2022 Journal Performance Data for: Acta Crystallographica A-Foundation and Advances

ISSN
2053-2733

EISSN
2053-2733

JCR ABBREVIATION
ACTA CRYSTALLOGR A

ISO ABBREVIATION
Acta Crystallogr. Sect. A

Journal Information

EDITION
Science Citation Index Expanded (SCIE)

CATEGORY
CHEMISTRY, MULTIDISCIPLINARY - SCIE
CRYSTALLOGRAPHY - SCIE

LANGUAGES
English

REGION
ENGLAND

1ST ELECTRONIC JCR YEAR
1997

Publisher Information

PUBLISHER
INT UNION CRYSTALLOGRAPHY

ADDRESS
2 ABBEY SQ, CHESTER CH1 2HU, ENGLAND

PUBLICATION FREQUENCY
6 issues/year

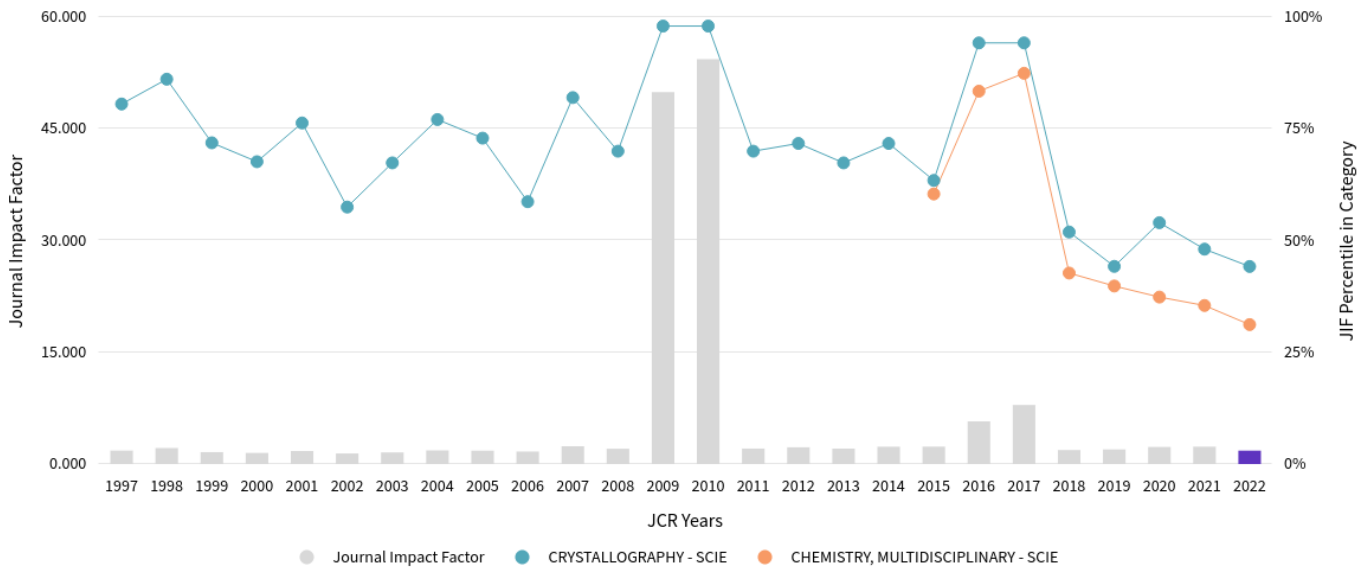
Journal's Performance

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

2022 JOURNAL IMPACT FACTOR	2022 JOURNAL IMPACT FACTOR WITHOUT SELF CITATIONS
1.8	1.6

Journal Impact Factor Trend 2022



Journal Impact Factor is calculated using the following metrics

Citations in 2022 to items published in 2020 (**100**) - 2021 (**110**)		**210**		
Number of citable items in 2020 (**62**) + 2021 (**53**)	=	**115**	=	**1.8**

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

Citations in 2022 to items published in 2020 (**100**) + 2021 (**110**) - Self Citations in 2022 to items published in 2020 (**11**) + 2021 (**13**)		**210 - 24**		
Number of citable items in 2020 (**62**) + 2021 (**53**)	=	**115**	=	**1.6**

Journal Impact Factor Contributing Items

Citable Items (115)

