

2023 Journal Performance Data for: JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE

ISSN

1059-9495

EISSN

1544-1024

JCR ABBREVIATION

J MATER ENG PERFORM

ISO ABBREVIATION

J. Mater. Eng. Perform.

Journal Information

EDITION

Science Citation Index
Expanded (SCIE)

CATEGORY

MATERIALS SCIENCE,
MULTIDISCIPLINARY

LANGUAGES

English

REGION

USA

1ST ELECTRONIC JCR YEAR

1997

Publisher Information

PUBLISHER

SPRINGER

ADDRESS

ONE NEW YORK PLAZA, SUITE
4600 , NEW YORK, NY 10004,
UNITED STATES

PUBLICATION FREQUENCY

24 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](#)

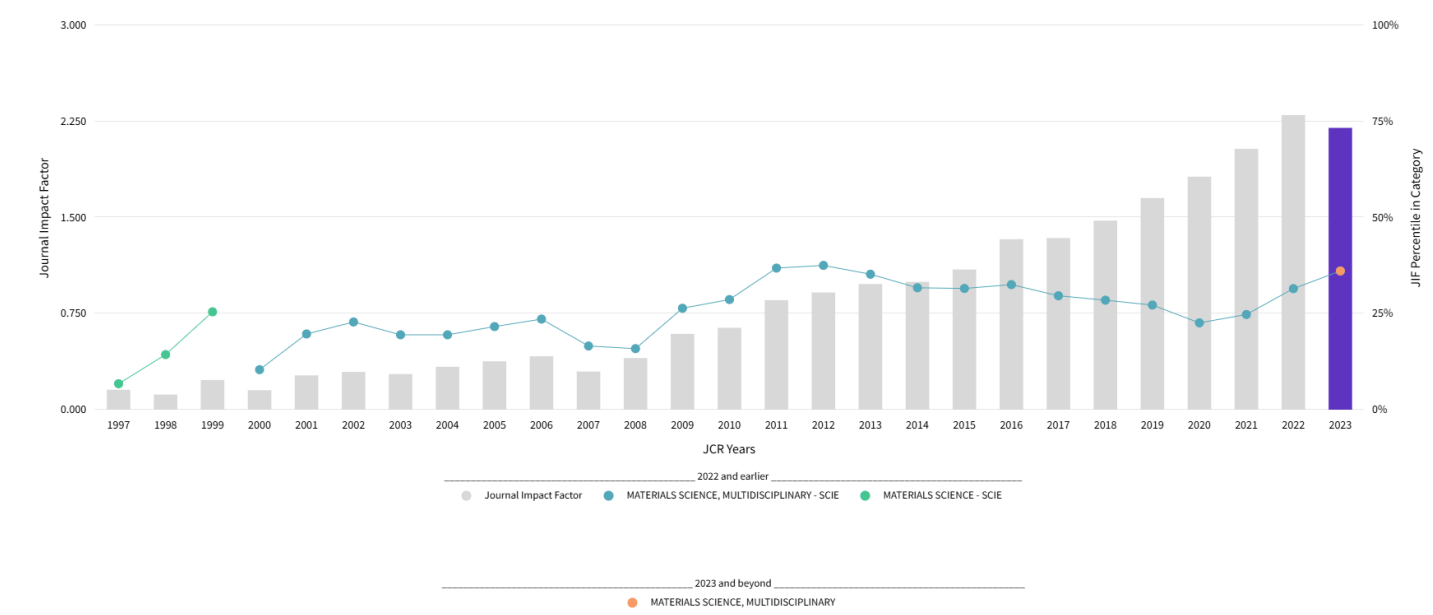
2023 JOURNAL IMPACT FACTOR

2.2

2023 JOURNAL IMPACT FACTOR WITHOUT SELF CITATIONS

1.9

Journal Impact Factor Trend 2023



Journal Impact Factor is calculated using the following metrics

Citations in 2023 to items published in 2021 (2,934) - 2022 (2,188)		5,122		
	=		=	2.2
Number of citable items in 2021 (1,091) + 2022 (1,271)		2,362		

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

Citations in 2023 to items published in 2021 (2,934) + 2022 (2,188) - Self Citations in 2023 to items published in 2021 (303) + 2022 (302)		5,122 - 605		
	=		=	1.9
Number of citable items in 2021 (1,091) + 2022 (1,271)		2,362		

Journal Impact Factor Contributing Items

Citable Items (2,362)

