

SEMINAR - 1

REU RESEARCH



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MARSHALL UNIVERSITY



THE SEMINAR TITLE

**Mastering Scholarly Research: Finding
Credible Sources and Analyzing Scientific
Papers & Technical Writing for STEM Research**



THE SEMINAR OVERVIEW

- Index and Non-Index Source
- Peer Review and Non-Peer
- Impact Factor & Citescore
- Impact Factor & JIF
- Predatory Journals
- Intellectual Property
- Plagiarism
- Writing Style
- Thesis Writing Style
- Paper Writing Style



What is Research?

1. **What is research?**
2. **Definition of research**
3. **Why is research necessary?**
4. **Knowledge about research and managerial effectiveness**
5. **Types of Research: Applied and Basic**
6. **Internal versus external researchers**
7. **Ethics and business research**



What is Research?

- Research is something we all do in various capacities.
- We analyze a problem at hand and come up with a conclusion or workable solution to address the issue.
- Research is simply the processes undertaken to find solutions to problems that we are facing.
- The word problem does not necessarily mean that there is an issue at hand. A problem here is used to indicate that there is a phenomenon which is worthy of attention for analysis.
- A series of steps carried out in an organized, inquisitive, and critical manner to investigate a phenomenon.



What is Research?

- Research builds knowledge or solves business-related problems or issues and assists in effective decision-making.
- Research is a step-by-step activity carried out in a critical, organized, logical, and systematic manner to analyze a problem or issue and find effective ways to mitigate the problem faced at work.
- Research is all about carrying out research within the organizational setting. Hence, the activity of research is still the same, however, the context is confined to organizations, their stakeholders, their processes or their customers.



Why Research is Necessary?

- Organizations can be faced with a multitude of problems ranging from financial, operational, strategic, customer, and employee-related.
- Research is a mechanism to gather data or information, understand the issues at hand, and derive logical solutions that can mitigate problems.



How Does Research Help Managers in Effective Decision Making?

- When investigations into an issue are carried out in a critical, organized, and systematic manner, the solutions proposed will help decision-makers make informed decisions.



Types of Research

	BASIC RESEARCH	APPLIED RESEARCH
Main purpose	To discover or expand knowledge	To find solutions or understand problems faced by the organization
Generalizability	The knowledge uncovered can be applied to a wider setting – can be relevant to a wider scope	The solutions outlined address the problem at hand and are localized in nature
Who interested?	Research usually undertaken by academia	Research undertaken by practitioners or within academia
Timeline	Timeline can be determined by the researcher	Timeline is determined by the decision makers



Ethics and Business Research

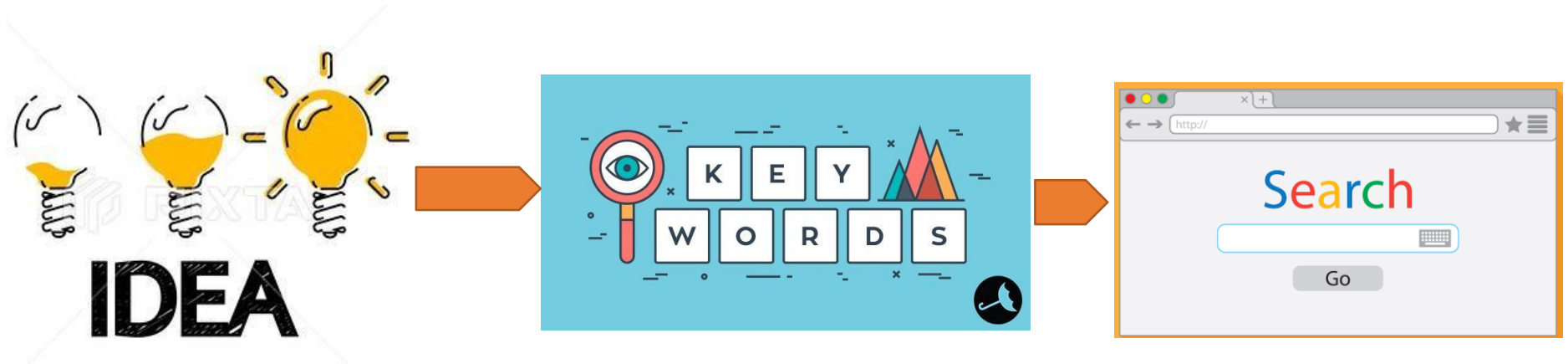
- Research is conducted morally without compromising the rights of any parties (especially the respondents of the research).
- Researcher has a key role to play.
- The researcher has to exhibit and practice good conduct throughout the research endeavor.

