How to write and publish a high impact journal article

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Global View of Publications

❑ **Approximately 35,000 journals published regularly and increased by 5-6% annually**

❑ **22,000 of them are ISI or Scopus abstracted**

❑ **Total number of papers published annually exceeds 2.5 million**

❑ **About 14,000 journals published in JCR (Impact factor journals)**

❑ **And Q1 journals are >4,000**

Global View of Publications

- ❑ **Over 50% of research papers receive no citation**
- ❑ **90% readers glance through the content list only**
- ❑ **Only 5% open the journal to review through the titles**
- ❑ **Less than 2% scientists read the abstract and introduction**
- ❑ **Less than 1% read rest of the paper!!!!!!!!!!!!!**

International Research Publications: Facts and Figures

- **Free and paid abstracts available Scopus, ISI Web of Science (WOS), PubMed Central, and Google Scholar**

- **PubMed Central holds over 2.2 million articles, has a collection of over 20 million citations**

- **SciVerse Scopus holds over 43 million records, it includes 18,000 peer-reviewed journals (including 1,800 open access journals), 700 trade publications, and 400 book series.**

- ***ISI Web of Science* claims to hold over 40 million items and 7387 science and engineering journals and 2257 social science journals.**

- **Google Scholar has almost taken all over the world biblometrics.**

Types of the Scientific Articles

➢ **Letters**

➢ **Research Articles**

➢ **Short Communications**

➢ **Review Articles**

Why it is Important to Publish in High Impact Factor Journals?

- Greater visibility of research findings
- Increase chances of citations
- Greater recognition among the peers
- Helping the Institutions for various rankings
- Part of KPIs (staff)
- Associated benefits such as promotions, increments, performance allowances, etc.
- Better opportunity

Which manuscripts are published in High Impact Factor Journals?

- ❑ **Work of established scientists/labs**
- ❑ **Results of general interest; wider scopes of the readers**
- ❑ **Novelty of findings; original research**
- ❑ **Concise and well written**

A Good Manuscript

- ❑ **Concise but informative**
- ❑ **To the point**
- ❑ **Free from grammatical and technical errors**
- ❑ **Technically correct**
- ❑ **Novel idea (out of the box thinking)**
- ❑ **Quality and original research**
- ❑ **Good writing and attractive presentation**

Before Starting to Write the Paper

❑ **Collect and analysis the data (experimental or numerical)**

❑ **Make the Tables; draw the Figures/graphs; develop the mathematical models and simulations**

❑ **If data are not sufficient or need to further improvement, experiment should be repeated.**

❑ **Write the papers whenever getting free time or allocated a specific time for write up**

Structure of a Scientific Paper

Title: Describe concisely the core contents of the paper (Authors, Affiliations, Corresponding author)

Abstract: Summarize the major elements of the paper
Keywords: (3 – 5 words)

IMRaD format

Introduction:
- provide context and rationale for the study;
- why your subject is important to your readers
- why did you do it ?

Methods/methodology : Describe the experimental procedures; what you did to achieve your objectives:

Structure of a Scientific Paper

Results: Summarize the findings without interpretation; what did you find

Discussion: Interpret the findings of the study; What does it all mean?

Conclusions: Summarize the major findings; answer of the objectives; what the results mean for the readers

Acknowledgement: Give credit to those who helped and provided financial support for the work

References: List all scientific papers, books proceedings and websites that are cited with the correct format

The Title

- ➢ **A good title is defined as the fewest possible words (10-15) that adequately describe the entire contents of the paper.**
- ➢ **The title is extremely important and must be chosen with great care as it will be read by thousands, whereas few will read the entire paper**
- ➢ **Indexing and abstracting of the paper depends on the accuracy of the title.**
- ➢ **Construction of an article title has a significant impact on citation frequency.**
- ➢ **By a study conducted by Jacques and Sebire* there was a strong association between increasing title length and citation rate [*J R Soc Med Sh Rep 2010;1:2. DOI 10.1258/shorts.2009.100020]**

The Abstract

- ➢ Should be informative, indicative and reflects the main content of the article.
- ➢ Should be concise, accurate and informative.
- ➢ Gives the quick idea of the contents
- ➢ What and how was done
- ➢ Provide a brief conclusions
- ➢ The content consists of brief background/problem statement (some journals), objective/purpose, methods, results and significant/conclusions
- ➢ In generally abstract should be written at the end

The Introduction

❑ **The introduction section is VERY important; it should make the Editor, the Reviewers and the readers want to read the paper especially for REJECTION of the paper**

