

# RESEARCH WRITING AND RESEARCH IMPACT MEASURES: WHAT LIBRARIANS NEED TO KNOW?

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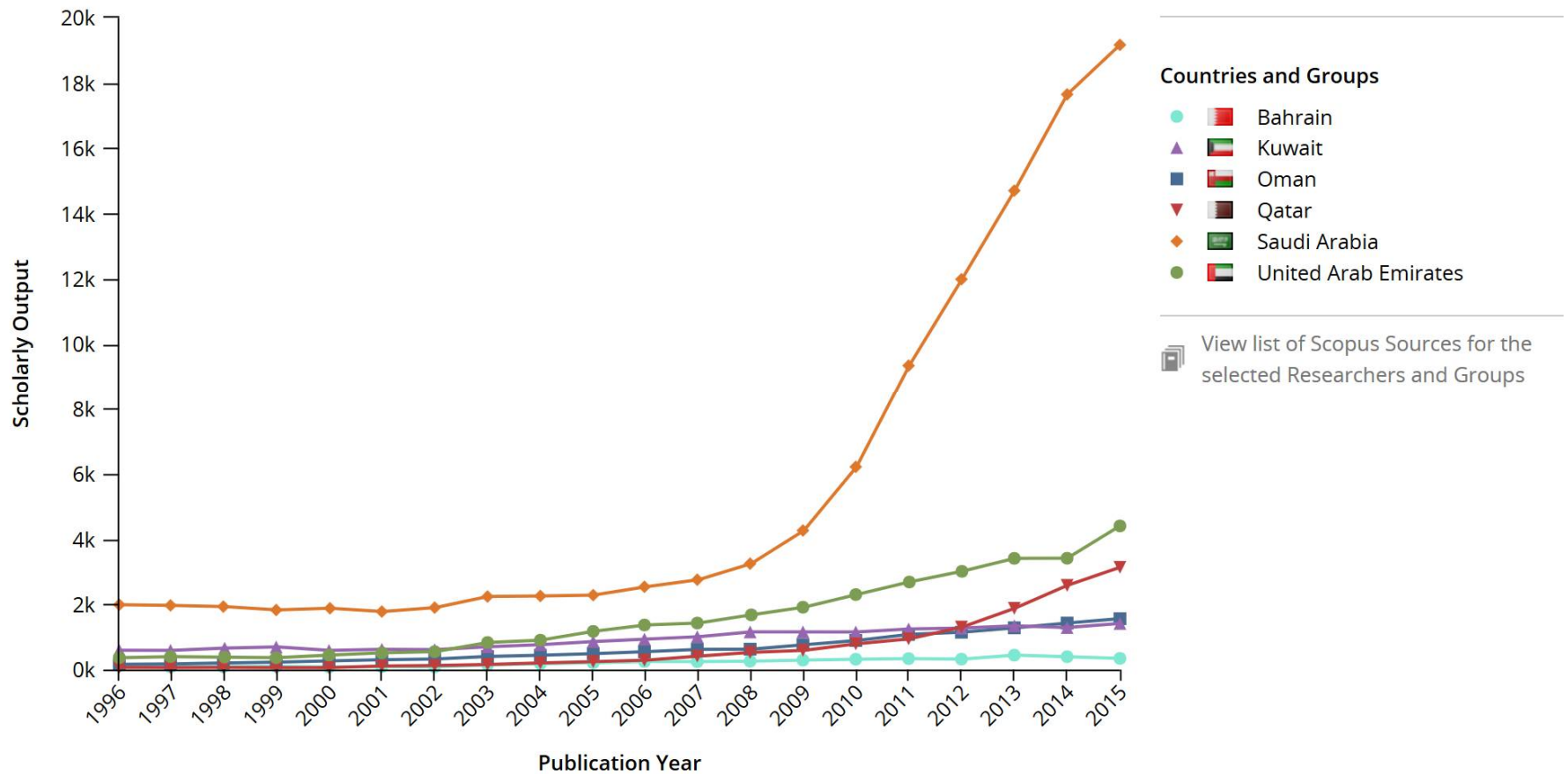


# Agenda

- Bench marking GCC LIS research
- Research publication process
- Quality and optimization of research publication
- Structuring of research publications
- Review and indexing process
- Research impact measures and evaluation metrics
- Author profiling and research networks
- Research Impact & University Rankings
- Q & A

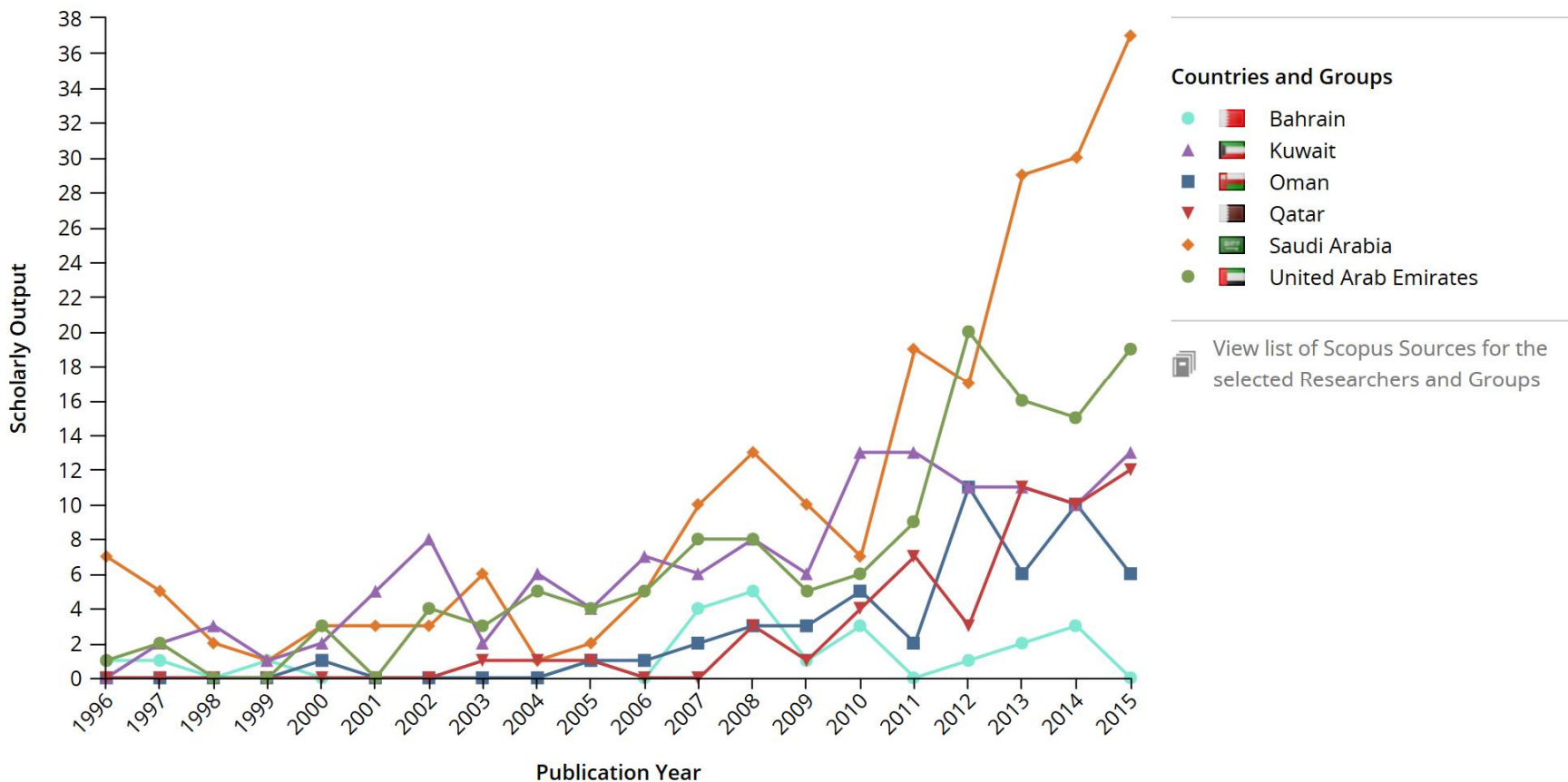
# Research Publications in **All Disciplines** **Individual GCC Countries** during 1996-2015

Visualization: Scival (Data: Scopus)



