


# 2023 Journal Performance Data for: Formalized Mathematics

 Open Access since 2006

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1898-9934

EISSN

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JCR ABBREVIATION

FORMALIZ MATH

ISO ABBREVIATION

Formaliz. Math.

## Journal Information

EDITION

Emerging Sources Citation  
Index (ESCI)

CATEGORY

MATHEMATICS

LANGUAGES

English

REGION

POLAND

1ST ELECTRONIC JCR YEAR

2020

## Publisher Information

PUBLISHER

SCIENDO

ADDRESS

BOGUMILA ZUGA 32A,  
WARSAW, MAZOVIA 01-811,  
POLAND

PUBLICATION FREQUENCY

4 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](#)

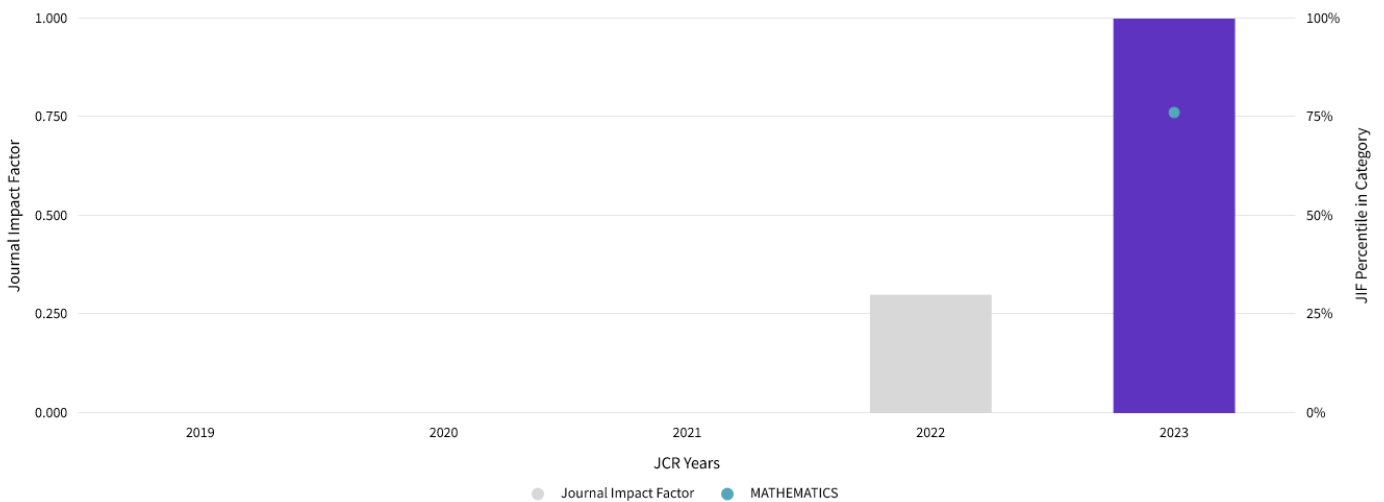
2023 JOURNAL IMPACT FACTOR

1.0

2023 JOURNAL IMPACT FACTOR WITHOUT SELF CITATIONS

0.2

## Journal Impact Factor Trend 2023



Journal Impact Factor is calculated using the following metrics






$$\frac{\text{Citations in 2023 to items published in 2021 (21) - 2022 (23)}}{\text{Number of citable items in 2021 (24) + 2022 (22)}} = \frac{44}{46} = 1.0$$

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

$$\frac{\text{Citations in 2023 to items published in 2021 (21) + 2022 (23) - Self Citations in 2023 to items published in 2021 (20) + 2022 (17)}}{\text{Number of citable items in 2021 (24) + 2022 (22)}} = \frac{44 - 37}{46} = 0.2$$

## Journal Impact Factor Contributing Items

### Citable Items (46)

TITLE	CITATION COUNT
Definition of Centroid Method as Defuzzification Authors: Mitsuishi, Takashi Volume: 30 Accession number: WOS:000903561800004 Document Type: Article	4 
Improper Integral. Part II Authors: Endou, Noboru Volume: 29 Accession number: WOS:000824850000010 Document Type: Article	4 
Absolutely Integrable Functions Authors: Endou, Noboru Volume: 30 Accession number: WOS:000901818200004 Document Type: Article	2 
Algebraic Extensions Authors: Schwarzweller, Christoph;Rowinska-Schwarzweller, Agnieszka Volume: 29 Accession number: WOS:000691288100004 Document Type: Article	2 
Artin's Theorem Towards the Existence of Algebraic Closures Authors: Schwarzweller, Christoph Volume: 30 Accession number: WOS:000905984600003 Document Type: Article	2 