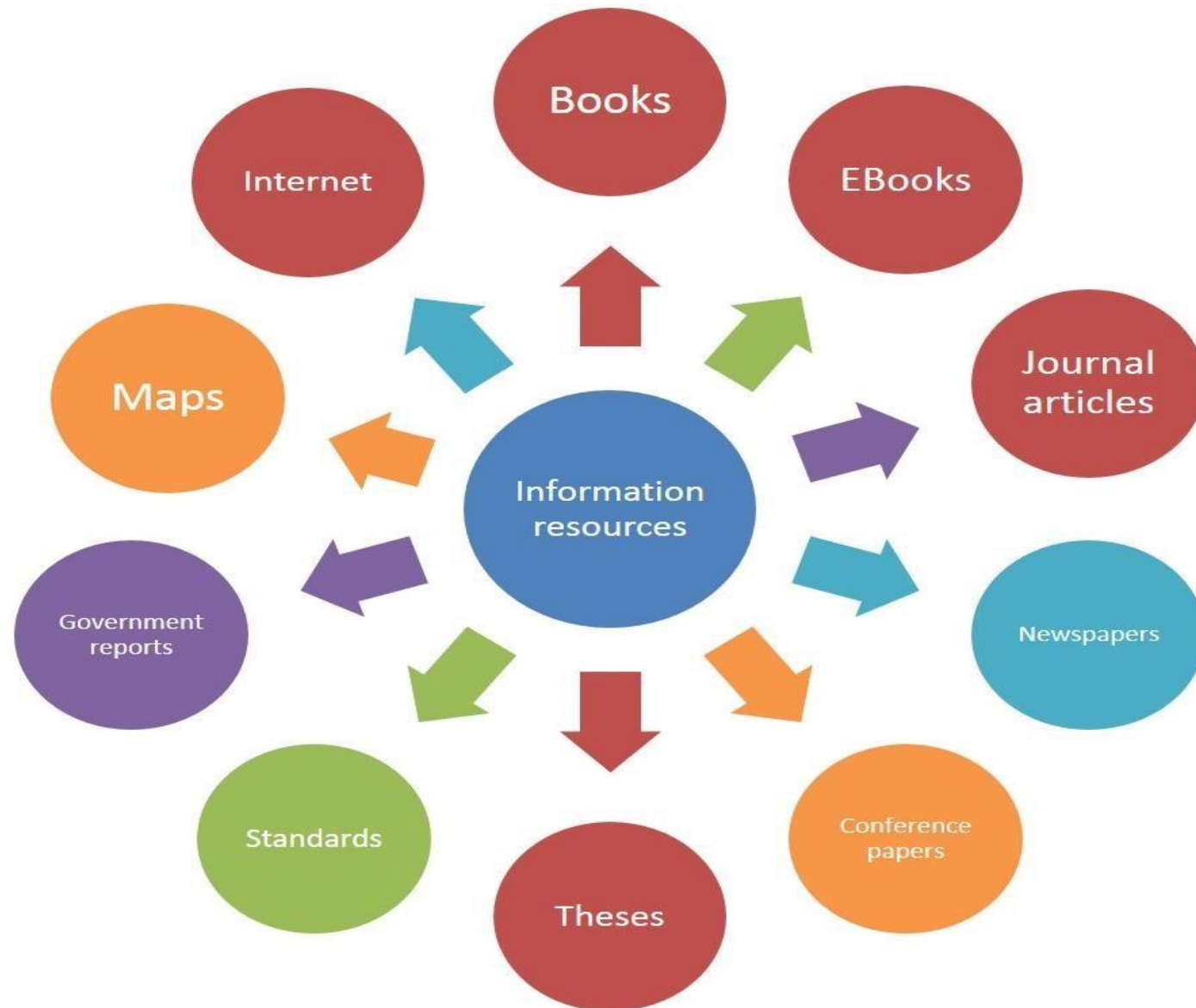


Reading Sources

- **Index and Non-Index Source**
- **Peer Review and Non-Peer**
- **Impact Factor & Cite score**
- **Impact Factor & JIF**
- **Predatory Journals**
- **Intellectual Property**
- **Plagiarism**
- **Writing Style**







INDEXED/NON-INDEXED SOURCES

INDEXED

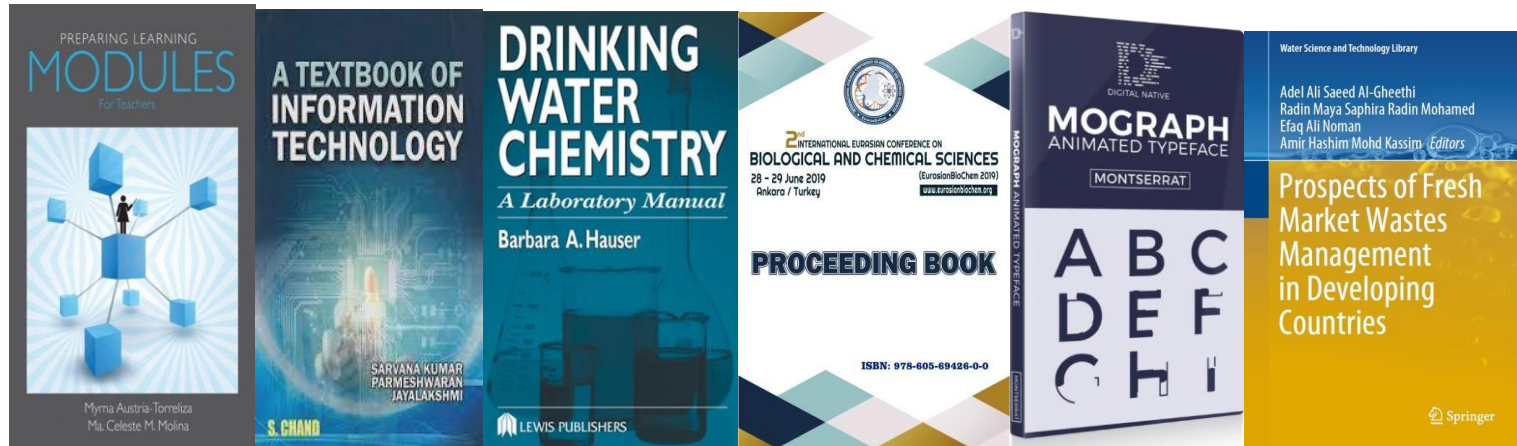
- Books
- Journals
- Conferences

Non-INDEXED

- Books
- Journals
- Conferences
- Newspapers
- Thesis
- Internet
- Website
- Reports
- Magazine