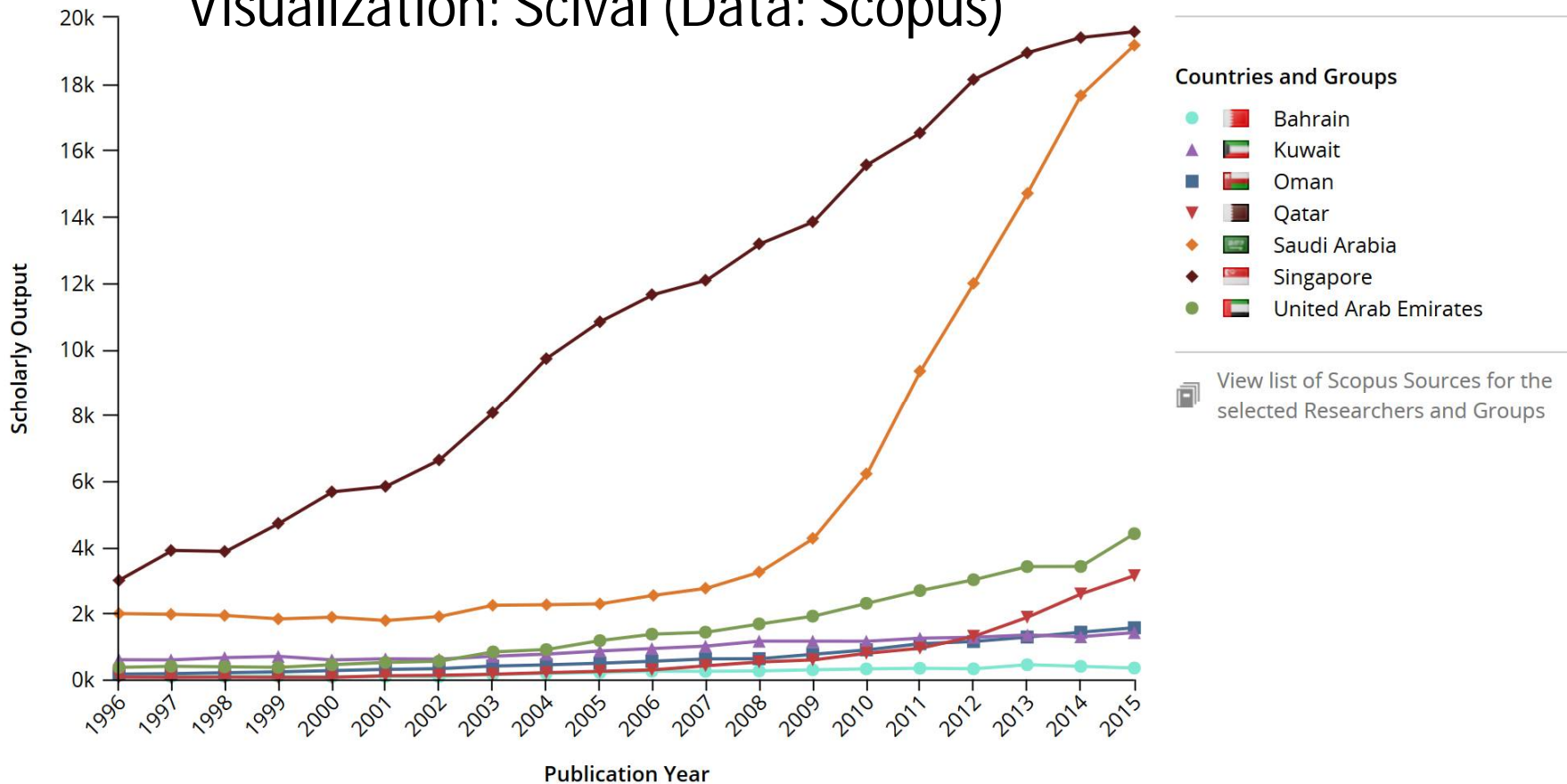
# Research Publications in **Library and Information Sciences** **Individual GCC Countries** during 1996-2015

Visualization: Scival (Data: Scopus)



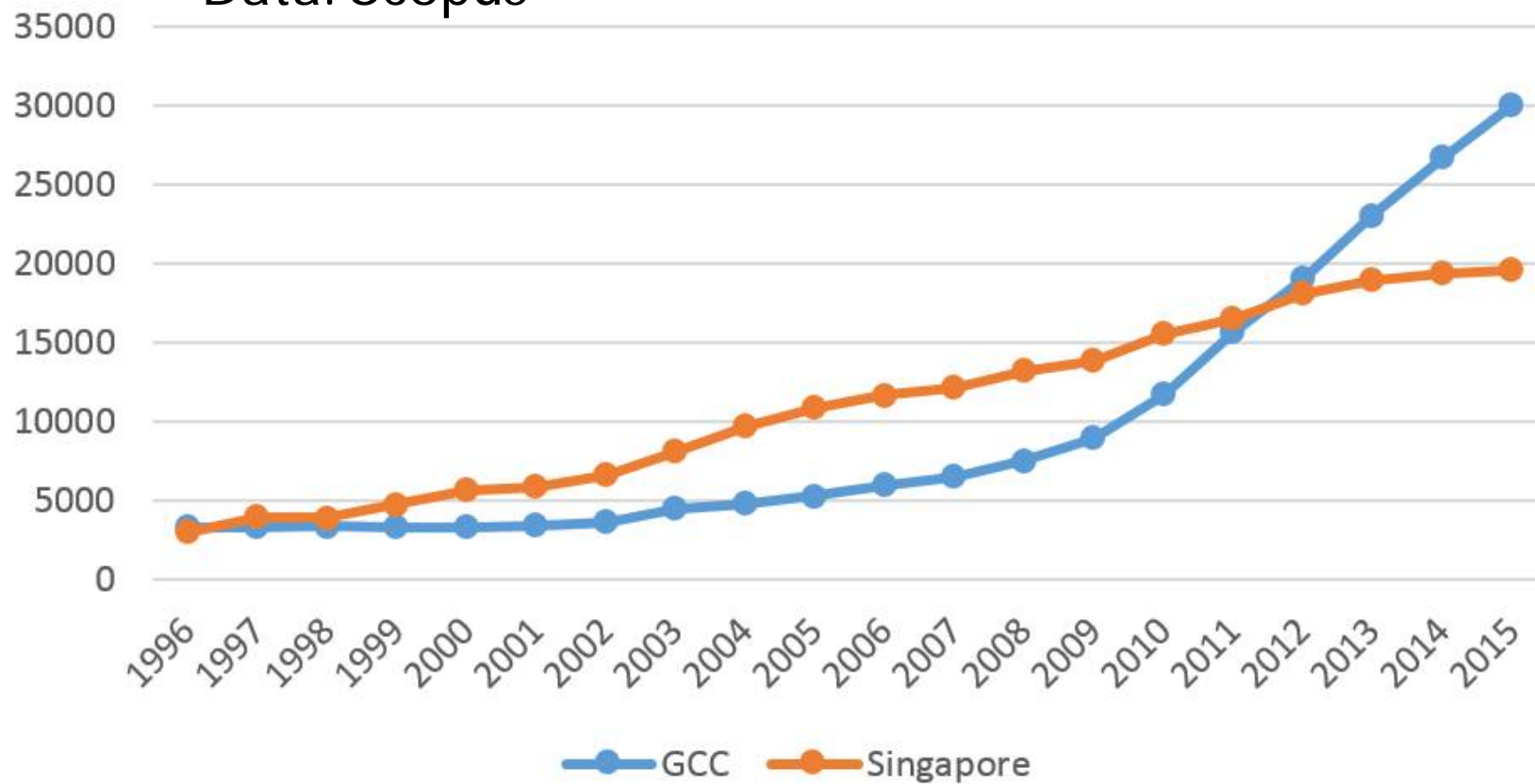
# Research Publications in **All Disciplines** **Singapore & Individual GCC Countries** during 1996-2015

Visualization: Scival (Data: Scopus)



