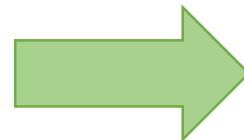


# **PENULISAN KARYA ILMIAH UNTUK PUBLIKASI PADA JURNAL INTERNASIONAL BEREPUTASI**

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LPPM UNIVERSITAS MUHAMMADIYAH JAKARTA  
2023

# Research and publication

Riset ↔ Publikasi



- Nyawa dari publikasi adalah riset
- Produktivitas publikasi = produktivitas riset

- Sustainable development of science and technology (data, knowledge)
- Developing new ideas and approaches
- Transfer of knowledge
- Findings: useful vs. garbage
- Personal recognition and professional development (publish or perish)
- Funding and carrier (individual & organization)
- PhD degree or promotion
- Institution and country rank
- Reward, Akuntabilitas

- Ilmu itu bagaikan hasil panen/buruan didalam karung, menulis adalah ikatannya (Imam Syafi'i)*
- Orang boleh pandai setinggi langit, tapi selama ia tidak menulis, ia akan hilang dari masyarakat dan sejarah. Menulis adalah bekerja untuk keabadian (Pramoedya Ananta Toer)*

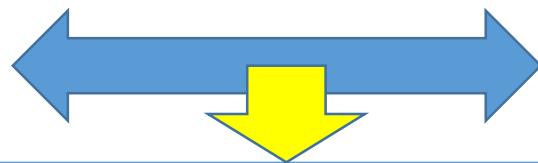
# Aspek Penting dalam Publikasi

- ❑ Kualitas riset: tinggi vs rendah
- ❑ Banyak jurnal (internasional (bereputasi vs predatory) dan nasional terkreditasi) dan seminar: from low to high quality
- ❑ Proses publikasi: cepat sampai sangat lama



# RISET & Scientific Article

HULU: riset

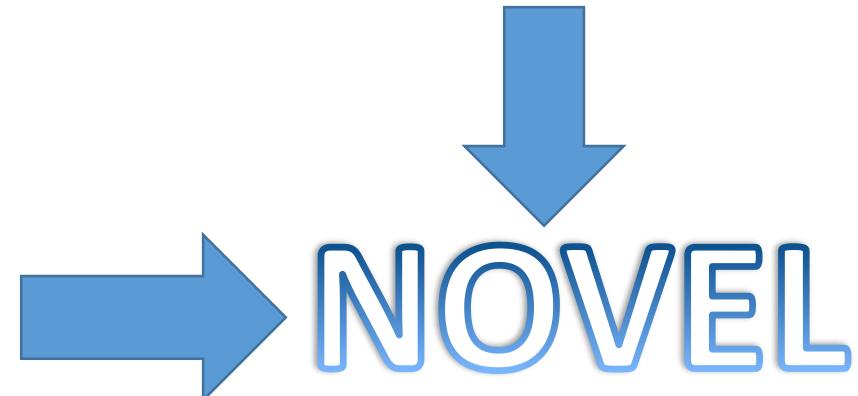


HILIR: Scientific Article

- The search for knowledge, or as any systematic investigation, with an open mind, to establish novel facts, usually using a scientific method
- A *systematic process of critical inquiry leading to valid propositions and conclusions that are communicated to interested others.*
- Some subjects require us to go beyond our personal knowledge and experience
- ...

Research is undertaken to:

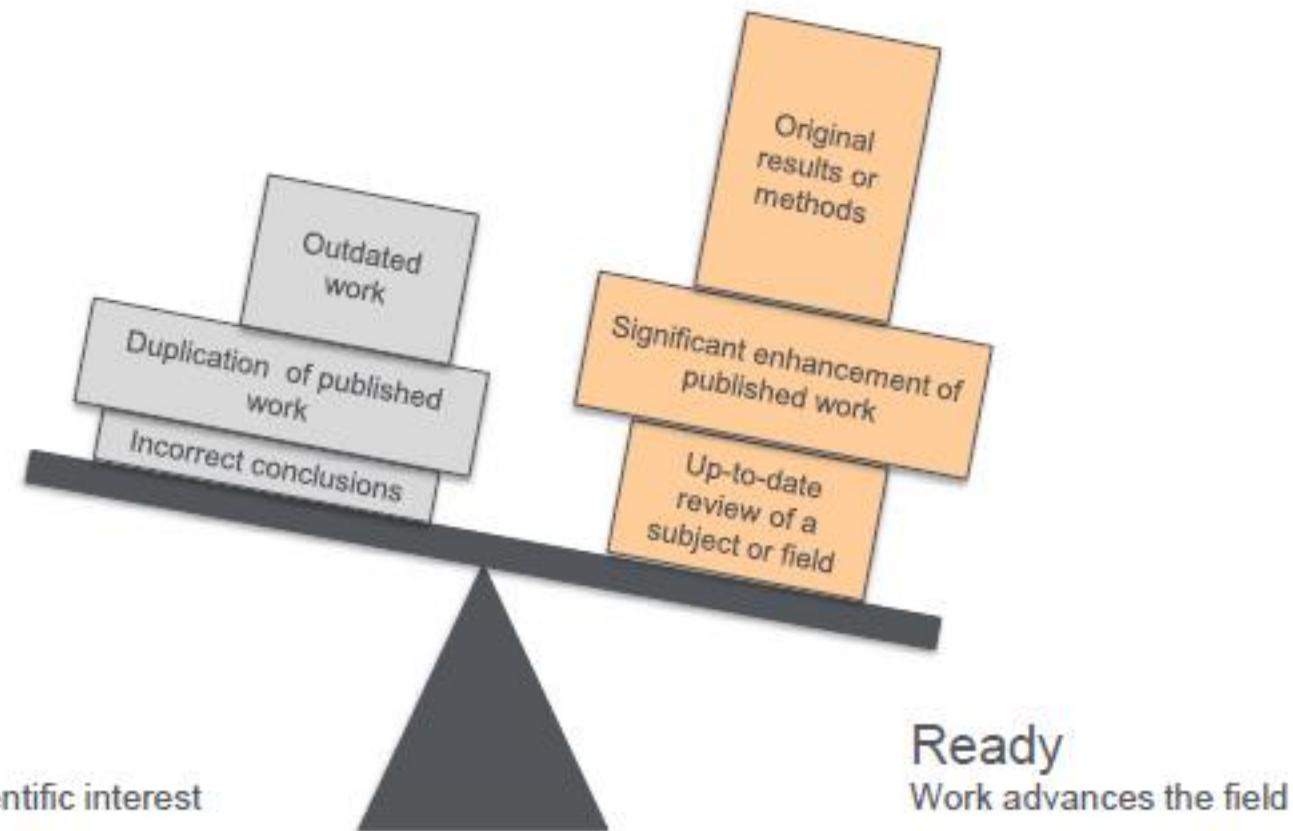
- explore an idea,
- probe an issue,
- solve a problem,
- make an argument that compels us to turn to outside help
- ....



Publication

## Planning your article

Are you ready to publish?



# RESEARCH AND PUBLICATION PROCESS

Before the research

- Search the literature and keep a record of the references
- Prepare dummy tables for results

