2023 Journal Performance Data for: Journal of Complex Networks

ISSN

2051-1310

EISSN

2051-1329

JCR ABBREVIATION

J COMPLEX NETW

ISO ABBREVIATION

J. Complex Netw.

Journal Information

EDITION

Science Citation Index Expanded (SCIE)

CATEGORY

MATHEMATICS, INTERDISCIPLINARY APPLICATIONS

LANGUAGES

English

REGION

ENGLAND

1ST ELECTRONIC JCR YEAR

2020

Publisher Information

PUBLISHER

OXFORD UNIV PRESS

ADDRESS

GREAT CLARENDON ST, OXFORD OX2 6DP, ENGLAND

PUBLICATION FREQUENCY

6 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
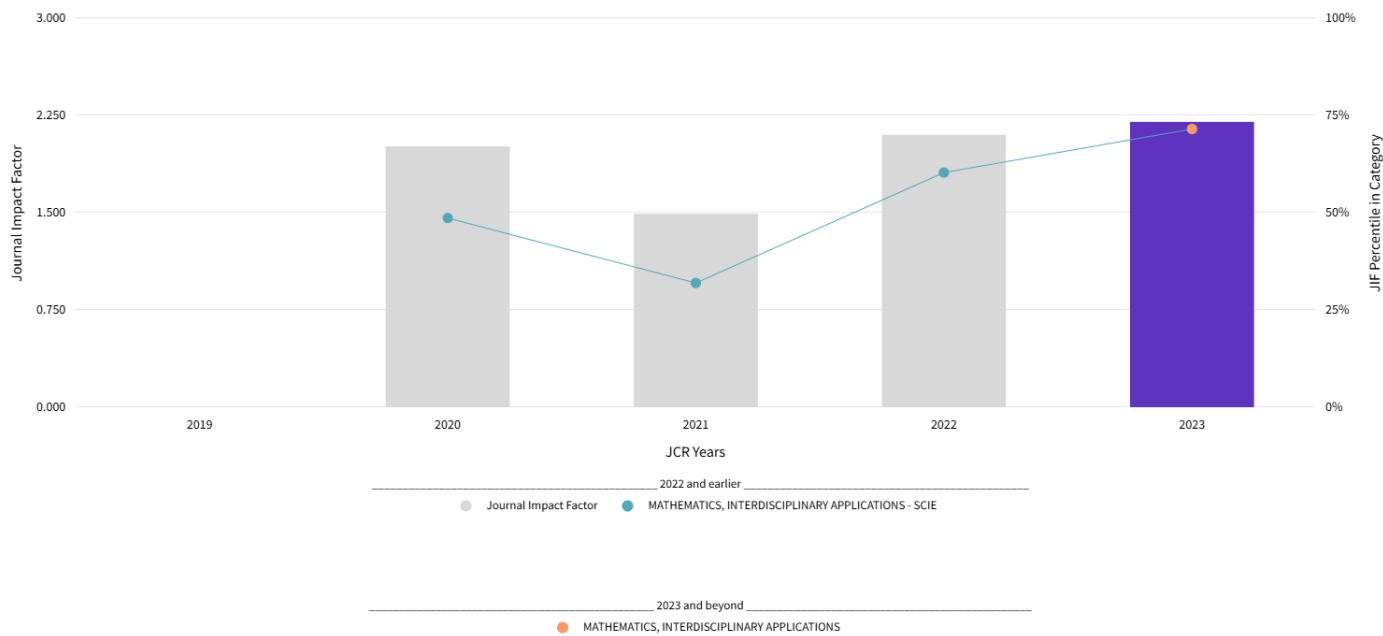
2023 JOURNAL IMPACT FACTOR

2.2

2023 JOURNAL IMPACT FACTOR WITHOUT SELF CITATIONS

2.2

Journal Impact Factor Trend 2023

Journal Impact Factor is calculated using the following metrics

Citations in 2023 to items published in 2021 (**216**) - 2022 (**55**)		271			
────────────	=	────────────	=	2.2	
Number of citable items in 2021 (**59**) + 2022 (**62**)		121			

Journal Impact Factor without self cites is calculated using the following metrics

Citations in 2023 to items published in 2021 (**216**) + 2022 (**55**) - Self Citations in 2023 to items published in 2021 (**6**) + 2022 (**2**)		271 - 8			
────────────	=	────────────	=	2.2	
Number of citable items in 2021 (**59**) + 2022 (**62**)		121			

Journal Impact Factor Contributing Items

Citable Items (121)