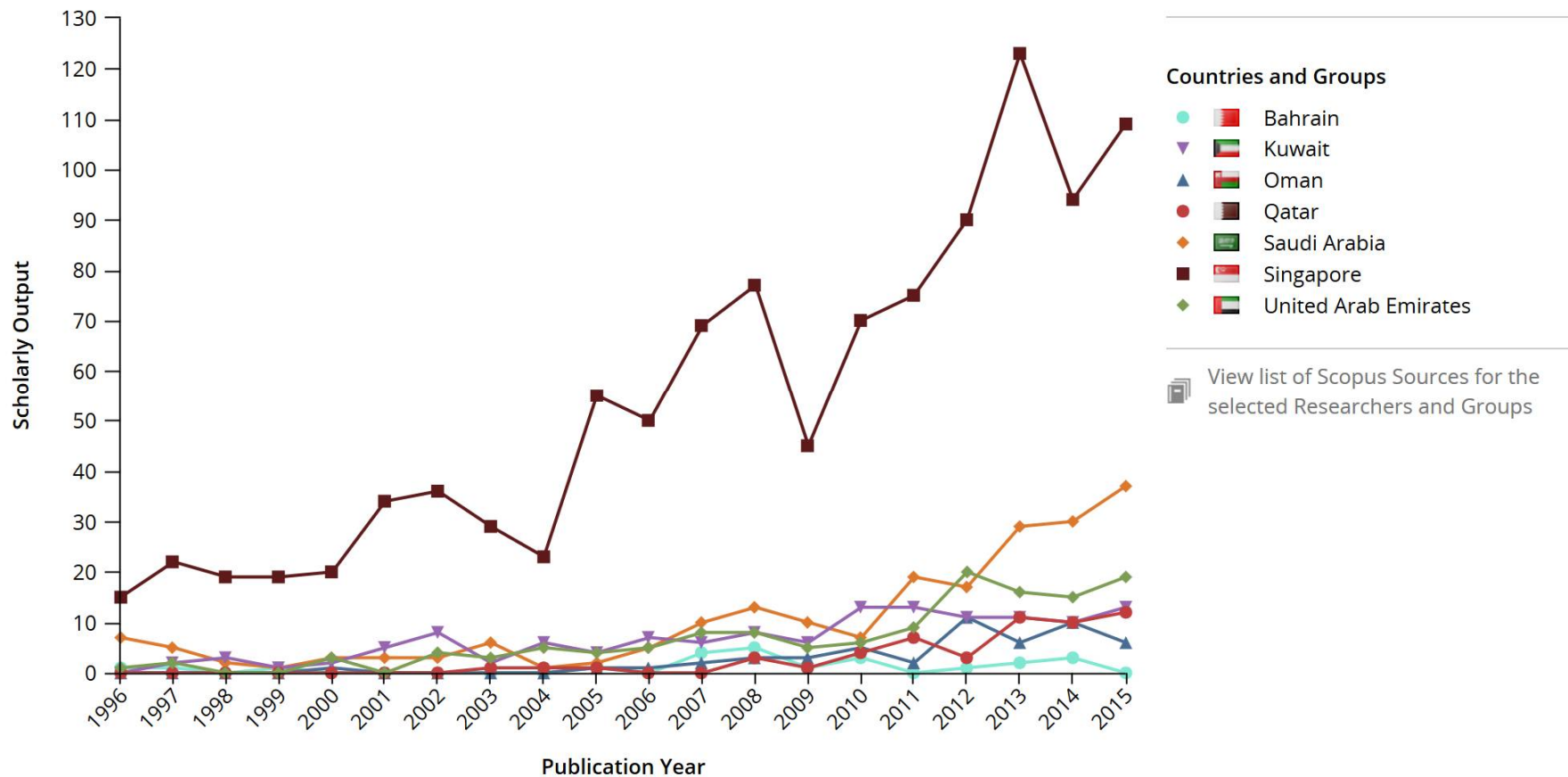
# Research Publications in **All Disciplines** **Singapore & GCC Countries together** during 1996-2015

Data: Scopus



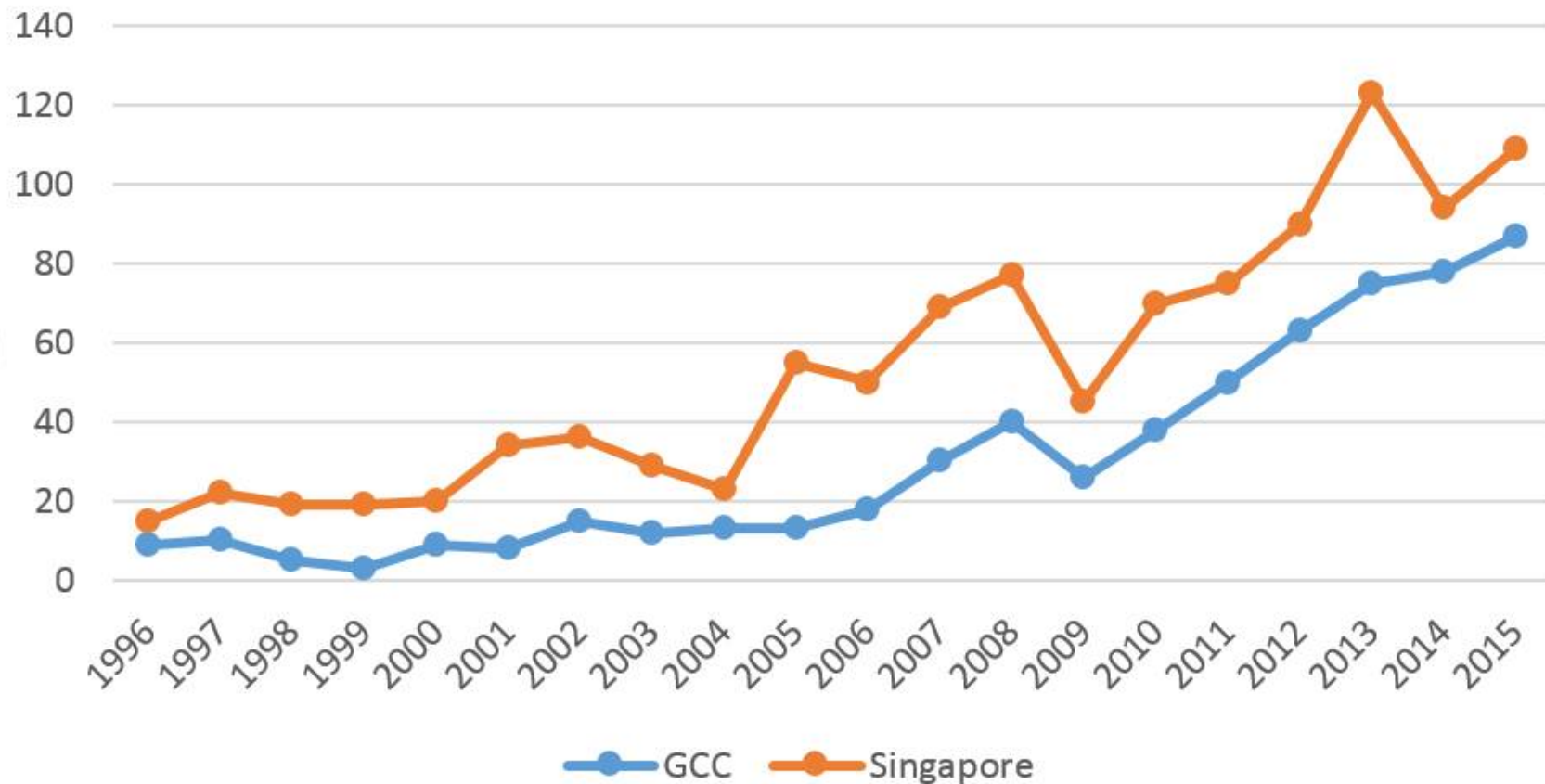
# Research Publications in **Library and Information Science** **Singapore & Individual GCC Countries** during 1996-2015

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# Research Publications in **Library and Information Science** **Singapore & GCC Countries together** during 1996-2015