During the research

- Record the results
- Update the literature

After completion of the research

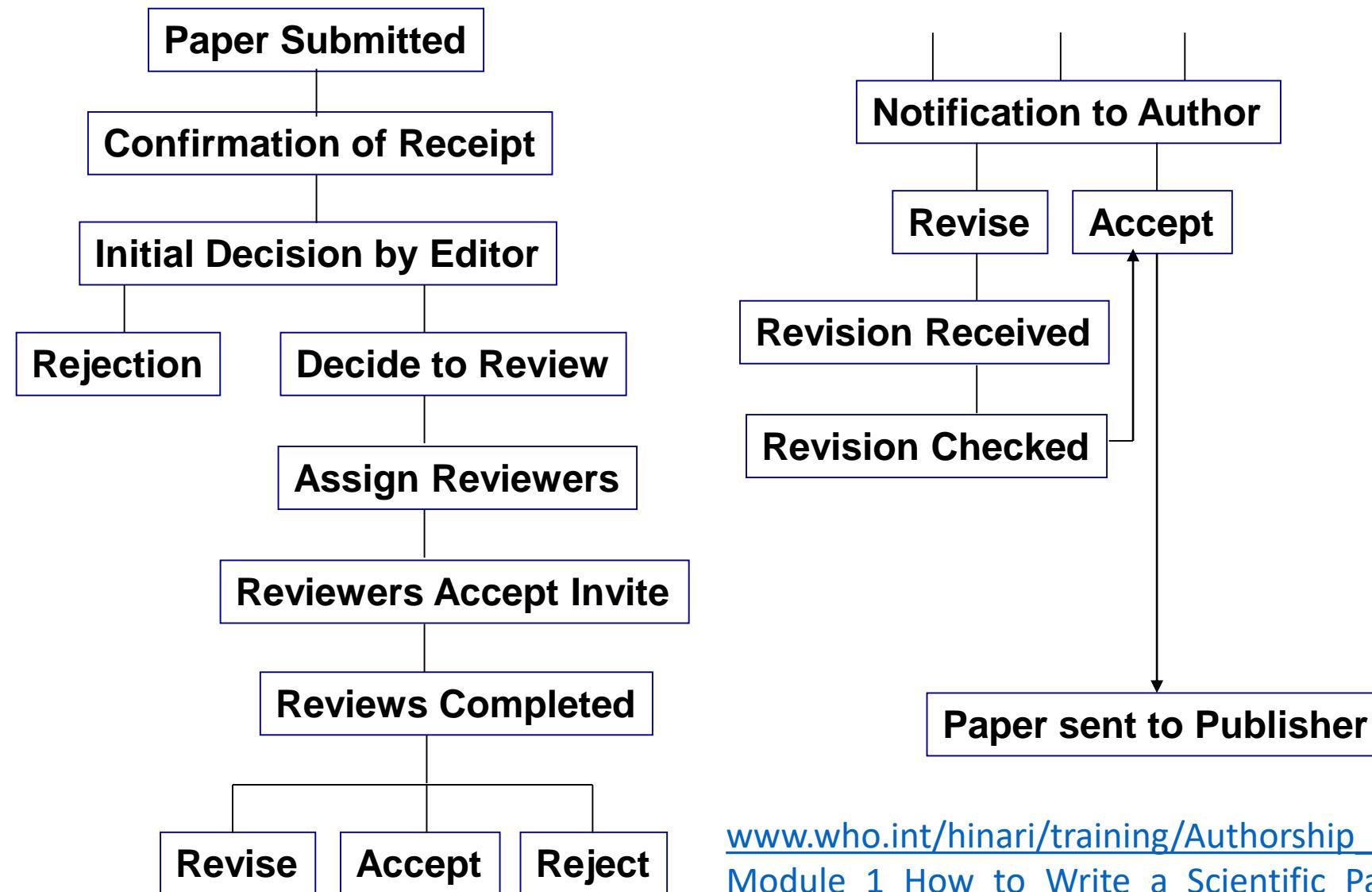
- Use a systematic approach, building the paper step by step
- Start with an outline, which will serve as framework
- The discussion is the part that requires most careful thought and interpretation
- Begin with the easiest section
- Decide on the journal to which the article will be submitted
- Write the rough draft: Once you start, write as fast as you can
- Put the paper aside for several days /weeks and then re-read it
- Give a version of the paper to a colleague or colleagues to review it
- Date all drafts

ArT

# JENIS PUBLIKASI

- Artikel dalam Jurnal: [review](#), penelitian, short communication, letter to editor
- Artikel dalam Prosiding Konferensi
- Buku Serial
- Buku, book chapter
- Publikasi Perdagangan
- Laporan

# Overview of Peer Review Process



[www.who.int/hinari/training/Authorship\\_Skills](http://www.who.int/hinari/training/Authorship_Skills)  
Module 1 How to Write a Scientific Paper  
2010\_04.ppt

# What Should be written

HAKEKAT  
PUBLIKASI:  
PENGEM-  
BANGAN  
IPTEK(S)



## Determine if you are ready to publish

You should consider publishing if you have information that advances understanding in a specific research field

### This could be in the form of:

- Presenting new, original results or methods
- Rationalizing, refining, or reinterpreting published results
- Reviewing or summarizing a particular subject or field

If you are ready to publish, a strong manuscript is what is needed next



# Scientific misconduct

## Research misconduct?:

The Department of Health and Human Services defines research misconduct as:

Fabrication, falsification, or plagiarism in proposing, performing, or reviewing research results.