Showing 1-5 rows of 46 total (use export in the relevant section to download the full table)

## Journal Impact Factor Contributing Items

### Citing Sources (4)

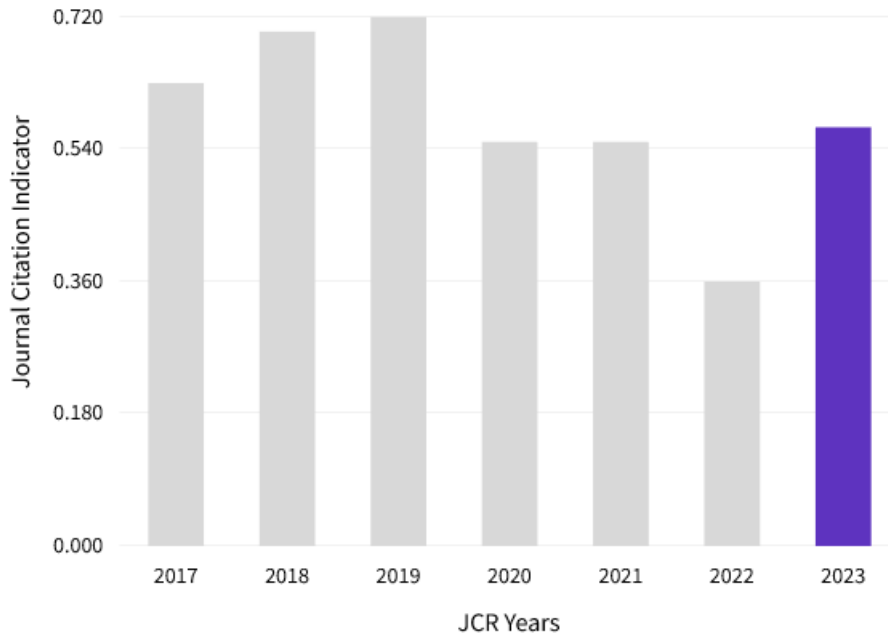
SOURCE NAME	COUNT
FORMALIZED MATHEMATICS	37
SCIENTIFIC DATA	5
IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY	1
SOFTWAREX	1

Showing 1-4 rows of 4 total (use export in the relevant section to download the full table)

# Journal Citation Indicator (JCI)

0.57

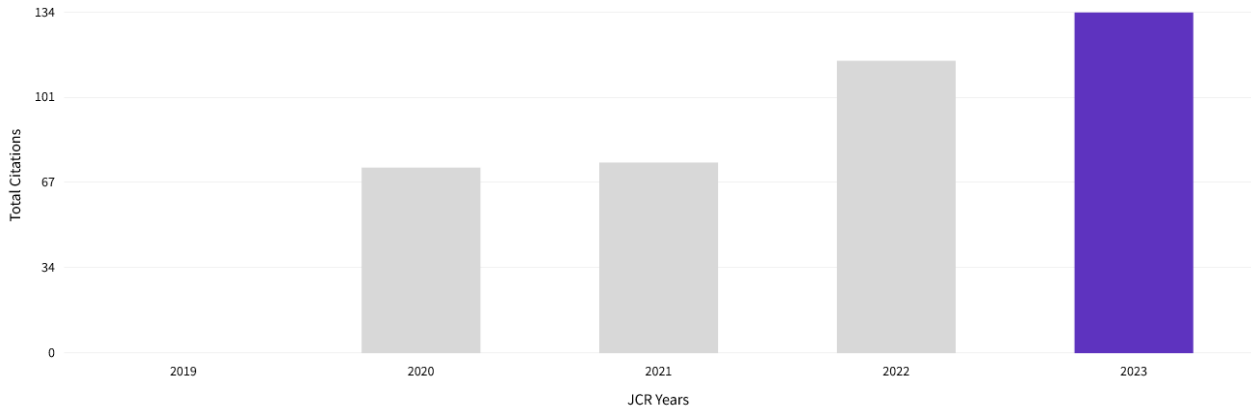
The Journal Citation Indicator (JCI) is the average Category Normalized Citation Impact (CNCI) of citable items (articles & reviews) published by a journal over a recent three year period. The average JCI in a category is 1. Journals with a JCI of 1.5 have 50% more citation impact than the average in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



