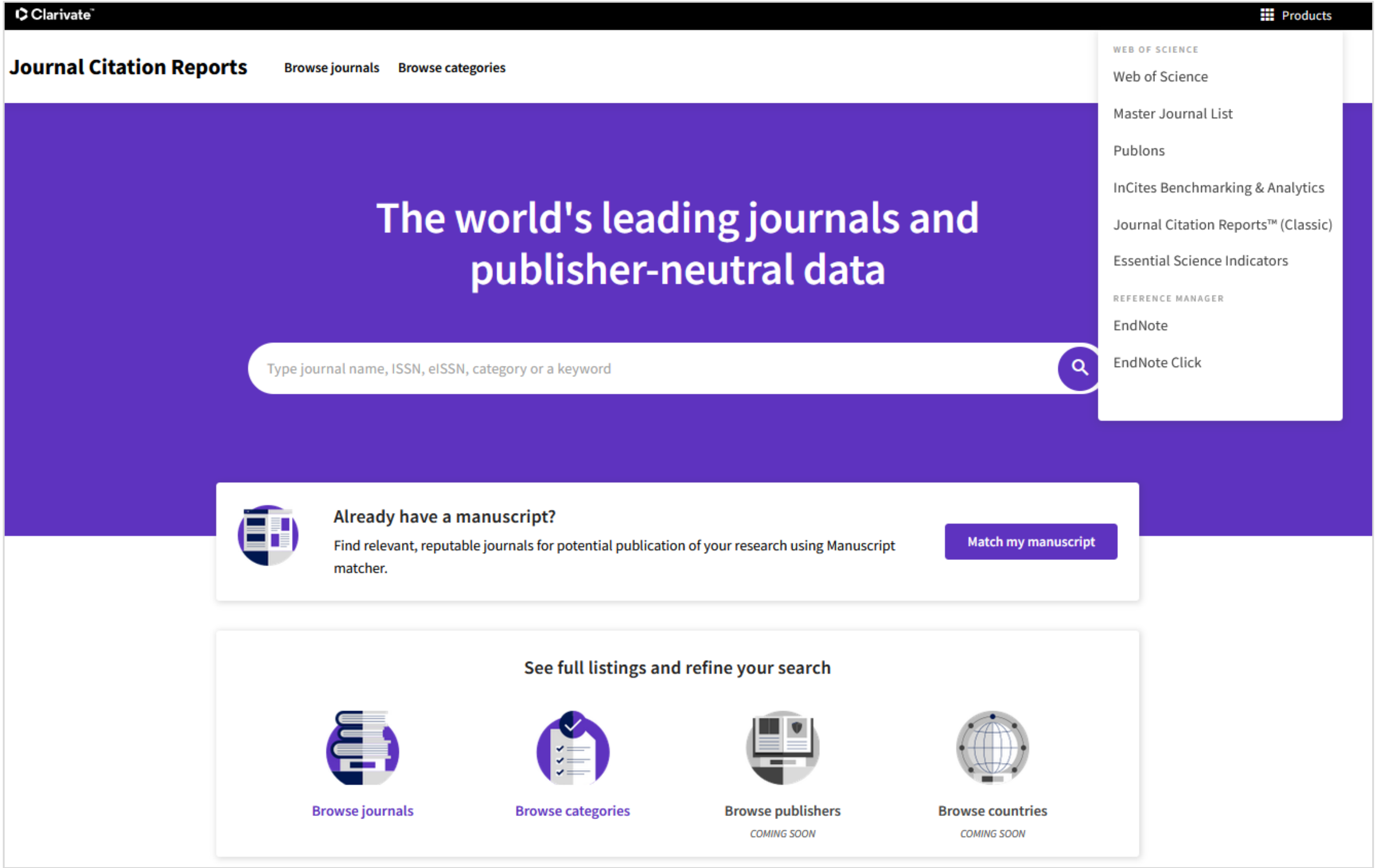
New User Experience



Dual Access for the remainder of 2021

Intuitive ranking

Rank by Journal Impact Factor

Journals of a category are sorted by Journal Impact Factor resulting in the Category Ranking below. This is presented by year in descending order for each category in which the journal is ranked in JCR.
Learn more

EDITION
Science Citation Index Expanded (SCIE)

CATEGORY
NURSING
63/124

JCR YEAR	JIF RANK	JIF QUARTILE	JIF PERCENTILE
2020	63/124	Q3	49.60
2019	99/123	Q4	19.92
2018	104/120	Q4	13.75
2017	110/118	Q4	7.20
2016	94/116	Q4	19.40

EDITION
Social Sciences Citation Index (SSCI)

CATEGORY
NURSING
61/122

JCR YEAR	JIF RANK	JIF QUARTILE	JIF PERCENTILE
2020	61/122	Q2	50.41
2019	97/121	Q4	20.25
2018	102/118	Q4	13.98
2017	107/115	Q4	7.39
2016	91/114	Q4	20.61

Example: a journal is listed in Nursing-SCIE and Nursing-SSCI.
In SCIE it is a Q3 journal but a Q2 in SSCI. With this new UI, it is easier to understand how the context of the category affects the rank, quartile and percentile across different categories

Interactive Charts

Citation distribution

Export

The Citation Distribution shows the frequency with which items published in the year or two years prior were cited in the JCR data year (i.e., the component of the calculation of the JIF). The graph has similar functionality as the JIF Trend graph, including hover-over data for each data point, and an intractive legend where hovering over a data element's legend highlights that element in the body of the graph. You can view Articles, Reviews, or Non-Citable (other) items to the JIF numerator. Learn more