TITLE	CITATION COUNT
Multi-Scale attributed node embedding Authors: Rozemberczki, Benedek;Allen, Carl;Sarkar, Rik Volume: 9 Accession number: WOS:000654647900001 Document Type: Article	74
The impact of human mobility networks on the global spread of COVID-19 Authors: Hancean, Marian-Gabriel;Slavinec, Mitja;Perc, Matjaz Volume: 8 Accession number: WOS:000634884900004 Document Type: Article	14
Bayesian inference of network structure from unreliable data Authors: Young, Jean-Gabriel;Cantwell, George T.;Newman, M. E. J. Volume: 8 Accession number: WOS:000634884900005 Document Type: Article	12
Characterization of robustness and resilience in graphs: a mini-review Authors: Schaeffer, S. E.;Valdes, V.;Figols, J.;Bachmann, I;Morales, F.;Bustos-Jimenez, J. Volume: 9 Accession number: WOS:000750884500006 Document Type: Article	9
Hypergraphs for predicting essential genes using multiprotein complex data Authors: Klimm, Florian;Deane, Charlotte M.;Reinert, Gesine Volume: 9 Accession number: WOS:000654647900002 Document Type: Article	7

Showing 1-5 rows of 121 total (use export in the relevant section to download the full table)

# Journal Impact Factor Contributing Items

Citing Sources (159)

SOURCE NAME	COUNT
SCIENTIFIC REPORTS	11
COMPLEX NETWORKS AND THEIR APPLICATIONS XI, COMPLEX NETWORKS 2022, VOL 2	9
JOURNAL OF COMPLEX NETWORKS	8
MATHEMATICS	6
NETWORK SCIENCE	6
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS	6
PHYSICAL REVIEW E	6
PROCEEDINGS OF THE 29TH ACM SIGKDD CONFERENCE ON KNOWLEDGE DISCOVERY AND DATA MINING, KDD 2023	6
PROCEEDINGS OF THE 32ND ACM INTERNATIONAL CONFERENCE ON INFORMATION AND KNOWLEDGE MANAGEMENT, CIKM 2023	6
APPLIED NETWORK SCIENCE	5
CHAOS	4
CHAOS SOLITONS & FRACTALS	4
IEEE TRANSACTIONS ON KNOWLEDGE AND DATA ENGINEERING	4
IEEE TRANSACTIONS ON NETWORK SCIENCE AND ENGINEERING	4
IEEE TRANSACTIONS ON NEURAL NETWORKS AND LEARNING SYSTEMS	4
JOURNAL OF THE ROYAL STATISTICAL SOCIETY SERIES A-STATISTICS IN SOCIETY	4
DISCRETE APPLIED MATHEMATICS	3
ENTROPY	3
EUROPEAN PHYSICAL JOURNAL B	3
INFORMATION SCIENCES	3

Showing 1-20 rows of 159 total (use export in the relevant section to download the full table)

Journal Citation Indicator (JCI)