TITLE	CITATION COUNT
<p>Defects in Metal Additive Manufacturing Processes</p> <p>Authors: Brennan, M. C.;Keist, J. S.;Palmer, T. A.</p> <p>Volume: 30</p> <p>Accession number: WOS:000668809900003</p> <p>Document Type: Article</p>	42
<p>Robust Metal Additive Manufacturing Process Selection and Development for Aerospace Components</p> <p>Authors: Gradl, Paul;Tinker, Darren C.;Park, Alison;Mireles, Omar R.;Garcia, Marissa;Wilkerson, Ryan;Mckinney, Christopher</p> <p>Volume: 31</p> <p>Accession number: WOS:000784085900001</p> <p>Document Type: Article</p>	37
<p>Effects of Post-processing on the Surface Finish, Porosity, Residual Stresses, and Fatigue Performance of Additive Manufactured Metals: A Review</p> <p>Authors: Ye, Chang;Zhang, Chaoyi;Zhao, Jingyi;Dong, Yalin</p> <p>Volume: 30</p> <p>Accession number: WOS:000678484600003</p> <p>Document Type: Review</p>	29
<p>Statistical and Experimental Analysis of Process Parameters of 3D Nylon Printed Parts by Fused Deposition Modeling: Response Surface Modeling and Optimization</p> <p>Authors: Moradi, Mahmoud;Aminzadeh, Ahmad;Rahmatabadi, Davood;Rasouli, Seyed Alireza</p> <p>Volume: 30</p> <p>Accession number: WOS:000664019400007</p> <p>Document Type: Article</p>	29
<p>Wire Arc Additive Manufacturing: A Comprehensive Review and Research Directions</p> <p>Authors: Raut, Laukik P.;Taiwade, Ravindra, V</p> <p>Volume: 30</p> <p>Accession number: WOS:000663290600006</p> <p>Document Type: Review</p>	28

Showing 1-5 rows of 2,362 total (use export in the relevant section to download the full table)

Journal Impact Factor Contributing Items

Citing Sources (687)

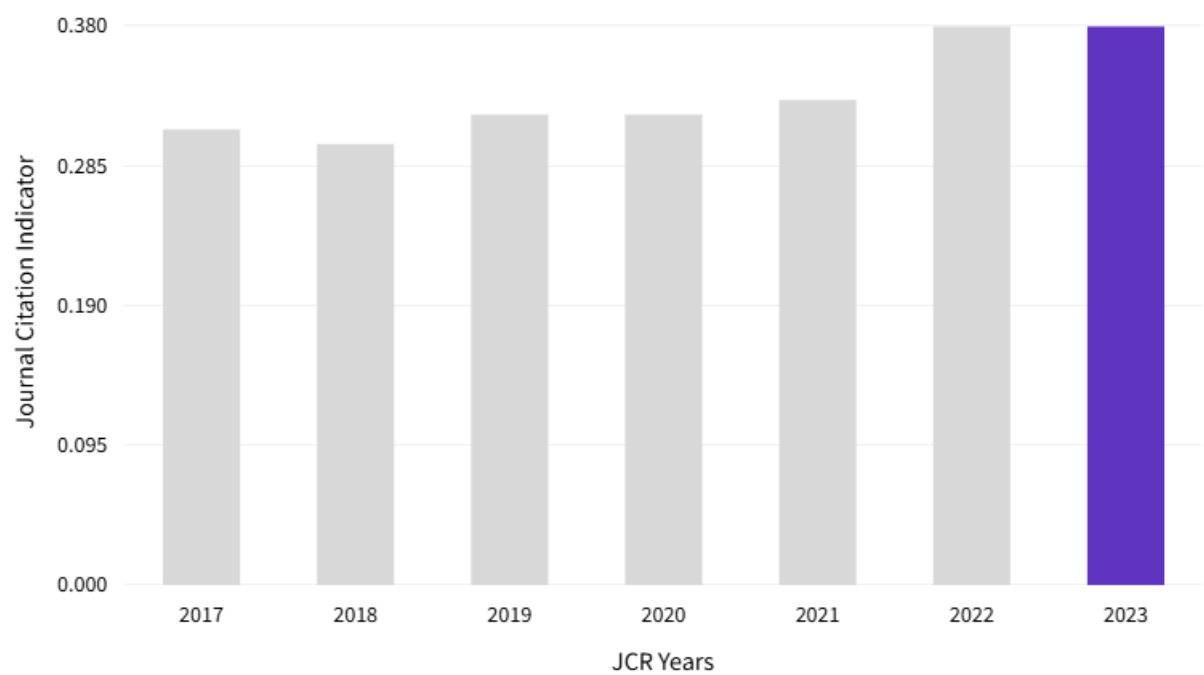
SOURCE NAME	COUNT
JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE	605
JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T	242
MATERIALS	237
METALS	232
INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY	135
MATERIALS TODAY COMMUNICATIONS	106
JOURNAL OF ALLOYS AND COMPOUNDS	93
MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING	83
COATINGS	70
JOURNAL OF MANUFACTURING PROCESSES	69
SURFACE & COATINGS TECHNOLOGY	59
POLYMERS	57
INTERNATIONAL JOURNAL OF INTERACTIVE DESIGN AND MANUFACTURING - IJIDEM	55
ADVANCED ENGINEERING MATERIALS	50
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART E- JOURNAL OF PROCESS MECHANICAL ENGINEERING	48
TRIBOLOGY INTERNATIONAL	48
ENGINEERING FAILURE ANALYSIS	46
CERAMICS INTERNATIONAL	45
MATERIALS CHARACTERIZATION	45
JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY	40

Showing 1-20 rows of 687 total (use export in the relevant section to download the full table)

Journal Citation Indicator (JCI)