ARTICLE CITATION MEDIAN

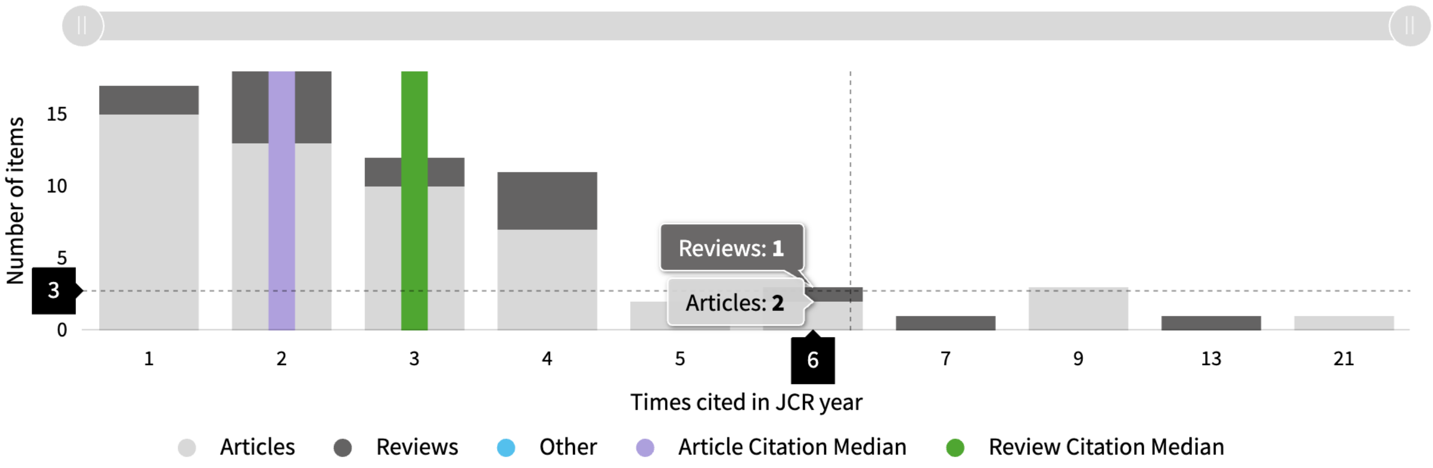
2

REVIEW CITATION MEDIAN

3

UNLINKED CITATIONS

34



TIMES CITED

0

ARTICLES

17

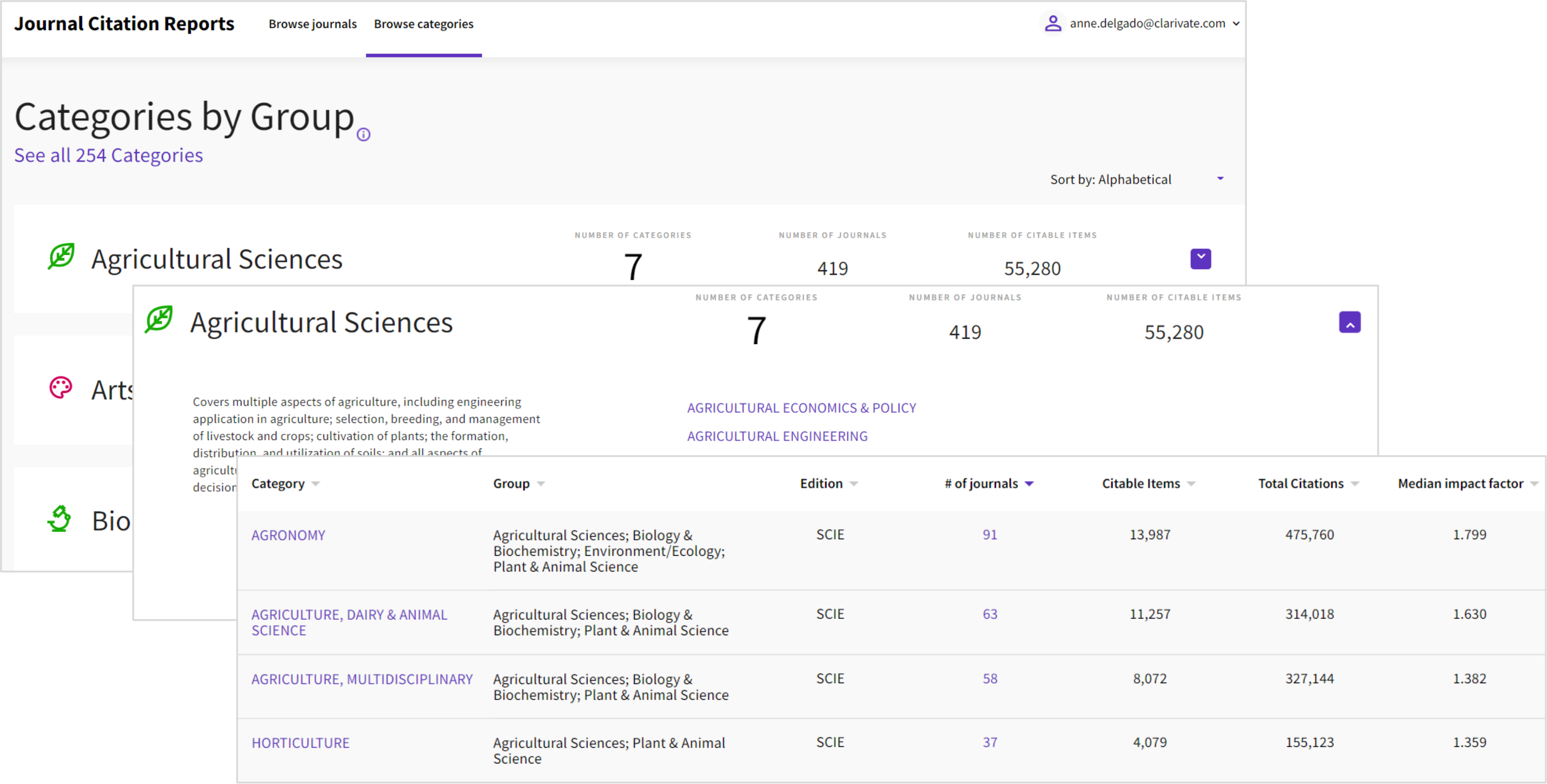
REVIEWS

1

OTHER

2

Browse Categories



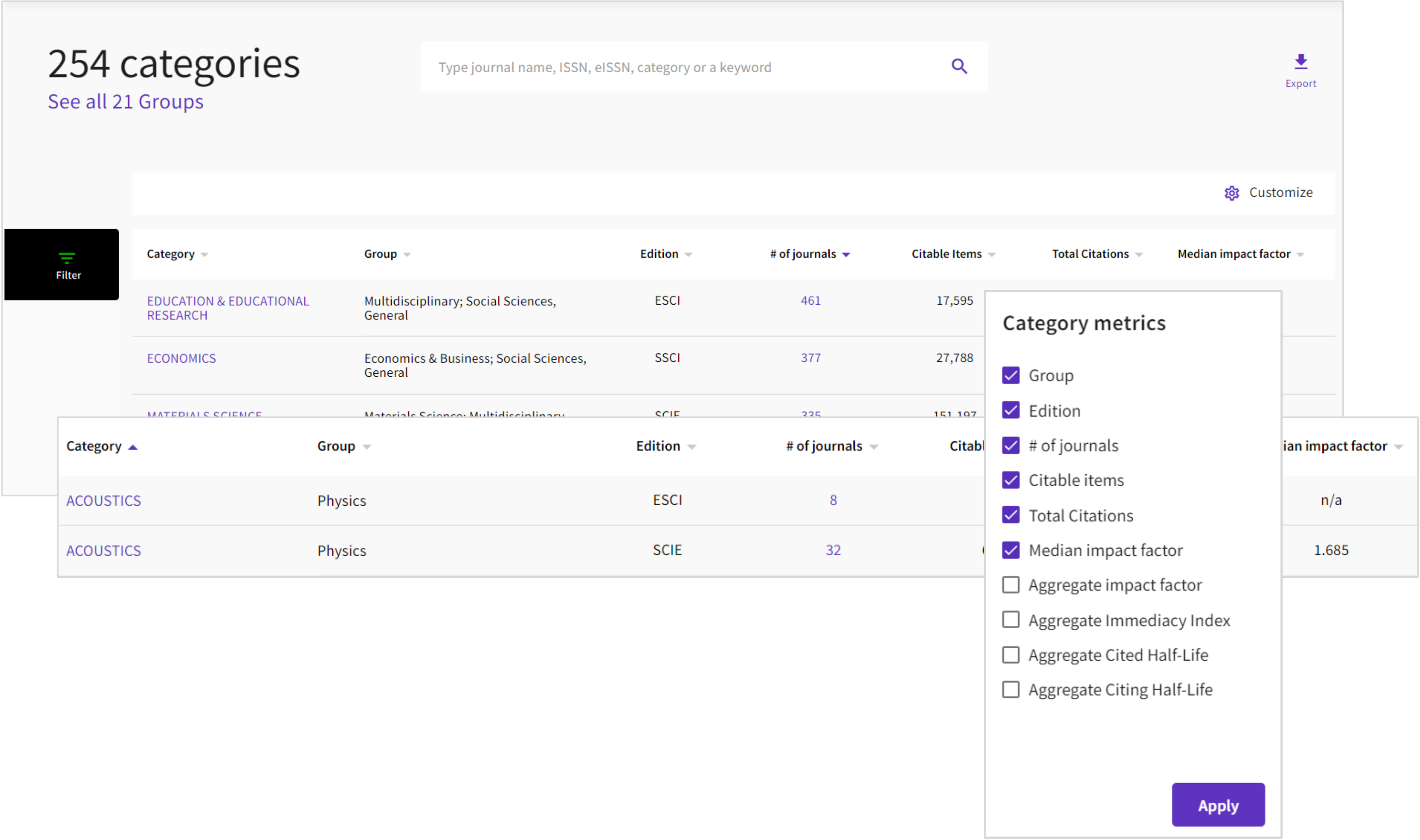
Category	Group	Edition	# of journals	Citable Items	Total Citations	Median impact factor
AGRONOMY	Agricultural Sciences; Biology & Biochemistry; Environment/Ecology; Plant & Animal Science	SCIE	91	13,987	475,760	1.799
AGRICULTURE, DAIRY & ANIMAL SCIENCE	Agricultural Sciences; Biology & Biochemistry; Plant & Animal Science	SCIE	63	11,257	314,018	1.630
AGRICULTURE, MULTIDISCIPLINARY	Agricultural Sciences; Biology & Biochemistry; Plant & Animal Science	SCIE	58	8,072	327,144	1.382
HORTICULTURE	Agricultural Sciences; Plant & Animal Science	SCIE	37	4,079	155,123	1.359

To help facilitate discovery, browse categories by **Groups**.

Groups are broad groupings of categories that include all categories on a relevant topic.

Notes on groups:
There are no metrics associated with them - they are solely for discovery.
The mapping is not 1:1 - categories can be included in multiple groups.

Browse Categories



Alternatively, you can search among the 254 WOS categories.

- Categories are sorted per number of journals per default
- You can filter to display categories either by group or category
- From the table view, you can customize the metrics you want to see.

