

BIOLOGICAL TRACE ELEMENT RESEARC

ISSN

0163-4984

EISSN

1559-0720

JCR ABBREVIATION

BIOL TRACE ELEM RES

ISO ABBREVIATION

Biol. Trace Elem. Res.

Journal information

EDITION

Science Citation Index Expanded (SCIE)

CATEGORY

BIOCHEMISTRY & MOLECULAR BIOLOGY

ENDOCRINOLOGY & METABOLISM

LANGUAGES

English

REGION

USA

1ST ELECTRONIC JCR YEAR

1997

Publisher information

PUBLISHER

SPRINGERNATU
RE

ADDRESS

CAMPUS, 4
CRINAN ST,
LONDON N1
9XW, ENGLAND

PUBLICATION FREQUENCY

12 issues/year

Journal's performance

Journal Impact Factor

The Journal Impact Factor (JIF) is a journal-level metric calculated from data indexed in the Web of Science Core Collection. It should be used with careful attention to the many factors that influence citation rates, such as the volume of publication and citations characteristics of the subject area and type of journal. The Journal Impact Factor can complement expert opinion and informed peer review. In the case of academic evaluation for tenure, it is inappropriate to use a journal-level metric as a proxy measure for individual researchers, institutions, or articles. [Learn more](#)

2023 JOURNAL IMPACT FACTOR

3.4

View calculation

JOURNAL IMPACT FACTOR WITHOUT SELF CITATIONS

3.1

View calculation

Journal Impact Factor contributing items Export

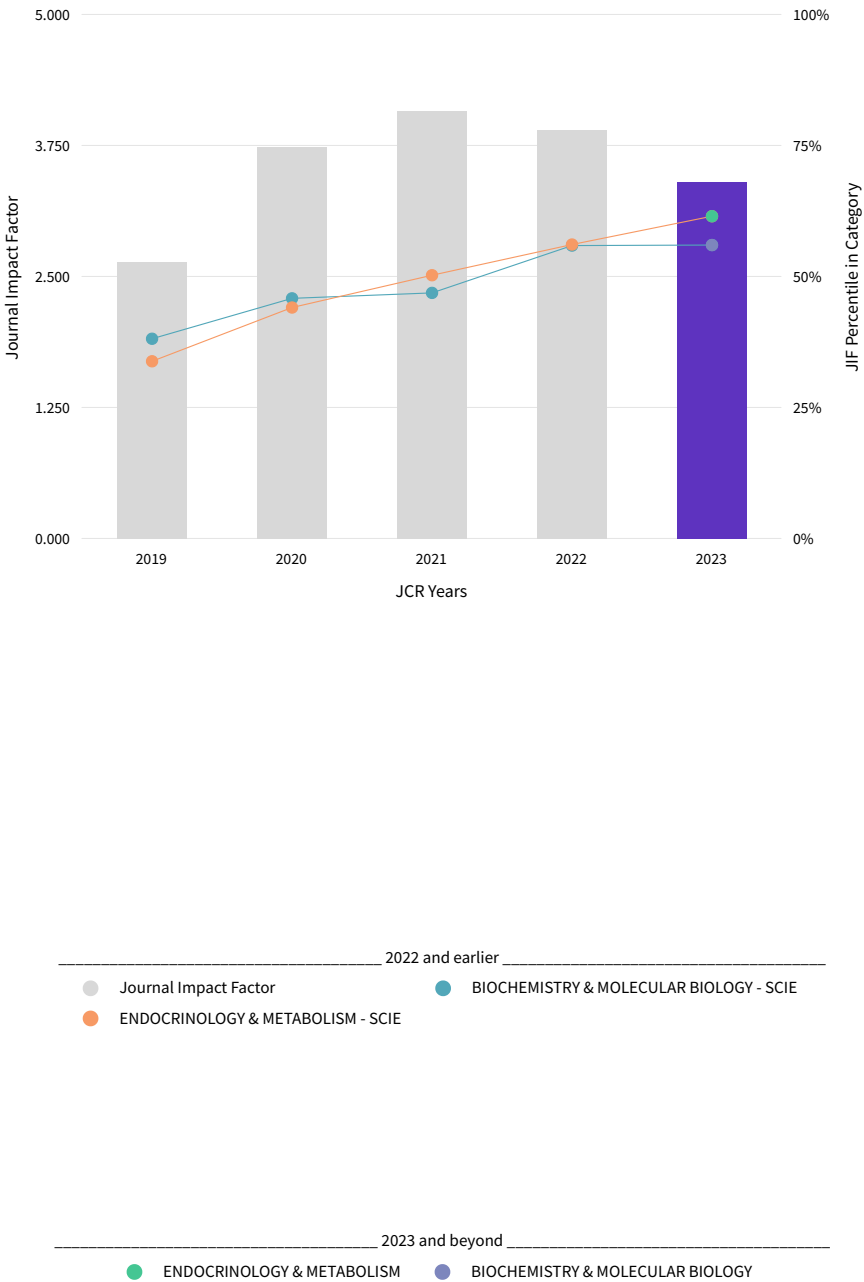
Citable items (986)		Citing Sources (955)	
TITLE		CITATION COUNT	
Heavy Metal Pollution in Aquaculture: Sources, Impacts and Mitigation...		42	▼

