IF, Metrics

1 author:

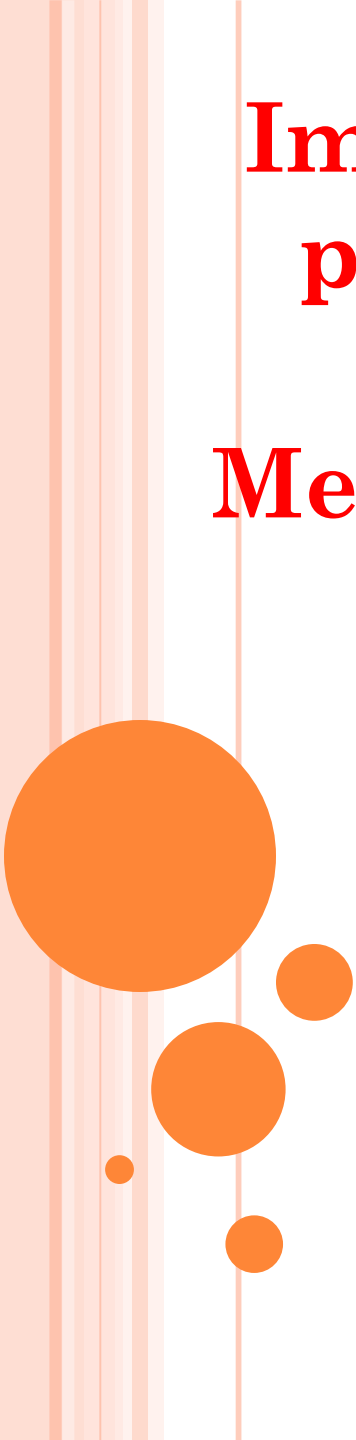Sourav Mahato
Mahatma Gandhi Central University
15 PUBLICATIONS   **3** CITATIONS

SEE PROFILE

Some of the authors of this publication are also working on these related projects:

Capacity Building Programme View project

Impact Factor of journal as per JCR, SNIP, SJR, IPP, Cite Score
Metrics: h-index, g index, i10 index, altmetrics

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OUTLINES

- Impact factor as per JCR

- IPP

- SNIP

- SJR

- Cite Score

- h-index

- g index

- i10 index

- Altmetrics

Journal level	Individual level
JCR	h-index
IPP	g index
SNIP	i10 index
SJR	altmetrics
Cite Score	

IMPACT FACTOR OF JOURNAL AS PER JCR

Journal Impact Factor / Impact factor:

Its score.

It measures the average impact of original research articles and review articles appearing in the same journal.

JCR (Journal Citation Report):

JCR is an annual publication by Clarivate Analytics. It is integrated with Web of Science. It provides information about journals including impact factors.

CONT....

Formula to calculate:

$$\mathrm{IF}_y = \frac{\text{Citations}_y}{\text{Publications}_{y-1} + \text{Publications}_{y-2}}$$

For example, *Nature* had an impact factor of 41.577 in 2017:

$$\mathrm{IF}_{2017} = \frac{\text{Citations}_{2017}}{\text{Publications}_{2016} + \text{Publications}_{2015}} = \frac{74090}{880 + 902} = 41.577$$

IPP (IMPACT PER PAPER)

The IPP measures the ratio of citations in a year to scholarly papers published in the <u>three previous years</u> divided by the number of scholarly papers published in those same years.

$$IPP_y = \frac{Citations_y}{Publications_{y-1} + Publications_{y-2} + Publications_{y-3}}$$

SNIP (SOURCE NORMALIZED IMPACT PER PAPER)

SNIP is a sophisticated metric that intrinsically accounts for field-specific differences in citation practices.

it is defined as the ratio of a journal's citation count per paper and the citation potential in its subject field.