0.38

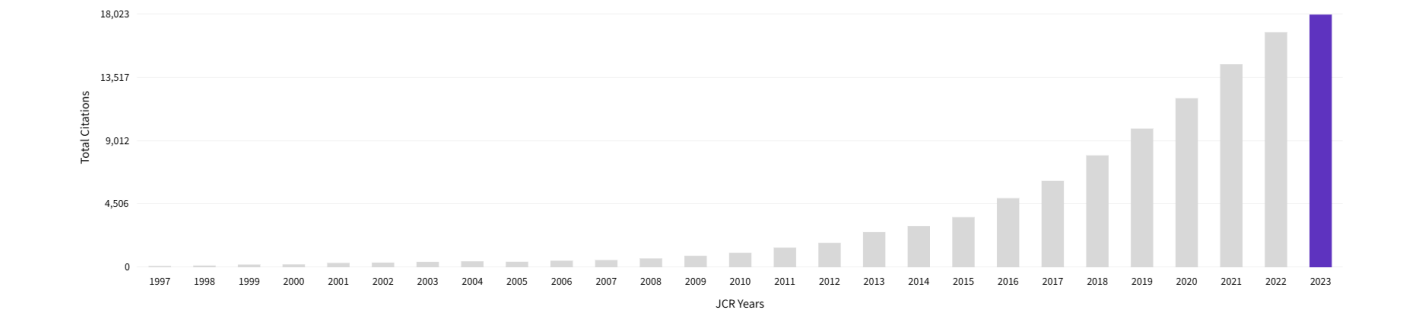
The Journal Citation Indicator (JCI) is the average Category Normalized Citation Impact (CNCI) of citable items (articles & reviews) published by a journal over a recent three year period. The average JCI in a category is 1. Journals with a JCI of 1.5 have 50% more citation impact than the average in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



Total Citations

18,023

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

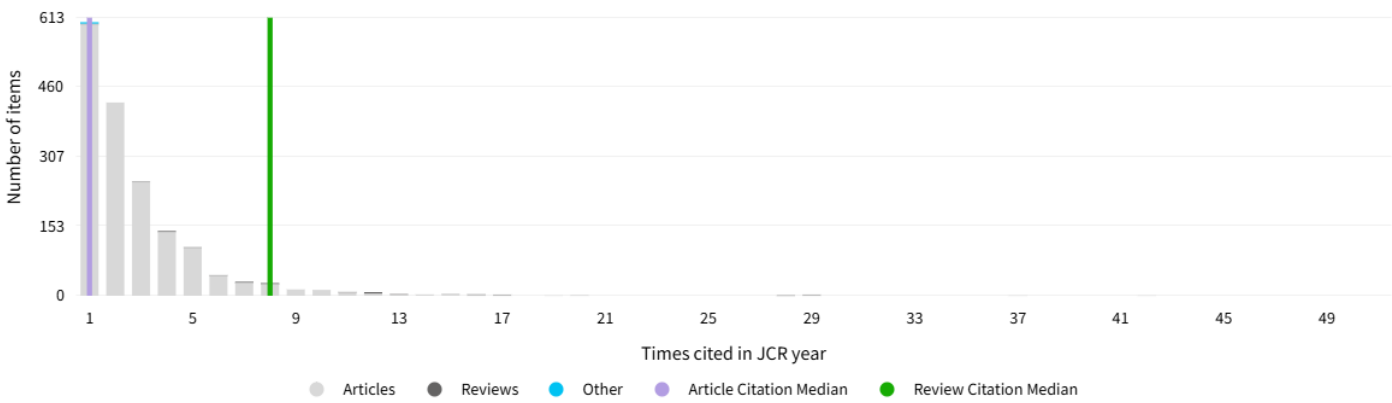
1

REVIEW CITATION MEDIAN

8

UNLINKED CITATIONS

178



0 times cited

ARTICLES

660

REVIEWS

2

OTHER

47

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

3,626

% OF CITABLE OA

4.83%

CITABLE

GOLD OPEN ACCESS

175 / 4.74%

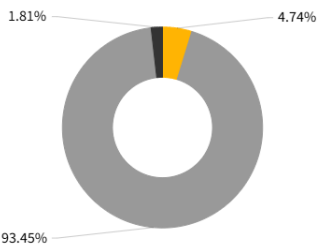
SUBSCRIPTION OR BRONZE

3,451 / 93.45%

NON-CITABLE

 OTHER (NON-CITABLE ITEMS)

67 / 1.81%



Citations*

TOTAL CITABLE

5,417

% OF CITABLE OA

7.33%

CITABLE

GOLD OPEN ACCESS

397 / 7.01%

SUBSCRIPTION OR BRONZE

5,020 / 88.66%

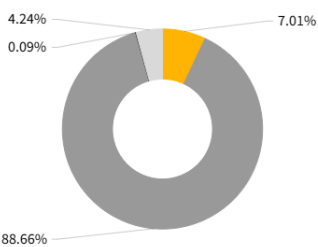
NON-CITABLE

 OTHER (NON-CITABLE ITEMS)

5 / 0.09%

 UNLINKED CITATIONS

240 / 4.24%



* 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

MATERIALS SCIENCE, MULTIDISCIPLINARY

281/439

JCR YEAR	JIF RANK	QUART ILE	JIF PERCENTILE
2023	281/439	Q3	36.1

Rank by JIF before 2023 for MATERIALS SCIENCE, MULTIDISCIPLINARY

EDITION

Science Citation Index Expanded (SCIE)