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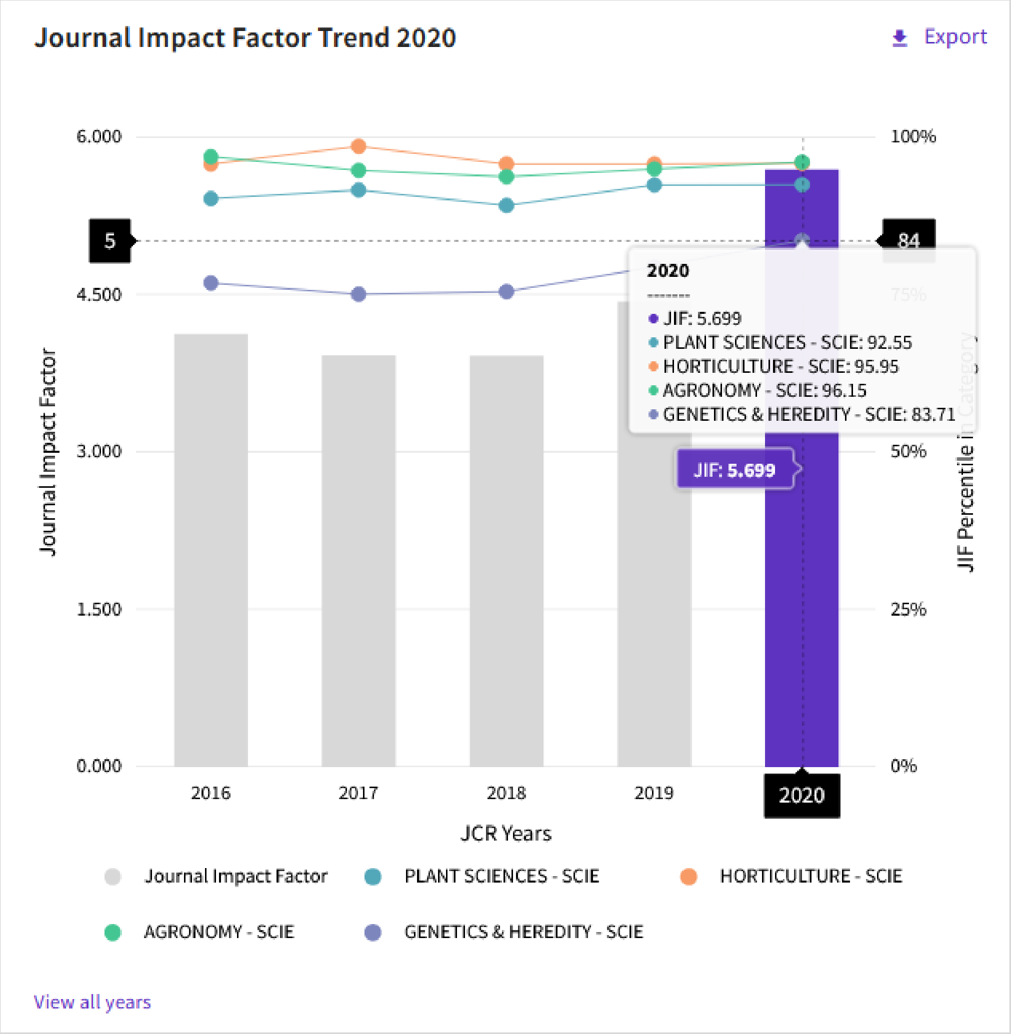
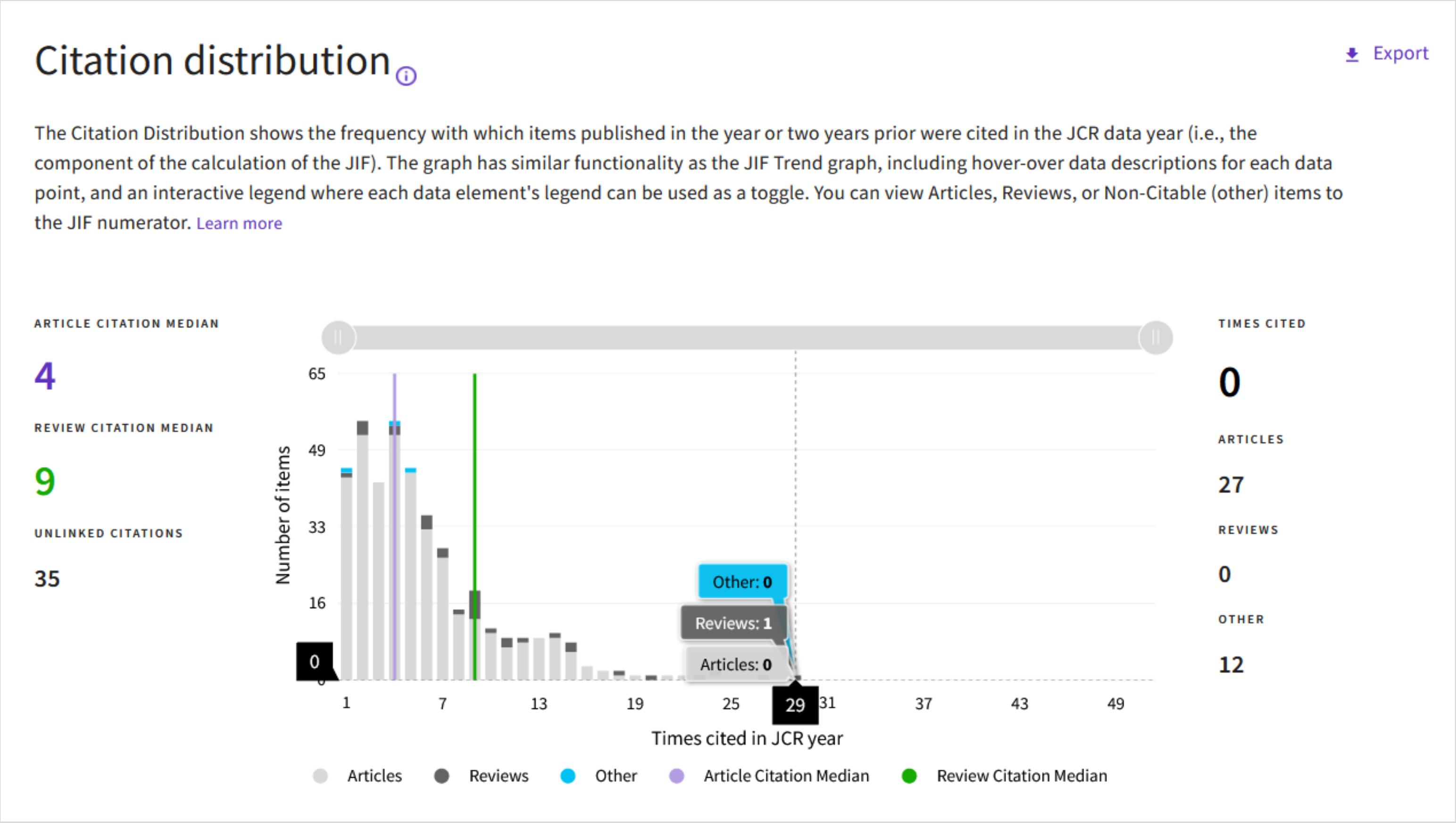
Help researchers draw better informed conclusions on journal impact



Assess journal performance in context with ready-made visualizations that show a journal's rank and performance over time:

- See whether a journal's JIF is growing or declining
- Determine how the journal's JIF ranks it in comparison to other journals in its subject category or categories.

