

# 2022 Journal Performance Data for: JOM

ISSN	EISSN
1047-4838	1543-1851
JCR ABBREVIATION	ISO ABBREVIATION
JOM-US	JOM

## Journal Information

EDITION	CATEGORY	
Science Citation Index Expanded (SCIE)	METALLURGY & METALLURGICAL ENGINEERING - SCIE MATERIALS SCIENCE, MULTIDISCIPLINARY - SCIE MINING & MINERAL PROCESSING - SCIE MINERALOGY - SCIE	
LANGUAGES	REGION	1ST ELECTRONIC JCR YEAR
English	USA	2004

## Publisher Information

PUBLISHER	ADDRESS	PUBLICATION FREQUENCY
SPRINGER	ONE NEW YORK PLAZA, SUITE 4600 , NEW YORK, NY 10004, UNITED STATES	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](#)

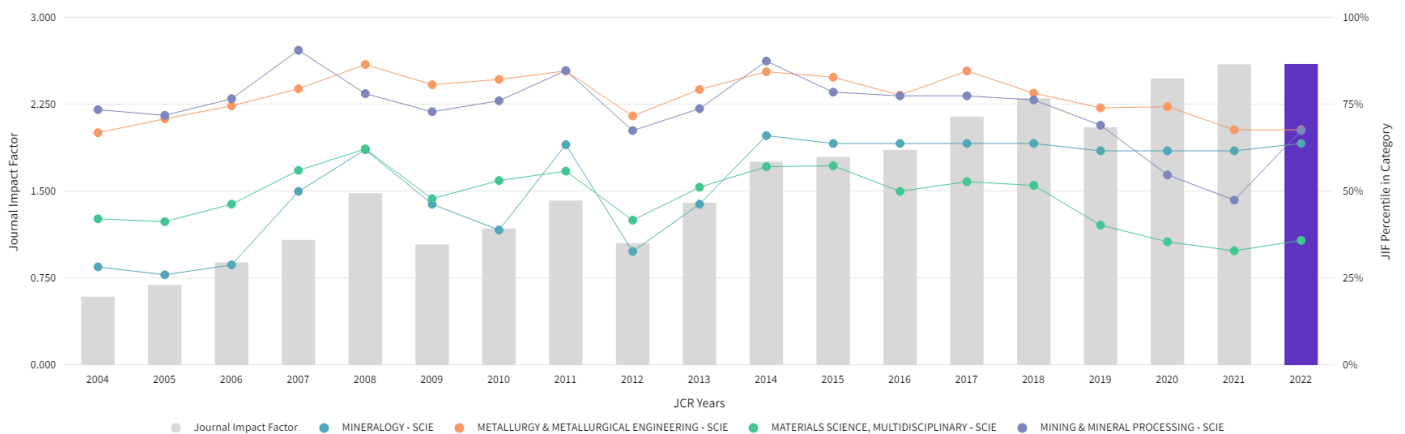
2022 JOURNAL IMPACT FACTOR

2.6

2022 JOURNAL IMPACT FACTOR WITHOUT SELF CITATIONS

2.5

## Journal Impact Factor Trend 2022



Journal Impact Factor is calculated using the following metrics


$$\frac{\text{Citations in 2022 to items published in 2020 (1,663) - 2021 (778)}}{\text{Number of citable items in 2020 (524) + 2021 (408)}} = \frac{2,441}{932} = 2.6$$

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

$$\frac{\text{Citations in 2022 to items published in 2020 (1,663) + 2021 (778) - Self Citations in 2022 to items published in 2020 (77) + 2021 (57)}}{\text{Number of citable items in 2020 (524) + 2021 (408)}} = \frac{2,441 - 134}{932} = 2.5$$

## Journal Impact Factor Contributing Items

### Citable Items (932)

TITLE	CITATION COUNT
Machine Learning in Additive Manufacturing: A Review Authors: Meng, Lingbin;McWilliams, Brandon;Jarosinski, William;Park, Hye- Yeong;Jung, Yeon-Gil;Lee, Jehyun;Zhang, Jing Volume: 72 Accession number: WOS:000558379100001 Document Type: Review	76
A Review on Additive Manufacturing of Titanium Alloys for Aerospace Applications: Directed Energy Deposition and Beyond Ti-6Al-4V Authors: Liu, Zhiying;He, Bei;Lyu, Tianyi;Zou, Yu Volume: 73 Accession number: WOS:000641649100001 Document Type: Review	38
Methods for Rapid Pore Classification in Metal Additive Manufacturing Authors: Snell, Robert;Tammam-Williams, Sam;Chechik, Lova;Lyle, Alistair;Hernandez-Nava, Everth;Boig, Charlotte;Panoutsos, George;Todd, Iain Volume: 72 Accession number: WOS:000504194300010 Document Type: Article	25 
A Review on Additive Manufacturing of Shape-Memory Materials for Biomedical Applications Authors: Sabahi, Nasim;Chen, Wenliang;Wang, Chun-Hui;Kruzic, Jamie J.;Li, Xiaopeng Volume: 72 Accession number: WOS:000515408600023 Document Type: Review	22
PolyJet 3D Printing of Composite Materials: Experimental and Modelling Approach Authors: Tee, Yun Lu;Peng, Chenxi;Pille, Philip;Leary, Martin;Tran, Phuong Volume: 72 Accession number: WOS:000515408600013 Document Type: Article	21