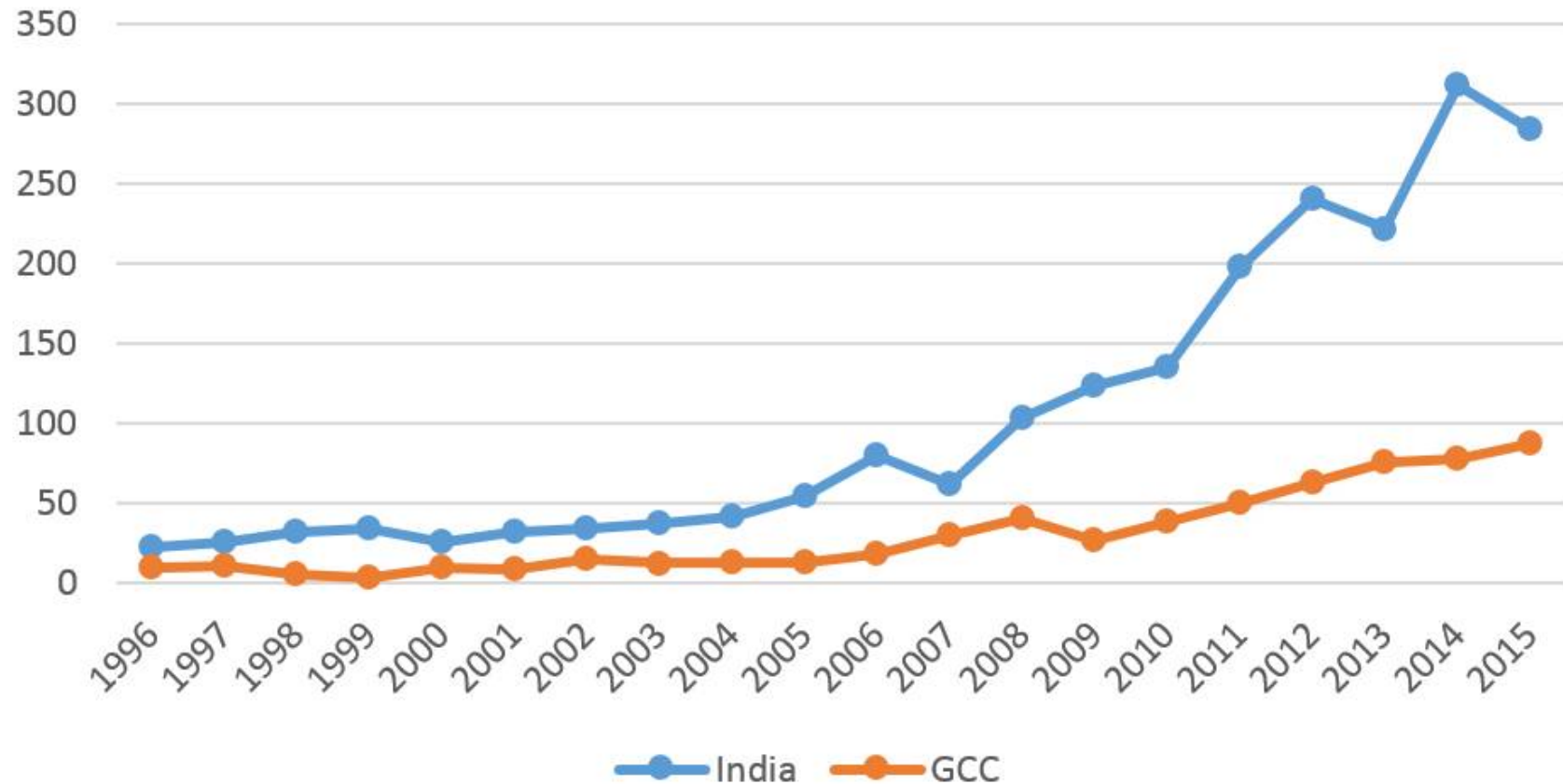
Data: Scopus





# Research Publications in **Library and Information Science** **India & GCC Countries together** during 1996-2015

Data: Scopus





- Scholarly Communication - Only reviewed and indexed research pieces qualify for the ratings and rankings of Universities and Institutions worldwide.
- It is essential to bring a large number of 'reviewed' research papers in indexed journals.
- Many of us do not gain an understanding of this.
- Creating awareness among potential LIS young researchers, librarians and faculty is important.



# Hints For Manuscript Writing

- **Title**
- **Abstract**
- **Introduction**
- **Methods and  
Materials**
- **Results, Figures &  
Tables**
- **Discussion &  
Conclusion**
- **References &  
Keywords**
- **Language Syntax**



# ABSTRACT

- Must introduce the subject in 1-2 sentences, give background
- Must cover **Aim Purpose Objective**
- Must include **Methods Results & Conclusions**
- Follow instructions e.g. Length of 300 words
- No figures
- Most people just read the abstract, therefore give important details

# INTRODUCTION

- \* Background of the subject, include Aim or purpose of the Research
- \* State what lead you to get into this Research.

- \* It Should Not Contain Discussion.
- \* should Not be too long
- \* Follow The Style of the Journal as per Guidelines

# METHODS & MATERIALS

- Sufficient Details for Others to Reproduce Results
- Clear Succinct Details (No Secrets!)
- Hidden Data is Irritating to Editors & Reviewers
- Inclusion & Exclusion Criteria of Subjects
- Adequate Sample Size
- Justification of Certain techniques
- Alternative methods considered & problems explained
- Randomization method detailed & Justified !



# RESULTS

## **Clear, Concise and Complete**

**Have to be Related to Methods**

## **Unorganized or Confusing Results Exhaust Reviewers**

**Grouping of Results to Carry a Message & to Lead to Discussion helps the Reviewers**

## **Figures – Sharp, Relevant Complete Legends**

**Tables - Clear Organized, Title & Footnotes**

# DISCUSSION

1<sup>st</sup> Discuss Own Data & must be Complete

Complete Referencing of Previous Studies

To avoid Reference to Literature that has Contrary Results is not acceptable

Editors do not ask for Subtitles, & No Need

Too Long a Discussion has Negative Impact

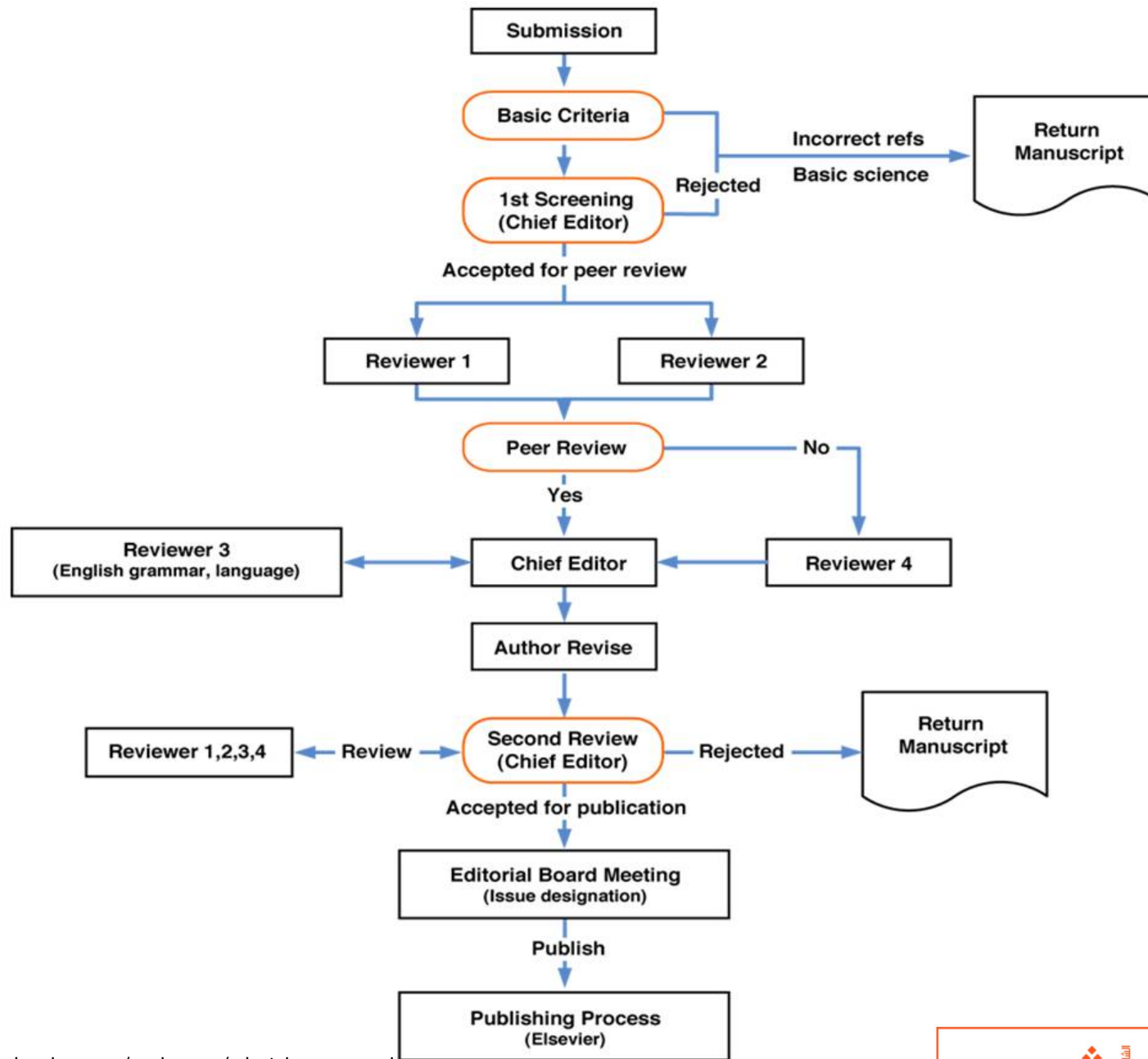
2<sup>nd</sup> Discuss & Compare with the Literature