JCR YEAR	JIF RANK	QUART ILE	JIF PERCENTILE
2022	236/344	Q3	31.5
2021	260/345	Q4	24.78
2020	259/334	Q4	22.60
2019	229/314	Q3	27.23
2018	210/293	Q3	28.50
2017	201/285	Q3	29.65
2016	186/275	Q3	32.55
2015	186/271	Q3	31.55
2014	178/260	Q3	31.73
2013	163/251	Q3	35.26
2012	151/241	Q3	37.55
2011	147/232	Q3	36.85
2010	161/225	Q3	28.67
2009	158/214	Q3	26.40
2008	162/192	Q4	15.89
2007	159/190	Q4	16.58
2006	135/176	Q4	23.58
2005	140/178	Q4	21.63
2004	143/177	Q4	19.49
2003	143/177	Q4	19.49
2002	134/173	Q4	22.83
2001	137/170	Q4	19.71
2000	151/168	Q4	10.42
1999	N/A	N/A	N/A
1998	N/A	N/A	N/A

CATEGORY

MATERIALS SCIENCE

N/A

Rank by JIF before 2023 for MATERIALS SCIENCE

EDITION

Science Citation Index Expanded (SCIE)

JCR YEAR	JIF RANK	QUART ILE	JIF PERCENTILE
2022	N/A	N/A	N/A
2021	N/A	N/A	N/A
2020	N/A	N/A	N/A
2019	N/A	N/A	N/A
2018	N/A	N/A	N/A
2017	N/A	N/A	N/A
2016	N/A	N/A	N/A
2015	N/A	N/A	N/A
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	119/159	Q3	25.47