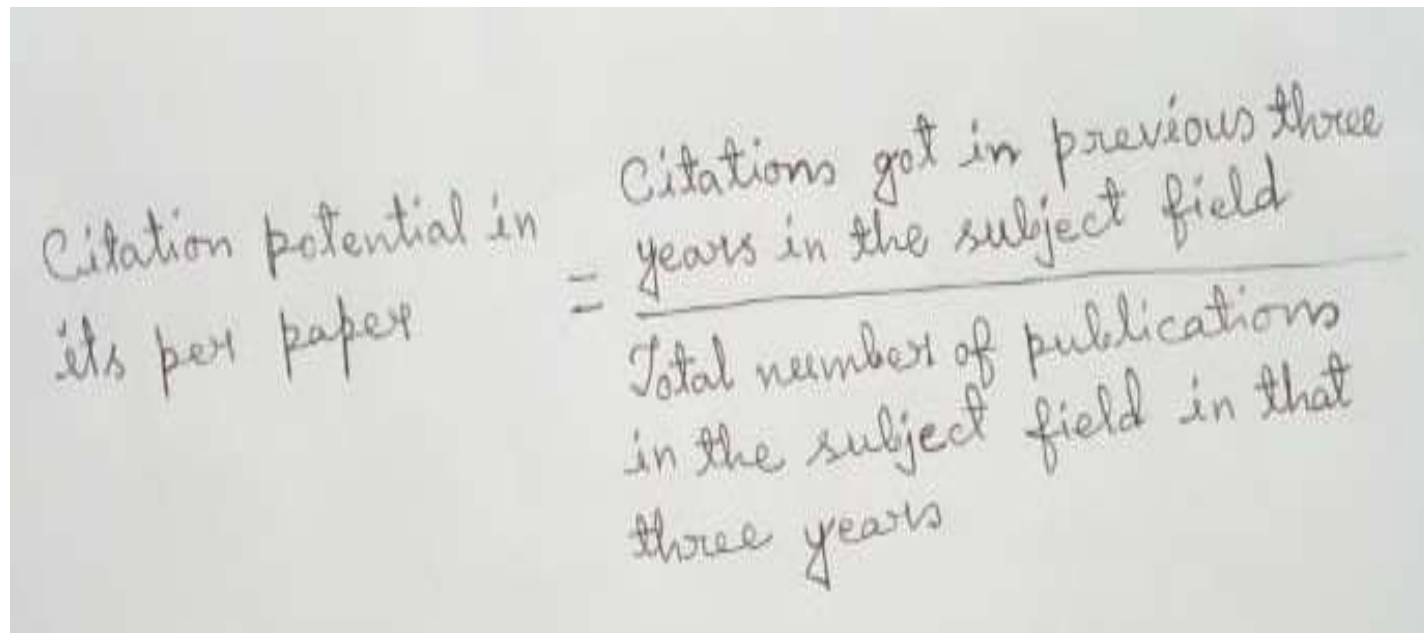<u>Past three years</u> are considered to compute.

$$SNIP = \frac{\text{Journal's citation count per paper}}{\text{Citation potential in its subject field}}$$

CONT….

i. Journal's citation count per paper = IPP or RIP

ii. Citation potential in its per paper

$$\text{Citation potential in its per paper} = \frac{\text{Citations got in previous three years in the subject field}}{\text{Total number of publications in the subject field in that three years}}$$

(SJR) SCImago Journal Rank

SJR is a numeric value indicating the average number of weighted citations received during a selected year per document published in that journal during the <u>previous three years</u>.

SJR indicator is a measure of the scientific influence of scholarly journals that accounts for both the number of citations received by a journal and <u>the importance or prestige of the journals where the citations come from</u>.

CONT....

Computation:

The SJR indicator computation is carried out using an <u>iterative algorithm</u> that distributes prestige values among the journals until a steady-state solution is reached.

CITE SCORE

Calculating the Cite Score is based on the number of citations to documents by a journal over four years, divided by the number of the same documents types indexed in Scopus and published in those same <u>four years</u>.

For example, the 2020, Cite Score counts the citations received in 2017-2020 to documents published in 2017-2020, and divides this by the number of these documents published in 2017-2020.

Mostly on <u>Pharmacy field</u>.

ORGANIZATIONS

o Clarivate Analytics

o ACM Digital Library

o Biomad Central

o EBSCOhost Databases

o IEEE Xplore

o InSPIRE

o PubMed Central

o ScienceDirect

o SciFinder Scholar

o Scitation

o US. Patent & Trademark Office Databases

COUNTERFEIT

- AE Global Index
- Advanced Science Index
- African Quality Centre for Journals
- American Standards for Journals and Research (ASJR)
- Arab Impact Factor
- Cite Factor
- Cosmos Impact Factor
- Global Impact Factor
- Global Science Citation Impact Factor (GSCIF)
- Universal Impact Factor (UIF)

h- index

Based on the set of the scientist's most cited papers and the number of citations that they have received in other publications.

The h-index is defined as the maximum value of h such that the given author has published at least h papers that have each been cited at least h times.

$$h\text{-index}\ (f) = \max\{i \in \mathbb{N} : f(i) \geq i\}$$

g index

The g-index is the unique largest number such that the top g articles received together at least g2 (g square) citations.