TITLE	CITATION COUNT
On an extension of Krivovichev's complexity measures Authors: Hornfeck, Wolfgang Volume: 76 Accession number: WOS:000546068600009 Document Type: Article	12
A cloud platform for atomic pair distribution function analysis: PDFitc Authors: Yang, Long;Culbertson, Elizabeth A.;Thomas, Nancy K.;Vuong, Hung T.;Kjaer, Emil T. S.;Jensen, Kirsten M. O.;Tucker, Matthew G.;Billinge, Simon J. L. Volume: 77 Accession number: WOS:000605197400002 Document Type: Article	10
Cluster-mining: an approach for determining core structures of metallic nanoparticles from atomic pair distribution function data Authors: Banerjee, Soham;Liu, Chia-Hao;Jensen, Kirsten M. O.;Juhas, Pavol;Lee, Jennifer D.;Tofanelli, Marcus;Ackerson, Christopher J.;Murray, Christopher B.;Billinge, Simon J. L. Volume: 76 Accession number: WOS:000506016900003 Document Type: Article	9
Isogonal weavings on the sphere: knots, links, polycatenanes Authors: O'Keeffe, Michael;Treacy, Michael M. J. Volume: 76 Accession number: WOS:000567771700008 Document Type: Article	8
Refinement of organic crystal structures with multipolar electron scattering factors Authors: Gruza, Barbara;Chodkiewicz, Michal Leszek;Krzeszczakowska, Joanna;Dominiak, Paulina Maria Volume: 76 Accession number: WOS:000506016900010 Document Type: Article	8

Showing 1-5 rows of 115 total (use export in the relevant section to download the full table)

Journal Impact Factor Contributing Items

Citing Sources (94)

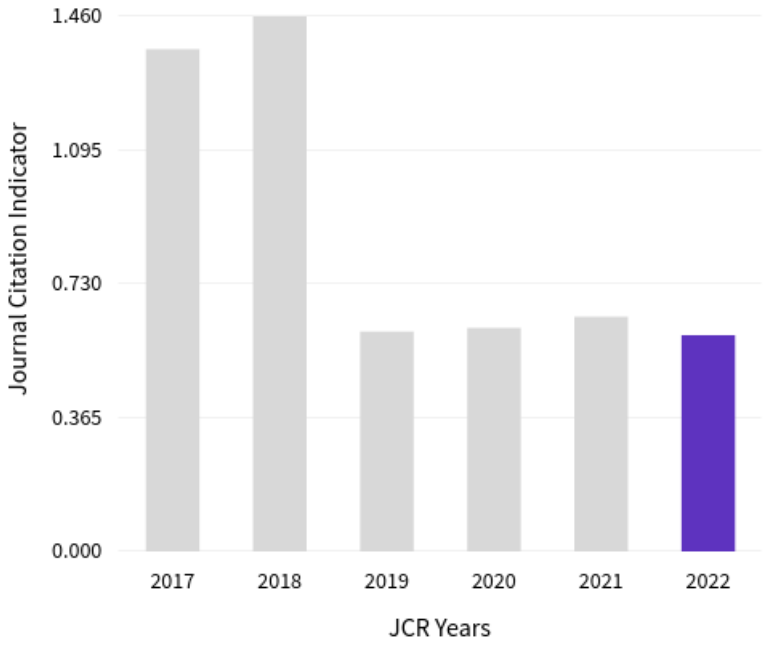
SOURCE NAME	COUNT
ACTA CRYSTALLOGRAPHICA A-FOUNDATION AND ADVANCES	24
JOURNAL OF APPLIED CRYSTALLOGRAPHY	14
IUCRJ	8
CRYSTENGCOMM	7
ACTA CRYSTALLOGRAPHICA SECTION B-STRUCTURAL SCIENCE CRYSTAL ENGINEERING AND MATERIALS	6
PHYSICAL REVIEW B	6
CHEMICAL REVIEWS	5
SYMMETRY-BASEL	5
CRYSTALS	4
INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES	4
NPJ COMPUTATIONAL MATERIALS	4
ACTA MATERIALIA	3
COMPUTATIONAL AND STRUCTURAL BIOTECHNOLOGY JOURNAL	3
CONDENSED MATTER	3
CRYSTALLOGRAPHY REPORTS	3
FARADAY DISCUSSIONS	3
FRONTIERS IN MOLECULAR BIOSCIENCES	3
HELVETICA CHIMICA ACTA	3
INORGANIC CHEMISTRY	3
JOURNAL OF ALLOYS AND COMPOUNDS	3

Showing 1-20 rows of 94 total (use export in the relevant section to download the full table)

Journal Citation Indicator (JCI)