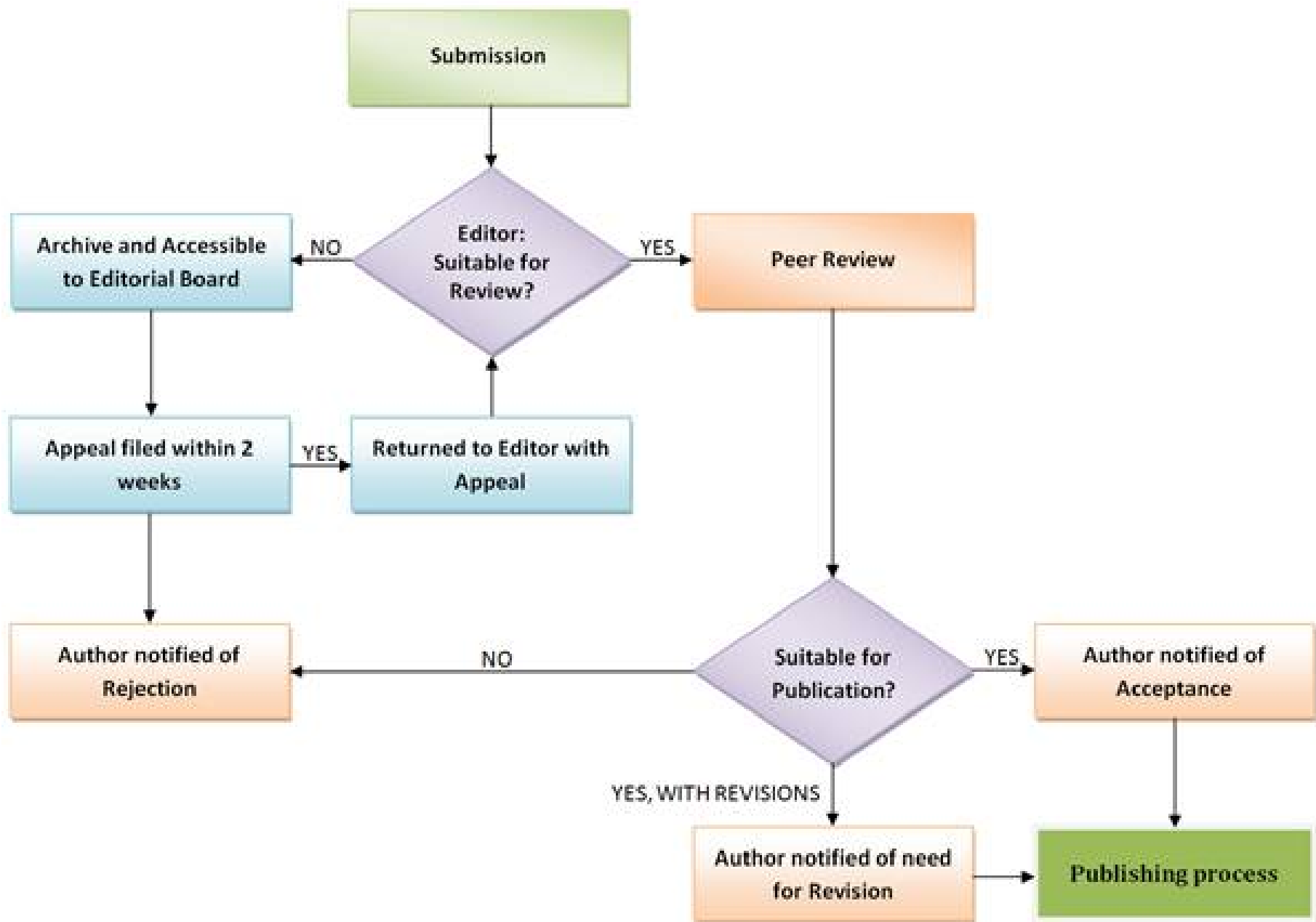
# CONCLUSION

- Must **Address the Title**
- Address the **Hypothesis** or the Questions Asked
- Conclusion must be **Concise &** to the Point
- Be Careful **Not to Overstate** and Never Conclude more than what your Data showed
- Not Necessary for Conclusion to be a Separate Section. It Can be just at the End of Discussion

# REFERENCES

- Reference Original Articles,
- References Must be Complete
- They Must be Relevant
- Too Many References have a Negative Impact
- Style Must Comply with Journal Instructions
- Errors in References are Annoying to Editors & Reviewers, & Reflects Negatively on Authors



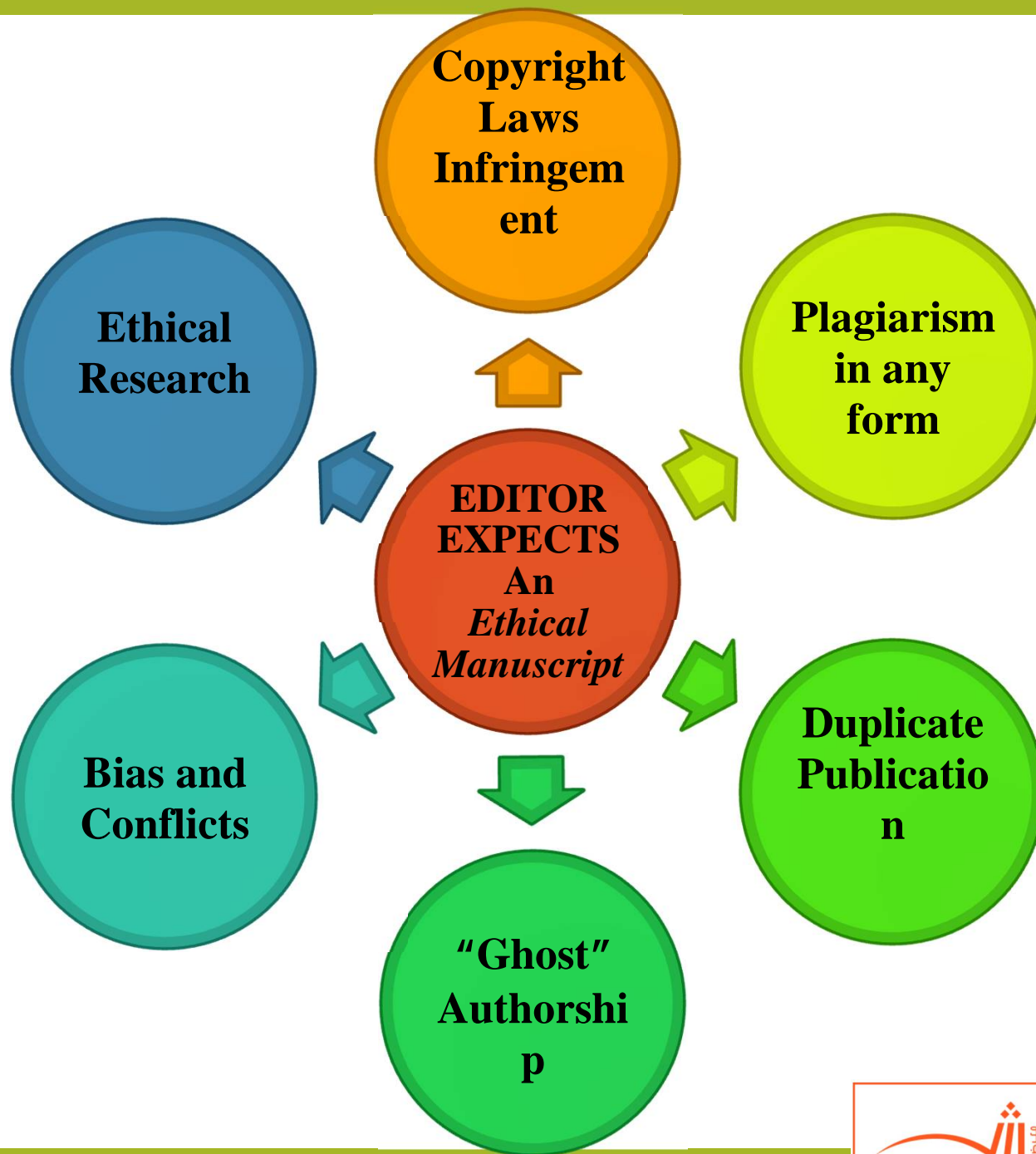




# EDITOR EXPECTS FROM AUTHORS

- **Submission of complete research data**
- **Carefully written MS, Figs. & Refs.**
- **Submission according to the journal style**
- **All instructions followed, e.g. If CD required**
- **Not to check with Editorial Office before prescribed time**
- **Submit extra data if not included in MS**
- **Submit reviewers names only if requested**
- **Editor may request author to submit raw data to the Journal' s Statistician**