Hence, a g-index of 10 indicates that the top 10 publications of an author have been cited at lest 100 times (10 square).

$$g^2 \leq \sum_{i \leq g} c_i$$

$$g \leq \frac{1}{g} \sum_{i \leq g} c_i$$

i10-index

The i10-index indicates the number of academic publications an author has written that have been cited by at least 10 sources.
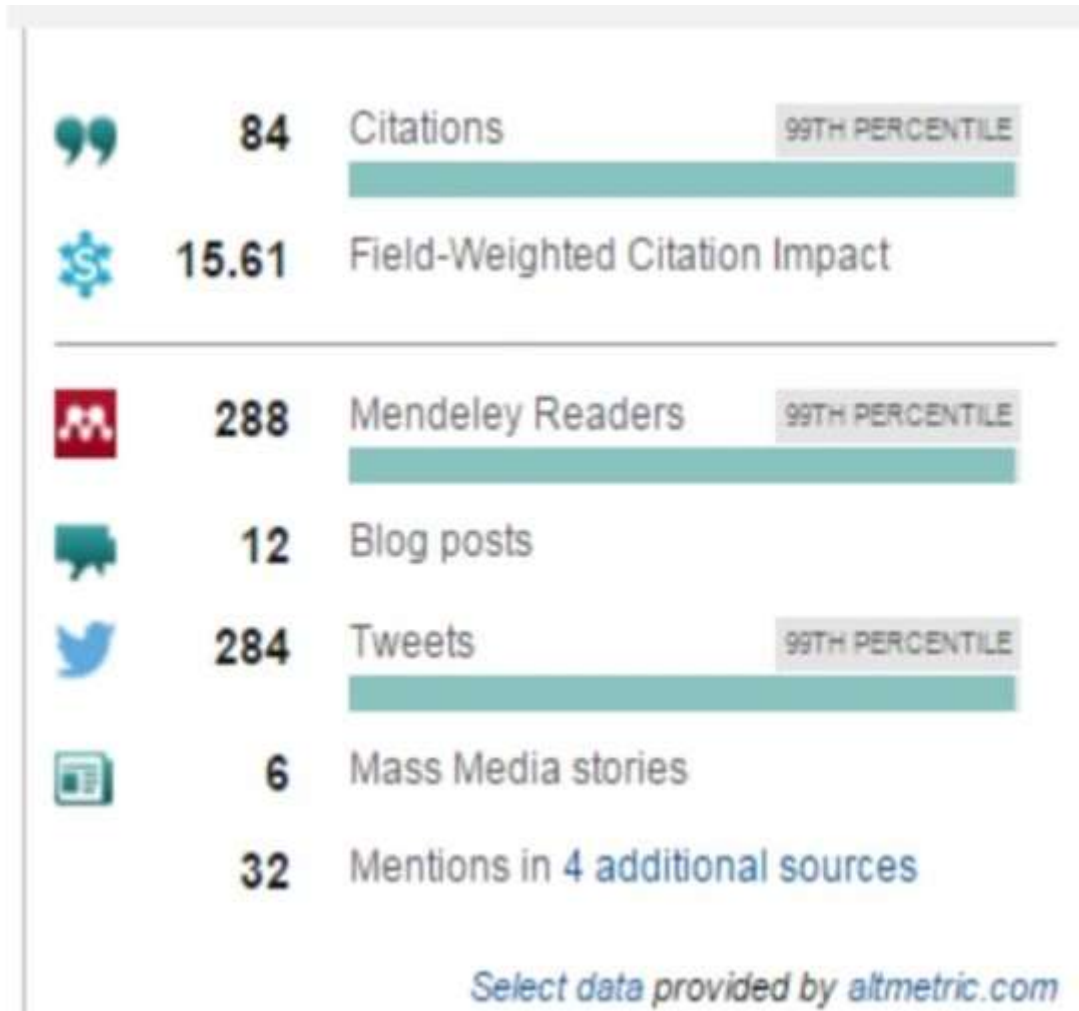
Almetrics

Almetrics are non-traditional bibliometrics proposed as an alternative or complement to more traditional citations impact metrics, and they use public platforms to gather data with open scripts and algorithms.

Categories:

- Viewed – HTML views and PDF downloads
- Discussed – journal comments, science blogs, Wikipedia, Twitter, Facebook and other social media
- Saved – Mendeley, CiteULike and other social bookmarks
- Cited – citations in the scholarly literature, tracked by Web of Science, Scopus, CrossRef and others
- Recommended – for example used by F1000Prime

Cont....

	84	Citations	99TH PERCENTILE
	15.61	Field-Weighted Citation Impact	
	288	Mendeley Readers	99TH PERCENTILE
	12	Blog posts	
	284	Tweets	99TH PERCENTILE
	6	Mass Media stories	
	32	Mentions in 4 additional sources	

Select data provided by altmetric.com

OTHERS

- Author-level Eigenfactor
- m-index
- e-index
- c-index
- o-index
- l-index
- RA-index
- s-index
- w-index
- h sqare

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THANK YOU