0.59

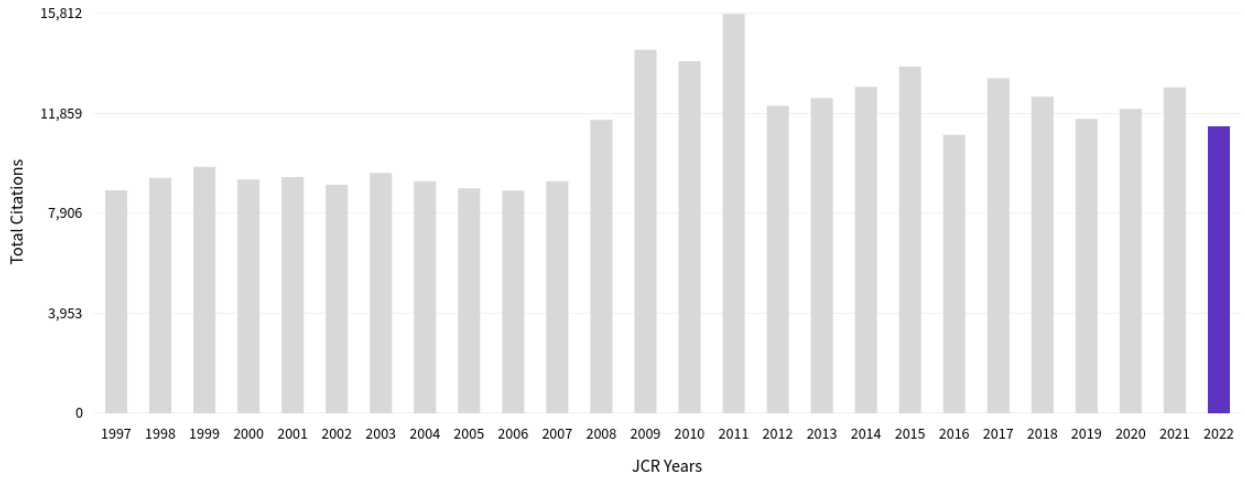
The Journal Citation Indicator (JCI) is the average Category Normalized Citation Impact (CNCI) of citable items (articles & reviews) published by a journal over a recent three year period. The average JCI in a category is 1. Journals with a JCI of 1.5 have 50% more citation impact than the average in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



Total Citations

11,364

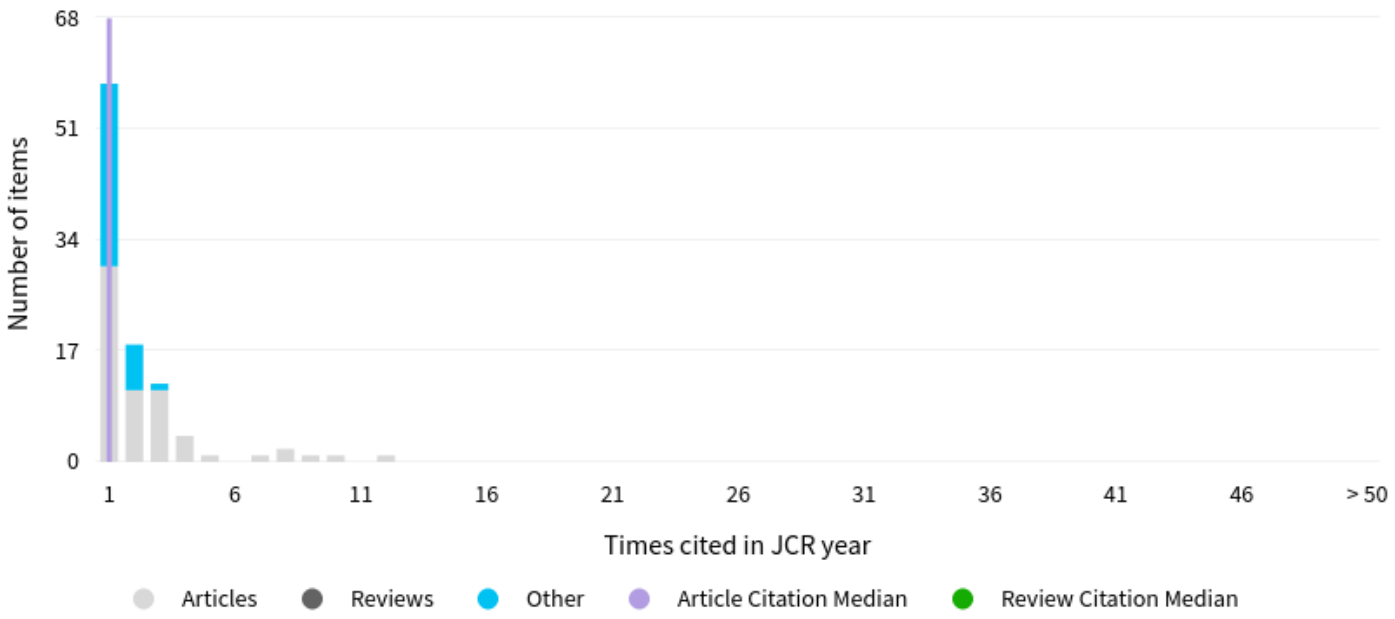
The total number of times that a journal has been cited by all journals included in the database in the JCR year. Citations to journals listed in JCR are compiled annually from the JCR years combined database, regardless of which JCR edition lists the journal.