# Total Citations

## 134

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

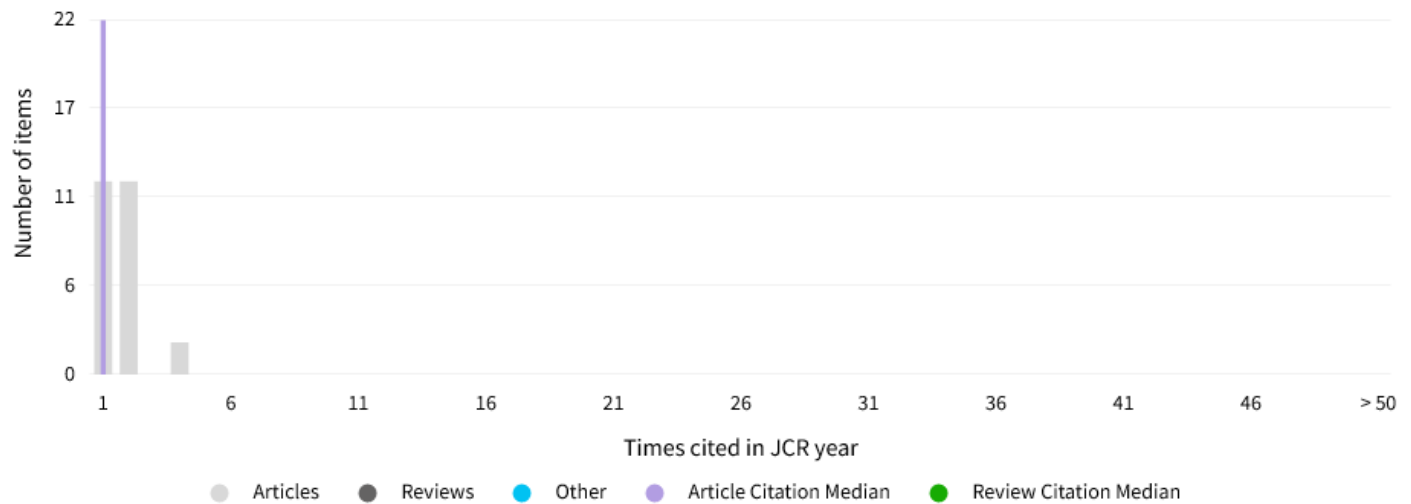
**1**

REVIEW CITATION MEDIAN

**N/A**

UNLINKED CITATIONS

**0**



## 0 times cited

ARTICLES

**20**

REVIEWS

**0**

OTHER

**1**



## 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

**67**

% OF CITABLE OA

**100.00%**

CITABLE

● GOLD OPEN ACCESS

67 / 97.10%

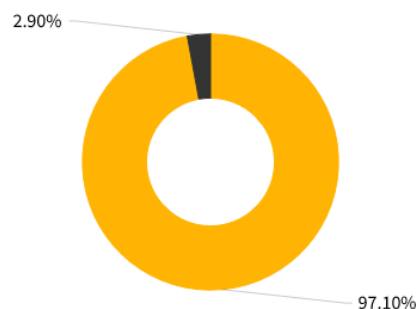
● SUBSCRIPTION OR BRONZE

0 / 0.00%

NON-CITABLE

● OTHER (NON-CITABLE ITEMS)

2 / 2.90%



### Citations\*

TOTAL CITABLE

**52**

% OF CITABLE OA

**100.00%**

CITABLE

● GOLD OPEN ACCESS

52 / 100.00%

● SUBSCRIPTION OR BRONZE

0 / 0.00%

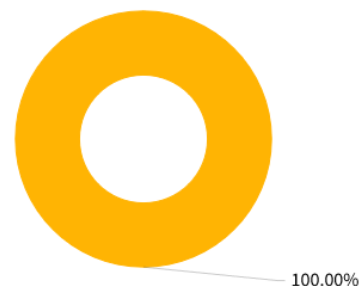
NON-CITABLE

● OTHER (NON-CITABLE ITEMS)