❑ **Brief background information of the current study**

❑ **Provide rationale for current study**

❑ **Integrated review of relevant works**

❑ **Research gap in knowledge to be filled**

❑ **Updated literature citation (references)**

❑ **State aim of study**

❑ **State the method of investigation**

❑ **State the principal results of the investigation**

The Methods/Methodology

❑ **If the method is new, details must be provided**

❑ **If the method has been previously published in a scientific journal, only the reference should be given with some outlines**

❑ **Type of equipment (manufacturer, model, etc.),**

❑ **Measurement conditions (if standard, give reference, and if new or modified, provide details)**

❑ **Number of samples tested, reproducibility,**

❑ **Data generated and collected,**

❑ **Exploitation of the data**

❑ **Statistical and analytical analysis (modern tools)**

The Results

- ❏ **Summarize and illustrate the findings in an orderly and logical sequence, without interpretation**
- ❏ **Presentation of the data: what did you find?**
- ❏ **Should answer all points raised in the methods**
- ❏ **Should present results but not comment on the findings**
- ❏ **Should include Figures (graphs and schemes), Tables, model equations, etc. in the text with proper numbering**
- ❏ **No mismatch in numbers between text and tables / figures**
- ❏ **No repetition between text and tables; tables and figures**
- ❏ **Results section is written in the past or present tense**
- ❏ **Do not describe methods that have already been described in the methods section**

The 'Discussion' (Results and discussion)

❑ **Hardest section to write**

❑ What might the results mean and why does it matter?

❑ Should answer the question stated in the introduction

❑ Concisely summarize the interpretation of the results

❑ Show how your results and interpretations agree or contrast with previously published work

❑ Discrepancies between new results and previously reported results. (critical discussion)

The 'Conclusions'

❑ **Summary of the major findings and analysis report**

❑ **Validation of the hypothesis and answer to the problems and research questions/objectives**

The 'Acknowledgment'

- ❑ **Funding sources such as grants, contracts or fellowships**

- ❑ **Research contributions by people other than the authors**

- ❑ **Technical help received from any individual in the lab or elsewhere**

- ❑ **Persons who gave scientific guidance, participated in discussions, etc.**

- ❑ **Technicians at user facilities or labs**

- ❑ **The source of special equipment, cultures, or any other material**

The 'References'

- **The references cited in the text must be listed in the reference section**
- **Cite current and major relevant references**
- **Reference citations must be accurate, complete and consistent**
- **Use correct style for journal papers**
- **Not many self citations**

Criteria for Acceptance

- ❑ **Originality**
- ❑ **Novel or creative research methodology**
- ❑ **New and important research findings**
- ❑ **Scientific Quality**
- ❑ **Experimental design and methodology**
- ❑ **Data representation**
- ❑ **Clarity of presentation (readability/ clarity of writing/ grammar)**
- ❑ **Depth of the investigation**
- ❑ **Thorough and logical discussion of results**
- ❑ **Importance in the scientific world**

Major reasons for REJECTION

J Technical Committee

Incorrect formatting

J Editorial Board

Inappropriate scope and audience

Lack of novelty

(Self-)Plagiarism Text + Image

Limited impact and urgency

J Reviewers

Lack of addressing of problems, research question and gaps

Inadequate literature citation

Flaws in methodology

Research data not sufficient

Conclusion not supported by the data

Ethics in Scientific Writings

❑ **Authorship issues**

❑ **Acknowledging past and present contributions of others**

❑ **Acknowledge grants/funding**

❑ **Falsification and data alteration**

❑ **Plagiarism**

❑ **Duplicate manuscripts**

❑ **Unnecessary self citation**

❑ **Author conflicts of interest**

Part 2: How to get published in high impact factor journals?

Choose the right journal

❑Aims and scope
❑Types of articles
❑Readership
❑Current hot topics
❑Review the abstracts of recent publications

Also go through the following:
❑Is the journal peer-reviewed?
❑Who are editorial boards?
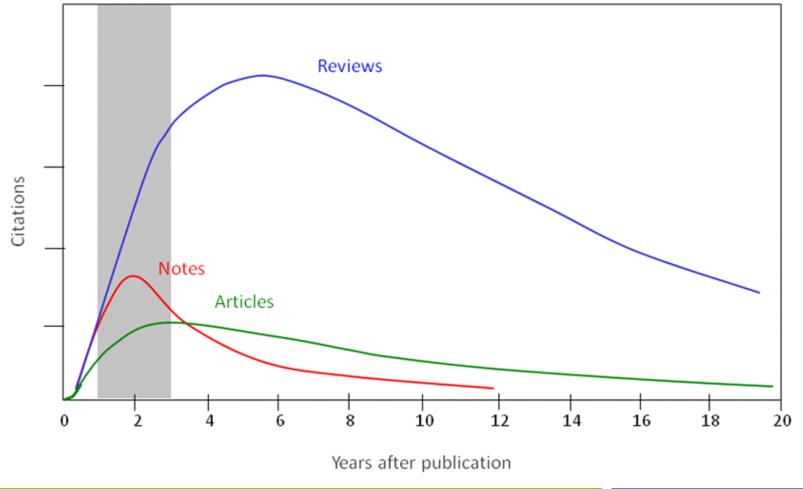❑Who is this journal's audience?
❑What is the journal's impact factor?