BOOK TYPES



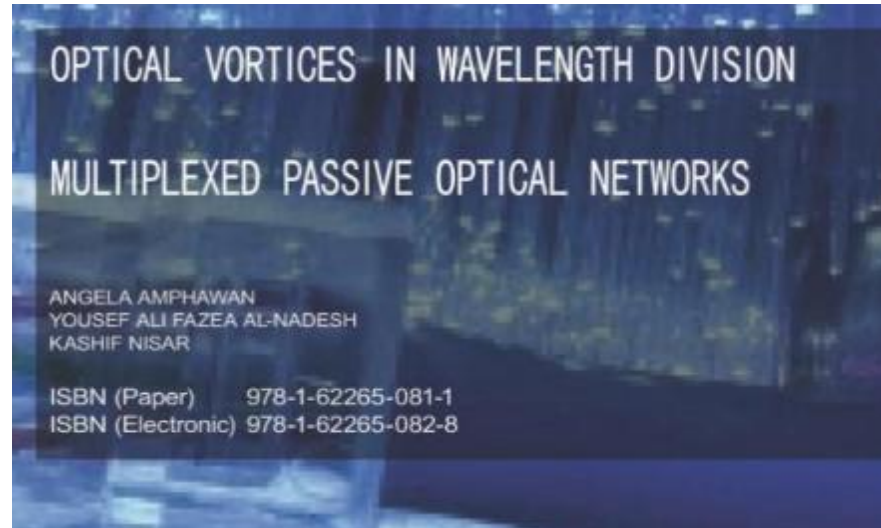
A module is a set of pages tied together in a hierarchical sequence, perhaps with chapters, sections, and subsections

A textbook is a comprehensive compilation of content in a branch of study, produced to meet the needs of educators, usually at educational institutions

Book with ISBN: The International Standard Book Number is a numeric

A monograph is a specialist work of writing or exhibition on a single subject or an aspect of a subject, often by a single author or artist, and usually on a scholarly subject.

Example of a book with ISBN



Example of proceeding combined in a book with ISBN



[Advanced Computer and Communication Engineering Technology](#) pp 355-363 | [Cite as](#)

Space Division Multiplexing in Multimode Fiber for Channel Diversity in Data Communications

Authors [Authors and affiliations](#)

Angela Amphawan , Yousef Fazea, Mohamed Elshaikh

Conference paper
First Online: 29 December 2015

3

1.4k

[Citations](#) [Downloads](#)

Part of the [Lecture Notes in Electrical Engineering](#) book series (LNEE, volume 362)

[Home](#) > [Advances on Intelligent Informatics and Computing](#) > Conference paper

A Review on 5G Technology in IoT-Application Based on Light Fidelity (Li-Fi) Indoor Communication

Conference paper | First Online: 30 March 2022
pp 371–384 | [Cite this conference paper](#)



Advances on Intelligent Informatics and Computing
(IRICT 2021)

Yousef Fazea , Fathey Mohammed & Abdulaziz Al-Nahari

 **Part of the book series:** [Lecture Notes on Data Engineering and Communications Technologies](#) ((LNDECT, volume 127))

 **Included in the following conference series:**
[International Conference of Reliable Information and Communication Technology](#)

Access this chapter

[Log in via an institution](#) →

Chapter USD 29.95
Price excludes VAT (USA)

PEER REVIEWED ARTICLES/BOOK

➤ INDEXED SCHOLARS

➤ NON-INDEXED SCHOLARS



Peer Reviewed vs. Non-peer reviewed

- Peer-reviewed or refereed journals
 - articles have been reviewed by other experts in the field before publication
- Non-peer reviewed
 - Articles have **NOT** been reviewed by experts



Peer-Reviewed* vs. Non Peer-Reviewed Publications: What Is the Difference?

	Peer-Reviewed	Not Peer-Reviewed	
	Scholarly Journal	Popular Magazine	Trade Magazine/Journal
Audience	Researchers and professionals	General public	Members of a specific business, industry or organization
Author(s)	Scholars/professors (usually a required part of their job at 4-year universities-not paid by journals)	Staff writers and journalists (often paid by magazines)	Experts in a field
Content	Longer articles Research projects, methodology, and theory Use subject-specific language and terms	Short articles of general interest, with a focus on current events, news, and personalities.	Short articles with an emphasis on industry trends, new products, techniques and organizational news.
Sources	Sources cited in bibliographies and/or footnotes	Rarely cited Information is usually second or third hand	Sources mentioned occasionally with bibliographies



Purpose	To share facts with other scholars/researchers in that same field of study	To entertain, inform, evoke emotional response	To share the latest information and news with others in the same trade
Advertisements	Few to None	Heavy	Moderate-Almost all or most are trade related
Examples	<i>American Literature, New England Journal of Medicine, Current History</i>	<i>Glamour, Time, Newsweek</i>	<i>Police Chief, Advertising Week, Tech Directions</i>

***Peer-Review Process**

Step 1: Author writes and submits article manuscript to journal

Step 2: Journal editor sends manuscript to expert reviewers to evaluate quality of research, writing, and conclusions

Step 3: Expert reviewers return manuscript to editor with suggested changes, as well as a recommendation to publish or not publish the article

Step 4: Editor reviews suggestions and returns the manuscript to the author for revision