INDEX

Impact  
Factor

JOURNAL

**INDEXING** - Process of creating index for all the fetched web pages and keeping them into a giant database from where it can later be retrieved. Essentially, the process of indexing is identifying the words and expressions that best describe the page and assigning the page to particular keywords.

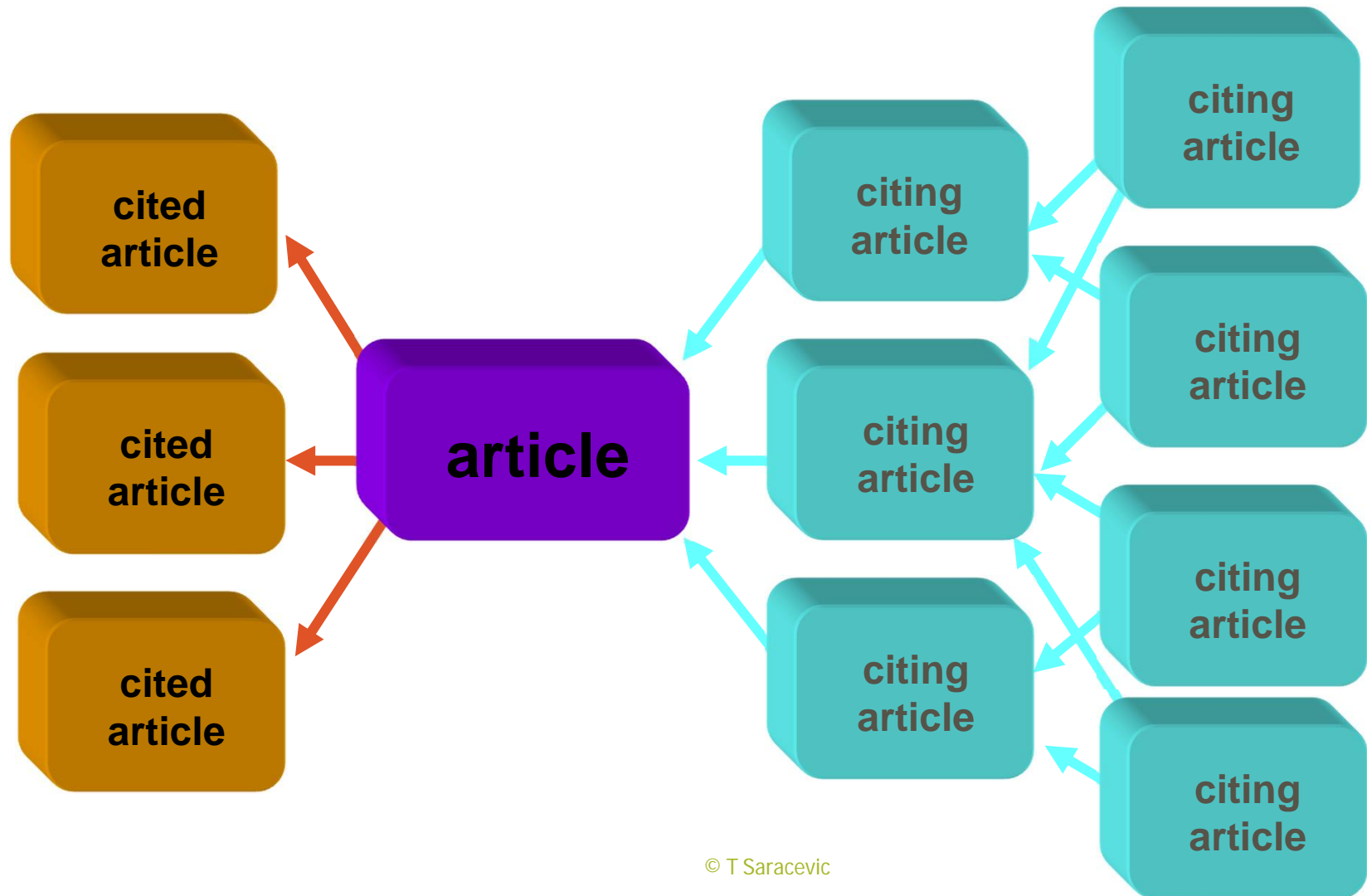
# Research Evaluation Metrics

Some numeric measures to gauge the performance and/or impact of a research publication/  
researcher/institution