Showing 1-5 rows of 932 total (use export in the relevant section to download the full table)

## Journal Impact Factor Contributing Items

### Citing Sources (619)

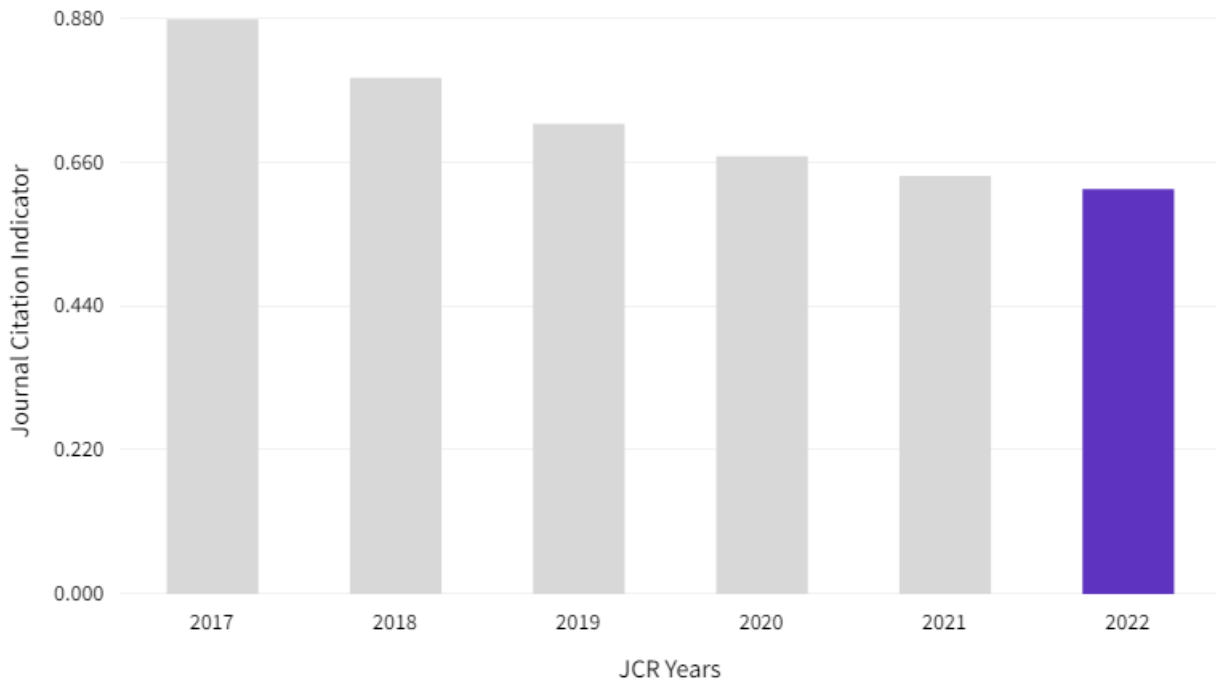
SOURCE NAME	COUNT
JOM	134
MATERIALS	87
ADDITIVE MANUFACTURING	67
METALS	62
MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING	52
JOURNAL OF ALLOYS AND COMPOUNDS	47
JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T	39
JOURNAL OF MATERIALS SCIENCE	36
JOURNAL OF SUSTAINABLE METALLURGY	32
MATERIALS & DESIGN	31
INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY	28
JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE	28
METALLURGICAL AND MATERIALS TRANSACTIONS B-PROCESS METALLURGY AND MATERIALS PROCESSING SCIENCE	24
ACTA MATERIALIA	23
CERAMICS INTERNATIONAL	22
JOURNAL OF CLEANER PRODUCTION	22
JOURNAL OF INTELLIGENT MANUFACTURING	21
JOURNAL OF MANUFACTURING PROCESSES	20
MATERIALS CHARACTERIZATION	19
SCIENTIFIC REPORTS	18

Showing 1-20 rows of 619 total (use export in the relevant section to download the full table)

# Journal Citation Indicator (JCI)

0.62

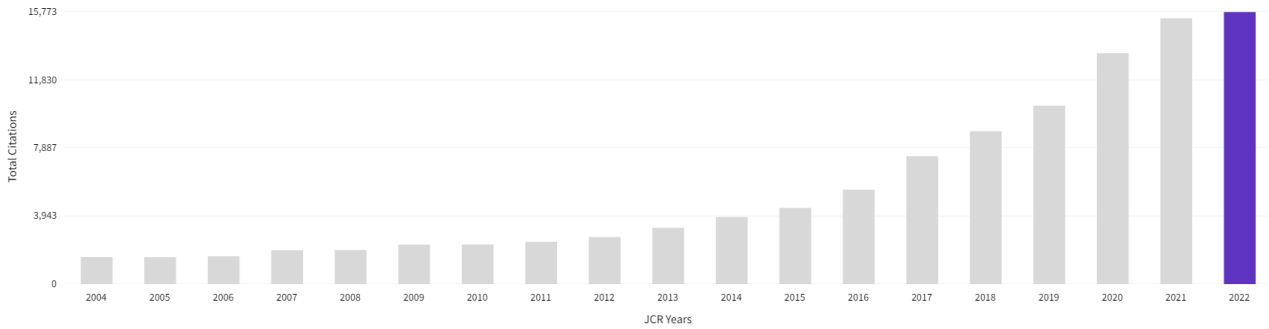
The Journal Citation Indicator (JCI) is the average Category Normalized Citation Impact (CNCI) of citable items (articles & reviews) published by a journal over a recent three year period. The average JCI in a category is 1. Journals with a JCI of 1.5 have 50% more citation impact than the average in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