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	0	5



0 times cited

ARTICLES	REVIEWS	OTHER
51	1	1,778

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
162

% OF CITABLE OA
35.19%

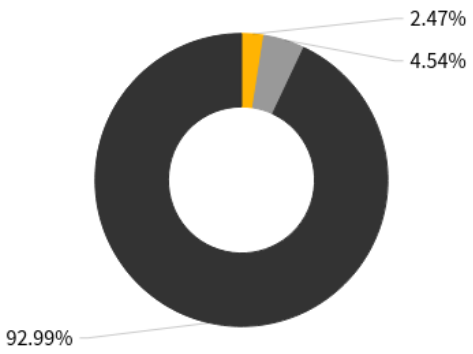
CITABLE

GOLD OPEN ACCESS
57 / 2.47%

SUBSCRIPTION OR BRONZE
105 / 4.54%

NON-CITABLE

OTHER (NON-CITABLE ITEMS)
2,149 / 92.99%



Citations*

TOTAL CITABLE
177

% OF CITABLE OA
44.63%

CITABLE

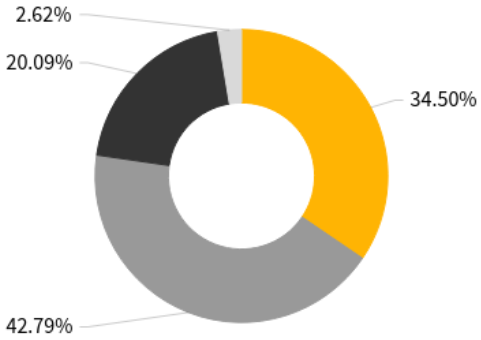
GOLD OPEN ACCESS
79 / 34.50%

SUBSCRIPTION OR BRONZE
98 / 42.79%

NON-CITABLE

OTHER (NON-CITABLE ITEMS)
46 / 20.09%

UNLINKED CITATIONS
6 / 2.62%



* Citations in 2022 to items published in (2020-2022)

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. Data for the most recent year is presented at the top of the list, with other years shown in reverse chronological order. Learn more

EDITION

Science Citation Index Expanded (SCIE)

CATEGORY

CHEMISTRY, MULTIDISCIPLINARY

123/178

JCR YEAR	JIF RANK	QUARTILE	JIF PERCENTILE
2022	123/178	Q3	31.2
2021	116/179	Q3	35.47
2020	112/178	Q3	37.36
2019	107/177	Q3	39.83
2018	99/172	Q3	42.73
2017	22/171	Q1	87.43
2016	28/166	Q1	83.43
2015	65/163	Q2	60.43
2014	N/A	N/A	N/A
2013	N/A	N/A	N/A
2012	N/A	N/A	N/A
2011	N/A	N/A	N/A
2010	N/A	N/A	N/A
2009	N/A	N/A	N/A
2008	N/A	N/A	N/A
2007	N/A	N/A	N/A
2006	N/A	N/A	N/A
2005	N/A	N/A	N/A
2004	N/A	N/A	N/A
2003	N/A	N/A	N/A
2002	N/A	N/A	N/A
2001	N/A	N/A	N/A
2000	N/A	N/A	N/A
1999	N/A	N/A	N/A
1998	N/A	N/A	N/A
1997	N/A	N/A	N/A

EDITION

Science Citation Index Expanded (SCIE)

CATEGORY

CRYSTALLOGRAPHY

15/26

JCR YEAR	JIF RANK	QUARTILE	JIF PERCENTILE
2022	15/26	Q3	44.2
2021	14/26	Q3	48.08
2020	12/25	Q2	54.00
2019	15/26	Q3	44.23
2018	13/26	Q2	51.92
2017	2/26	Q1	94.23
2016	2/26	Q1	94.23
2015	10/26	Q2	63.46
2014	7/23	Q2	71.74
2013	8/23	Q2	67.39
2012	7/23	Q2	71.74
2011	8/25	Q2	70.00
2010	1/25	Q1	98.00
2009	1/25	Q1	98.00
2008	8/25	Q2	70.00
2007	5/25	Q1	82.00
2006	10/23	Q2	58.70
2005	7/24	Q2	72.92
2004	6/24	Q1	77.08
2003	8/23	Q2	67.39
2002	9/20	Q2	57.50
2001	5/19	Q2	76.32
2000	6/17	Q2	67.65
1999	5/16	Q2	71.88
1998	3/18	Q1	86.11
1997	4/18	Q1	80.56

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

CHEMISTRY, MULTIDISCIPLINARY

92/230

JCR YEAR	JCI RANK	QUARTILE	JCI PERCENTILE
2022	92/230	Q2	60.22
2021	82/224	Q2	63.62
2020	84/219	Q2	61.87
2019	79/215	Q2	63.49
2018	28/212	Q1	87.03
2017	28/205	Q1	86.59

CATEGORY

CRYSTALLOGRAPHY

16/33

JCR YEAR	JCI RANK	QUARTILE	JCI PERCENTILE
2022	16/33	Q2	53.03
2021	14/33	Q2	59.09
2020	15/33	Q2	56.06
2019	15/33	Q2	56.06
2018	4/32	Q1	89.06
2017	4/31	Q1	88.71