0.63

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
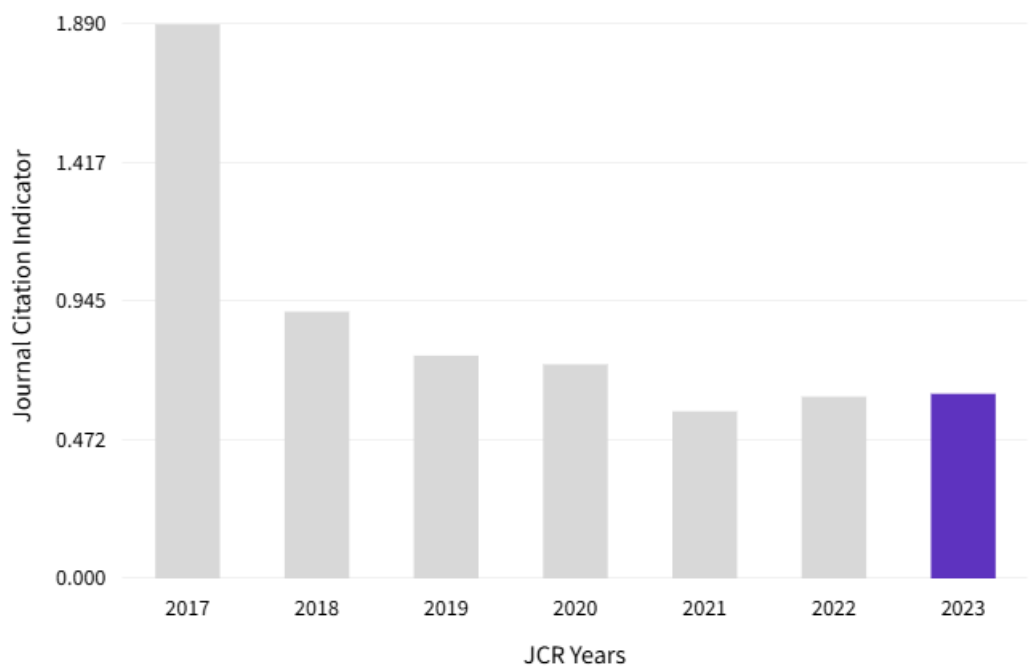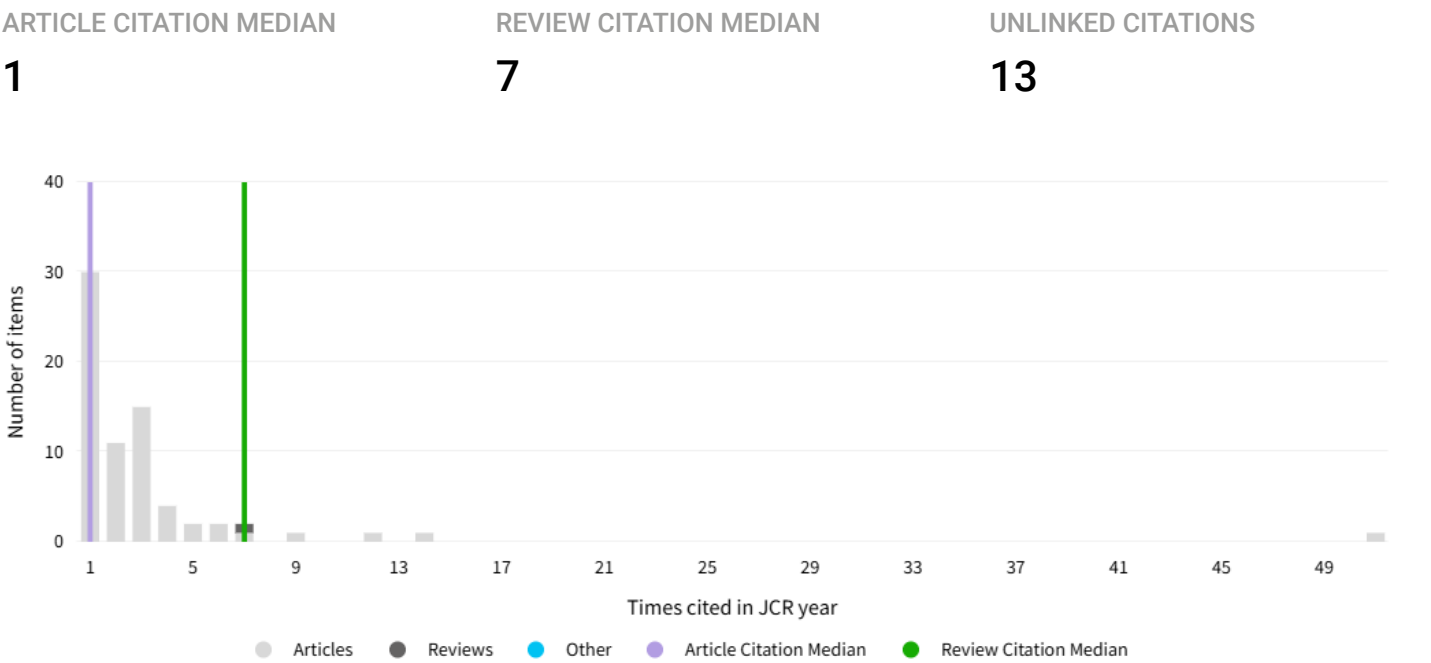
Total Citations

1,117

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.
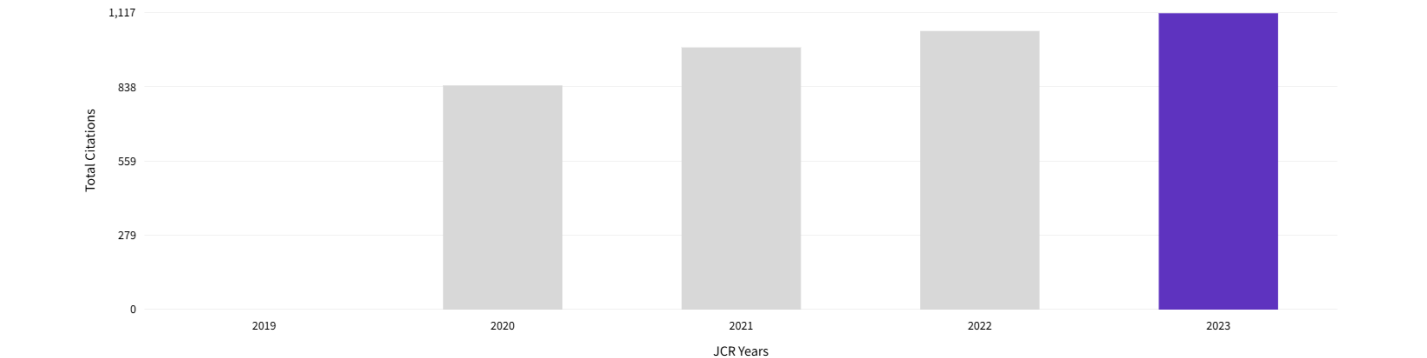
Citation Distribution