Help your institution conduct research evaluation more responsibly



- Recognize the extent to which outlier papers may be driving a journal’s JIF
- See the difference between paper versus journal level citations
- Understand how citation rates vary for articles versus reviews.

Easily assess a journal's relevance to your research

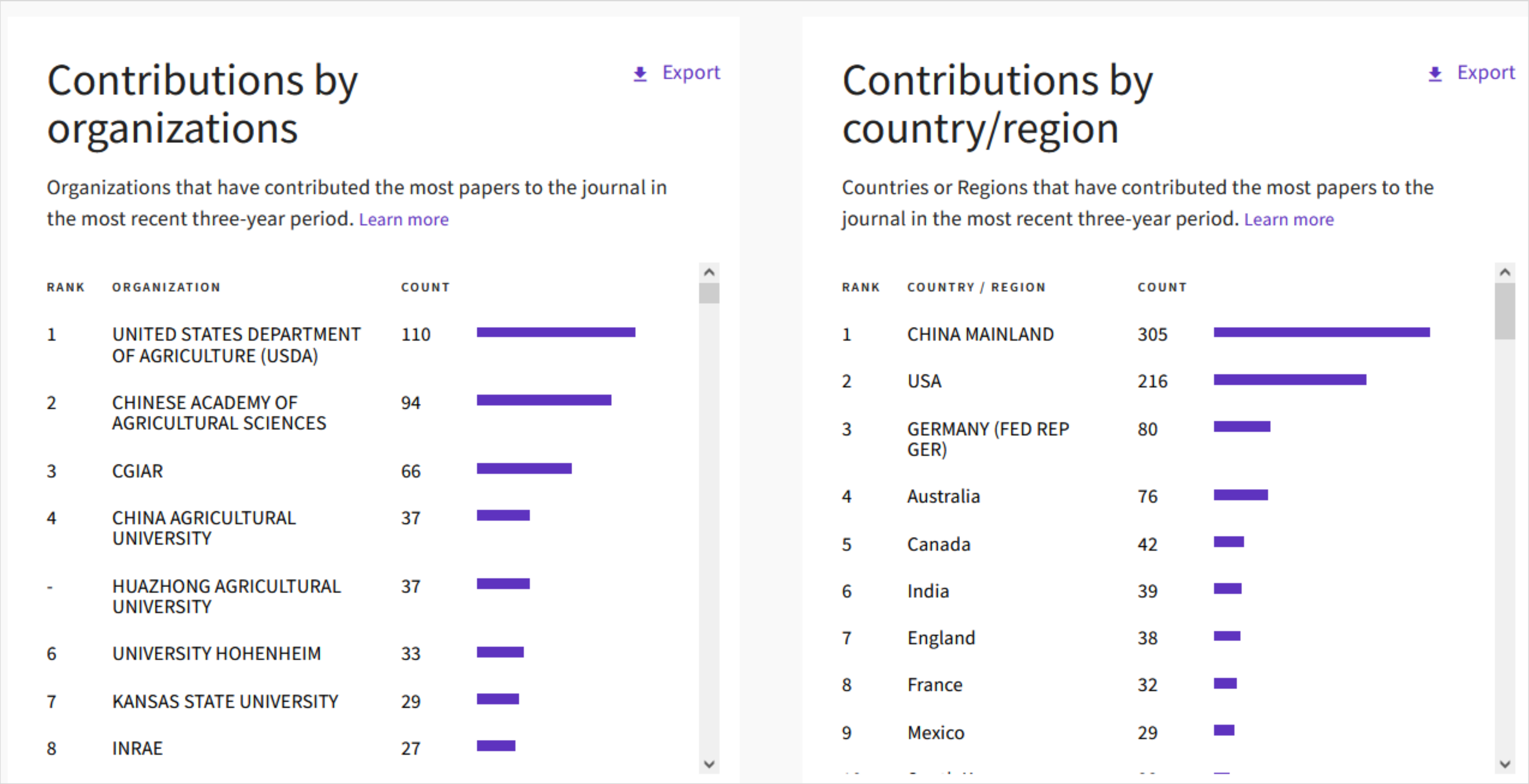
Journal Impact Factor contributing items Export

Citable items (435) | Citing Sources (309)

TITLE	CITATION COUNT
Enhancing the rate of genetic gain in public-sector plant breeding programs: lessons from the breeder's equation	29
Accelerating crop genetic gains with genomic selection	27
Toward the sequence-based breeding in legumes in the post-genome sequencing era	24
Efficiency of multi-trait, indirect, and trait-assisted genomic selection for improvement of biomass sorghum	24
Advances in understanding salt tolerance in rice	23
Genome-wide association mapping for resistance to leaf rust, stripe rust and tan spot in wheat reveals potential	22
A 55K SNP array-based genetic map and its utilization in QTL mapping for productive tiller number in common	21
Back to the future: revisiting MAS as a tool for modern plant breeding	20
Fine-mapping of the Fusarium head blight resistance QTL Qfhs.ifa-5A identifies two resistance QTL associated with	19

- Determine whether your manuscript is a good topical fit for a journal.
- Quickly identify your institution's contribution to a journal's JIF by clicking through to analyze its citable items in the Web of Science Core Collection.

Easily assess a journal’s relevance to your research



Contributions by organizations

Export

Organizations that have contributed the most papers to the journal in the most recent three-year period. Learn more

RANK	ORGANIZATION	COUNT
1	UNITED STATES DEPARTMENT OF AGRICULTURE (USDA)	110
2	CHINESE ACADEMY OF AGRICULTURAL SCIENCES	94
3	CGIAR	66
4	CHINA AGRICULTURAL UNIVERSITY	37
-	HUAZHONG AGRICULTURAL UNIVERSITY	37
6	UNIVERSITY HOHENHEIM	33
7	KANSAS STATE UNIVERSITY	29
8	INRAE	27

Contributions by country/region

Export

Countries or Regions that have contributed the most papers to the journal in the most recent three-year period. Learn more

RANK	COUNTRY / REGION	COUNT
1	CHINA MAINLAND	305
2	USA	216
3	GERMANY (FED REP GER)	80
4	Australia	76
5	Canada	42
6	India	39
7	England	38
8	France	32
9	Mexico	29

Understand a journal’s audience by viewing the affiliations and countries of contributing authors.