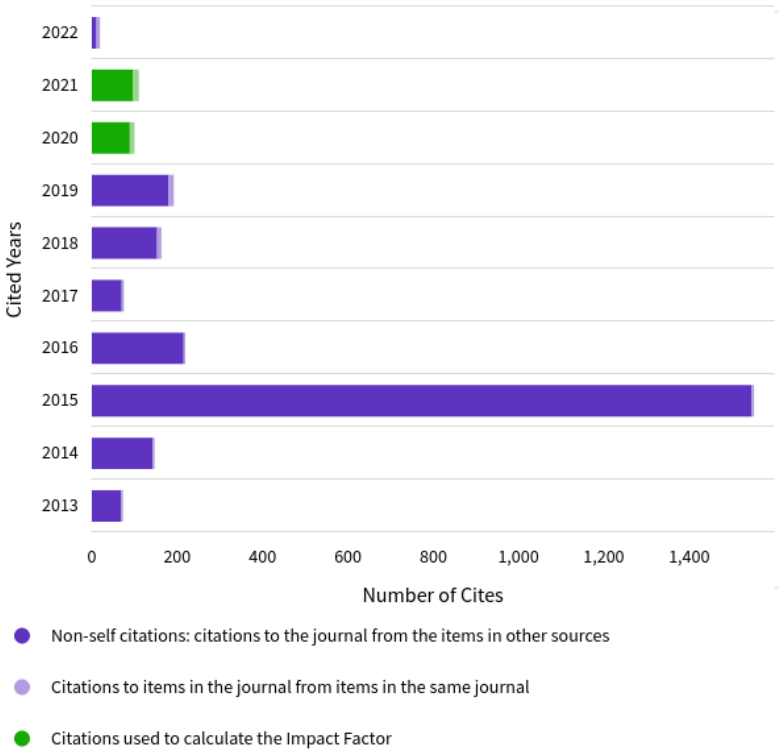
Citation network

Cited Half-life

20.9 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
11,364	11,212	152



# OF CITES FROM 2022	CUMULATIVE %	# OF CITING SOURCES
11,364 citations	**100.00%**	**1,145 sources**
19 citations	0.17%	10 sources
110 citations	1.14%	59 sources
100 citations	2.02%	53 sources
192 citations	3.70%	92 sources
163 citations	5.14%	106 sources
75 citations	5.80%	55 sources
219 citations	7.73%	153 sources
1,551 citations	21.37%	273 sources
147 citations	22.67%	96 sources
73 citations	23.31%	54 sources
Previous years: 8,715 citations		

Citing titles in all years

Acta Crystallographica A-Foundation and Advances

	SOURCE NAME	COUNT
	All Others	445
1	Journal of Molecular Structure	446
2	INORGANIC CHEMISTRY	409
3	MOLECULES	309
4	CRYSTAL GROWTH & DESIGN	228
5	ACTA CRYSTALLOGRAPHICA SECTION E-STRUCTURE REPORTS ONLINE	205
6	PHYSICAL REVIEW B	188
7	Crystals	178
8	POLYHEDRON	172
9	Acta Crystallographica Section B-Structural Science Crystal Engineering and Materials	168
10	Ceramics International	167
11	Journal of Alloys and Compounds	167
12	DALTON TRANSACTIONS	154
13	Acta Crystallographica A-Foundation and Advances	152
14	JOURNAL OF SOLID STATE CHEMISTRY	152
15	JOURNAL OF APPLIED CRYSTALLOGRAPHY	147
16	CHEMISTRY OF MATERIALS	132
17	IUCrJ	123
18	Materials	117
19	CRYSTENGCOMM	114
20	INORGANICA CHIMICA ACTA	112

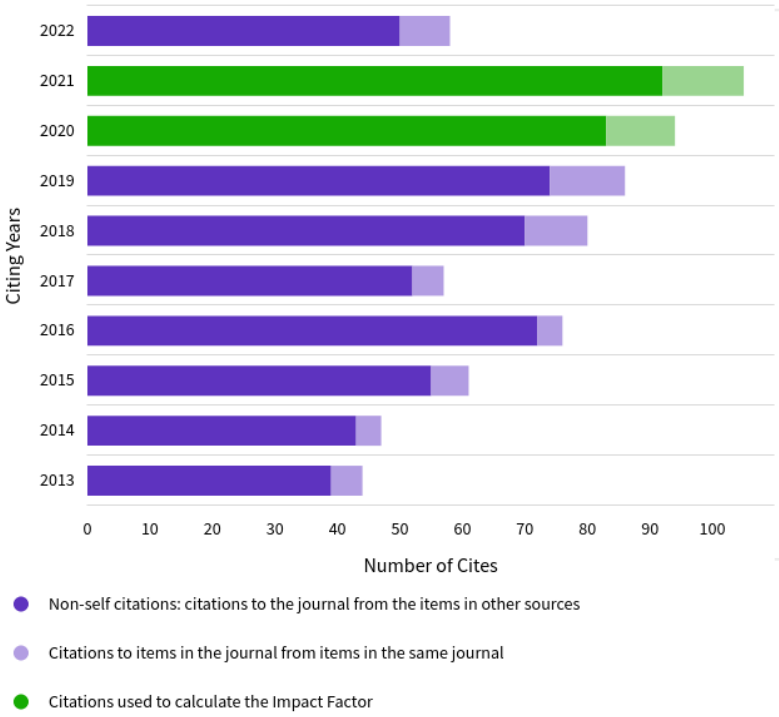
Showing 1 - 20 rows of 688 total (use export in the relevant section to download the full table)