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	REVIEW CITATION MEDIAN	UNLINKED CITATIONS
1	7	13

0 times cited

ARTICLES	REVIEWS	OTHER
51	0	2

Open Access (OA)

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
163

% OF CITABLE OA
22.09%

CITABLE	NON-CITABLE
● GOLD OPEN ACCESS	● OTHER (NON-CITABLE ITEMS)
36 / 21.43%	5 / 2.98%
● SUBSCRIPTION OR BRONZE	
127 / 75.60%	

2.98%
21.43%
75.60%
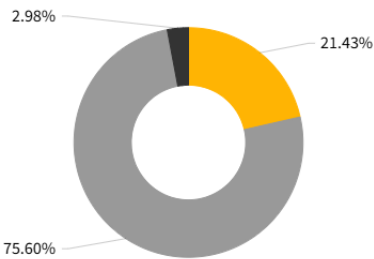
Citations*

TOTAL CITABLE
273

% OF CITABLE OA
56.04%

CITABLE	NON-CITABLE
● GOLD OPEN ACCESS	● OTHER (NON-CITABLE ITEMS)
153 / 52.58%	0 / 0.00%
● SUBSCRIPTION OR BRONZE	● UNLINKED CITATIONS
120 / 41.24%	18 / 6.19%

6.19%
41.24%
52.58%
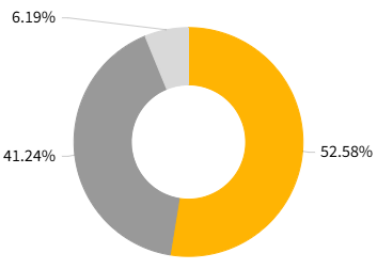
* Citations in 2023 to items published in (2021-2023)

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

MATHEMATICS, INTERDISCIPLINARY APPLICATIONS

39/135

JCR YEAR	JIF RANK	QUARTILE	JIF PERCENTILE	
2023	39/135	Q2	71.5	

Rank by JIF before 2023 for MATHEMATICS, INTERDISCIPLINARY APPLICATIONS

Science Citation Index Expanded (SCIE)

JCR YEAR	JIF RANK	QUARTILE	JIF PERCENTILE	
2022	43/107	Q2	60.3	
2021	74/108	Q3	31.94	
2020	56/108	Q3	48.61	

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

MATHEMATICS, INTERDISCIPLINARY APPLICATIONS

56/135

JCR YEAR	JCI RANK	QUARTILE	JCI PERCENTILE	
2023	56/135	Q2	58.89	
2022	59/134	Q2	56.34	
2021	73/132	Q3	45.08	
2020	48/127	Q2	62.60	
2019	46/127	Q2	64.17	
2018	38/125	Q2	70.00	
2017	7/123	Q1	94.72	

Citation network

Cited Half-life

5.7 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	NON-SELF CITATIONS	SELF CITATIONS
1,117	1,077	40

- ● Non-self citations: citations to the journal from the items in other sources
- ● Citations to items in the journal from items in the same journal
- ● Citations used to calculate the Impact Factor

	# OF CITES FROM 2023	CUMULATIVE %	# OF CITING SOURCES
	1,117 citations	100.00%	458 sources
2023	20 citations	1.79%	16 sources
2022	55 citations	6.71%	40 sources
2021	216 citations	26.05%	135 sources
2020	137 citations	38.32%	89 sources
2019	54 citations	43.15%	47 sources
2018	110 citations	53.00%	77 sources
2017	101 citations	62.04%	87 sources
2016	23 citations	64.10%	22 sources
2015	102 citations	73.23%	79 sources
2014	242 citations	94.90%	154 sources

Previous years:
57 citations

Citing titles in all years

Journal of Complex Networks

	SOURCE NAME	COUNT
	All Others	300
1	Journal of Complex Networks	40
2	PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS	35
3	CHAOS SOLITONS & FRACTALS	34
4	Scientific Reports	34
5	PHYSICAL REVIEW E	24
6	Entropy	22
7	CHAOS	21
8	STUD COMPUT INTELL	20
9	Applied Network Science	19
10	IEEE TRANSACTIONS ON KNOWLEDGE AND DATA ENGINEERING	17
11	Network Science	15
12	IEEE Transactions on Network Science and Engineering	14
13	Journal of Physics-Complexity	14
14	Mathematics	14
15	Social Network Analysis and Mining	14
16	PLoS One	12
17	INFORMATION SCIENCES	11
18	IEEE Transactions on Neural Networks and Learning Systems	10
19	KNOWLEDGE AND INFORMATION SYSTEMS	10
20	Physical Review Research	10