0 / 0.00%

● UNLINKED CITATIONS

0 / 0.00%



\* 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

MATHEMATICS

**117/489**

JCR YEAR	JIF RANK	QUART ILE	JIF PERCENTILE	
2023	117/489	Q1	76.2	

## 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

**249/489**

JCR YEAR	JCI RANK	QUARTILE	JCI PERCENTILE	
2023	249/489	Q3	49.18	
2022	402/485	Q4	17.22	
2021	304/475	Q3	36.11	
2020	306/471	Q3	35.14	
2019	222/470	Q2	52.87	
2018	232/469	Q2	50.64	
2017	268/462	Q3	42.10	

# Citation network

## Cited Half-life

4.6 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

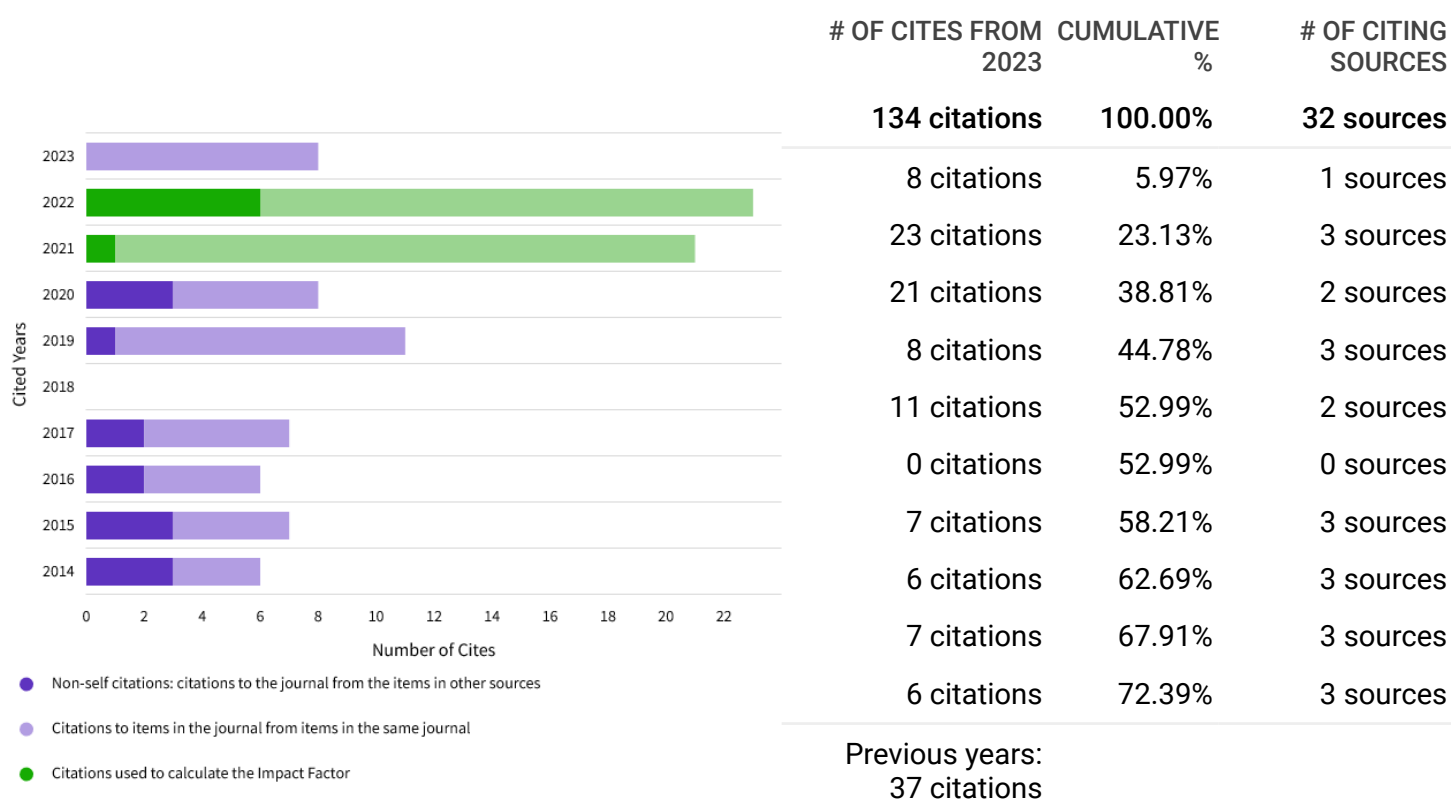
134

NON-SELF CITATIONS

43

SELF CITATIONS

91



## Citing titles in all years

### Formalized Mathematics

	SOURCE NAME	COUNT
	All Others	7
1	Formalized Mathematics	91
2	JOURNAL OF AUTOMATED REASONING	6
3	Scientific Data	5
4	Filomat	2
5	JOURNAL OF DISCRETE MATHEMATICAL SCIENCES & CRYPTOGRAPHY	2
6	New Mathematics and Natural Computation	2
7	Annales Mathematicae Silesianae	1
8	Communications in Combinatorics and Optimization	1
9	COMPUTATIONAL & APPLIED MATHEMATICS	1
10	European Journal of Pure and Applied Mathematics	1
11	Frontiers in Animal Science	1
12	IEEE Access	1
13	IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY	1
14	INFORMATION PROCESSING & MANAGEMENT	1
15	International Journal of Applied Earth Observation and Geoinformation	1
16	International Journal of Fuzzy Systems	1
17	International Journal of Productivity and Performance Management	1
18	INTERNATIONAL JOURNAL OF REMOTE SENSING	1
19	JOURNAL OF ARTIFICIAL INTELLIGENCE RESEARCH	1
20	JOURNAL OF CHEMICAL PHYSICS	1

Showing 1 - 20 rows of 23 total (use export in the relevant section to download the full table)