Journal Impact Factor Trend 2023

Export

15

?



[View all years](#)

A Comprehensive Review on Selenium and Its Effects on Human Health and...	30		▼
Mitochondrial Ferritin Deficiency Promotes Osteoblastic Ferroptosis Vi...	29		▼
Probabilistic Health Risk Assessment of Trace Elements in Baby Food and Mil...	28		▼
The Role of Selenium Nanoparticles in Agriculture and Food Technology	28		▼
Arsenic and Human Health: Genotoxicity, Epigenomic Effects, and...	27		▼
Resveratrol-Selenium Nanoparticles Alleviate Neuroinflammation and...	27		▼
Synergistic effect of <i>Spirulina platensis</i> and selenium nanoparticles on growt...	27		▼
Biomedical Applications of Mycosynthesized Selenium...	24		▼
COVID-19 and Selenium Deficiency: a Systematic Review	22		▼

[View All in Web of Science](#)

Journal Citation Indicator (JCI)

[Export](#)

0.81

The Journal Citation Indicator (JCI) is the average Category Normalized Citation Impact (CNCI) of citable items (articles & reviews) published by a journal over a recent three year period. The average JCI in a category is 1. Journals with a JCI of 1.5 have 50% more citation impact than the average in that category. It may be used alongside other metrics to help you evaluate journals.

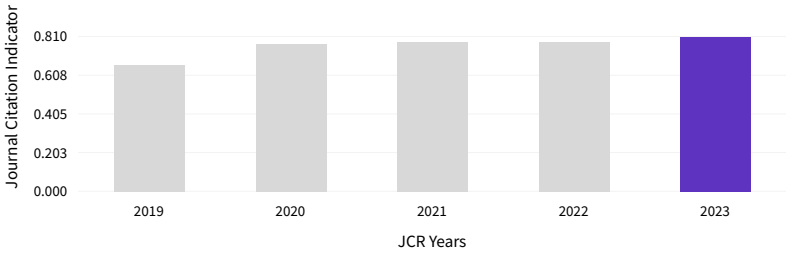
[Learn more](#)

Total Citations

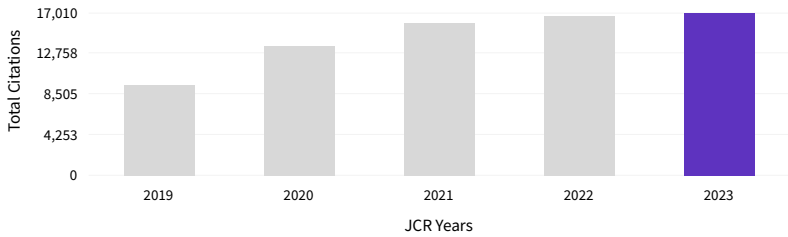
[Export](#)

17,010

The total number of times that a journal has been cited by all journals included in the database in the JCR year. Citations to journals listed in JCR are compiled annually from the JCR years combined database, regardless of which JCR edition lists the journal.