Choose the right journal

- ❑ **Selection of a suitable journal by the Impact Factors is now well established**

- ❑ **Journals with higher Impact Factors are better regarded**

- ❑ **In most disciplines, there is some consistency about which journals are perceived as being of high impact which can be found in the Journal Citation Reports (JCR) published by Thomson Reuters (ISI)**

- ❑ **In addition, selection of the journals for publication should be at least within indexed journals i.e. Scopus and ISI indexed**
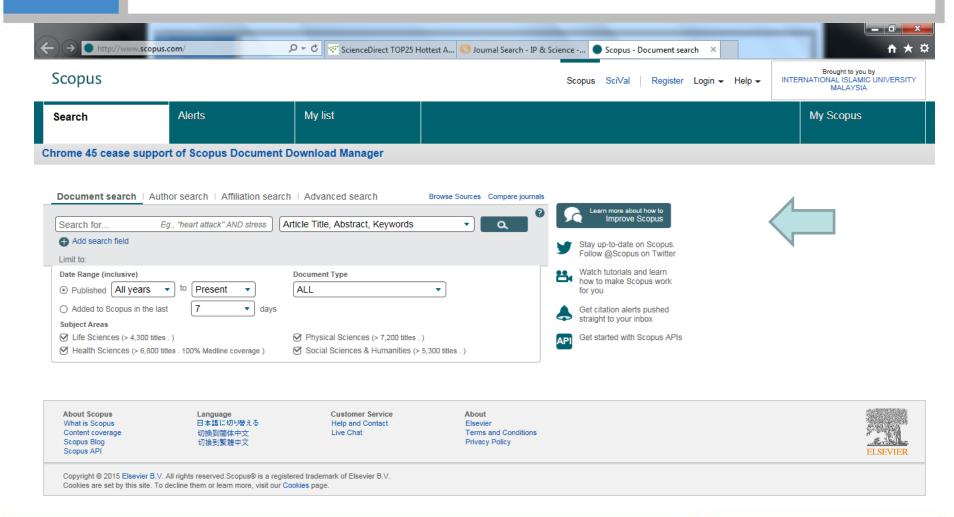
Citations impact

Major Indexed Journals

❑ **Scopus Indexed Journals**

Journals are available at Scopus Database:

➢ **www.scopus.com**

➢ **https://www.scimagojr.com**

❑ **WoS (ISI) Indexed Journals**

➢ **Impact factor journals are available in Journal Citation Reports (JCR)**

➢ **And full list can be found at Web of Science Master List: https://mjl.clarivate.com/home**
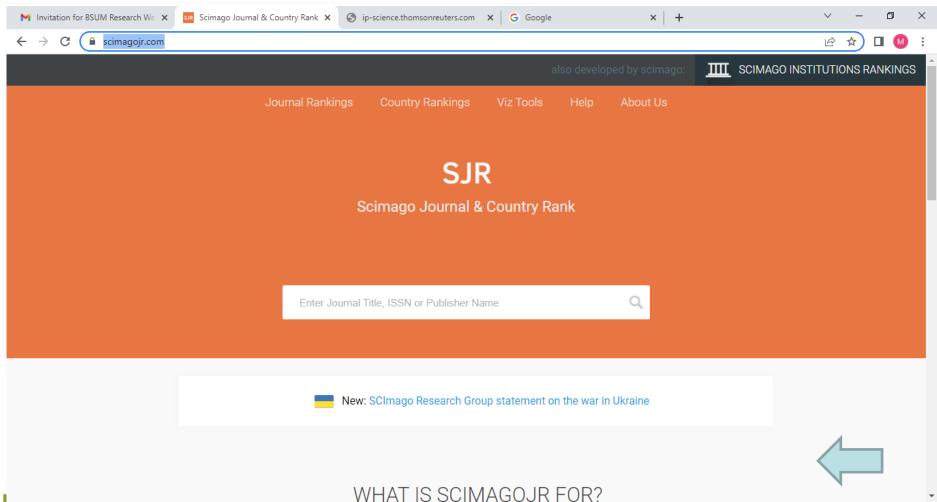
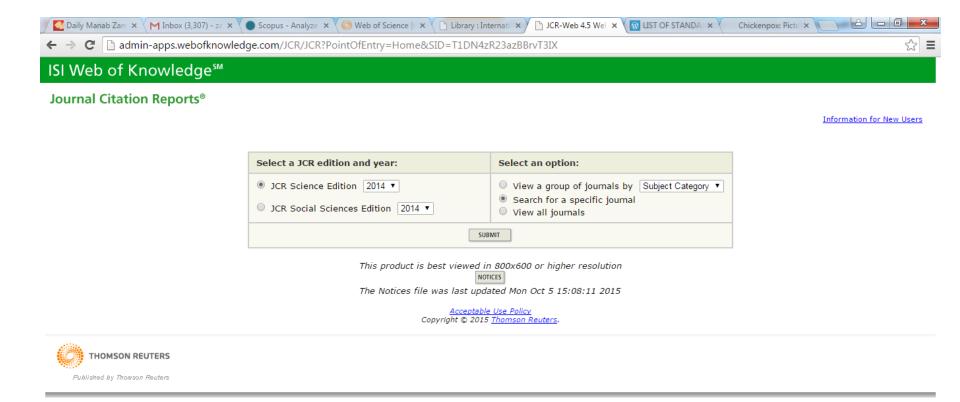INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