Citing Half-life

12.4 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
1,649	1,497	152



# OF CITES FROM 2022	CUMULATIVE %	# OF CITED SOURCES
1,649 citations	**100.00%**	**632 sources**
58 citations	3.52%	31 sources
105 citations	9.88%	70 sources
94 citations	15.59%	62 sources
86 citations	20.80%	55 sources
80 citations	25.65%	51 sources
57 citations	29.11%	41 sources
76 citations	33.72%	49 sources
61 citations	37.42%	43 sources
47 citations	40.27%	33 sources
44 citations	42.94%	30 sources
Previous years: 941 citations		

Cited titles in all years

Acta Crystallographica A-Foundation and Advances

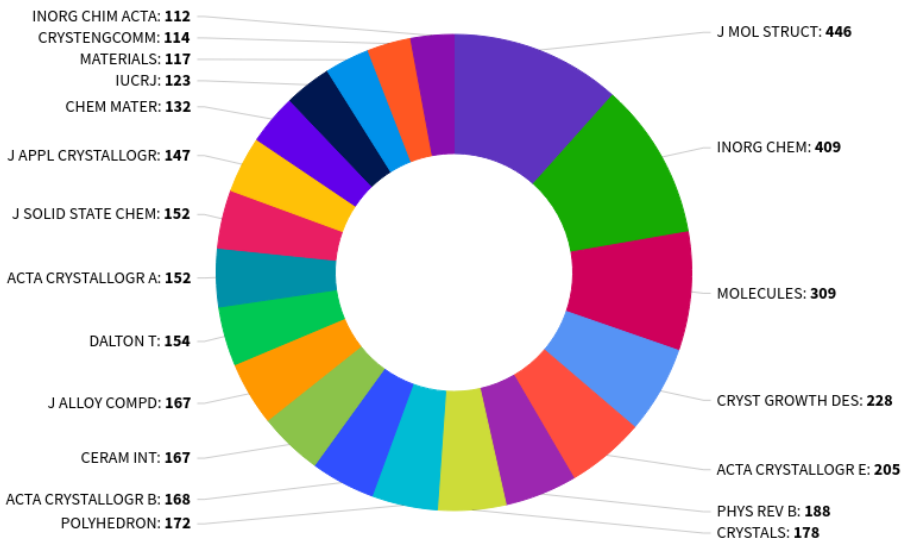
	SOURCE NAME	COUNT
	All Others	438
1	Acta Crystallographica A-Foundation and Advances	152
2	JOURNAL OF APPLIED CRYSTALLOGRAPHY	82
3	PHYSICAL REVIEW B	41
4	PHYSICAL REVIEW LETTERS	37
5	Zeitschrift fur Kristallographie-Crystalline Materials	37
6	Acta Crystallographica Section B-Structural Science Crystal Engineering and Materials	32
7	NATURE	27
8	Acta Crystallographica Section D-Structural Biology	19
9	JOURNAL OF SYNCHROTRON RADIATION	18
10	PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA	17
11	CRYSTALLOGRAPHY REPORTS	16
12	IUCrJ	14
13	PHILOSOPHICAL MAGAZINE	14
14	Journal of the American Chemical Society	13
15	JOURNAL OF PHYSICS-CONDENSED MATTER	13
16	Nature Communications	13
17	Journal of Physics A-Mathematical and Theoretical	11
18	OPTICS EXPRESS	11
19	Scientific Reports	11
20	DISCRETE & COMPUTATIONAL GEOMETRY	10

Showing 1 - 20 rows of 152 total (use export in the relevant section to download the full table)