[View all years](#)



[View all years](#)

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 descriptions for each data point, and an interactive legend where each data element's legend can be used as a toggle. You can view Articles, Reviews, or Non-Citable (other) items to the JIF numerator. [Learn more](#)

ARTICLE CITATION
MEDIAN

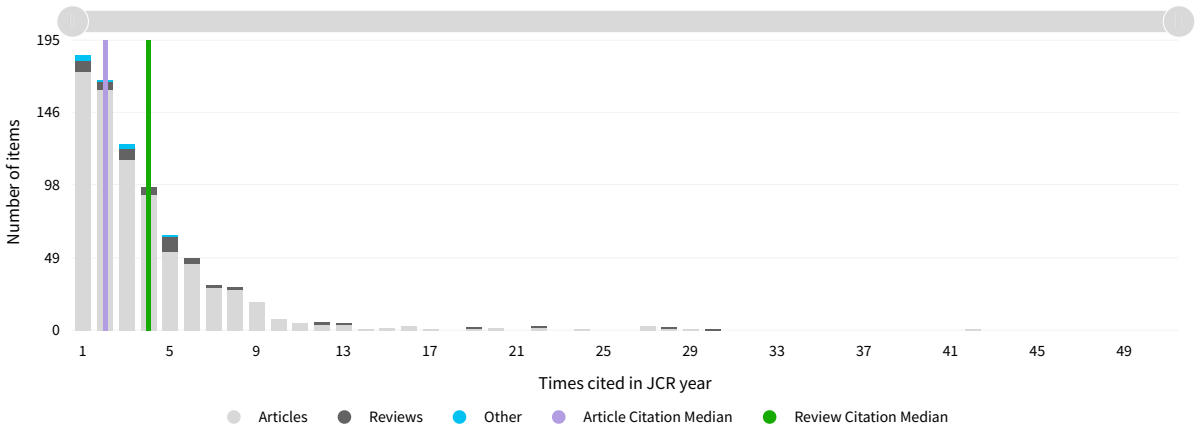
2

REVIEW CITATION
MEDIAN

4

UNLINKED CITATIONS

85



TIMES CITED

0

ARTICLES

178

REVIEWS

4

OTHER

34

Open Access (OA)

[Export](#)