Showing 1 - 20 rows of 158 total (use export in the relevant section to download the full table)

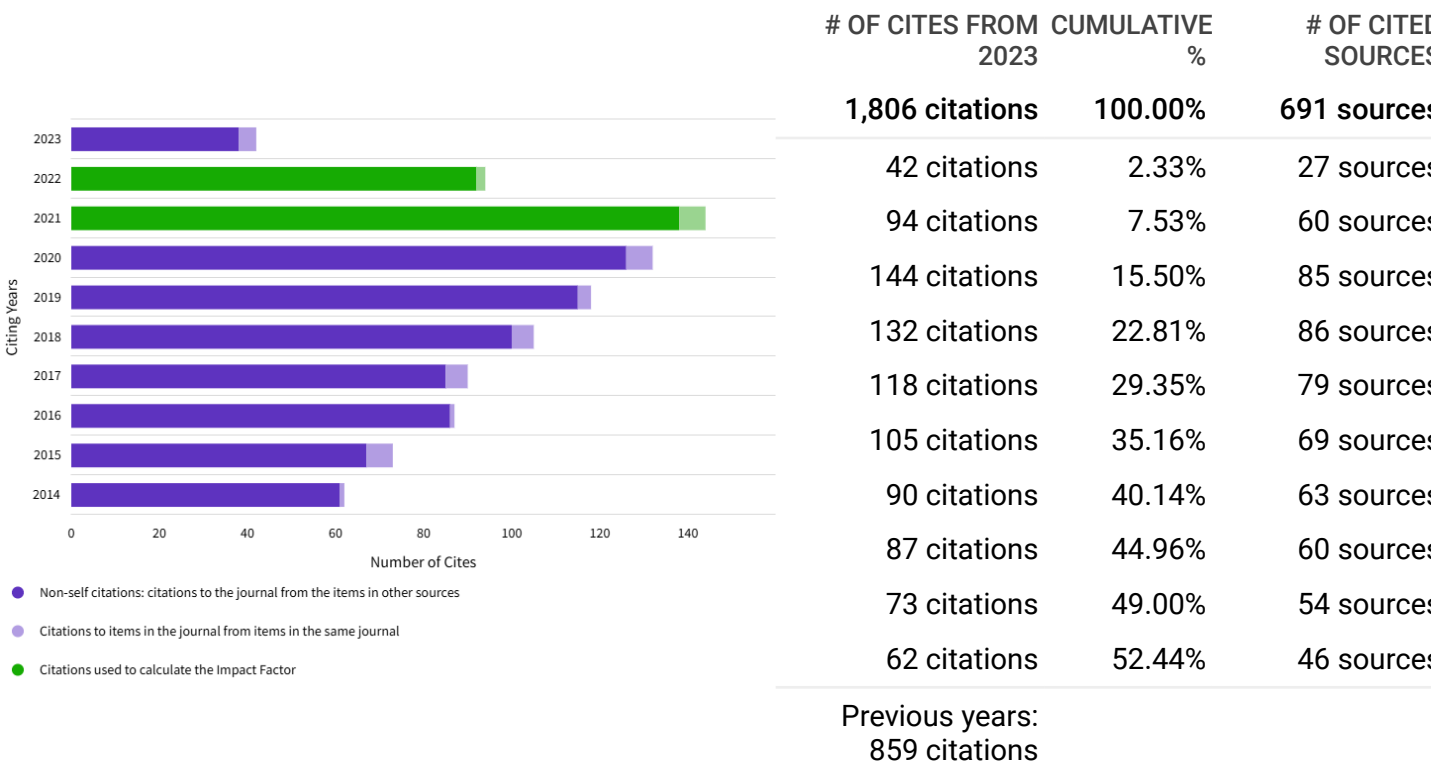# Citing Half-life

9.3 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	NON-SELF CITATIONS	SELF CITATIONS
1,806	1,766	40

	# OF CITES FROM 2023	CUMULATIVE %	# OF CITED SOURCES
	1,806 citations	**100.00%**	**691 sources**
2023	42 citations	2.33%	27 sources
2022	94 citations	7.53%	60 sources
2021	144 citations	15.50%	85 sources
2020	132 citations	22.81%	86 sources
2019	118 citations	29.35%	79 sources
2018	105 citations	35.16%	69 sources
2017	90 citations	40.14%	63 sources
2016	87 citations	44.96%	60 sources
2015	73 citations	49.00%	54 sources
2014	62 citations	52.44%	46 sources

Previous years:
859 citations

Chart — Citing Years (2023–2014) vs Number of Cites:
- Non-self citations: citations to the journal from the items in other sources
- Citations to items in the journal from items in the same journal
- Citations used to calculate the Impact Factor