Journal Citation Relationships

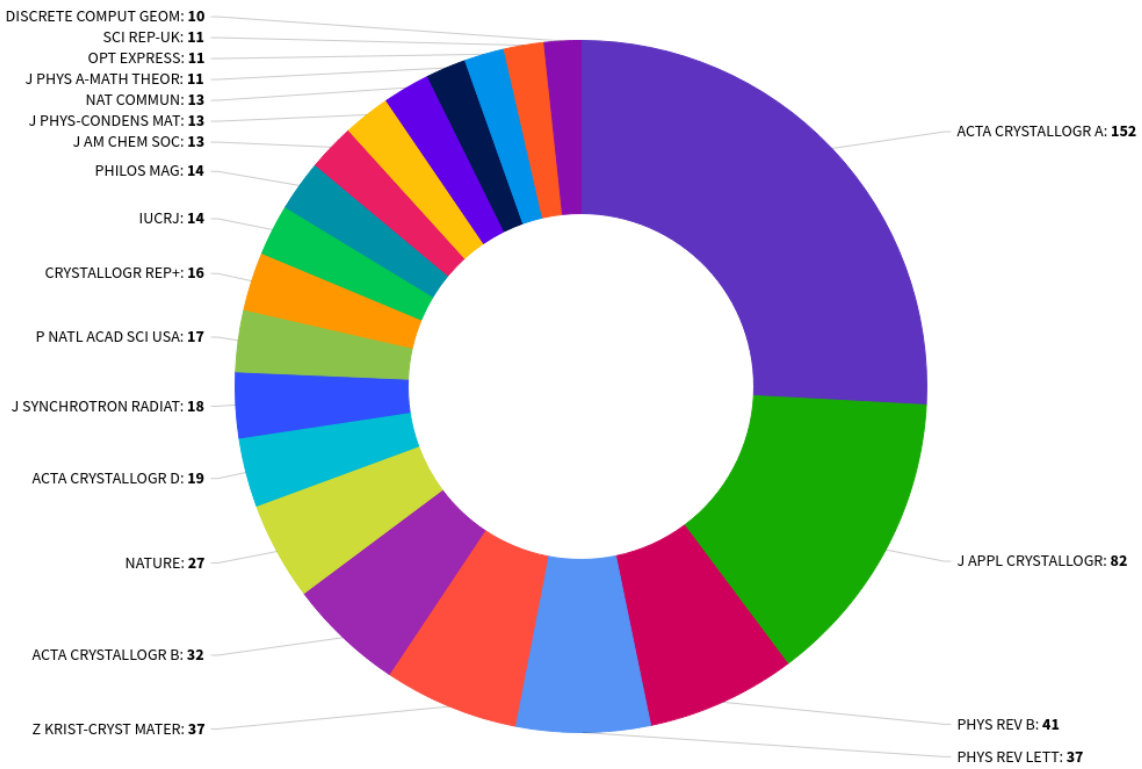
Cited Data

Top 20 journals citing ACTA CRYSTALLOGR A by number of citations



Citing Data

Top 20 journals cited by ACTA CRYSTALLOGR A 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

47 total citable items

	ARTICLES	REVIEWS	COMBINED (C)	OTHER DOCUMENT TYPES (O)	PERCENTAGE
NUMBER IN JCR YEAR 2022 (A)	47	0	47	335	12%
NUMBER OF REFERENCES (B)	1,442	0	1,442	207	87%
RATIO (B/A)	30.7	N/A	30.7	0.6	

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

37.7

EDITION

Science Citation Index Expanded

CHEMISTRY, MULTIDISCIPLINARY

31.2

CRYSTALLOGRAPHY

44.2

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	UNITED STATES DEPARTMENT OF ENERGY (DOE)	247
2	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS)	92
3	HELMHOLTZ ASSOCIATION	77
4	UNIVERSITY OF CALIFORNIA SYSTEM	67
5	UDICE-FRENCH RESEARCH UNIVERSITIES	65
6	CZECH ACADEMY OF SCIENCES	64
7	SWISS FEDERAL INSTITUTES OF TECHNOLOGY DOMAIN	47
8	RUSSIAN ACADEMY OF SCIENCES	46

Showing 1 - 8 rows of 1198 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	905
2	GERMANY (FED REP GER)	233
3	England	204
4	France	174
5	Japan	147
6	Poland	112
7	Czech Republic	89
8	Switzerland	88

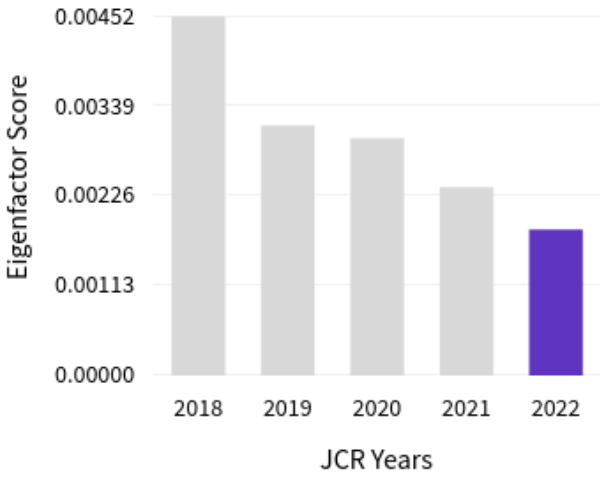
Showing 1 - 8 rows of 80 total (use export in the relevant section to download the full table)