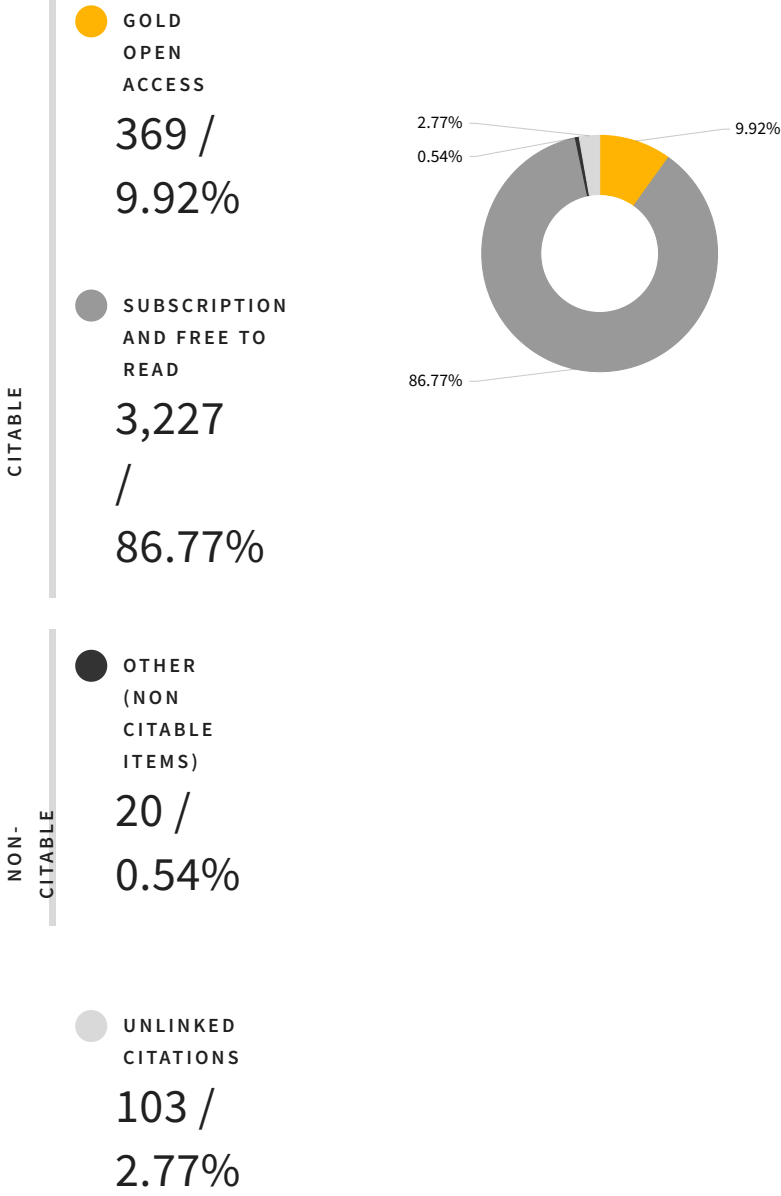
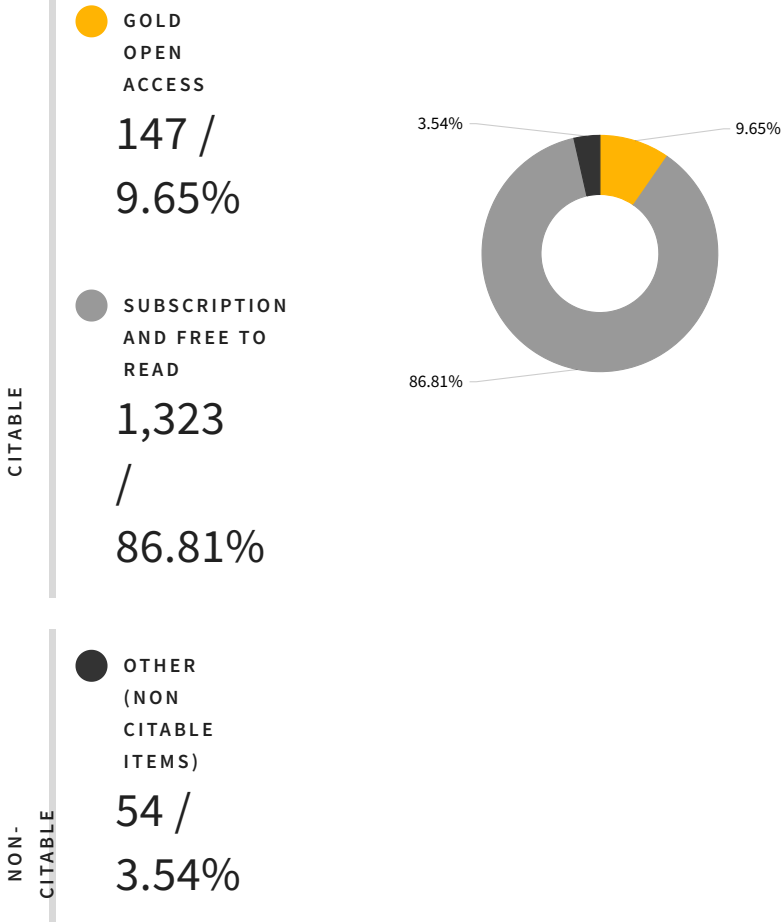
The data included in this tile summarizes the items published in the journal in the JCR data year and in the previous two years. This three-year set of published items is used to provide descriptive analysis of the content and community of the journal. [Learn more](#)

Items

TOTAL CITABLE	% OF CITABLE OA
1,470	10.00%

Citations*

TOTAL CITABLE	% OF CITABLE OA
3,596	10.26%



*Citations in 2023 to items published in [2021 - 2023]

Rank by Journal Impact Factor

Journals within a category are sorted in descending order by Journal Impact Factor (JIF) resulting in the Category Ranking below. A separate rank is shown for each category in which the journal is listed in JCR. Beginning in 2023, ranks are calculated by category. [Learn more](#)