Cited titles in all years

Journal of Complex Networks

	SOURCE NAME	COUNT
	All Others	484
1	PHYSICAL REVIEW E	159
2	Scientific Reports	49
3	PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA	47
4	Journal of Complex Networks	40
5	ARXIV	39
6	PHYSICAL REVIEW LETTERS	38
7	PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS	38
8	NATURE	37
9	SCIENCE	33
10	SOCIAL NETWORKS	30
11	PHYSICS REPORTS-REVIEW SECTION OF PHYSICS LETTERS	28
12	PLoS One	24
13	Nature Communications	21
14	CHAOS	18
15	SIAM REVIEW	17
16	LECT NOTES COMPUT SC	16
17	Communications Physics	14
18	JOURNAL OF STATISTICAL MECHANICS-THEORY AND EXPERIMENT	13
19	Nature Physics	12
20	REVIEWS OF MODERN PHYSICS	12

Showing 1 - 20 rows of 207 total (use export in the relevant section to download the full table)
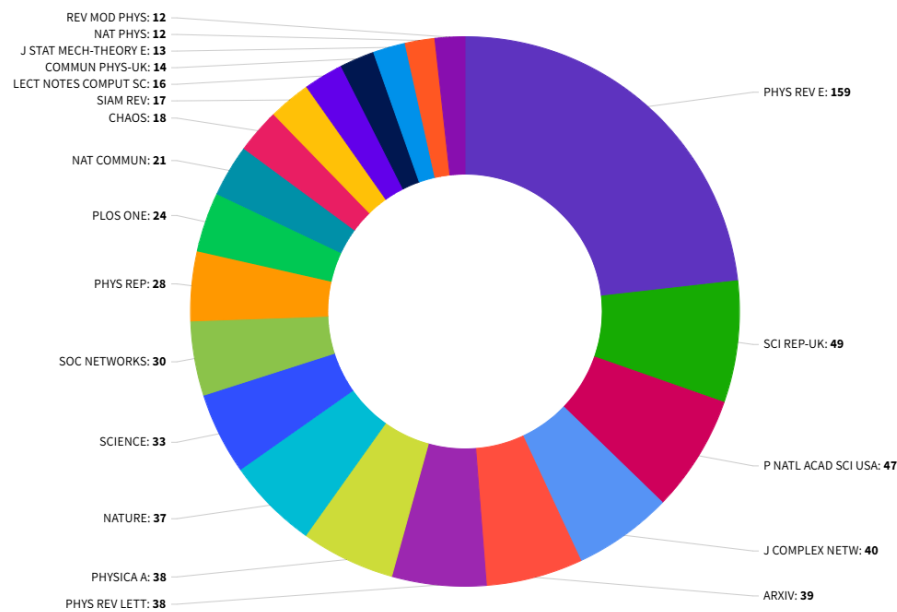
Journal Citation Relationships

Cited Data

Top 20 journals citing J COMPLEX NETW by number of citations

- PHYS REV RES: **10**
- KNOWL INF SYST: **10**
- IEEE T NEUR NET LEAR: **10**
- INFORM SCIENCES: **11**
- PLOS ONE: **12**
- SOC NETW ANAL MIN: **14**
- MATHEMATICS-BASEL: **14**
- J PHYS-COMPLEXITY: **14**
- IEEE T NETW SCI ENG: **14**
- NETW SCI: **15**
- IEEE T KNOWL DATA EN: **17**
- APPL NETW SCI: **19**
- STUD COMPUT INTELL: **20**
- CHAOS: **21**
- J COMPLEX NETW: **40**
- PHYSICA A: **35**
- CHAOS SOLITON FRACT: **34**
- SCI REP-UK: **34**
- PHYS REV E: **24**
- ENTROPY-SWITZ: **22**
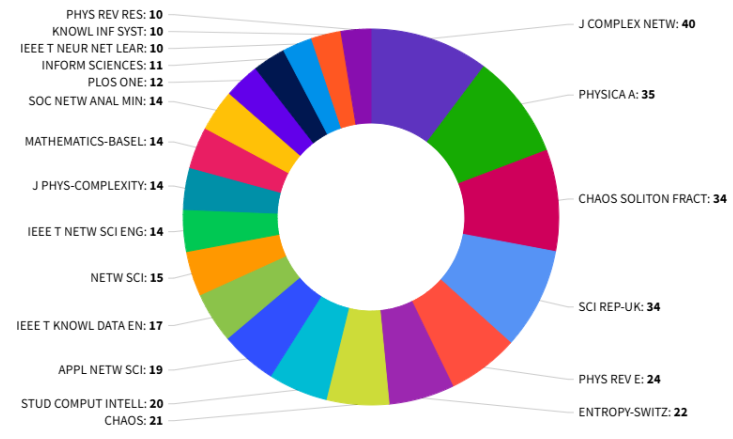
Citing Data