**Fabrication:** making up results and recording or reporting them

**Falsification:** manipulation of research materials, equipment, or processes, or changing or omitting results such that the research is not accurately represented in the record.

**Plagiarism:** the appropriation of another's ideas, processes, results, or words without giving proper credit.

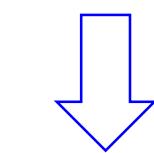
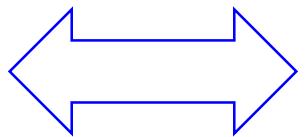
Authorship, Multiple submission, Ownership, Conflict of interest, etc.

# Scientific Journal

- a **scientific journal** is a **periodical** publication intended to **further the progress of science**, usually by reporting new research\*
- a periodical that serves as a source of **scientific information** and means of scientific communication\*\*

## International journal

means more than one country or nation is involved within journal activities ...  
peer reviewed



(General)

- Peer reviewed
  - Diversity of the countries and the topics covered (Authors, papers, editors, etc.)
  - The journal covers many interests in common/general interest
  - International audience (International circulation)
- (DIKTI, existing)
- Editorial board berasal dari berbagai negara serta berdomisisili di negaranya
  - Bahasa yang digunakan bahasa PBB
  - Terbit secara teratur dan beredar di berbagai negara

# Selecting an International Journal

- Search the journal using journal finder
- Check the aims and scope of the journal to see if your article is a good fit (see the published articles)
- Check the journal reputation (Indexation, Impact factor, citation, etc. ... ISI Thomson)
- Consider questionable journals ... better to avoid them e.g.,:  
<https://scholarlyoa.com/publishers/>  
Tidak semua jurnal yang ada di laman tersebut tidak baik namun lebih baik menghindari.
- Submit to only one journal at a time: scientific misconduct
- Avoid a journal that has been discontinued by a reputable database

# Selecting an International Journal

## Journal database

e.g.:

- [www.scimagojr.com](http://www.scimagojr.com)
- [Scopus.com](http://Scopus.com)
- [Scencedirect.com](http://Scencedirect.com)
- [journal finder.elsevier.com](http://journal finder.elsevier.com)

## Choosing the right journal

Investigate all candidate journals on [Elsevier.com](http://Elsevier.com) to find out:

- Aims and scope
- Accepted types of articles
- Readership
- Current hot topics
  - go through the abstracts of recent publications

The screenshot shows the Elsevier journal page for "Surface Science (including Surface Science Letters)". It includes the journal logo, impact factor (2.010), and several recent articles with their titles and authors.

**Surface Science (including Surface Science Letters)**  
A Journal Devoted to the Physics and Chemistry of Surfaces  
Surface Science deals with fundamental experimental and theoretical studies in the physics and chemistry of surfaces and interfaces. It covers topics contributing to a better understanding of basic phenomena...