# Total Citations

## 15,773

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

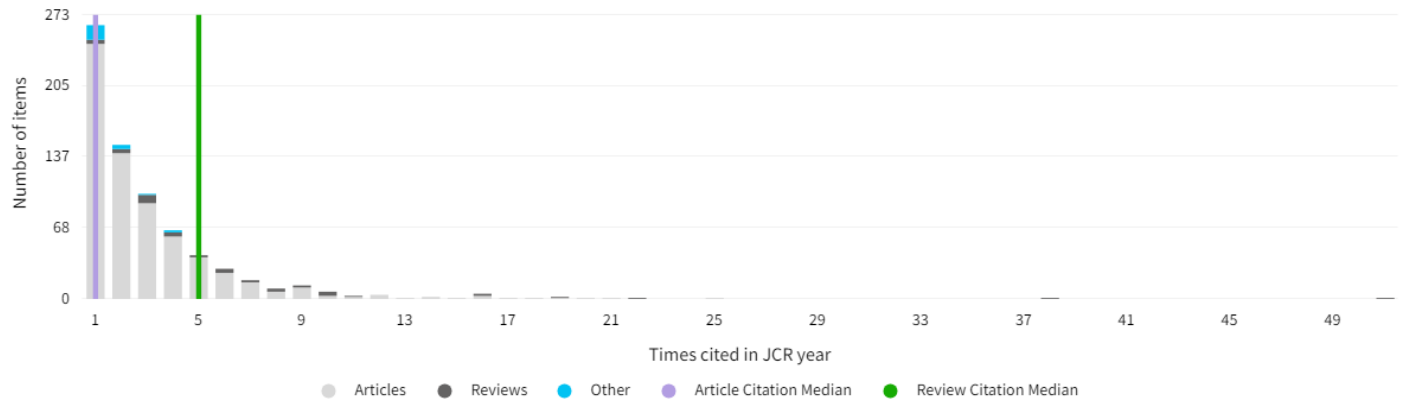
**1**

REVIEW CITATION MEDIAN

**5**

UNLINKED CITATIONS

**46**



## 0 times cited

ARTICLES

**227**

REVIEWS

**3**

OTHER

**144**



## 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

**1,420**

% OF CITABLE OA

**9.15%**

CITABLE

● GOLD OPEN ACCESS

130 / 7.84%

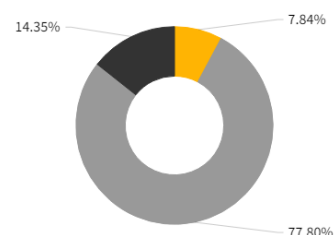
● SUBSCRIPTION OR BRONZE

1,290 / 77.80%

NON-CITABLE

● OTHER (NON-CITABLE ITEMS)

238 / 14.35%



### Citations\*

TOTAL CITABLE

**2,642**

% OF CITABLE OA

**11.36%**

CITABLE

● GOLD OPEN ACCESS

300 / 10.94%

● SUBSCRIPTION OR BRONZE

2,342 / 85.41%

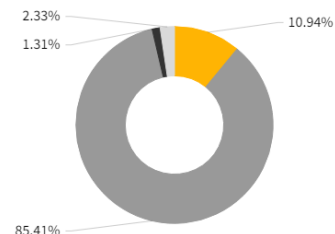
NON-CITABLE

● OTHER (NON-CITABLE ITEMS)

36 / 1.31%

● UNLINKED CITATIONS

64 / 2.33%



\* 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

MATERIALS SCIENCE, MULTIDISCIPLINARY

**221/344**

JCR YEAR	JIF RANK	QUART ILE	JIF PERCENTILE	
2022	221/344	Q3	35.9	
2021	232/345	Q3	32.90	
2020	216/334	Q3	35.48	
2019	188/314	Q3	40.29	
2018	142/293	Q2	51.71	
2017	135/285	Q2	52.81	
2016	138/275	Q3	50.00	
2015	116/271	Q2	57.38	
2014	112/260	Q2	57.12	
2013	123/251	Q2	51.20	
2012	141/241	Q3	41.70	
2011	103/232	Q2	55.82	
2010	106/225	Q2	53.11	
2009	112/214	Q3	47.90	
2008	73/192	Q2	62.24	
2007	84/190	Q2	56.05	
2006	95/176	Q3	46.31	
2005	105/178	Q3	41.29	
2004	103/177	Q3	42.09	

### EDITION

Science Citation Index Expanded (SCIE)

### CATEGORY

METALLURGY & METALLURGICAL ENGINEERING

**26/79**

JCR YEAR	JIF RANK	QUART ILE	JIF PERCENTILE	
2022	26/79	Q2	67.7	
2021	26/79	Q2	67.72	
2020	21/80	Q2	74.38	
2019	21/79	Q2	74.05	
2018	17/76	Q1	78.29	
2017	12/75	Q1	84.67	
2016	17/74	Q1	77.70	
2015	13/73	Q1	82.88	
2014	12/74	Q1	84.46	
2013	16/75	Q1	79.33	
2012	22/76	Q2	71.71	
2011	12/75	Q1	84.67	
2010	14/76	Q1	82.24	
2009	14/70	Q1	80.71	
2008	9/63	Q1	86.51	
2007	14/66	Q1	79.55	
2006	17/65	Q2	74.62	
2005	20/67	Q2	70.90	
2004	24/71	Q2	66.90	