# Citing Half-life

## 8.9 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

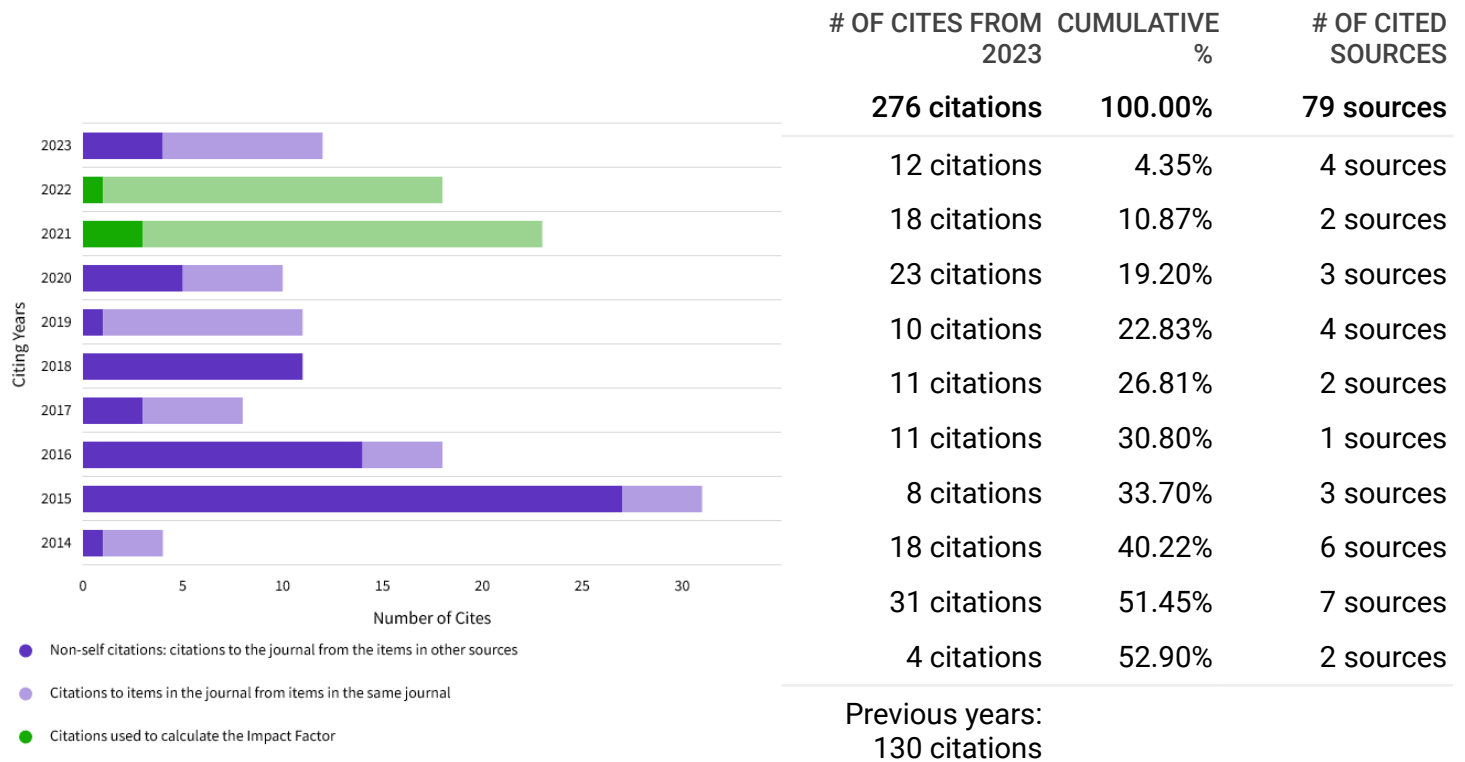
276

NON-SELF CITATIONS

185

SELF CITATIONS

91



## Cited titles in all years

### Formalized Mathematics

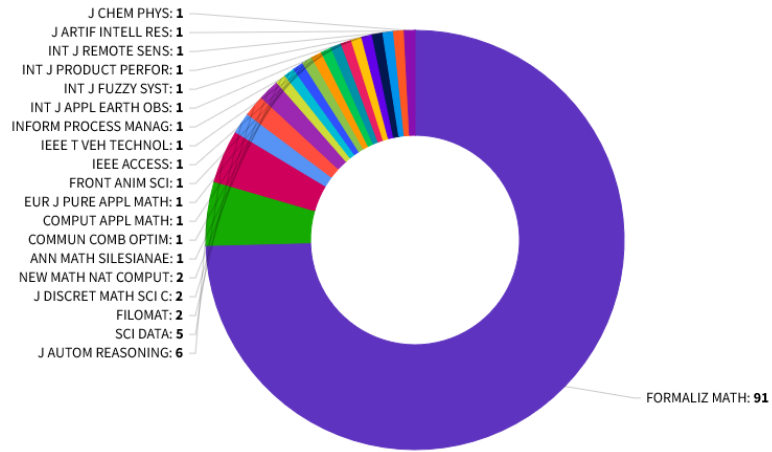
	SOURCE NAME	COUNT
	All Others	47
1	Formalized Mathematics	91
2	JOURNAL OF AUTOMATED REASONING	17
3	FUZZY SETS AND SYSTEMS	5
4	JOURNAL OF SYMBOLIC COMPUTATION	4