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

MATERIALS SCIENCE, MULTIDISCIPLINARY

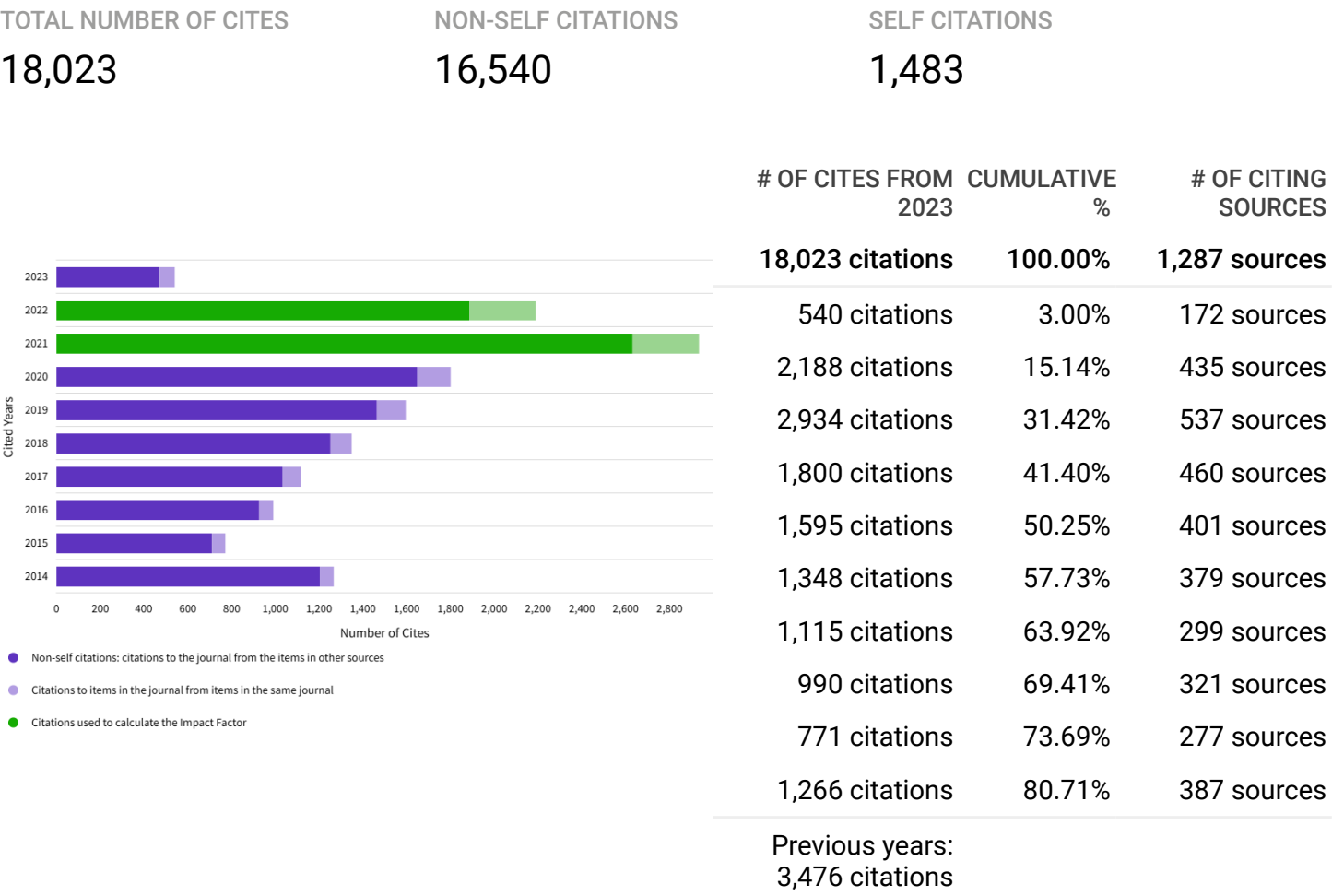
298/439

JCR YEAR	JCI RANK	QUART ILE	JCI PERCENTILE	
2023	298/439	Q3	32.23	<div><div></div></div>
2022	291/424	Q3	31.49	<div><div></div></div>
2021	303/414	Q3	26.93	<div><div></div></div>
2020	280/384	Q3	27.21	<div><div></div></div>
2019	264/375	Q3	29.73	<div><div></div></div>
2018	256/361	Q3	29.22	<div><div></div></div>
2017	233/343	Q3	32.22	<div><div></div></div>

Citation network

Cited Half-life 5.0 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.



Citing titles in all years

JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE

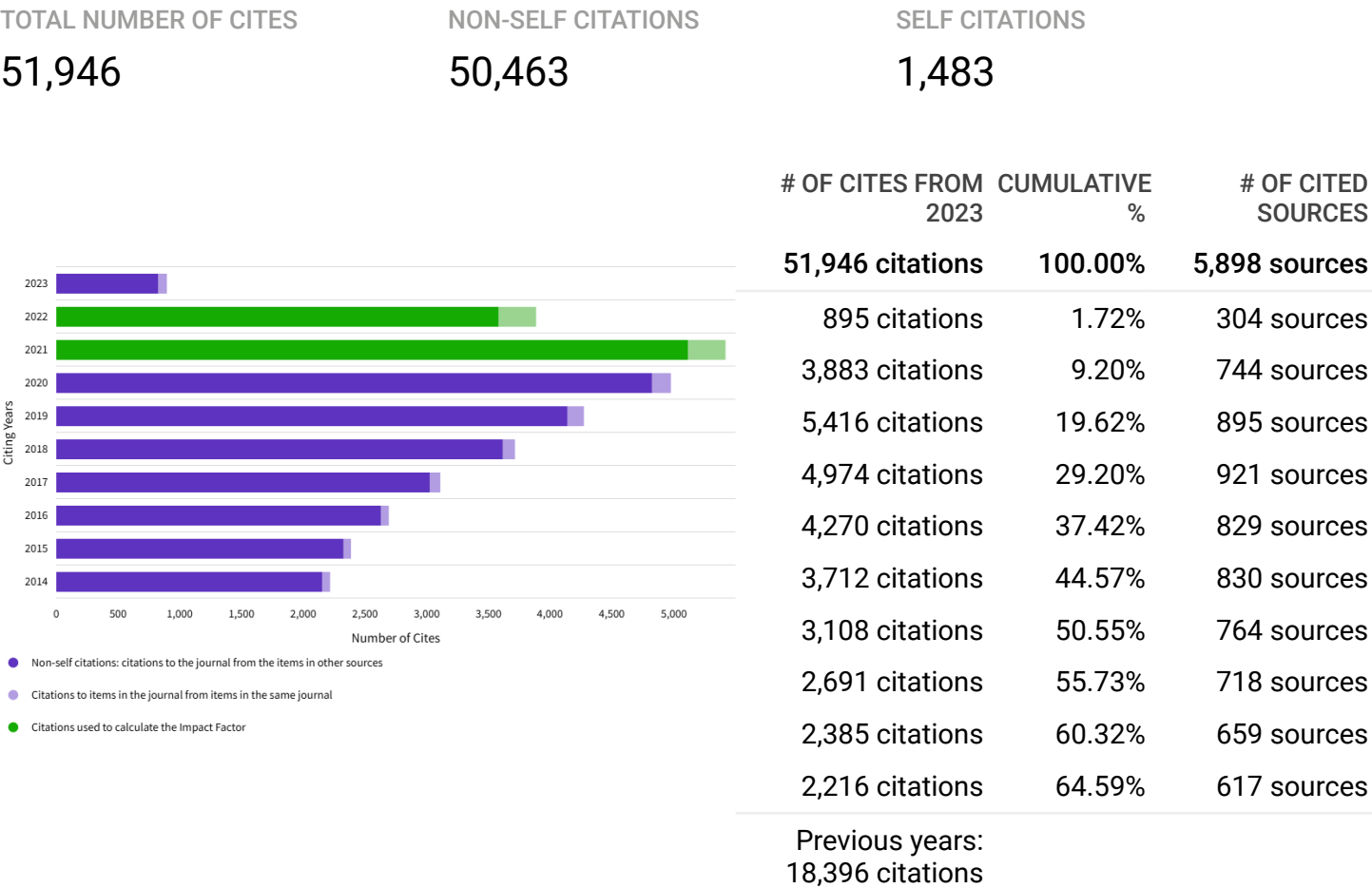
	SOURCE NAME	COUNT
	All Others	482
1	JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE	1,483
2	Journal of Materials Research and Technology-JMR&T	1,002
3	Materials	871
4	Metals	648
5	INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY	432
6	Materials Today Communications	382
7	Journal of Alloys and Compounds	381
8	MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING	348
9	Coatings	260
10	MATERIALS CHARACTERIZATION	219
11	Journal of Manufacturing Processes	217
12	SURFACE & COATINGS TECHNOLOGY	210
13	ADVANCED ENGINEERING MATERIALS	176
14	JOURNAL OF MATERIALS SCIENCE	153
15	Ceramics International	147
16	Engineering Failure Analysis	137
17	STEEL RESEARCH INTERNATIONAL	137
18	International Journal of Interactive Design and Manufacturing - IJIDeM	136
19	CORROSION SCIENCE	132
20	MATERIALS CHEMISTRY AND PHYSICS	131