## EDITION

Science Citation Index Expanded (SCIE)

## CATEGORY

MINERALOGY

11/29

JCR YEAR	JIF RANK	QUART ILE	JIF PERCENTILE	
2022	11/29	Q2	63.8	
2021	12/30	Q2	61.67	
2020	12/30	Q2	61.67	
2019	12/30	Q2	61.67	
2018	11/29	Q2	63.79	
2017	11/29	Q2	63.79	
2016	11/29	Q2	63.79	
2015	11/29	Q2	63.79	
2014	10/28	Q2	66.07	
2013	15/27	Q3	46.30	
2012	18/26	Q3	32.69	
2011	10/26	Q2	63.46	
2010	17/27	Q3	38.89	
2009	15/27	Q3	46.30	
2008	10/25	Q2	62.00	
2007	13/25	Q3	50.00	
2006	19/26	Q3	28.85	
2005	19/25	Q4	26.00	
2004	17/23	Q3	28.26	

## EDITION

Science Citation Index Expanded (SCIE)

## CATEGORY

MINING &amp; MINERAL PROCESSING

7/20

JCR YEAR	JIF RANK	QUART ILE	JIF PERCENTILE	
2022	7/20	Q2	67.5	
2021	11/20	Q3	47.50	
2020	10/21	Q2	54.76	
2019	7/21	Q2	69.05	
2018	5/19	Q2	76.32	
2017	5/20	Q1	77.50	
2016	5/20	Q1	77.50	
2015	5/21	Q1	78.57	
2014	3/20	Q1	87.50	
2013	6/21	Q2	73.81	
2012	7/20	Q2	67.50	
2011	4/23	Q1	84.78	
2010	6/23	Q2	76.09	
2009	7/24	Q2	72.92	
2008	4/16	Q1	78.13	
2007	2/16	Q1	90.63	
2006	4/15	Q2	76.67	
2005	5/16	Q2	71.88	
2004	5/17	Q2	73.53	

## 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

**193/424**

JCR YEAR	JCI RANK	QUART ILE	JCI PERCENTILE	
2022	193/424	Q2	54.60	
2021	178/414	Q2	57.13	
2020	153/384	Q2	60.29	
2019	128/375	Q2	66.00	
2018	112/361	Q2	69.11	
2017	87/343	Q2	74.78	

### CATEGORY

METALLURGY & METALLURGICAL ENGINEERING

**22/91**

JCR YEAR	JCI RANK	QUART ILE	JCI PERCENTILE	
2022	22/91	Q1	76.37	
2021	20/91	Q1	78.57	
2020	17/90	Q1	81.67	
2019	16/89	Q1	82.58	
2018	13/88	Q1	85.80	
2017	11/86	Q1	87.79	

### CATEGORY

MINERALOGY

**12/30**

JCR YEAR	JCI RANK	QUART ILE	JCI PERCENTILE	
2022	12/30	Q2	61.67	
2021	12/31	Q2	62.90	
2020	12/31	Q2	62.90	
2019	12/31	Q2	62.90	
2018	11/31	Q2	66.13	
2017	11/30	Q2	65.00	

### CATEGORY

MINING & MINERAL PROCESSING

**11/32**

JCR YEAR	JCI RANK	QUART ILE	JCI PERCENTILE	
2022	11/32	Q2	67.19	
2021	11/31	Q2	66.13	
2020	10/30	Q2	68.33	
2019	8/29	Q2	74.14	
2018	6/26	Q1	78.85	
2017	5/26	Q1	82.69	