- People based metrics
  - Journal based metrics
- AND Profiling**

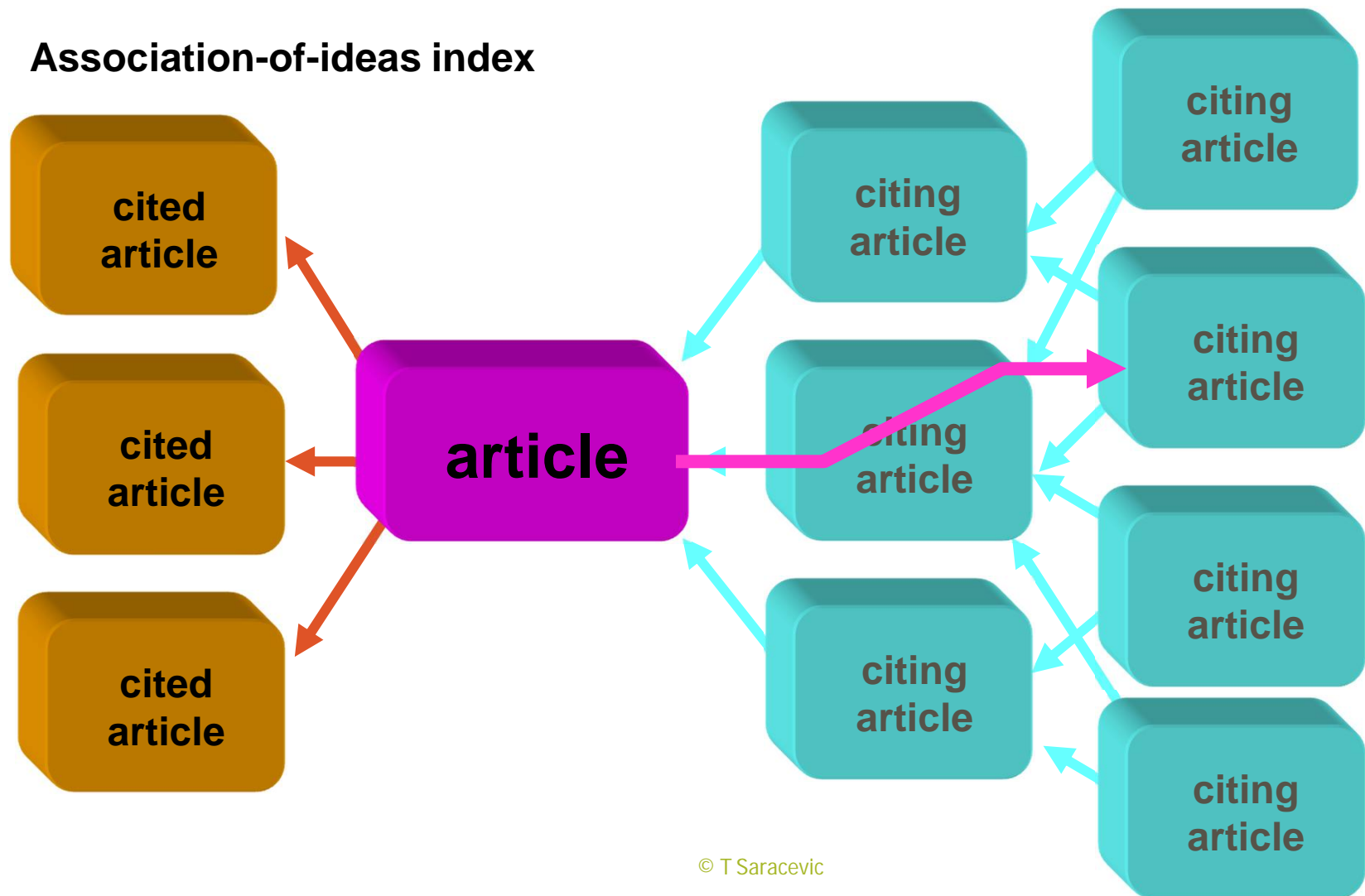


# Citation matrix



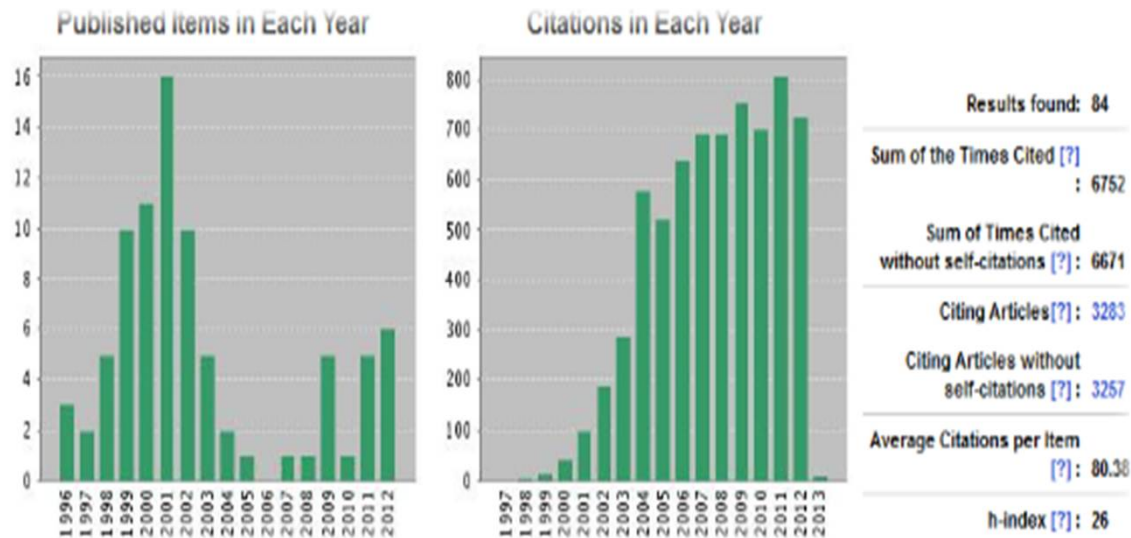
# Science Citation Index

## Association-of-ideas index



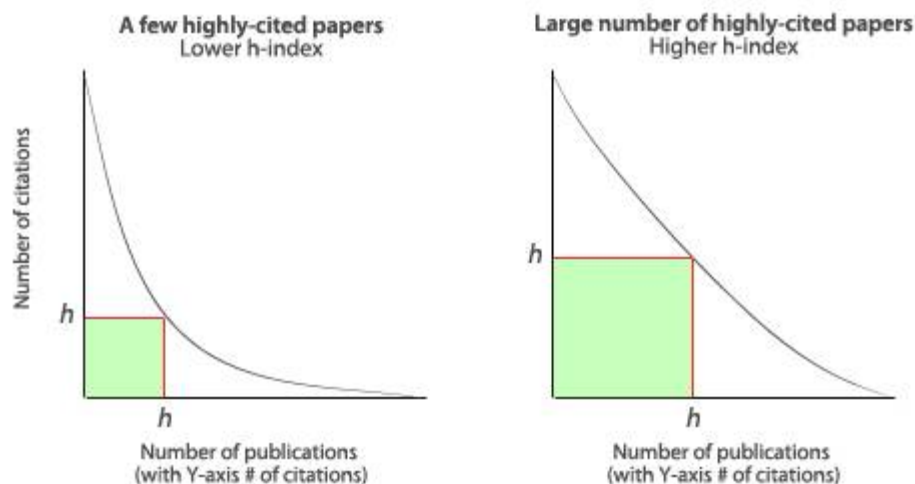
# Impact Metrics: People based citation count / citation report

- A citation report is a **collation of bibliographic details** for the documents an individual has authored, along with the **number of times those documents have been cited by others**.



# Impact Metrics: People based h-Index

- Proposed by Jorge Hirsch in 2005
- Aims at productivity as well as impact.
- To have an h-index of  $H$ ,  $H$  of a scholar's publications must have been cited by others at least  $H$  times each.
- has limitations of incomparability across fields and across career stages.



# Impact Metrics: Journal based Impact Factor

Top Ranking 10 Journals in LIS  
Data : **Journal Citation Report**



	Full Journal Title	Total Cites	Journal Impact Factor ▼
1	MIS QUARTERLY	11,320	5.384
2	JOURNAL OF INFORMATION TECHNOLOGY	1,695	4.775
3	Journal of Computer-Mediated Communication	3,160	3.541
4	JOURNAL OF THE AMERICAN MEDICAL INFORMATICS ASSOCIATION	6,622	3.428
5	INFORMATION SYSTEMS RESEARCH	5,175	3.047
6	JOURNAL OF MANAGEMENT INFORMATION SYSTEMS	3,818	3.025
7	EUROPEAN JOURNAL OF INFORMATION SYSTEMS	1,981	2.892
8	INTERNATIONAL JOURNAL OF INFORMATION MANAGEMENT	1,937	2.692
9	JOURNAL OF STRATEGIC INFORMATION SYSTEMS	1,159	2.595
10	INFORMATION SYSTEMS JOURNAL	1,052	2.522



# Impact Metrics: Journal based Free Impact Metrics

## Top 10 LIS journals

Data: SCImago Journal Rank (SJR)

	Title	Type	↓ SJR
1	<a href="#">Information Systems Research</a>	journal	4.397 Q1
2	<a href="#">European Journal of Information Systems</a>	journal	2.382 Q1
3	<a href="#">College and Research Libraries</a> 	journal	2.296 Q1
4	<a href="#">Information Communication and Society</a>	journal	2.009 Q1
5	<a href="#">Journal of Cheminformatics</a> 	journal	1.746 Q1
6	<a href="#">Library and Information Science Research</a> 	journal	1.629 Q1
7	<a href="#">Journal of Chemical Information and Modeling</a>	journal	1.610 Q1
8	<a href="#">Journal of the Association for Information Science and Technology</a>	journal	1.601 Q1
9	<a href="#">Reference Services Review</a>	journal	1.546 Q1
10	<a href="#">Journal of Information Technology</a>	journal	1.474 Q1

# Why others would cite your work?

- To help readers understand the **context of an argument**, who may share their interest in a particular area of study.
- To allow them to acknowledge those authors whose research **contributed to their learning and research**.
- To illustrate their own learning process, also draw attention to the **originality and legitimacy** of their own ideas.
- To demonstrate their integrity and skill as a responsible researcher in their field of study.
- To reflect the careful and thorough work they have put into locating and exploring reference sources.



In a nutshell - To “**stand on the shoulders of the giants**” and then proceed in **furthering the research**

# altmetrics

## Impact



highly cited

highly saved

+2

highly discussed

highly viewed

- Supplementing Peer-Review, traditional citations
- Include discussion (e.g. Twitter), saving/downloads (e.g. Mendeley Recommendations etc).

# PlumX@KAUST



David I. Ketcheson

Associate Professor

Website, Academia, Github, Google+, Google Scholar, ORCID, Mendeley, ResearchGate, Twitter

Show Profile Data Embed Widget

### Artifact Summary


- Code: 57
- Article: 44
- Conference: 6
- Video: 6
- Paper: 4

Researcher from:

Computer, Electrical and Mathematical Sciences and Engineering (CEMSE) / Applied Mathematics and Computational Science

All (122) Code (57) Article (44) Conference Paper (6) Video (6) Paper (4) Figure (2) Media (1) Report (1) Book (1)

Impact by Type: All



### Usage

Clicks: 12  
Abstract Views: 16349  
Downloads: 4579

### Captures

Bookmarks: 1  
Readers: 19

### Mentions

Comments: 5

### Social Media

Likes: 160  
Shares: 72  
+1s: 91

### Citations

RePEc: 1

[see details](#)

# Author Profiling

- Creation of a unique author identifier.
- Most databases allow.
- Connect all your papers together within a database.
- Correctly identifying all publications by an author within a single database
- Avoid confusions in multiple names (including maiden names), similar names/initials
- Linking articles together will increase the h-index within a database.