5	MATHEMATICAL STRUCTURES IN COMPUTER SCIENCE	4
6	JOURNAL OF SYMBOLIC LOGIC	3
7	BULLETIN OF SYMBOLIC LOGIC	2
8	Journal of Logic and Analysis	2
9	Moscow Mathematical Journal	2

Showing 1 - 9 rows of 9 total (use export in the relevant section to download the full table)

# Journal Citation Relationships

## Cited Data

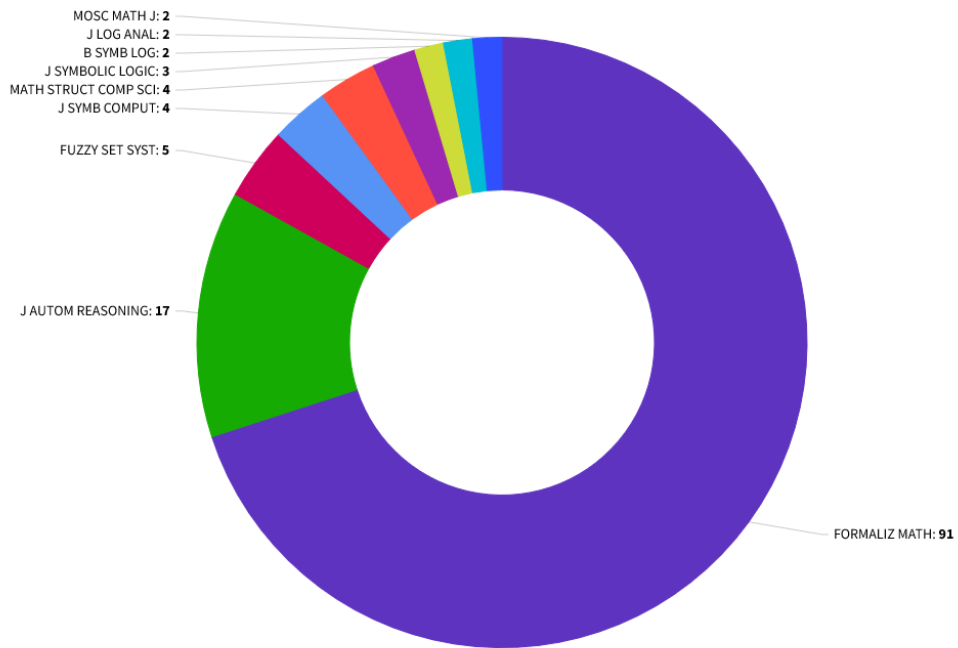
Top 20 journals citing FORMALIZ MATH by number of citations