Step 5: Author revises and resubmits the article to the editor

Step 6: The article is published in the journal



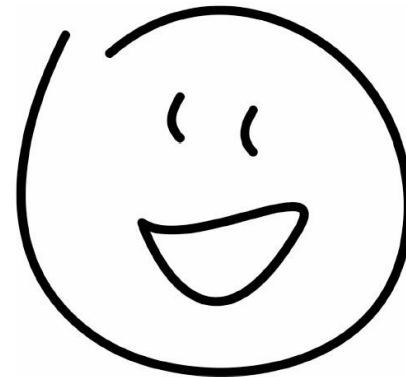
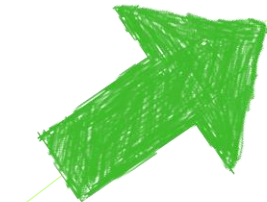
LEVELS of PRESTIGE

22

INDEXED JOURNAL

NON-INDEXED JOURNAL

CONFERENCE



INDEXED JOURNAL?

refine your research
SCOPUSTM

ProQuest

Scopus(ScieVerse)

IEEE(IEL /IEEE Xplore)

ISI (Thompson)

ACM

Ei

ELSEVIER

Scopus

COMPENDEX

WEB OF SCIENCE

PMC

DOAJ
DIRECTORY OF
OPEN ACCESS
JOURNALS

SciVerse

Scopus

SCImago
Journal & Country
Rank

SJR

ISI Web of KnowledgeSM

Journal Citation Reports[®]

Impact
Factor

IEEE



ISI Web of
KNOWLEDGESM
Transforming Research

Science Citation Index
Expanded

Web of Science

Clarivate
Analytics

Clarivate
Analytics

WEB OF SCIENCETM



THOMSON REUTERS



M
MARSHALL

Scopus



<https://www.scopus.com/sources?zone=TopNavBar&origin=NO%20ORIGIN%20DEFINED>

Sources

i CiteScore metrics for journals and serials

CiteScore metrics from Scopus are:

- Comprehensive
- Transparent
- Current and free

Use this page to find a source and view associated metrics. Use qualitative as well as quantitative metrics when presenting your research impact. Always use more than one quantitative metric. Learn more about CiteScore.

Filter refine list

Display options

☐ Display only Open Access journals

Counts for previous 3 years

☒ No minimum selected

☐ Minimum citations

☐ Minimum documents

CiteScore highest quartile

☐ Show only titles in top 10 percent

41,154 results

☐ All

View metrics for year: 2018

Source title ↓	CiteScore ↓	Highest percentile ↓	Citations 2018 ↓	Documents 2015-17 ↓	% Cited ↓
☐ 1 Ca-A Cancer Journal for Clinicians	160.19	99% 1/120 Hematology	20,184	126	77
☐ 2 MMWR. Recommendations and reports : Morbidity and mortality weekly report. Recommendations and reports / Centers for Disease Control <i>Open Access</i>	87.75	99% 1/89 Epidemiology	1,053	12	100



Ca-A Cancer Journal for Clinicians

Scopus coverage years: from 1950 to Present

Publisher: Wiley-Blackwell

ISSN: 0007-9235 E-ISSN: 1542-4863

Subject area: [Medicine: Hematology](#) [Medicine: Oncology](#)

[View all documents >](#)

[Set document alert](#)

[Save to source list](#) [Journal Homepage](#)

CiteScore 2018

160.19

[Add CiteScore to your site](#)

SJR 2018

72.576

SNIP 2018

100.014

[CiteScore](#) [CiteScore rank & trend](#) [CiteScore presets](#) [Scopus content coverage](#)

CiteScore 2018

Calculated using data from 30 April, 2019

$$160.19 = \frac{\text{Citation Count 2018}}{\text{Documents 2015 - 2017*}} = \frac{20,184 \text{ Citations} >}{126 \text{ Documents} >}$$

*CiteScore includes all available document types

[View CiteScore methodology >](#) [CiteScore FAQ >](#)

CiteScoreTracker 2019 ⓘ

Last updated on 09 April, 2020
Updated monthly

$$176.31 = \frac{\text{Citation Count 2019}}{\text{Documents 2016 - 2018}} = \frac{22,744 \text{ Citations to date} >}{129 \text{ Documents to date} >}$$

CiteScore rank ⓘ

Category	Rank	Percentile
Medicine Hematology	#1/120	99th
Medicine Oncology	#1/320	99th

[View CiteScore trends >](#)



Scientific Journal Ranking (SJR)





Title	Type	↓ SJR	H index	Total Docs. (2018)	Total Docs. (3years)	Total Refs. (2018)	Total Cites (3years)	Citable Docs. (3years)	Cites / Doc. (2years)	Ref. / Doc. (2018)	
1 CA - A Cancer Journal for Clinicians	journal	72.576 Q1	144	45	127	3078	20088	103	206.85	68.40	
2 MMWR. Recommendations and reports : Morbidity and mortality weekly report. Recommendations and reports / Centers for Disease Control	journal	48.894 Q1	134	3	12	559	1043	12	86.00	186.33	
3 Nature Reviews Materials	journal	34.171 Q1	61	99	195	8124	7297	104	70.16	82.06	
4 Quarterly Journal of Economics	journal	30.490 Q1	228	40	124	2498	1495	120	12.81	62.45	





Journal Citation Reports

JCR



About this journal

Electronic ISSN Print ISSN

1614-7499

0944-1344

Abstracted and indexed in

AGRICOLA

BIOSIS

Biological Abstracts

CAB Abstracts

CNKI

Chemical Abstracts Service (CAS)