# Citation network

## Cited Half-life

7.2 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

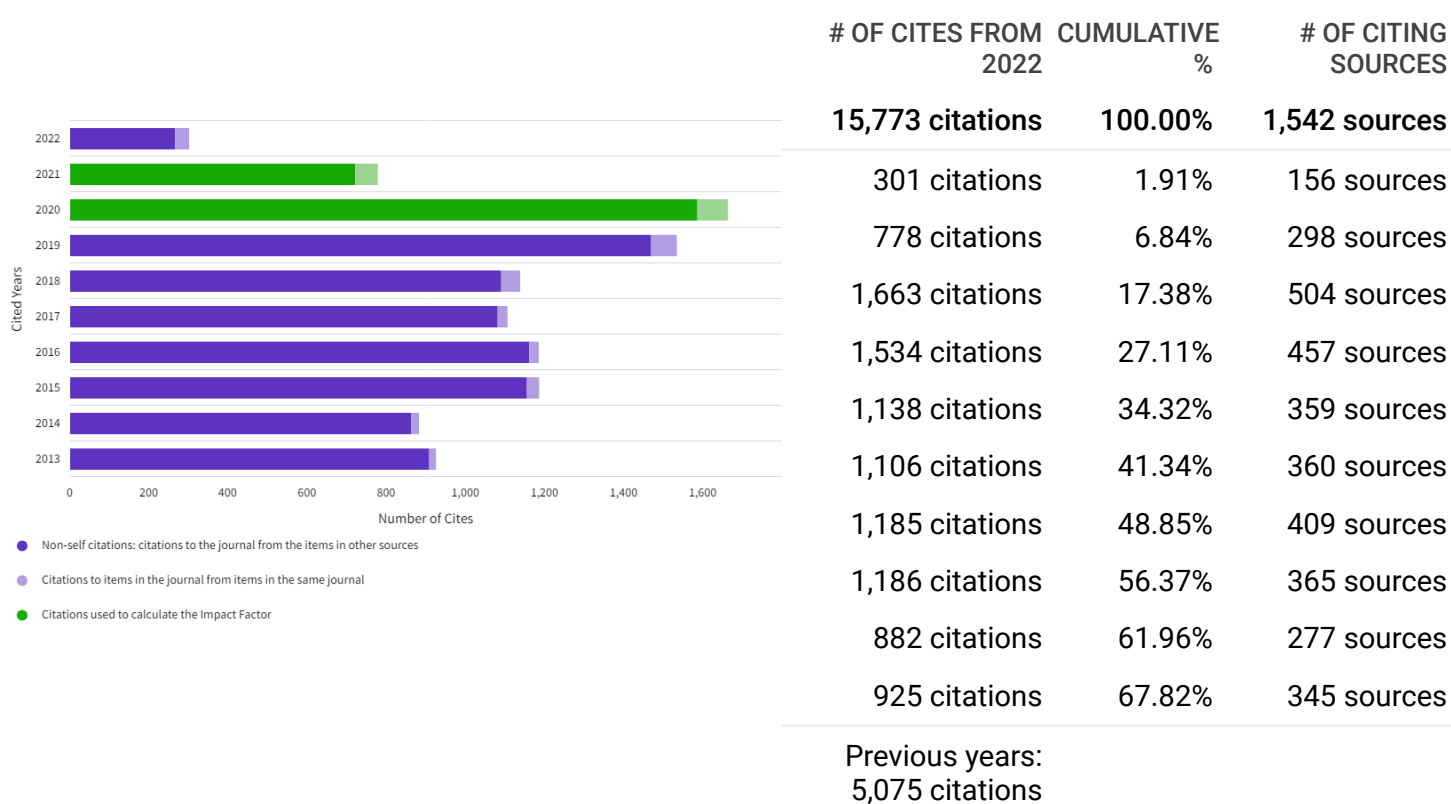
15,773

NON-SELF CITATIONS

15,275

SELF CITATIONS

498



## Citing titles in all years

JOM

	SOURCE NAME	COUNT
	All Others	617
1	Materials	589
2	JOM	498
3	MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING	470
4	Metals	466
5	Journal of Alloys and Compounds	447
6	Journal of Materials Research and Technology-JMR&T	314
7	ACTA MATERIALIA	267
8	Additive Manufacturing	256
9	CORROSION SCIENCE	191
10	JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE	182
11	METALLURGICAL AND MATERIALS TRANSACTIONS B-PROCESS METALLURGY AND MATERIALS PROCESSING SCIENCE	172
12	JOURNAL OF MATERIALS SCIENCE	168
13	Materials Today Communications	167
14	MATERIALS & DESIGN	165
15	MATERIALS CHARACTERIZATION	149
16	Journal of Materials Science & Technology	148
17	INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY	144
18	Journal of Nuclear Materials	138
19	SURFACE & COATINGS TECHNOLOGY	122
20	Journal of Sustainable Metallurgy	121

Showing 1 - 20 rows of 889 total (use export in the relevant section to download the full table)