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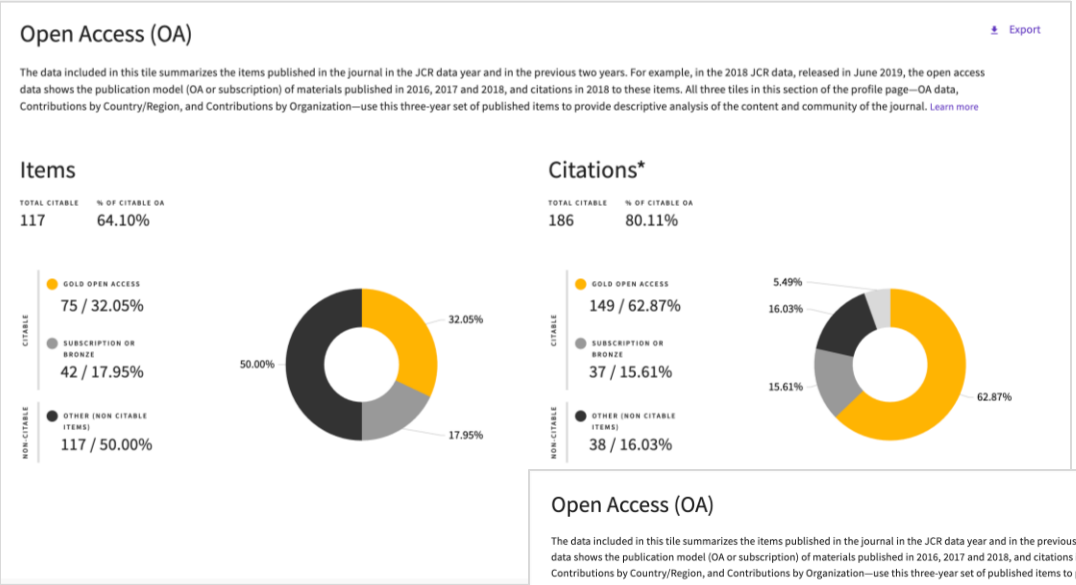
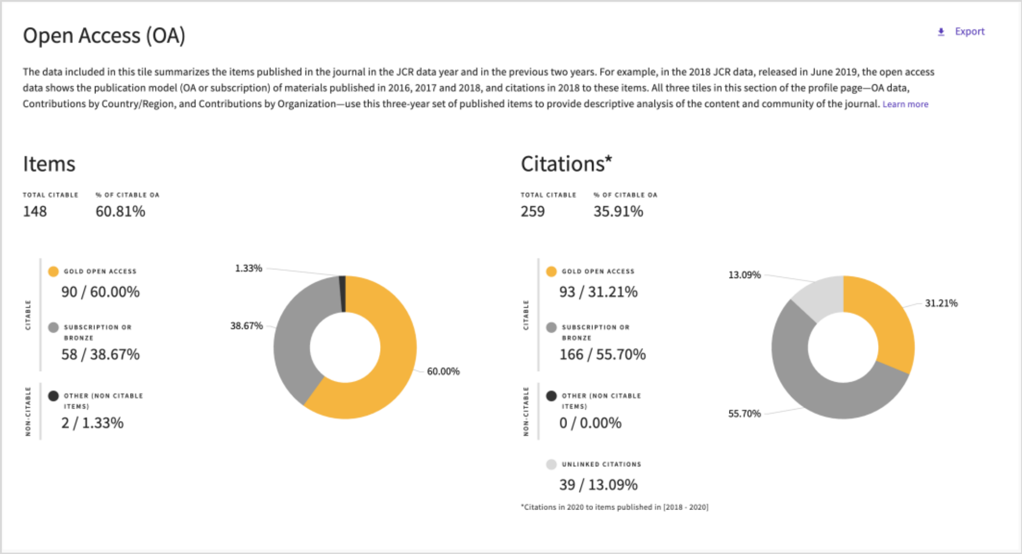
Make confident decisions about your open access strategy