Current Contents/ Agriculture, Biology & Environmental Sciences

Dimensions

EBSCO Biomedical Reference Collection

EBSCO Discovery Service

EBSCO Energy & Power Source

EBSCO Environment

EBSCO STM Source

EBSCO Sustainability Reference Center

EBSCO Wildlife & Ecology Studies Worldwide

EMBiology

Elsevier Biobase

Gale

Gale Academic OneFile

Geobase

Google Scholar

INIS Atomindex

Institute of Scientific and Technical Information of China

Japanese Science and Technology Agency (JST)

Journal Citation Reports/Science Edition

Medline

Naver

OCLC WorldCat Discovery Service

ProQuest ABI/INFORM

ProQuest Agricultural & Environmental Science Database

ProQuest Algology, Mycology and Protozoology Abstracts (Microbiology C)

ProQuest Bacteriology Abstracts (Microbiology B)

ProQuest Biological Science Database

ProQuest Business Premium Collection

ProQuest Central

ProQuest Ecology Abstracts

ProQuest Environmental Science

ProQuest Health & Medical Collection

ProQuest Health Research Premium Collection

ProQuest Industrial and Applied Microbiology Abstracts (Microbiology A)

ProQuest Medical Database

ProQuest Natural Science Collection

ProQuest Pharma Collection

ProQuest Pollution Abstracts

ProQuest Public Health Database

ProQuest SciTech Premium Collection

ProQuest Science Database

ProQuest Toxicology Abstracts

ProQuest-ExLibris Primo

ProQuest-ExLibris Summon

SCImago

SCOPUS

[Science Citation Index](#)

Science Citation Index Expanded (SciSearch)

Semantic Scholar

Transport Research International Documentation (TRID)

WTI Frankfurt eG



ISI Web of Knowledge

Journal Citation Reports®

Other Resources
In-House Digital Collection
UUM Repository
Free eJournal
Free eBooks
Additional eJournal

Electronic Books

- Books 24x7 Collection -
- OfficeEssential
- Ebrary eBooks
- Dissertation

Online Database

- ACM Digital I
- BLIS : BERN
- CCH Online J
- Cambridge J
- CLJ Law
- EBSCOhost
- EconLit - Ovi
- Emerald Mar
- ERIC
- Global Marke
- Database
- IEEE Xplore
- IMF eLibrary
- Journal Citat
- (Web)
- Jstor:Atts &
- LawNet

WEB OF KNOWLEDGESM

DISCOVERY STARTS HERE

Additional Resources

Analytical Tools:

Journal Citation Reports®

Journal performance metrics offer a systematic, objective means to critically evaluate the world's leading journals

- Delivers quantifiable statistical information based on citation data
- Provides a variety of impact and influence metrics, including the Journal Impact Factor and Eigenfactor™
- Includes

ISI Web of KnowledgeSM

Journal Citation Reports®

Web Sites:

BiologyBrowser

A free database of resources and links

Index to Organism Names

The world's largest online database of

Web Search

Scientific

Find sci
content f

Select a JCR edition and year:	Select an option:
☒ JCR Science Edition 2010 ▼	☒ View a group of journals by Subject Category ▼
☐ JCR Social Sciences Edition 2010 ▼	☐ Search for a specific journal
	☐ View all journals
SUBMIT	

This product is best viewed in 800x600 or higher resolution

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The Notices file was last updated Wed Sep 28 11:41:34 2011

[Acceptable Use Policy](#)
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IMPACT FACTOR & CITESCORE?

Why impact factors and all?

2.5 million
publications/year...
Reading publications is
impossible!



CITESCORE

citations in a year to documents published in previous 3 years
of documents in previous 3 years

This comprehensive, current and open metric for journal citation impact (introduced in December 2016) is available in a free layer of **Scopus.com**. It includes a yearly release and monthly CiteScore Tracker updates. Find CiteScore metrics for journals, conference proceedings, book series and trade journals at <https://www.scopus.com/sources>

IMPACT FACTOR & JIF?

*Only references in articles within the journals indexed in *Web of Science* are counted; does not include citations that may cite the articles in *JIT* from book chapters, proceedings, or other journals that are not indexed in *Web of Science*

Journal Impact Factor Calculation

$$\begin{array}{l} \text{2018} \\ \text{Journal} \\ \text{Impact} \\ \text{Factor} \end{array} = \frac{12,526}{56} = 223.679$$

How is Journal Impact Factor Calculated?

$$\text{JIF} = \frac{\begin{array}{l} \text{Citations in 2018 to} \\ \text{items published in 2016} \\ \text{(6,932) + 2017 (5,594)} \end{array}}{\begin{array}{l} \text{Number of citable items} \\ \text{in 2016 (27) + 2017} \\ \text{(29)} \end{array}} = \frac{12,526}{56}$$



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[View Articles](#)
[Guide for Authors](#)
[Abstracting/ Indexing](#)
[Track Your Paper](#)
[Order Journal](#)
[Journal Metrics](#)
[CiteScore: 10.2](#)
[Impact Factor: 6.125](#)
[5-Year Impact Factor: 5.387](#)
[Source Normalized Impact per Paper \(SNIP\): 2.687](#)

Future Generation Computer Systems

Special Issues

Special issues published in Future Generation Computer Systems.