Be ready to known  
as a **NUMBER**

# Author Profiling

## Author Identifiers

ORCID

Connecting Research  
and Researchers

<http://orcid.org/>

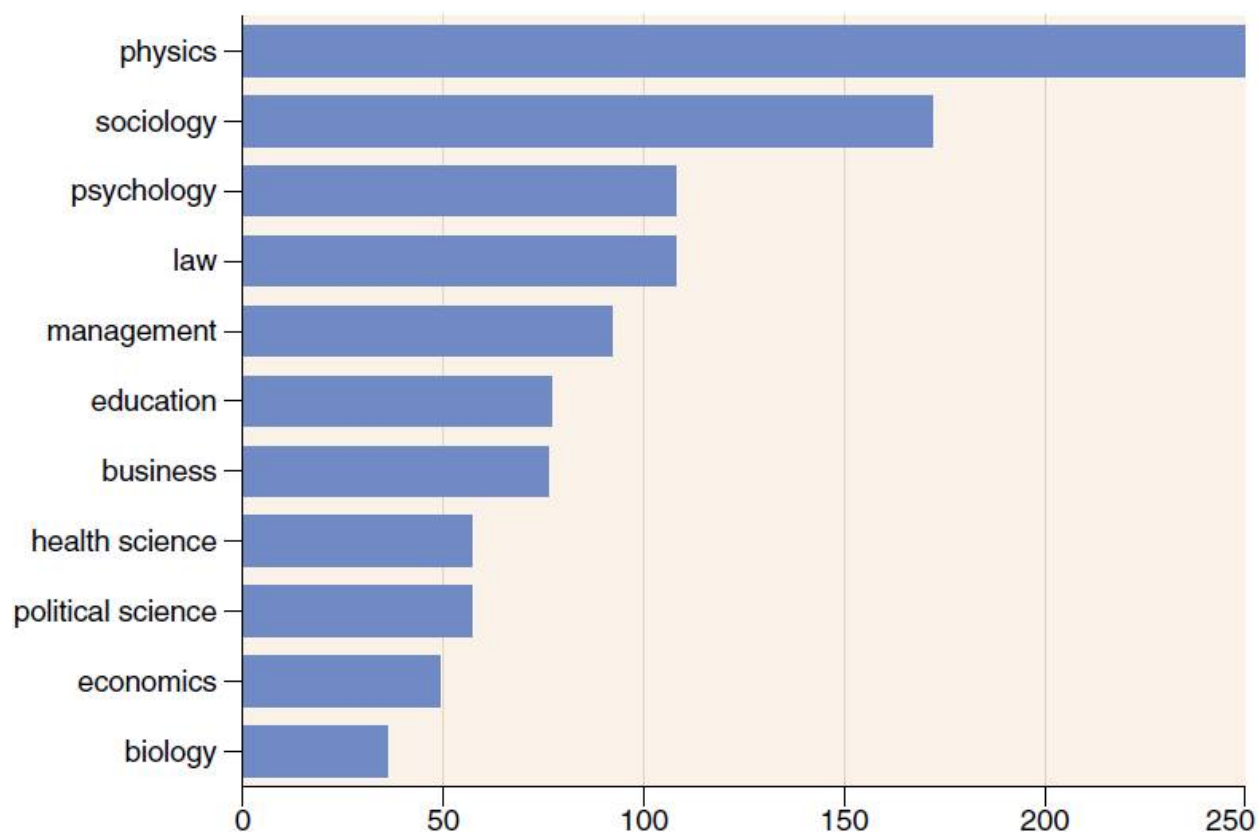
**ORCID provides a persistent digital identifier that distinguishes you from every other researcher and, through integration in key research workflows such as manuscript and grant submission, supports automated linkages between you and your professional activities ensuring that your work is recognized.**

**Include your ORCID identifier on your Webpage, when you submit publications, apply for grants, and in any research workflow to ensure you get credit for your work.**

# Open Access and Citation Impact

## We Cite .. What We See.

By definition an open-access article has greater visibility, and it's becoming evident that scientists do take the opportunity to read and use what they would otherwise not have seen.



**Across a range of scholarly disciplines, opening access to articles increases their citation rate**

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# WEIGHTING SCHEME FOR RANKINGS SCORES

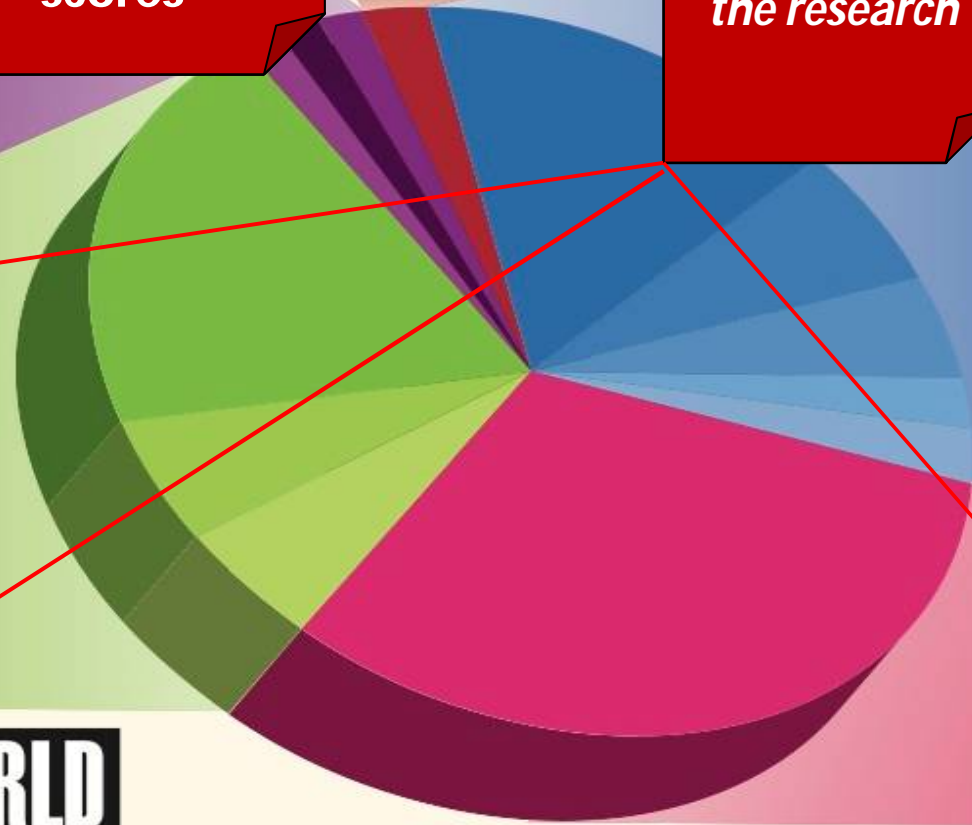
<b>International mix – staff and students</b>	
Ratio of international to domestic staff	2.5%
Ratio of international to domestic students	2.5%
Proportion of internationally co-authored research papers	2.5%

**Research publications impact on 38.5% of the total scores**

<b>Industry income – innovation</b>	
Research income from industry (per academic staff)	2.5%

**Improving the impact**  
*By increasing the visibility of the research*

<b>Research – volume, income and reputation</b>	
Reputational survey – research	18%
Research income (scaled)	6%
Papers per academic and research staff	6%



<b>Teaching – the learning environment</b>	
Reputational survey – teaching	15%
PhD awards per academic	6%
Undergraduates admitted per academic	4.5%
Income per academic	2.25%
PhD awards/bachelor's awards	2.25%

<b>Citations – research influence</b>	
Citation impact (normalised average citations per paper)	30%

For the latest World University Rankings news, debate and social networking, see [www.timeshighereducation.co.uk/world-university-rankings/](http://www.timeshighereducation.co.uk/world-university-rankings/)





# Thank you



Vijay and Saif