CATEGORY

BIOCHEMISTRY & MOLECULAR BIOLOGY

138/313

JCR YEAR	JIF RANK	JIF QUARTILE	JIF PERCENTILE
2023	138/313	Q2	56.1

Rank by JIF before 2023 for BIOCHEMISTRY & MOLECULAR BIOLOGY

EDITION
Science Citation Index Expanded (SCIE)

JCR YEAR	JIF RANK	JIF QUARTILE	JIF PERCENTILE
2022	126/285	Q2	56.0
2021	158/297	Q3	46.97
2020	160/295	Q3	45.93
2019	184/297	Q3	38.22

CATEGORY

ENDOCRINOLOGY & METABOLISM

72/186

JCR YEAR	JIF RANK	JIF QUARTILE	JIF PERCENTILE
2023	72/186	Q2	61.6

Rank by JIF before 2023 for ENDOCRINOLOGY & METABOLISM

EDITION
Science Citation Index Expanded (SCIE)

JCR YEAR	JIF RANK	JIF QUARTILE	JIF PERCENTILE
2022	64/145	Q2	56.2
2021	73/146	Q2	50.34
2020	82/146	Q3	44.18
2019	95/143	Q3	33.92

Rank by Journal Citation Indicator (JCI) ⓘ

Journals within a category are sorted in descending order by Journal Citation Indicator (JCI) resulting in the Category Ranking below. A separate rank is shown for each category in which the journal is listed in JCR. Data for the most recent year is presented at the top of the list, with other years shown in reverse chronological order. [Learn more](#)

CATEGORY

BIOCHEMISTRY & MOLECULAR BIOLOGY

104/313

JCR YEAR	JCI RANK	JCI QUARTILE	JCI PERCENTILE
2023	104/313	Q2	66.93
2022	116/315	Q2	63.33
2021	123/322	Q2	61.96
2020	138/311	Q2	55.79
2019	163/310	Q3	47.58
2018	164/308	Q3	46.92
2017	176/306	Q3	42.65

CATEGORY

ENDOCRINOLOGY & METABOLISM

71/186

JCR YEAR	JCI RANK	JCI QUARTILE	JCI PERCENTILE
2023	71/186	Q2	62.10
2022	75/184	Q2	59.51
2021	74/180	Q2	59.17
2020	81/180	Q2	55.28
2019	92/179	Q3	48.88
2018	103/179	Q3	42.74
2017	104/174	Q3	40.52

Citation network

Cited Half-life

5.3 years

The Cited Half-Life is the median age of the items in this journal that were cited in the JCR year. Half of a journal's cited items were published more recently than the cited half-life.

TOTAL NUMBER OF CITES

17,010

NON SELF-CITATIONS

15,813

SELF-CITATIONS

1,197

Cited Half-life Data

Citing Half-life

7.2 years

The Citing Half-Life is the median age of items in other publications cited by this journal in the JCR year.