Trusted Cloud Edges (CE) Computations

Last update August 2020

Ernesto Damiani | Claudio Ardagna | Mauro Conti | Chia-Mu Yu

Trustworthy Information

Journal Metrics

Source Normalized Impact per Paper (SNIP):

SCImago Journal Rank (SJR):

5-Year Impact Factor:

er Boissier | Victor Sanchez-Anguix | Kuo-Ming Chao

metrics for a better Cyberworld

Impacts metrics

Source Normalized Impact per Paper



- Freely available online via Scopus
- Similar to Impact Factor, but considers 3 years
- Measures contextual citation impact
- Citations weighted by the likelihood of citation in the subject field of source



Devised at the University of Leiden, currently the most sophisticated journal performance indicator

Calculation for journal impact factor (example)

A= total cites in 2014

B= 2014 cites to articles published in 2012-13 (this is a subset of A)

C= number of articles published in 2012-13

D= B/C = 2014 impact factor



Quartile Scores (Q_1 , Q_2 , Q_3 , Q_4)

Web of Science
InCites
Journal Citation Reports
Essential Science Indicators
EndNote
Publons
Sign In
Help
English

InCites Journal Citation Reports
Clarivate Analytics

Home
Download
Add

Go to Journal Profile
Master Search
Compare Journals
View Title Changes
Select Journals
Select Categories
Select JCR Year
2018
Select Edition
SCIE SSCI
Open Access
Open Access
Category Schema
Web of Science

Journals By Rank
Categories By Rank

Journal Titles Ranked by Impact Factor

Compare Selected Journals
Add Journals to New or Existing List
Customize Indicators

		Full Journal Title	Total Cites	Journal Impact Factor	Eigenfactor Score
☐	1	CA-A CANCER JOURNAL FOR CLINICIANS	32,410	223.679	0.07743
☐	2	Nature Reviews Materials	7,901	74.449	0.03387
☐	3	NEW ENGLAND JOURNAL OF MEDICINE	344,581	70.670	0.68712
☐	4	LANCET	247,292	59.102	0.42800
☐	5	NATURE REVIEWS DRUG DISCOVERY	32,266	57.618	0.05488
☐	6	CHEMICAL REVIEWS	188,635	54.301	0.26714
☐	7	Nature Energy	11,113	54.000	0.04063
☐	8	NATURE REVIEWS CANCER	50,529	51.848	0.07406



[Home](#) > [Journal Profile](#)

CA-A CANCER JOURNAL FOR CLINICIANS

ISSN: 0007-9235

eISSN: 1542-4863

WILEY

111 RIVER ST, HOBOKEN 07030-5774, NJ

USA

[Go to Journal Table of Contents](#)[Go to Ulrich's](#)[Printable Version](#)

TITLES

ISO: CA-Cancer J. Clin.

JCR Abbrev: CA-CANCER J CLIN

CATEGORIES

ONCOLOGY -- SCIE

LANGUAGES

English

PUBLICATION FREQUENCY

6 issues/year

[Current Year](#)[2017](#)[All Years](#)

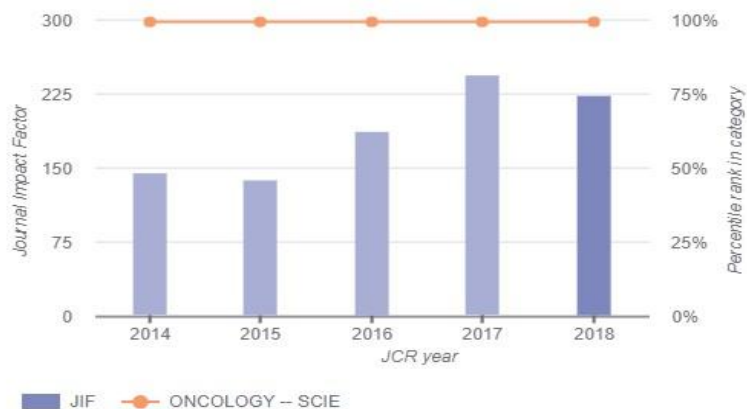
The data in the two graphs below and in the Journal Impact Factor calculation panels represent citation activity in 2018 to items published in the journal in the prior two years. They detail the components of the Journal Impact Factor. Use the "All Years" tab to access key metrics and additional data for the current year and all prior years for this journal.

Journal Impact Factor Trend 2018

[Printable Version](#)

223.679

2018 Journal Impact Factor



Citation distribution 2018

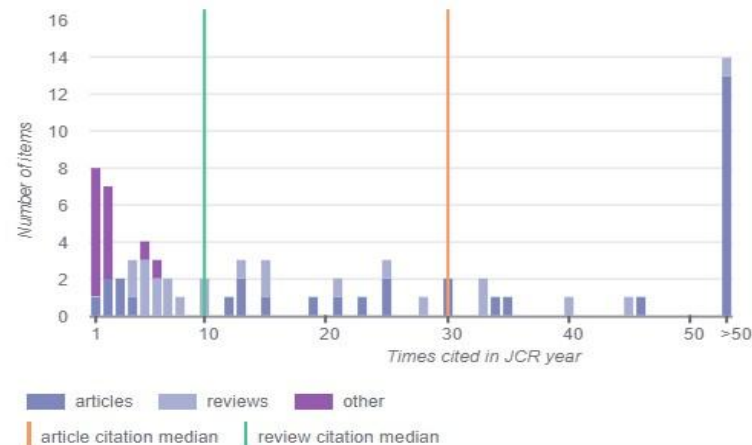
[Printable Version](#)