Showing 1 - 20 rows of 805 total (use export in the relevant section to download the full table)

Citing Half-life

6.9 years

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



	# OF CITES FROM 2023	CUMULATIVE %	# OF CITED SOURCES
2023	51,946 citations	100.00%	5,898 sources
2022	895 citations	1.72%	304 sources
2021	3,883 citations	9.20%	744 sources
2020	5,416 citations	19.62%	895 sources
2019	4,974 citations	29.20%	921 sources
2018	4,270 citations	37.42%	829 sources
2017	3,712 citations	44.57%	830 sources
2016	3,108 citations	50.55%	764 sources
2015	2,691 citations	55.73%	718 sources
2014	2,385 citations	60.32%	659 sources
	2,216 citations	64.59%	617 sources
Previous years: 18,396 citations			

Citing Years

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 MATERIALS ENGINEERING AND PERFORMANCE

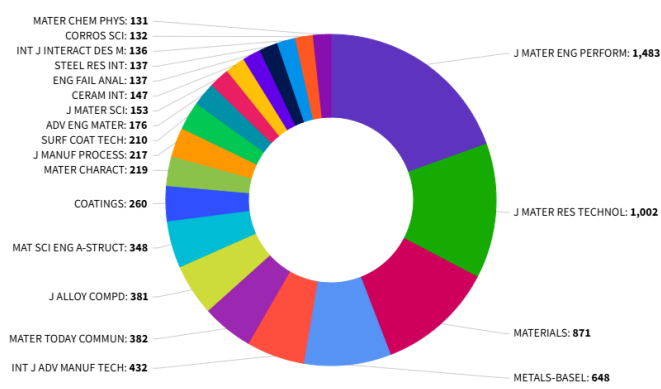
	SOURCE NAME	COUNT
	All Others	4,042
1	MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING	3,444
2	Journal of Alloys and Compounds	1,827
3	JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE	1,483
4	ACTA MATERIALIA	1,418
5	MATERIALS & DESIGN	1,367
6	SURFACE & COATINGS TECHNOLOGY	1,332
7	CORROSION SCIENCE	1,174
8	JOURNAL OF MATERIALS PROCESSING TECHNOLOGY	922
9	METALLURGICAL AND MATERIALS TRANSACTIONS A-PHYSICAL METALLURGY AND MATERIALS SCIENCE	790
10	INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY	730
11	WEAR	686
12	SCRIPTA MATERIALIA	660
13	MATERIALS CHARACTERIZATION	657
14	Journal of Materials Research and Technology-JMR&T	578
15	APPLIED SURFACE SCIENCE	571
16	Materials	562
17	Journal of Manufacturing Processes	534
18	Ceramics International	529
19	Journal of Materials Science & Technology	446
20	MATERIALS LETTERS	446

Showing 1 - 20 rows of 1856 total (use export in the relevant section to download the full table)

Journal Citation Relationships

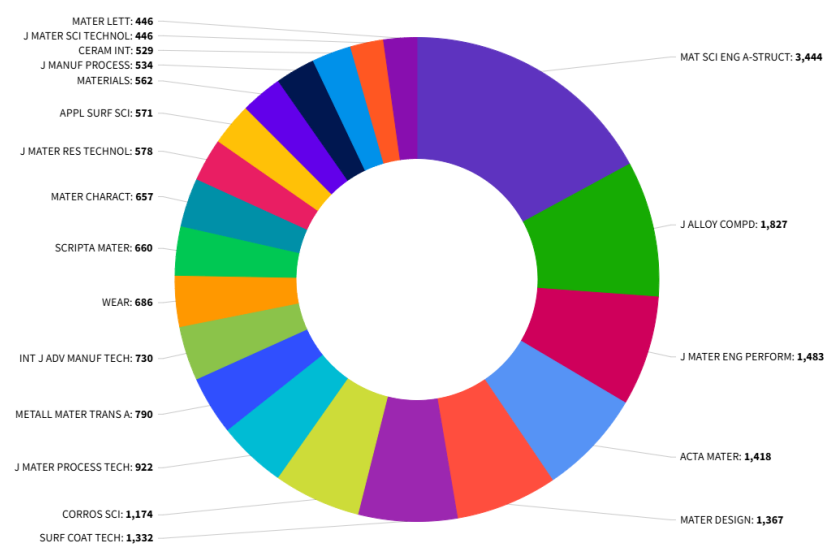
Cited Data

Top 20 journals citing J MATER ENG PERFORM by number of citations



Citing Data

Top 20 journals cited by J MATER ENG PERFORM 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](#)