Example 1: 32% of open access publications get 63% of the citations

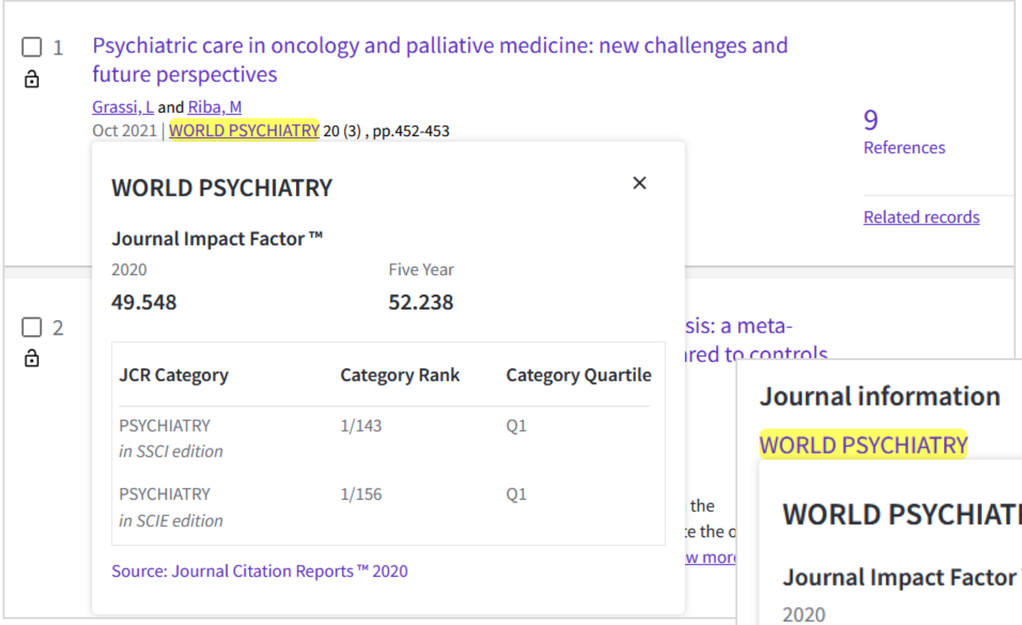


Example 2: 60% of open access publications get 31% of the citations

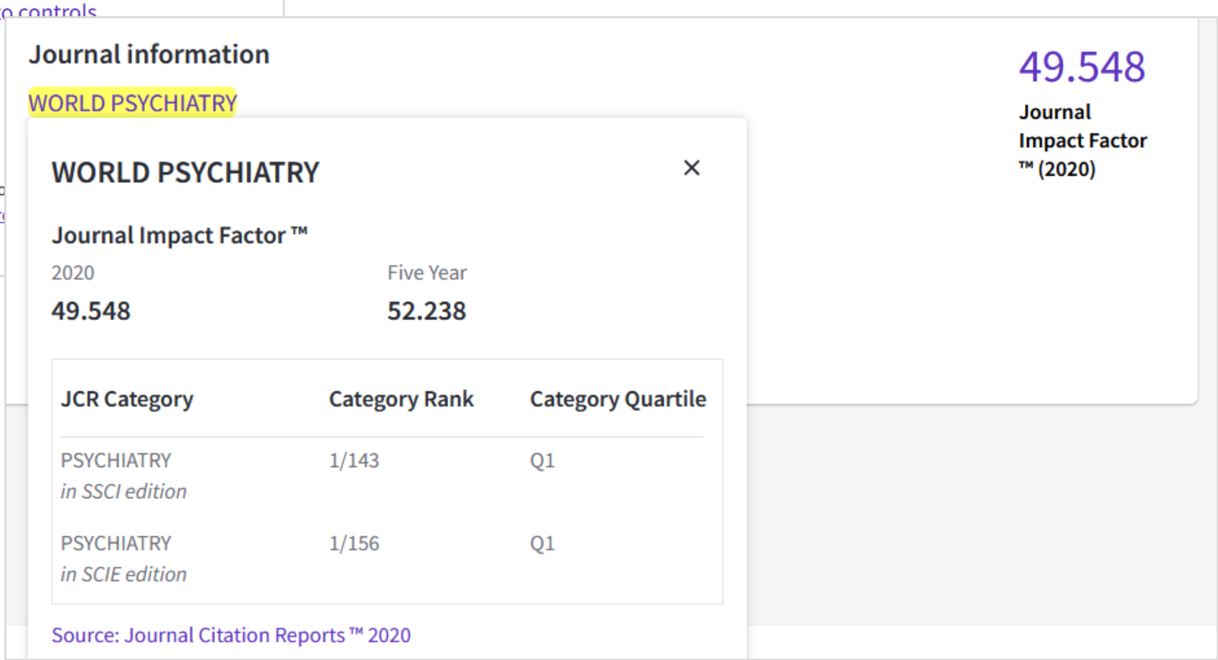
- Identify journals that can make your article available as open access at the time of publication
- Understand how journals' access models impact the scholarly discourse within your community
- Make data driven decisions about your organization's open access policies.

Open Access data sourced from Our Research↗ (formerly ImpactStory).