30

Article citation median

10

Review citation median



Journal Impact Factor Calculation

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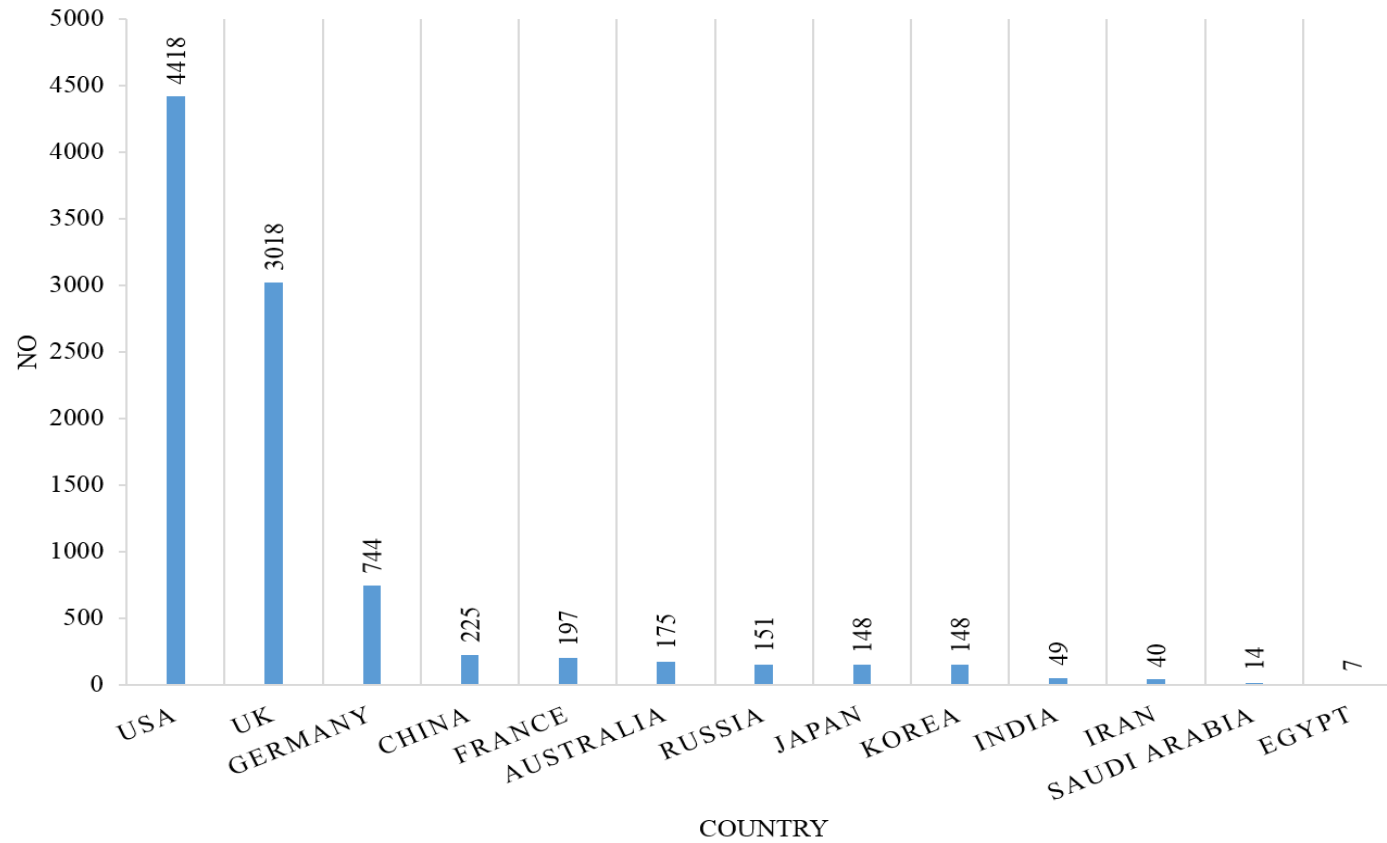
Essential Science Indicator (ESI)

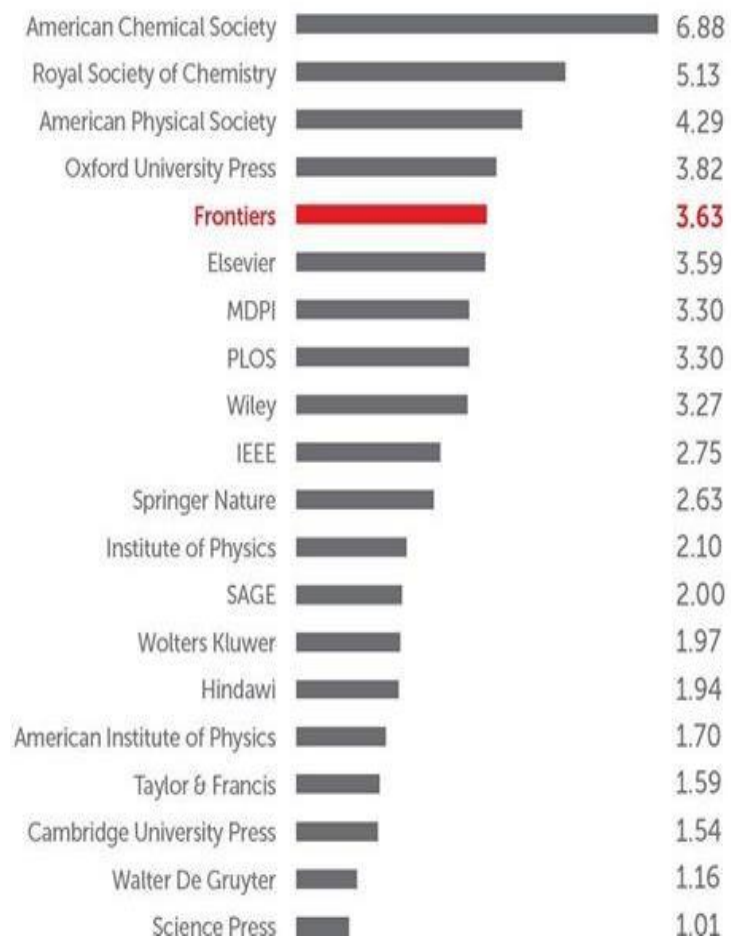
Science Citation Index Expanded (SCIE)-JCR