1,264 total citable items

	ARTICLES	REVIEWS	COMBINED (C)	OTHER DOCUMENT TYPES (O)	PERCENTAGE
NUMBER IN JCR YEAR 2023 (A)	1,252	12	1,264	17	99%
NUMBER OF REFERENCES (B)	50,233	1,700	51,933	13	100%
RATIO (B/A)	40.1	141.7	41.1	0.8	

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

36.1

MATERIALS SCIENCE,
MULTIDISCIPLINARY

36.1

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	INDIAN INSTITUTE OF TECHNOLOGY SYSTEM (IIT SYSTEM)	260	<div></div>
2	NATIONAL INSTITUTE OF TECHNOLOGY (NIT SYSTEM)	242	<div></div>
3	UNIVERSITY OF SCIENCE & TECHNOLOGY BEIJING	99	<div></div>
4	CHINESE ACADEMY OF SCIENCES	88	<div></div>
5	NORTHEASTERN UNIVERSITY - CHINA	83	<div></div>
6	HARBIN INSTITUTE OF TECHNOLOGY	58	<div></div>
7	CENTRAL SOUTH UNIVERSITY	45	<div></div>
-	COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH (CSIR) - INDIA	45	<div></div>

Showing 1 - 8 rows of 2638 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	CHINA MAINLAND	1766	<div></div>
2	INDIA	790	<div></div>
3	IRAN	214	<div></div>
4	USA	197	<div></div>
5	TURKIYE	188	<div></div>
6	BRAZIL	80	<div></div>
-	CANADA	80	<div></div>
8	GERMANY (FED REP GER)	68	<div></div>

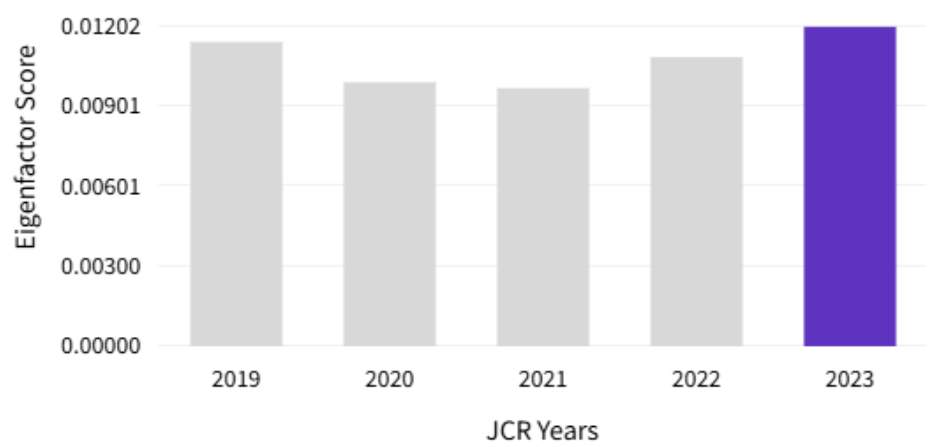
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Additional metrics

Eigenfactor score

0.01202

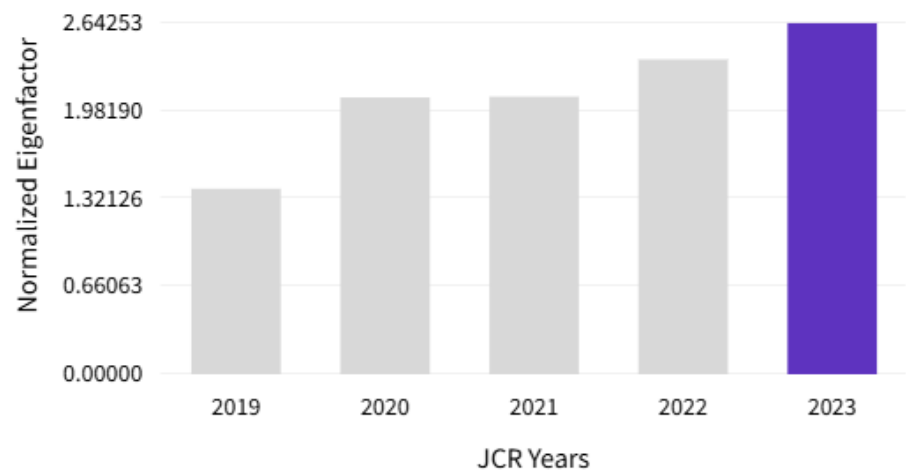
The Eigenfactor Score is a reflection of the density of the network of citations around the journal using 5 years of cited content as cited by the Current Year. It considers both the number of citations and the source of those citations, so that highly cited sources will influence the network more than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