Additional metrics

Eigenfactor score

0.00184

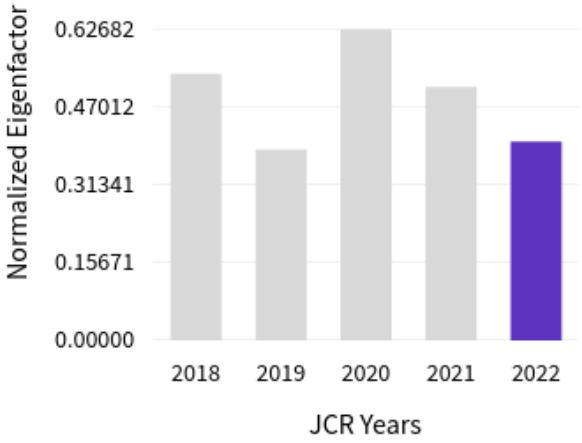
The Eigenfactor Score is a reflection of the density of the network of citations around the journal using 5 years of cited content as cited by the Current Year. It considers both the number of citations and the source of those citations, so that highly cited sources will influence the network more than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



Normalized Eigenfactor

0.40059

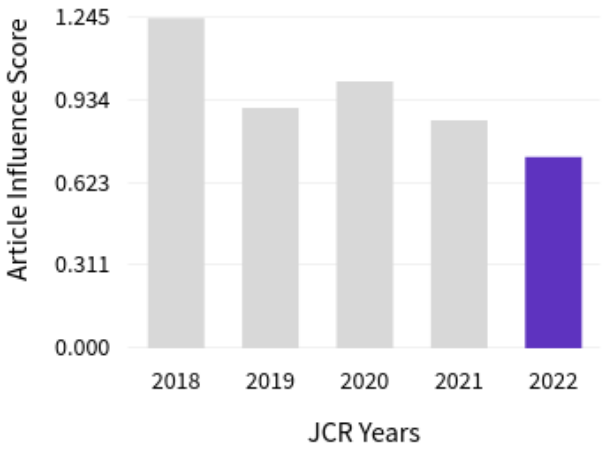
The Normalized Eigenfactor Score is the Eigenfactor score normalized, by rescaling the total number of journals in the JCR each year, so that the average journal has a score of 1. Journals can then be compared and influence measured by their score relative to 1. Learn more



Article influence score

0.722

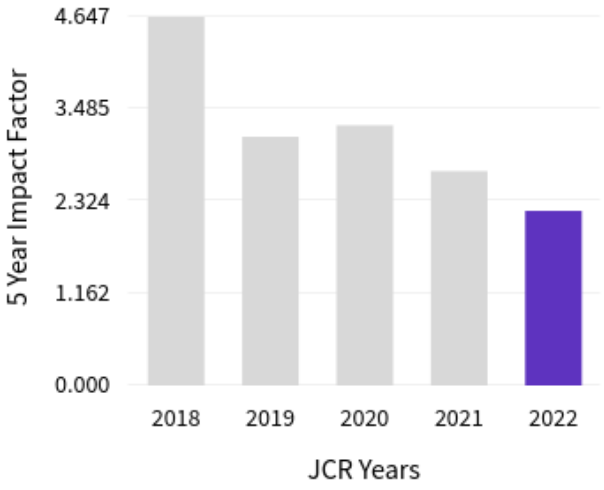
The Article Influence Score normalizes the Eigenfactor Score according to the cumulative size of the cited journal across the prior five years. The mean Article Influence Score for each article is 1.00. A score greater than 1.00 indicates that each article in the journal has above-average influence.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



5 year Impact Factor

2.2

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.



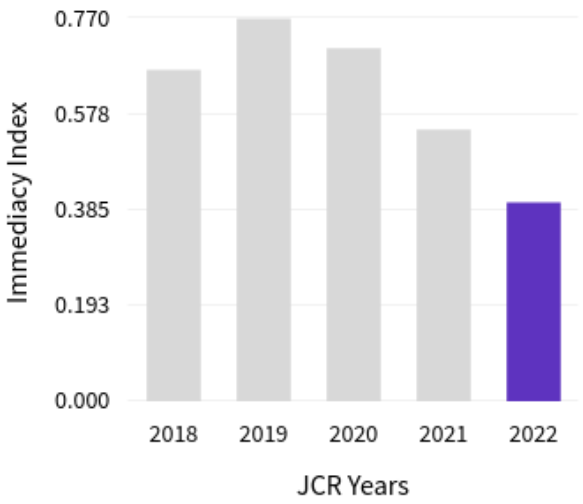
5 year Impact Factor calculation

$$\frac{\text{Citations in 2022 to items published in [2017-2021] (640)}}{\text{Number of citable items in [2017-2021] (290)}} = \frac{640}{290} = 2.2$$

Immediacy Index

0.4

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 2022 to items published in 2022	19	19 / 47 = 0.4
Number of items published in 2022	47	