Journal Impact Factor at your fingertip

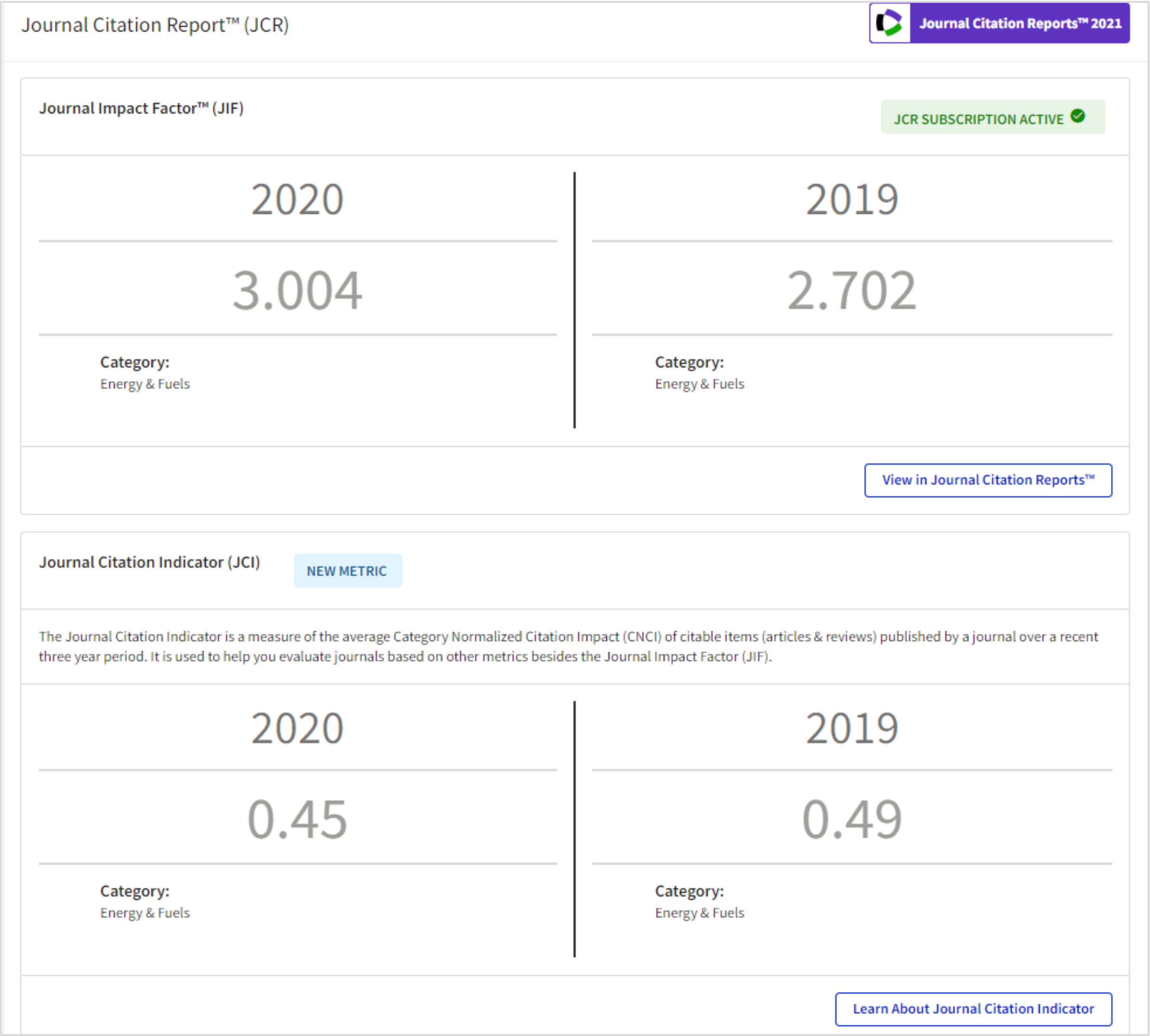


JIF and Rank on the Result List page



and on the full record.

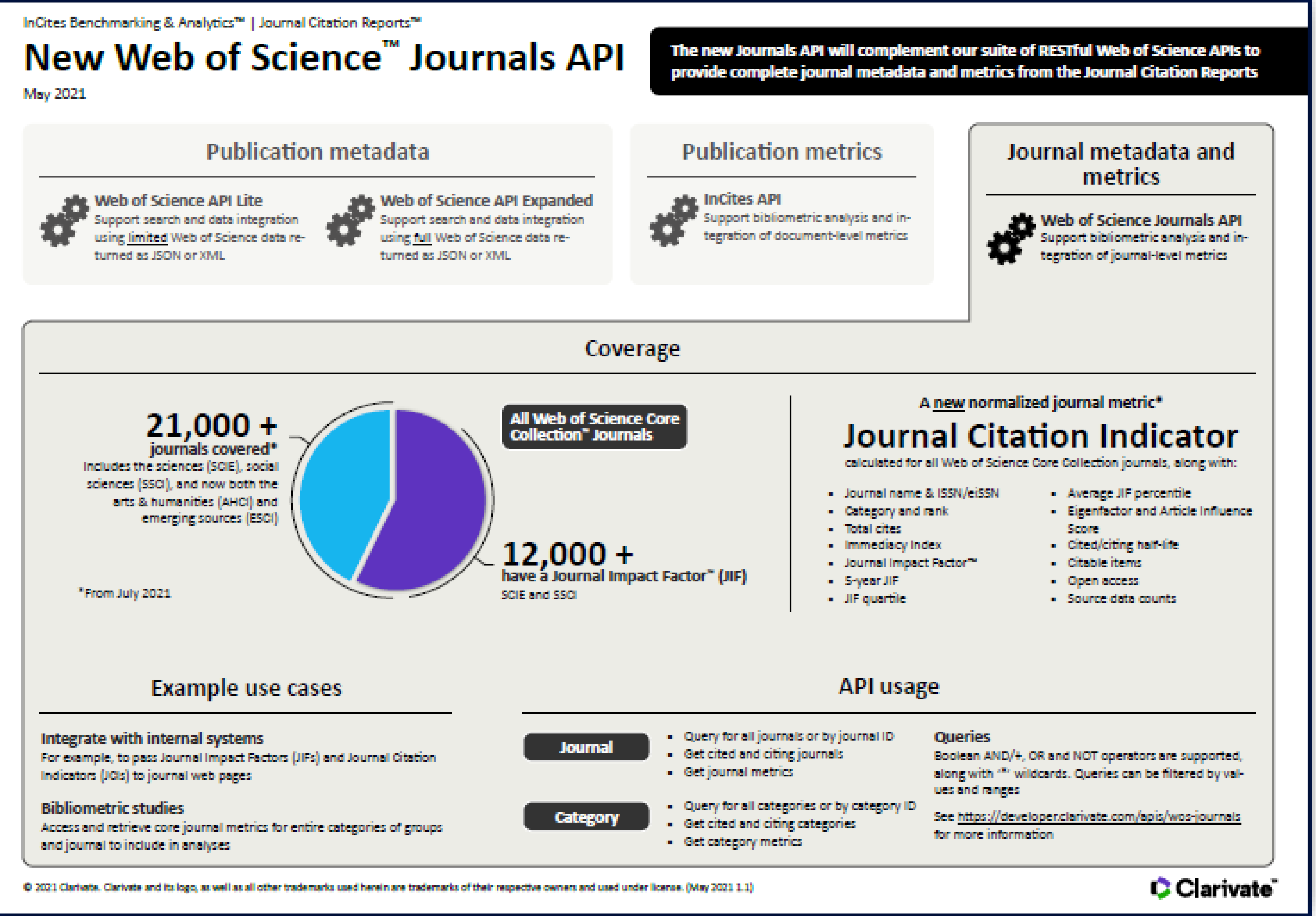
Journal Impact Factor at your fingertip



Journal Profile Page on Master Journal List

- Displaying the 2019 and 2020 JIFs only to entitled users (Green icon = JCR subscription active)
- Displaying the 2019 and 2020 JCI for all users.

In lieu of the JCR Metrics file, we now offer a new **Journals API** that will be able to support use cases requiring to load journals' data, along with their metrics such as the Journal Impact Factor and the new Journal Citation Indicator.



*For journals covered on our Web of Science Core Collection - via our Developer Portal.

Rely on Journal Citation Reports to identify the right journals

Conduct research evaluation more responsibly with multidimensional journal indicators and context for the numbers

Find the best-fit journals for your manuscript using with a tool that helps you consider audience, topical relevance, open access and citation impact

Ensure that your library collections support rigorous research and teaching using publisher-neutral data produced by objective experts

Obtain the transparency you need to make data-driven decisions about your open access strategy with ease and speed using an intuitive tool

Vă mulțumesc!

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www.clarivate.com

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Web of Science Academy >

Events & Webinars >

LibGuides >

Videos >

Web of Science Blog >

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