Top 20 journals cited by J COMPLEX NETW by number of citations

PHYS REV E: **159**
SCI REP-UK: **49**
P NATL ACAD SCI USA: **47**
J COMPLEX NETW: **40**
ARXIV: **39**
PHYS REV LETT: **38**
PHYSICA A: **38**
NATURE: **37**
SCIENCE: **33**
SOC NETWORKS: **30**
PHYS REP: **28**
PLOS ONE: **24**
NAT COMMUN: **21**
CHAOS: **18**
SIAM REV: **17**
LECT NOTES COMPUT SC: **16**
COMMUN PHYS-UK: **14**
J STAT MECH-THEORY E: **13**
NAT PHYS: **12**
REV MOD PHYS: **12**

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

42 total citable items

	ARTICLES	REVIEWS	COMBINED (C)	OTHER DOCUMENT TYPES (O)	PERCENTAGE
NUMBER IN JCR YEAR 2023 (A)	42	0	42	3	93%
NUMBER OF REFERENCES (B)	1,803	0	1,803	3	100%
RATIO (B/A)	42.9	N/A	42.9	1.0	

Average JIF Percentile

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

71.5

MATHEMATICS, INTERDISCIPLINARY APPLICATIONS

71.5

Contributions by Organizations

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

RANK	ORGANIZATION	COUNT	
1	THE SANTA FE INSTITUTE	7	
2	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS)	6	
-	UNIVERSIDADE DE SAO PAULO	6	
-	UNIVERSITY OF OXFORD	6	
5	MAX PLANCK SOCIETY	5	
-	UNIVERSITY OF CALIFORNIA SYSTEM	5	
-	UNIVERSITY OF LIMERICK	5	
8	DELFT UNIVERSITY OF TECHNOLOGY	3	

Showing 1 - 8 rows of 280 total (use export in the relevant section to download the full table)

Contributions by country/region

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	USA	39	
2	ENGLAND	22	
3	CHINA MAINLAND	19	
4	BRAZIL	13	
-	INDIA	13	
-	ITALY	13	
7	GERMANY (FED REP GER)	12	
8	CANADA	7	

Showing 1 - 8 rows of 46 total (use export in the relevant section to download the full table)

# Additional metrics

Eigenfactor score

0.00160

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
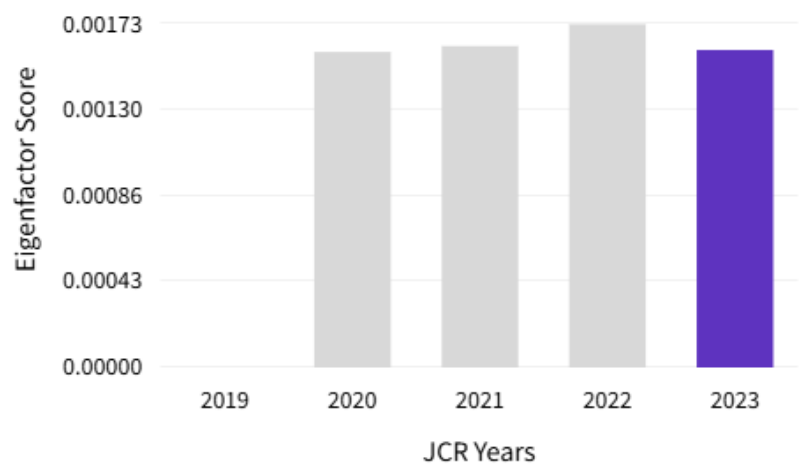

Normalized Eigenfactor

0.35355

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
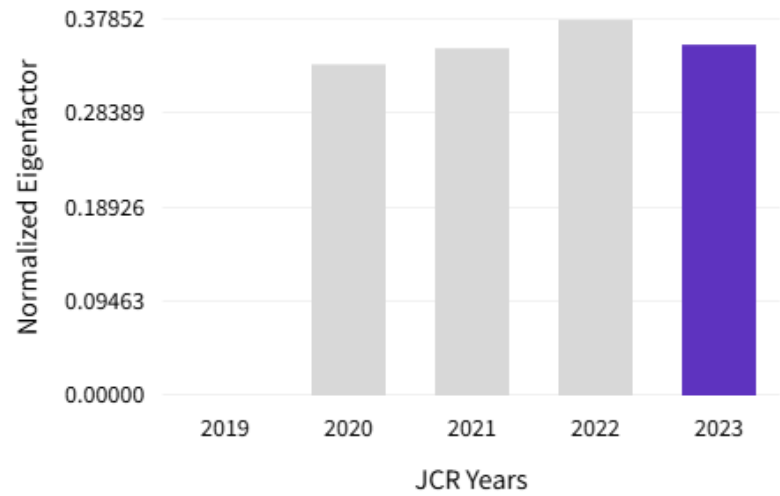
Article influence score
0.692