# Citing Half-life

## 7.5 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

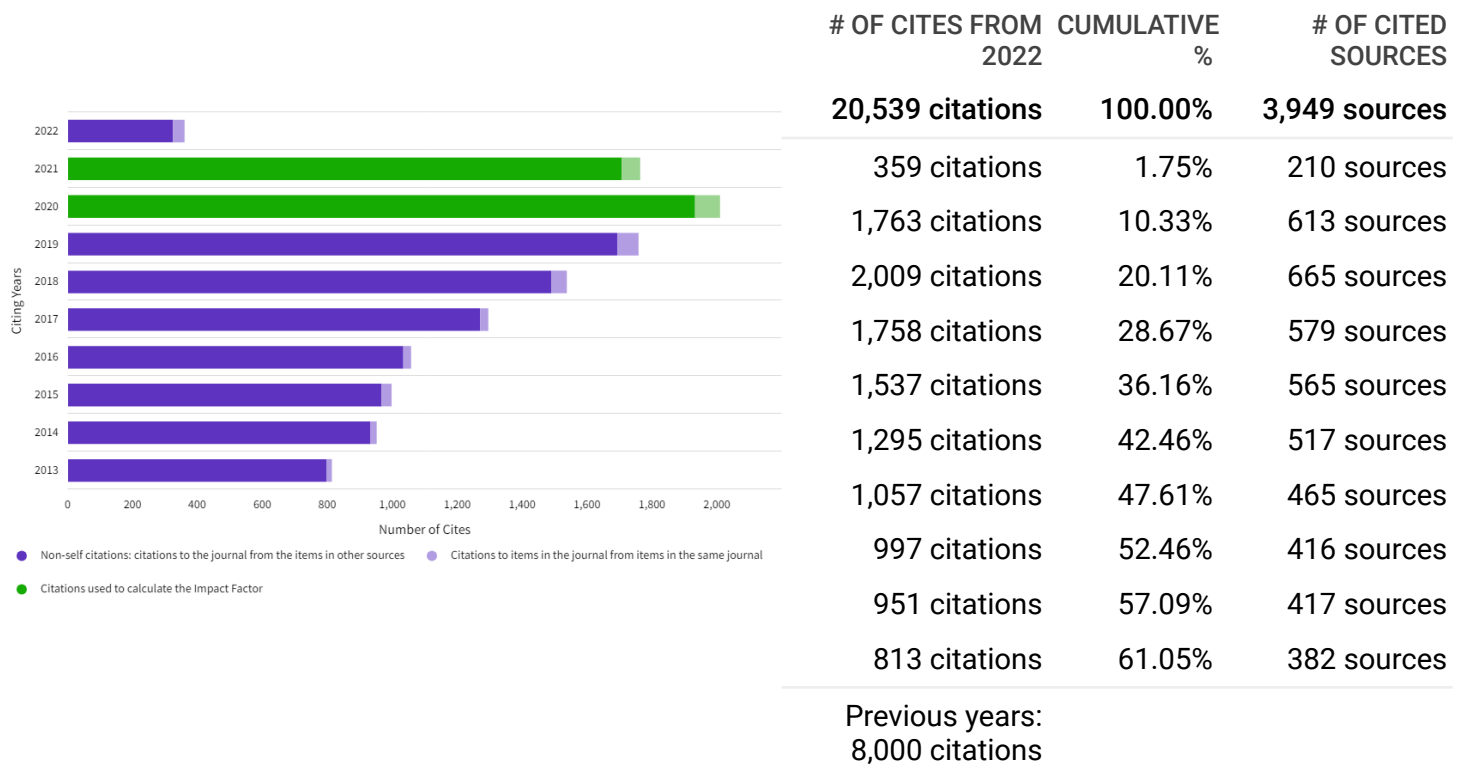
20,539

NON-SELF CITATIONS

20,041

SELF CITATIONS

498



## Cited titles in all years

JOM

	SOURCE NAME	COUNT
	All Others	2,701
1	MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING	762
2	ACTA MATERIALIA	601
3	Journal of Alloys and Compounds	527
4	JOM	498
5	METALLURGICAL AND MATERIALS TRANSACTIONS B-PROCESS METALLURGY AND MATERIALS PROCESSING SCIENCE	332
6	METALLURGICAL AND MATERIALS TRANSACTIONS A-PHYSICAL METALLURGY AND MATERIALS SCIENCE	277
7	SCRIPTA MATERIALIA	265
8	MATERIALS & DESIGN	248
9	ISIJ INTERNATIONAL	238
10	HYDROMETALLURGY	223
11	CORROSION SCIENCE	195
12	SURFACE & COATINGS TECHNOLOGY	182
13	Ceramics International	178
14	JOURNAL OF MATERIALS PROCESSING TECHNOLOGY	166
15	JOURNAL OF MATERIALS SCIENCE	146
16	JOURNAL OF APPLIED PHYSICS	141
17	JOURNAL OF HAZARDOUS MATERIALS	141
18	Journal of Nuclear Materials	139
19	MINERALS ENGINEERING	130
20	APPLIED SURFACE SCIENCE	129

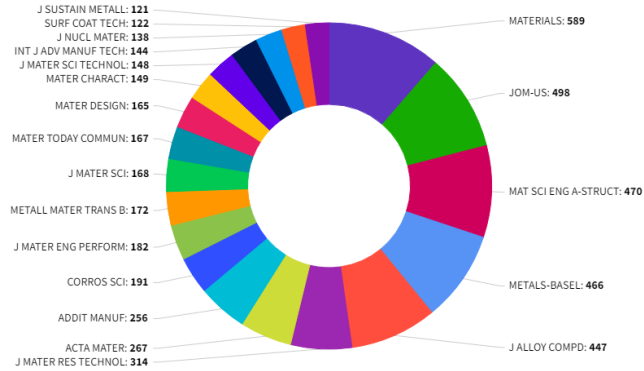
Showing 1 - 20 rows of 888 total (use export in the relevant section to download the full table)