# Citing Data

Top 20 journals cited by FORMALIZ MATH 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](#)

### 21 total citable items

	ARTICLES	REVIEWS	COMBINED (C)	OTHER DOCUMENT TYPES (O)	PERCENTAGE
NUMBER IN JCR YEAR 2023 (A)	21	0	21	1	95%
NUMBER OF REFERENCES (B)	262	0	262	14	95%
RATIO (B/A)	12.5	N/A	12.5	14.0	

## 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









**76.2**

MATHEMATICS

**76.2**

## 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	UNIVERSITY OF BIALYSTOK	18	
2	FAHRENHEIT UNIVERSITIES	9	
3	GIFU COLL	7	
-	YAMAGUCHI UNIVERSITY	7	
5	SHINSHU UNIVERSITY	6	
6	KARUIZAWA HOTCH 244-1	5	
7	CAFR MSA2P ASBL	4	
8	IBARAKI UNIVERSITY	3	

Showing 1 - 8 rows of 25 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	Japan	31	
2	Poland	28	
3	Belgium	4	
4	GERMANY (FED REP GER)	2	
5	USA	1	

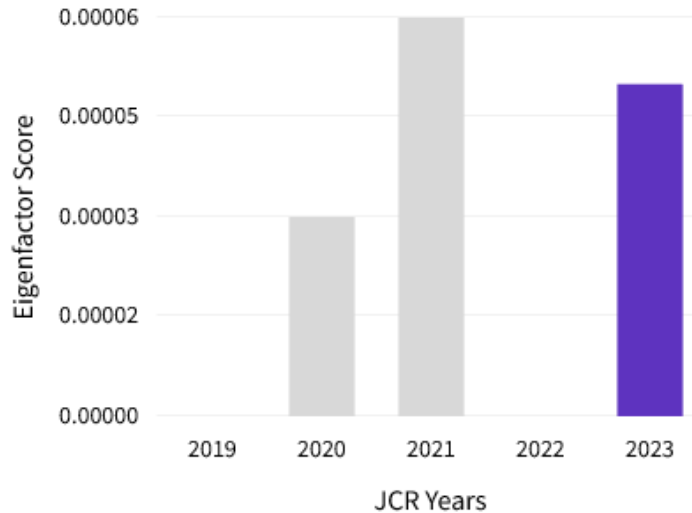
Showing 1 - 5 rows of 5 total (use export in the relevant section to download the full table)

# Additional metrics

## Eigenfactor score

**0.00005**

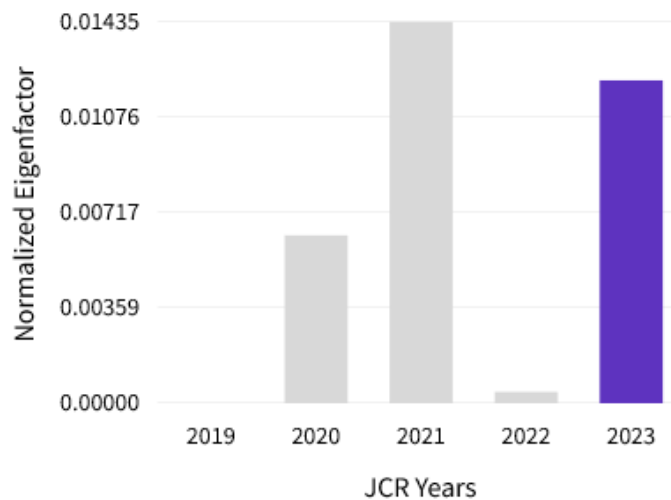
The Eigenfactor Score is a reflection of the density of the network of citations around the journal using 5 years of cited content as cited by the Current Year. It considers both the number of citations and the source of those citations, so that highly cited sources will influence the network more than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