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
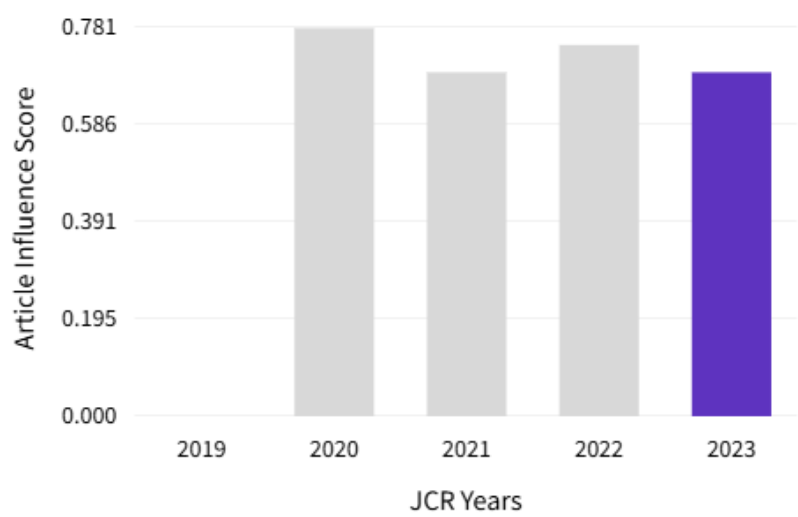
5 year Impact Factor

2.0

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.
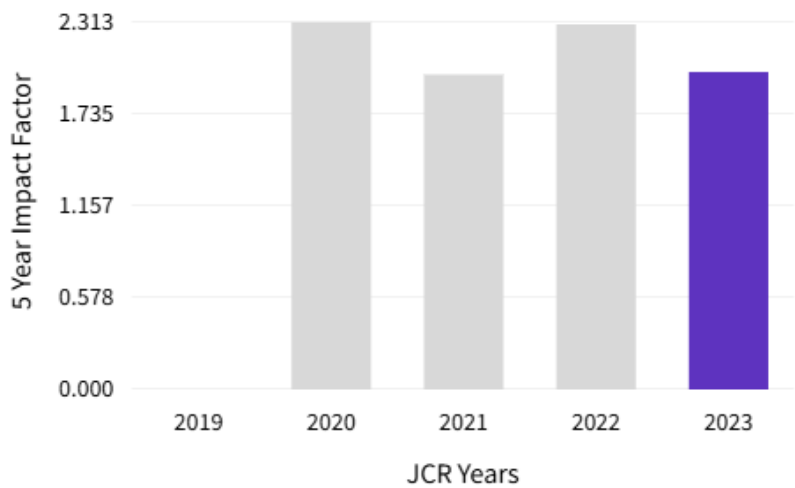

5 year Impact Factor calculation

$$\frac{\text{Citations in 2023 to items published in [2018-2022] (572)}}{\text{Number of citable items in [2018-2022] (281)}} = \frac{572}{281} = 2.0$$

Immediacy Index

0.5

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
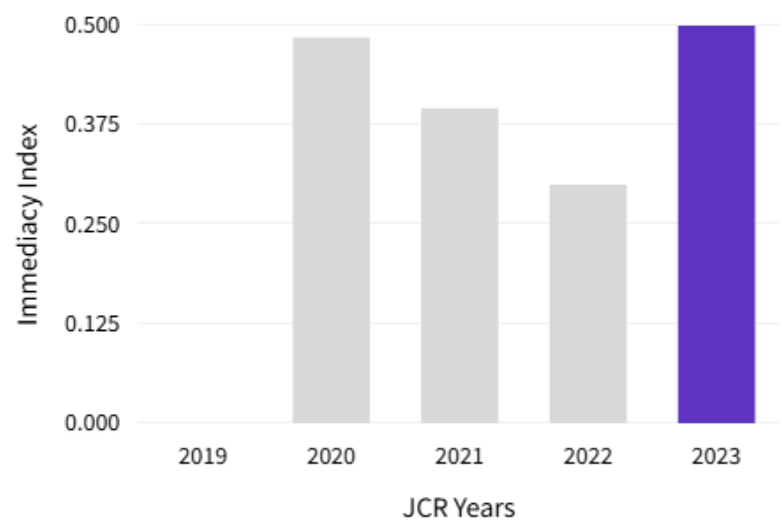
Immediacy Index calculation

Cites in 2023 to items published in [2023]		20		
Number of items published in [2023]	=	42	=	0.5