TOTAL NUMBER OF CITES

30,012

NON SELF-CITATIONS

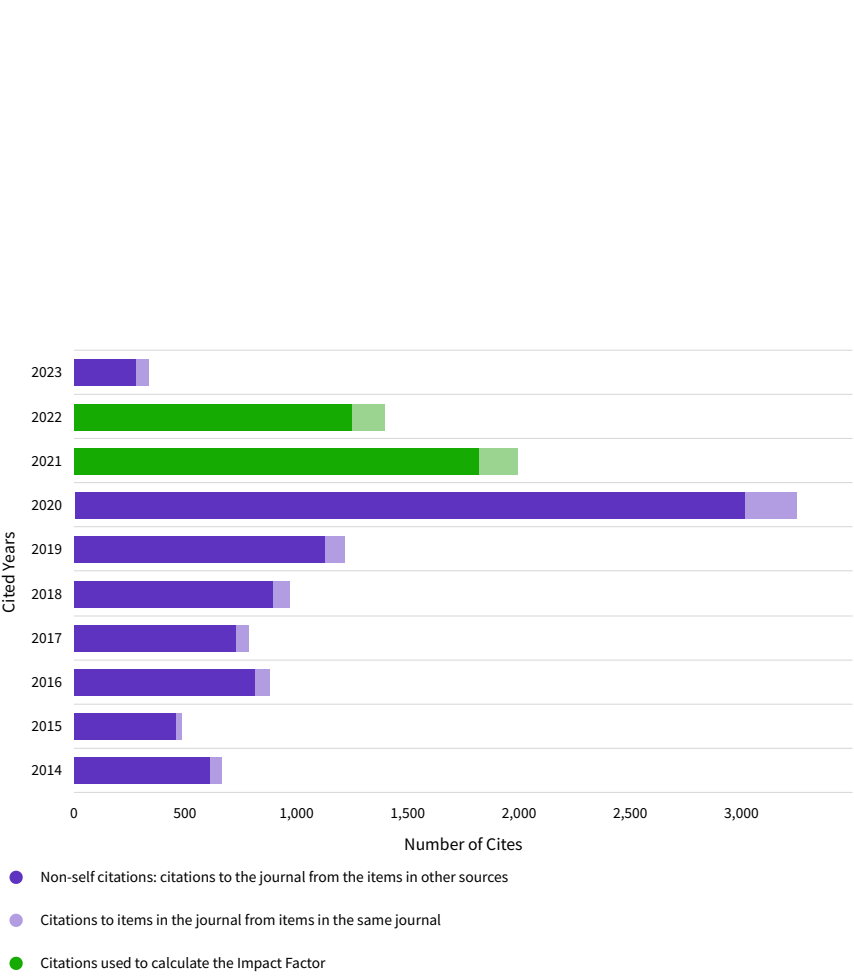
28,815

SELF-CITATIONS

1,197

Citing Half-life Data

Export



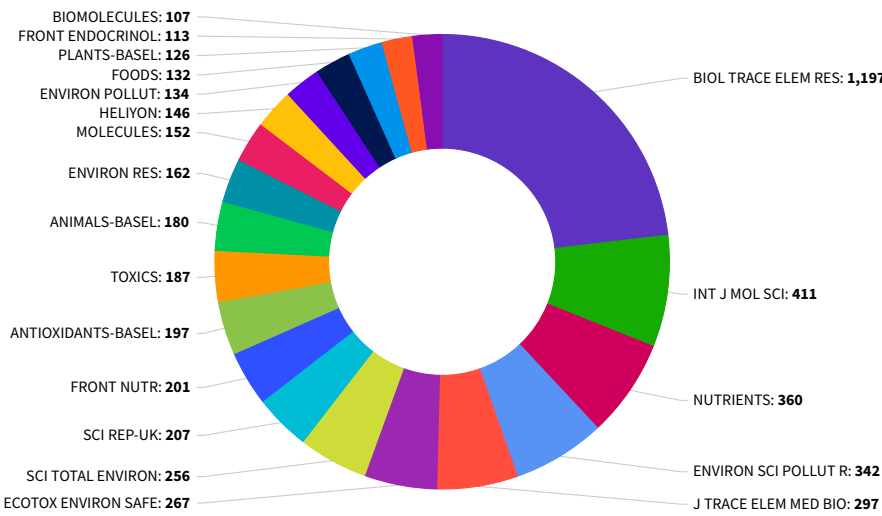
CITED YEAR	# OF CITES FROM 2023	CUMULATIVE %	# OF CITING SOURCES
All years	17,010 citations	100.00%	2,372 sources >
2023	333 citations	1.96%	175 sources >
2022	1,394 citations	10.15%	505 sources >
2021	1,992 citations	21.86%	725 sources >
2020	3,247 citations	40.95%	1,027 sources >
2019	1,216 citations	48.10%	501 sources >
2018	966 citations	53.78%	452 sources >
2017	781 citations	58.37%	389 sources >
2016	876 citations	63.52%	437 sources >
2015	483 citations	66.36%	268 sources >
2014	662 citations	70.25%	328 sources >
Older	5,060 citations		

Journal Citation Relationships

Cited Data

Citing Data

Top 20 journals citing BIOL TRACE ELEM RES by number of citations



Content metrics

Source data

This tile shows the breakdown of document types published by the journal. Citable Items are Articles and Reviews. For the purposes of calculating JIF, a JCR year considers the publications of that journal in the two prior years. [Learn more](#)