## Normalized Eigenfactor

**0.01215**

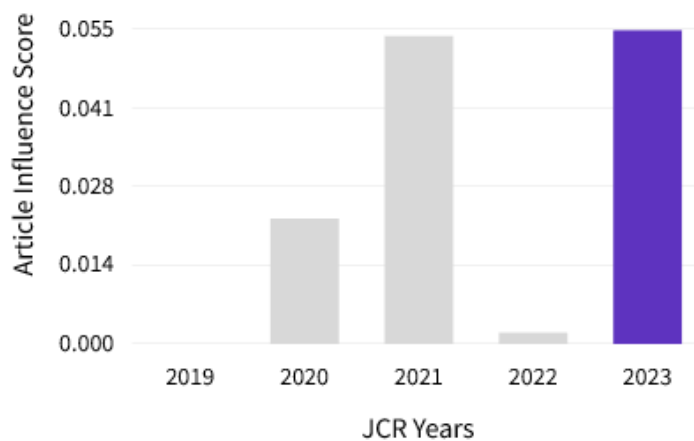
The Normalized Eigenfactor Score is the Eigenfactor score normalized, by rescaling the total number of journals in the JCR each year, so that the average journal has a score of 1. Journals can then be compared and influence measured by their score relative to 1. [Learn more](#)



## Article influence score

**0.055**

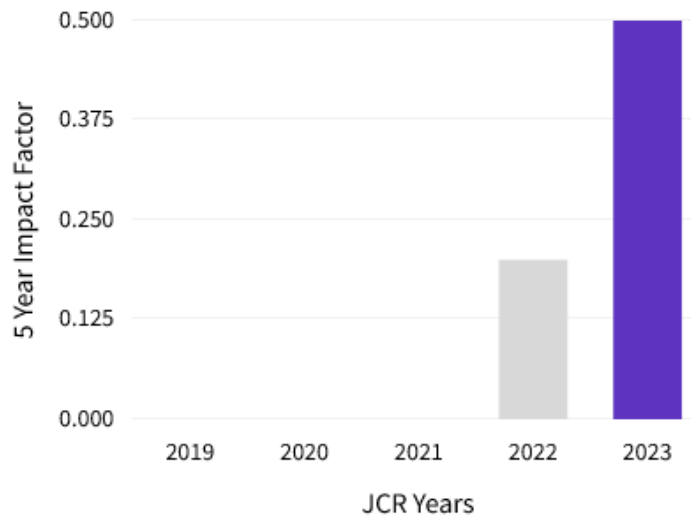
The Article Influence Score normalizes the Eigenfactor Score according to the cumulative size of the cited journal across the prior five years. The mean Article Influence Score for each article is 1.00. A score greater than 1.00 indicates that each article in the journal has above-average influence.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



# 5 year Impact Factor

## 0.5

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

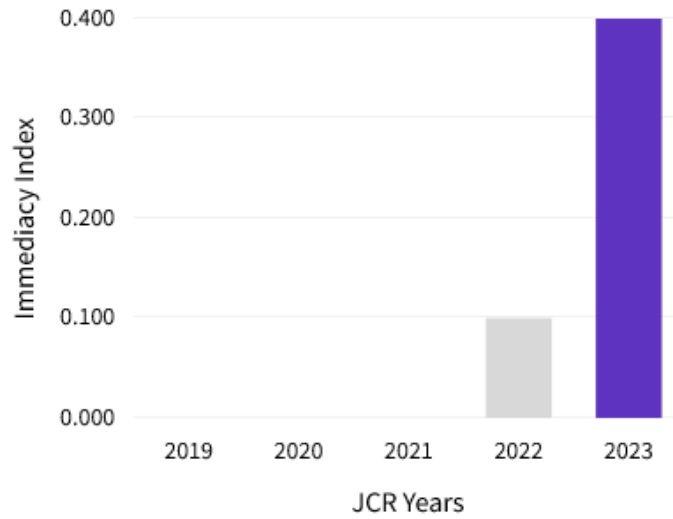
Citations in 2023 to items published in [2018-2022] (63)			
<hr/>	=	$\frac{63}{122}$	= 0.5
Number of citable items in [2018-2022] (122)			

# 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

$$\frac{\text{Cites in 2023 to items published in [2023]}}{\text{Number of items published in [2023]}} = \frac{8}{21} = 0.4$$