Normalized Eigenfactor

2.64253

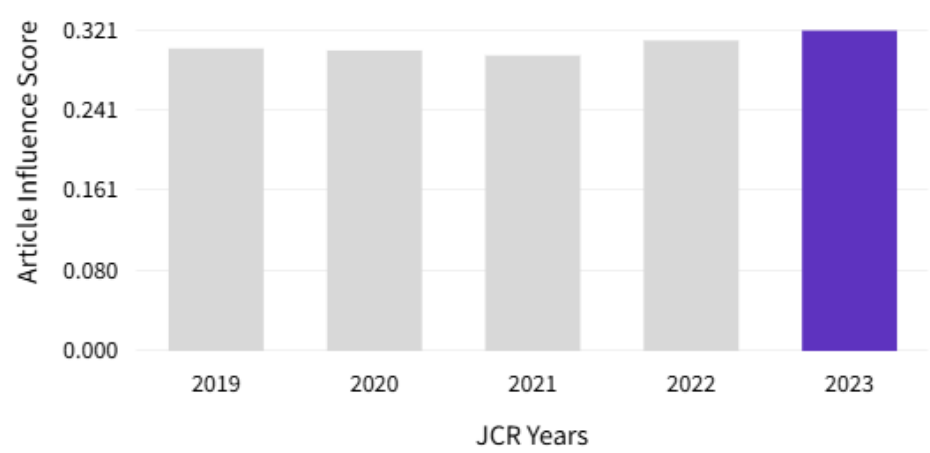
The Normalized Eigenfactor Score is the Eigenfactor score normalized, by rescaling the total number of journals in the JCR each year, so that the average journal has a score of 1. Journals can then be compared and influence measured by their score relative to 1. [Learn more](#)



Article influence score

0.321

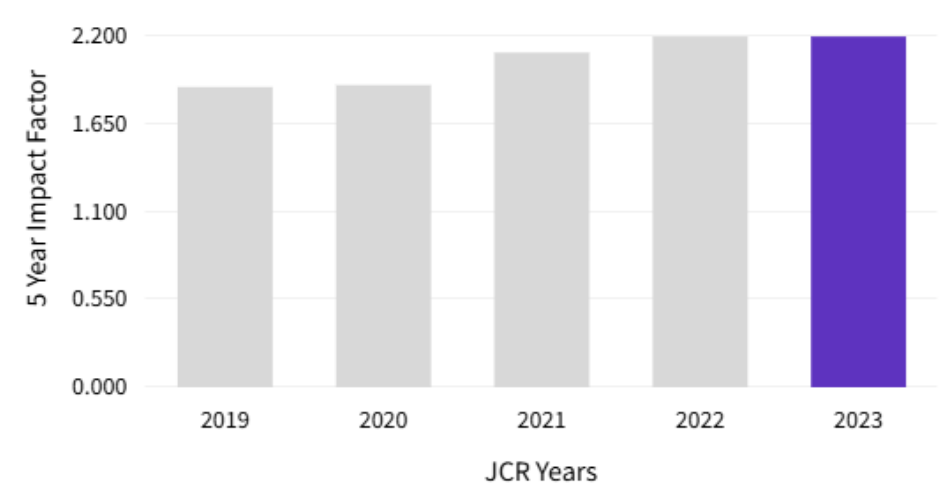
The Article Influence Score normalizes the Eigenfactor Score according to the cumulative size of the cited journal across the prior five years. The mean Article Influence Score for each article is 1.00. A score greater than 1.00 indicates that each article in the journal has above-average influence.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

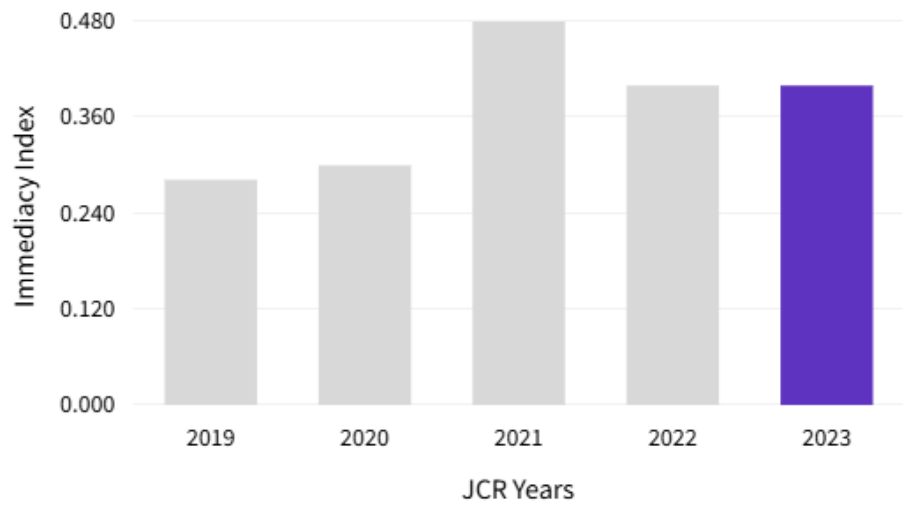
Citations in 2023 to items published in [2018-2022] (9,865)				
	=	9,865	=	2.2
Number of citable items in [2018-2022] (4,527)		4,527		

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 2023 to items published in [2023]				
		540		
<hr/>				
Number of citable items published in [2023]	=	1,264	=	0.4