Scopus Database

Scopus: SCImago Journals

Journal Citation Reports (JCR)

WoS Master Journal List

Journal Citation Reports (JCR)

❑ **The JCR provides quantitative tools for ranking, evaluating, categorizing, and comparing journals**

❑ **Impact factor derived using citation data in the Science Citation Index (SCI) and the Social Science Citation Index (SSCI)**

❑ **Helps in determining the publication impact and influence in the global research community**

❑ **Widely accepted and used**

High Impact Factor Journals

- Impact factor of journal is the frequency of its citations.

- High impact factor journals are the ones which have high frequency of citations by others

- It is a superficial, but internationally accepted, measure of quality of journals

- A good high impact journal may publish a paper which have high to zero citations.

Impact Factor of a Journal

- **Reflecting the average number of citations of an article in a journal**

- **Appears in Journal Citation Reports - Science Citation Index**

- **Journals with high impact factors considered to be more scientifically important and more prestigious.**

Impact Factor = $\dfrac{\text{Citations in 2016 to articles published in 2014 and 2015}}{\text{Articles published in 2014 and 2015}}$

Impact Factor of a Journal

Impact Factor Calculation

Journal: Bioresource Technology

Impact Factor in 2015 (June): 4.494

Cites in 2014 to articles published in :
  2013   = 7499
  2012   = 8382
 Total = 15,881

Number of articles published in:
  2013   =   1976
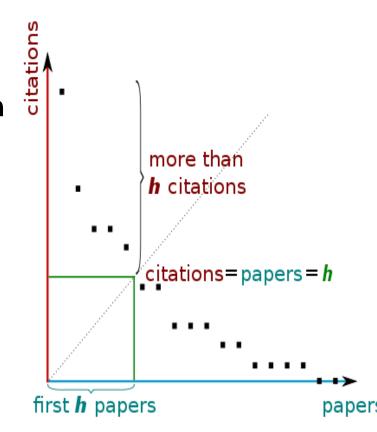 2012   =   1558
  Total =   3534

Calculation:
  $$\frac{\text{Cites to recent articles}}{\text{Number of recent articles}} \quad \frac{15,881}{3534} = 4.494$$

H-index

❑ **Proposed by Jorge Hirsch in 2005**

❑ **An individual has a index of h, when they have published at least h papers, each of which has been cited at least h times**

❑ **So, an h-index of 10 means that the author has published 10 papers cited at least 10 times each.**

❑ **Numerous criticisms have been levelled at the metric, but it is still very widely used.**

G-index

❑ **Proposed by Leo Egghe in 2006.**

❑ **An individual has a g-index of g when they have published at least g papers which have in total been cited more than g^2 times.**

❑ **So, a g-index of 10 means that an author has produced 10 publications, which have in total accrued at least 100 citations amongst them**.

Predatory Journals and Publishers

Scholarly Open Access
Critical analysis of scholarly open-access publishing

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LIST OF PUBLISHERS

Beall's List:

Potential, possible, or probable predatory scholarly open-access publishers

This is a list of questionable, scholarly open-access publishers. We recommend that scholars read the available reviews, assessments and descriptions provided here, and then decide for themselves whether they want to submit articles, serve as editors or on editorial boards. The criteria for determining predatory publishers are here.

We hope that tenure and promotion committees can also decide for themselves how importantly or not to rate articles published in these journals in the context of their own institutional standards and/or geocultural locus. We emphasize that journal publishers and journals change in their business and editorial practices over time. This list is kept up-to-date to the best extent possible but may not reflect sudden, unreported, or unknown enhancements.

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Thank you

....for your attention