# Journal Citation Relationships

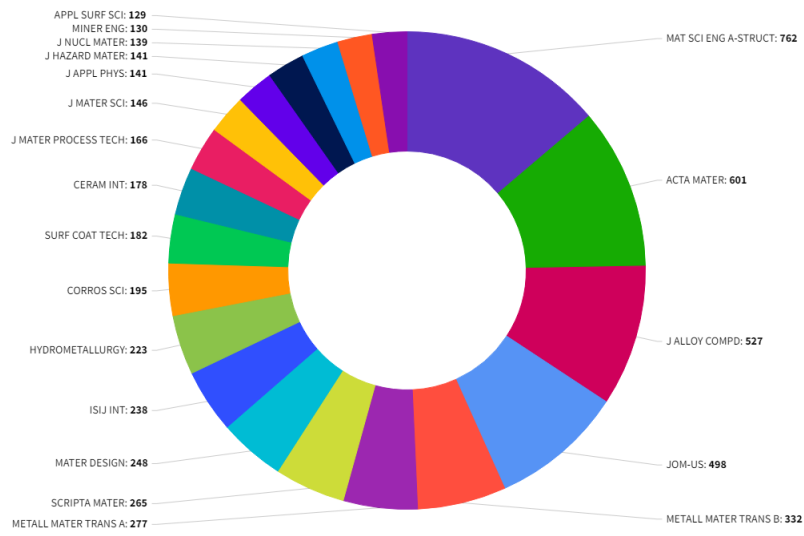
## Cited Data

Top 20 journals citing JOM-US by number of citations



# Citing Data

## Top 20 journals cited by JOM-US 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](#)

### 488 total citable items

	ARTICLES	REVIEWS	COMBINED (C)	OTHER DOCUMENT TYPES (O)	PERCENTAGE
NUMBER IN JCR YEAR 2022 (A)	465	23	488	73	87%
NUMBER OF REFERENCES (B)	18,061	2,373	20,434	105	99%
RATIO (B/A)	38.8	103.2	41.9	1.4	

# 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

**58.7**

EDITION

Science Citation Index Expanded

MINERALOGY

**63.8**

MATERIALS SCIENCE,  
MULTIDISCIPLINARY

**35.9**

METALLURGY & METALLURGICAL  
ENGINEERING









**67.7**

MINING & MINERAL PROCESSING

**67.5**

## 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	UNITED STATES DEPARTMENT OF ENERGY (DOE)	153	
2	CENTRAL SOUTH UNIVERSITY	91	
3	NORTHEASTERN UNIVERSITY - CHINA	70	
4	UNIVERSITY OF SCIENCE & TECHNOLOGY BEIJING	68	
5	UNIVERSITY OF CALIFORNIA SYSTEM	38	
6	KUNMING UNIVERSITY OF SCIENCE & TECHNOLOGY	36	
7	INDIAN INSTITUTE OF TECHNOLOGY SYSTEM (IIT SYSTEM)	34	
8	UNIVERSITY SYSTEM OF OHIO	32	

Showing 1 - 8 rows of 1308 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	578	
2	USA	471	
3	India	101	
4	Australia	92	
5	GERMANY (FED REP GER)	67	
6	Canada	47	
7	Iran	44	
8	South Korea	41	

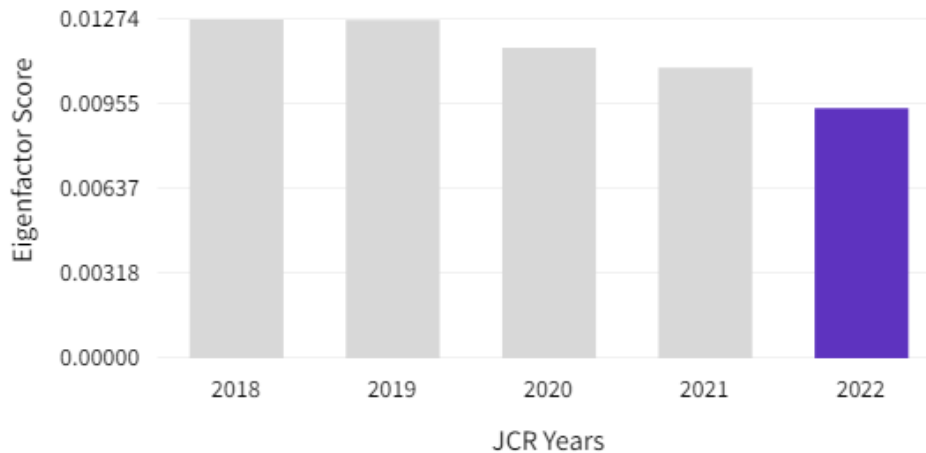
Showing 1 - 8 rows of 75 total (use export in the relevant section to download the full table)

# Additional metrics

## Eigenfactor score

**0.00940**

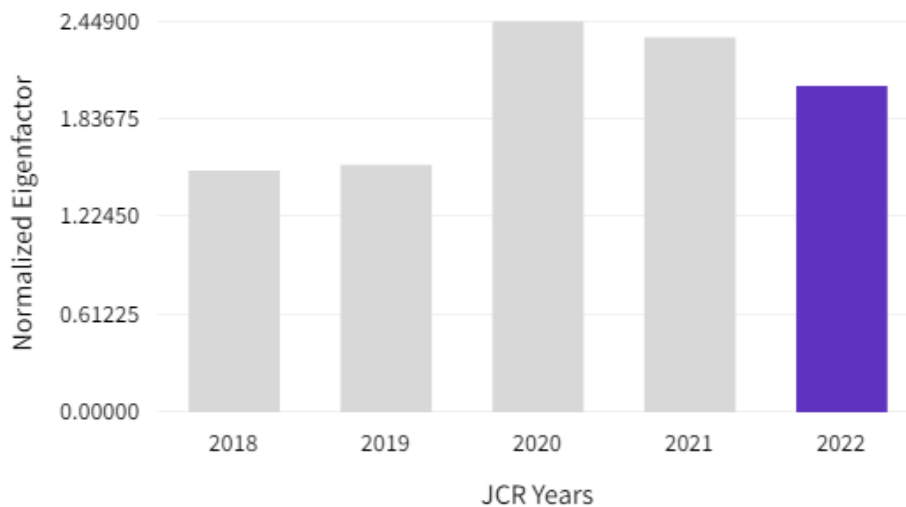
The Eigenfactor Score is a reflection of the density of the network of citations around the journal using 5 years of cited content as cited by the Current Year. It considers both the number of citations and the source of those citations, so that highly cited sources will influence the network more than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