JCR Impact Factor

JCR Year ↕	ONCOLOGY – SCIE	
	Rank	Quartile
2018	1/230	Q1
2017	1/223	Q1
2016	1/217	Q1
2015	1/213	Q1
2014	1/211	Q1

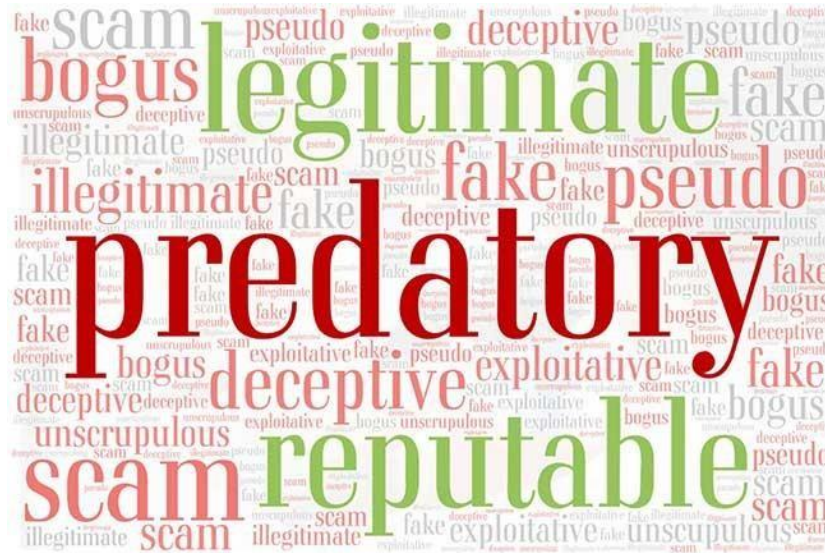






Potential predatory scholarly open-access publishers

Potential predatory scholarly open-access publishers



<https://beallslist.weebly.com/?fbclid=IwAR0pVy6WgZ8ASoztd0FMfZNcSEJgwfYVGBBgVW97sFmpZzNLRG4f0SI2yg>

Beall's List of Predatory Journals and Publishers

BEALL'S LIST OF PREDATORY JOURNALS AND PUBLISHERS

[PUBLISHERS](#) [STANDALONE JOURNALS](#) [CONTACT](#) [OTHER](#) [THINK CHECK SUBMIT](#)

Potential predatory scholarly open-access publishers

Instructions: first, find the journal's publisher - it is usually written at the bottom of journal's webpage or in the "About" section. Then simply enter the publisher's name or its URL in the search box above. If the journal does not have a publisher use the [Standalone Journals](#) list.

Original list

This is an archived version of the Beall's list - a list of potential predatory publishers created by a librarian [Jeffrey Beall](#). We will only update links and add notes to this list. A list of new predatory publishers is available below the original one.

- [IOBB Email Press](#)
- [2425 Publishers](#)
- [The 5th Publisher](#)
- [ABC Journals](#)
- [A M Publishers](#)
- [Alshinav](#)
- [Academe Research Journals](#)

Other important lists

[List of journals falsely claiming to be indexed by DOAJ](#)

[DOAJ: Journals added and removed](#)

[JCR Master Journal List](#)

[Questionable conferences](#)

[How to avoid predatory conferences](#)

[Journal Evaluation Tool](#)

News





GENERAL IMPACT FACTOR

ResearchGate



ज्ञान-विज्ञान विमुक्तये

UGC

University Grants Commission

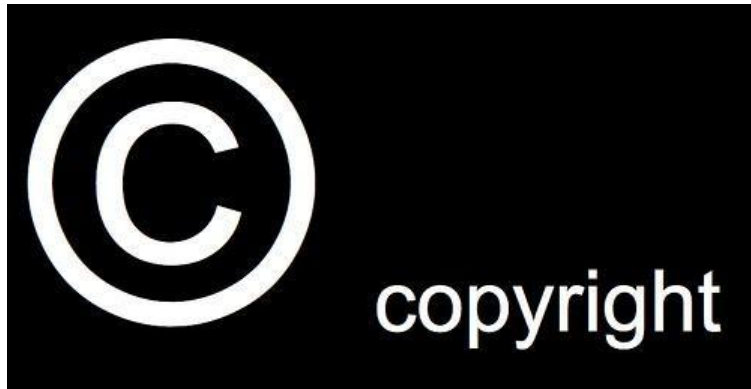
Approved Journal List



INDEX  COPENICUS
I N T E R N A T I O N A L









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PLAGIARISM SELF-PLAGIARISM

“Plagiarism is not a victimless crime”

“It is a serious offense”

Plagiarism is an opposite of novelty



Your research has begun....





**Thank
You**