484 total citable items

	ARTICLES	REVIEWS	COMBINED(C)	OTHER DOCUMENT TYPES(O)	PERCENTAGE
NUMBER IN JCR YEAR 2023 (A)	443	41	484	11	98%
NUMBER OF REFERENCES (B)	25,178	4,817	29,995	17	100%
RATIO (B/A)	56.8	117.5	62.0	1.5	

Average JIF Percentile [Export](#)

The Average Journal Impact Factor Percentile takes the sum of the JIF Percentile rank for each category under consideration, then calculates the average of those values. [Learn more](#)

ALL CATEGORIES AVERAGE	BIOCHEMISTRY & MOLECULAR BIOLOGY
58.9	56.1
	ENDOCRINOLOGY & METABOLISM
	61.6

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	EGYPTIAN KNOWLEDGE BANK (EKB)	105	
2	NORTHEAST AGRICULTURAL UNIVERSITY - CHINA	36	
3	GUIZHOU MEDICAL UNIVERSITY	25	
-	INDIAN COUNCIL OF AGRICULTURAL RESEARCH (ICAR)	25	
5	HARBIN MEDICAL UNIVERSITY	24	
6	UNIVERSITY OF SAUDI MEDICAL SCIENCES	22	

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	563	
2	Iran	160	
3	India	147	
4	Turkey	116	
5	Egypt	105	
6	USA	103	
7	Brazil	72	
8	Pakistan	55	
9	Turkiye	41	

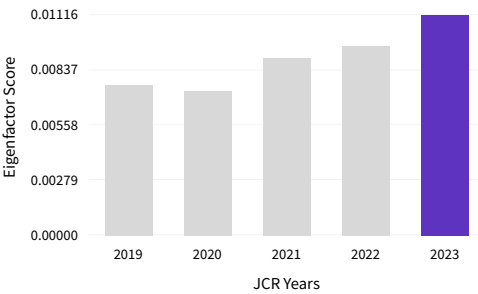
Additional metrics

Eigenfactor Score



0.01116

The Eigenfactor Score is a reflection of the density of the network of citations around the journal using 5 years of cited content as cited by the Current Year. It considers both the number of citations and the source of those citations, so that highly cited sources will influence the network more than less cited sources. The Eigenfactor calculation does not include journal self-citations. [Learn more](#)

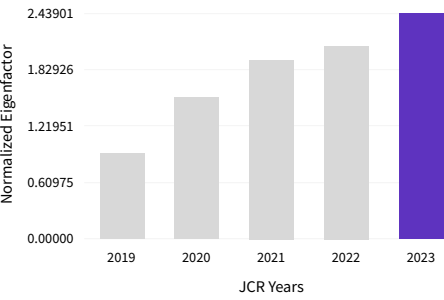


Normalized Eigenfactor



2.43901

The Normalized Eigenfactor Score is the Eigenfactor score normalized, by rescaling the total number of journals in the JCR each year, so that the average journal has a score of 1. Journals can then be compared and influence measured by their score relative to 1. [Learn more](#)

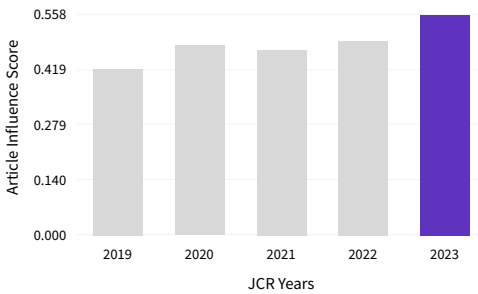


Article influence score



0.558

The Article Influence Score normalizes the Eigenfactor Score according to the cumulative size of the cited journal across the prior five years. The mean Article Influence Score for each article is 1.00. A score greater than 1.00 indicates that each article in the journal has above-average influence. [Learn more](#)



5 Year Impact Factor



3.7

[View Calculation](#)

The 5-year Impact Factor is the average number of times articles from the journal published in the past five years have been cited in the JCR year. It is calculated by dividing the number of citations in the JCR year by the total number of articles published in the five previous years. [Learn more](#)

Immediacy Index



0.7

[View Calculation](#)

The Immediacy Index is the count of citations in the current year to the journal that reference content in this same year. Journals that have a consistently high Immediacy Index attract citations rapidly. [Learn more](#)