## Normalized Eigenfactor

**2.04774**

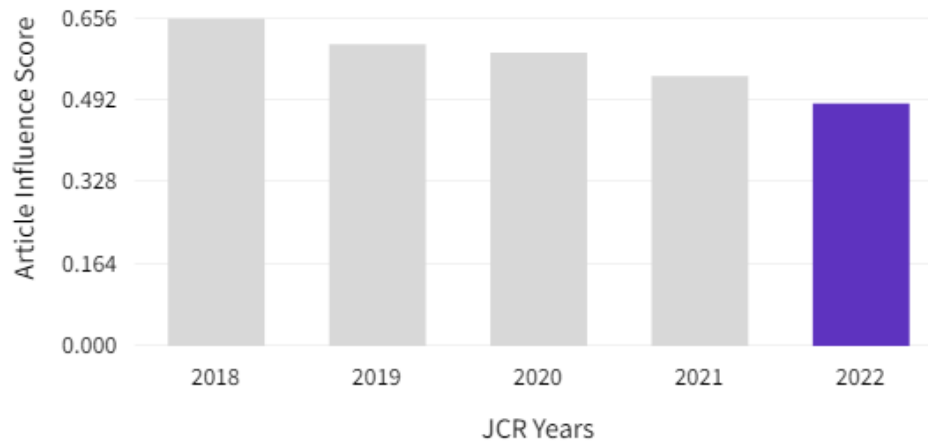
The Normalized Eigenfactor Score is the Eigenfactor score normalized, by rescaling the total number of journals in the JCR each year, so that the average journal has a score of 1. Journals can then be compared and influence measured by their score relative to 1. [Learn more](#)



## Article influence score

**0.486**

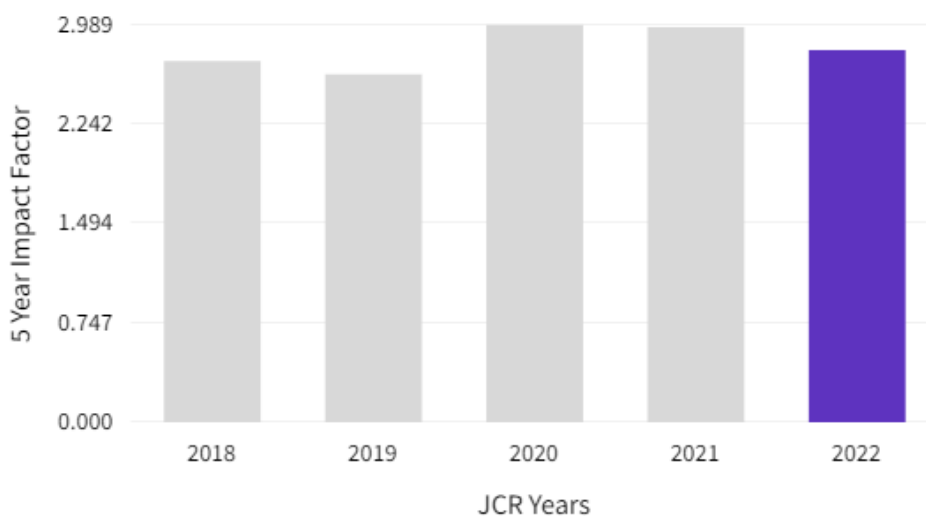
The Article Influence Score normalizes the Eigenfactor Score according to the cumulative size of the cited journal across the prior five years. The mean Article Influence Score for each article is 1.00. A score greater than 1.00 indicates that each article in the journal has above-average influence.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



# 5 year Impact Factor

## 2.8

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 2022 to items published in [2017-2021] (6,219)	=	6,219	=	2.8
Number of citable items in [2017-2021] (2,202)		2,202		

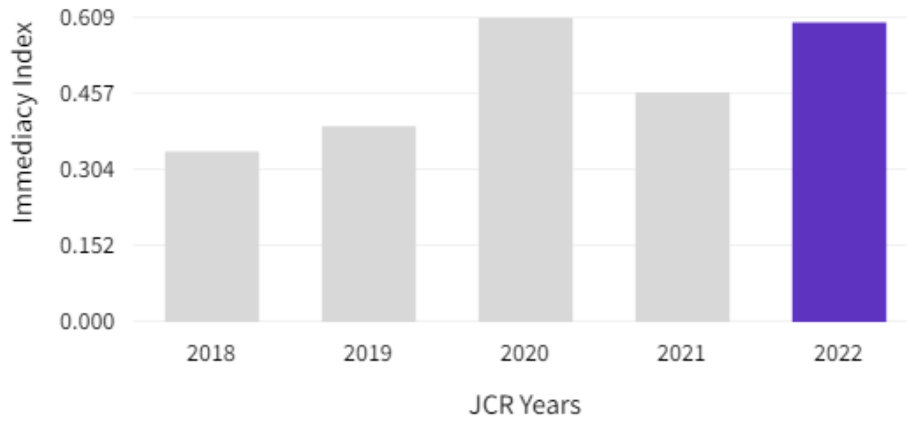


# Immediacy Index

0.6

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

$$\frac{\text{Cites in 2022 to items published in [2022]}}{\text{Number of items published in [2022]}} = \frac{301}{488} = 0.6$$