**Impact Factor: 2.010**  
5-Year Impact Factor: 1.698  
Impact Factor: 4.211 (2012)  
CiteScore: 4.02 (2012)

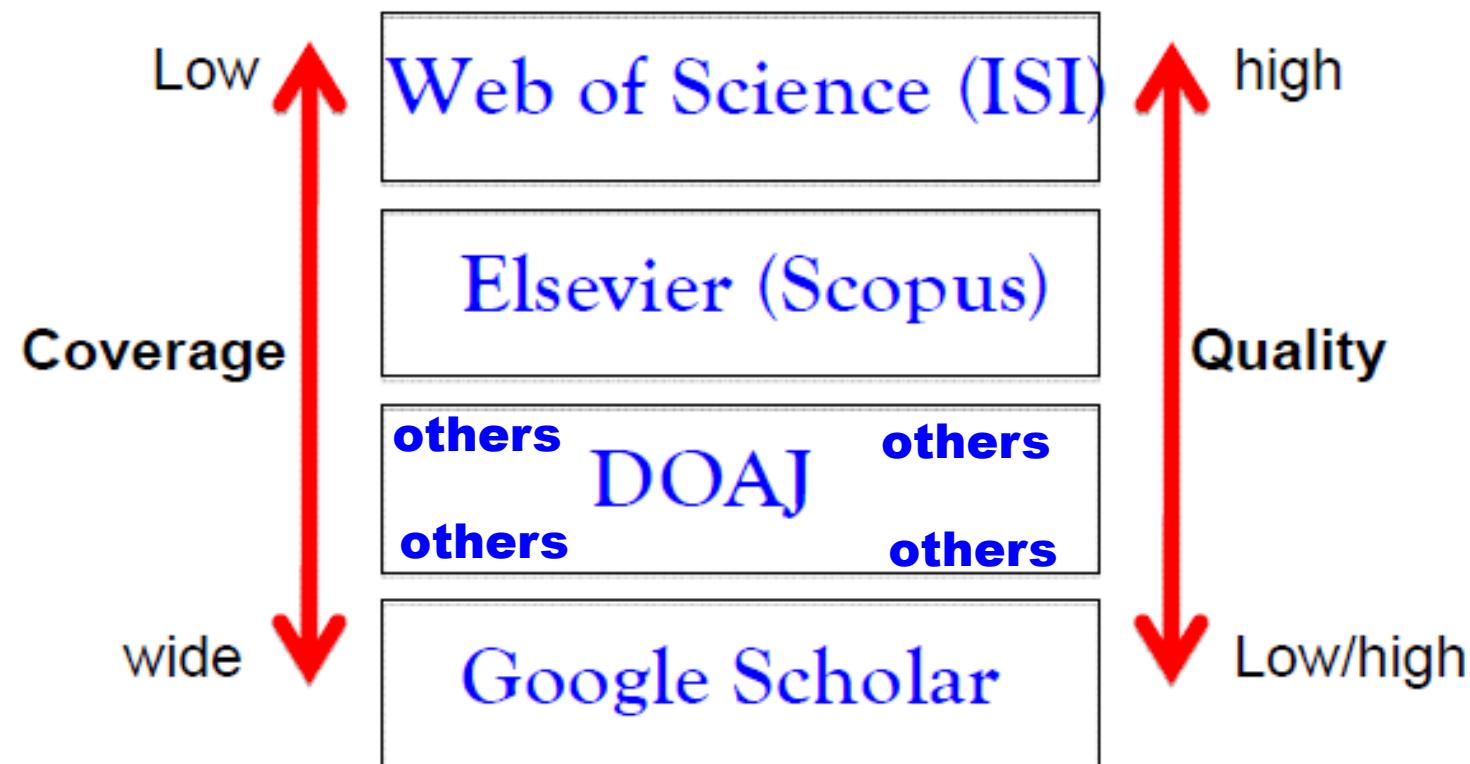
**Most Read Articles**  
Carbon nanotube opportunities and challenges  
...  
Hydrogen intercalation of graphite gels  
...  
Characterization of peptide immobilization on acrylate terminated surface via click chemistry  
...  
**Most Cited Articles**  
Chemical bonding of PTOx on Ag surfaces and the formation of interface states  
...  
Graphene on metal surfaces  
...  
A DFT + DZ description of oxygen vacancies at the TiO<sub>2</sub>(110) surface  
...  
**Special Issues**  
Electroactive Surfaces and Interfaces  
Volume 60, Issues 17-18 (2012)

**Open access solutions available for this journal**

**SciVerse**  
SciVerse Application Co-Author Visualizer

# Selecting an International Journal

Journal indexing service. Indexation of a journal is considered a reflection of its quality. Indexed journals are considered to be of higher scientific quality as compared to non-indexed journals.

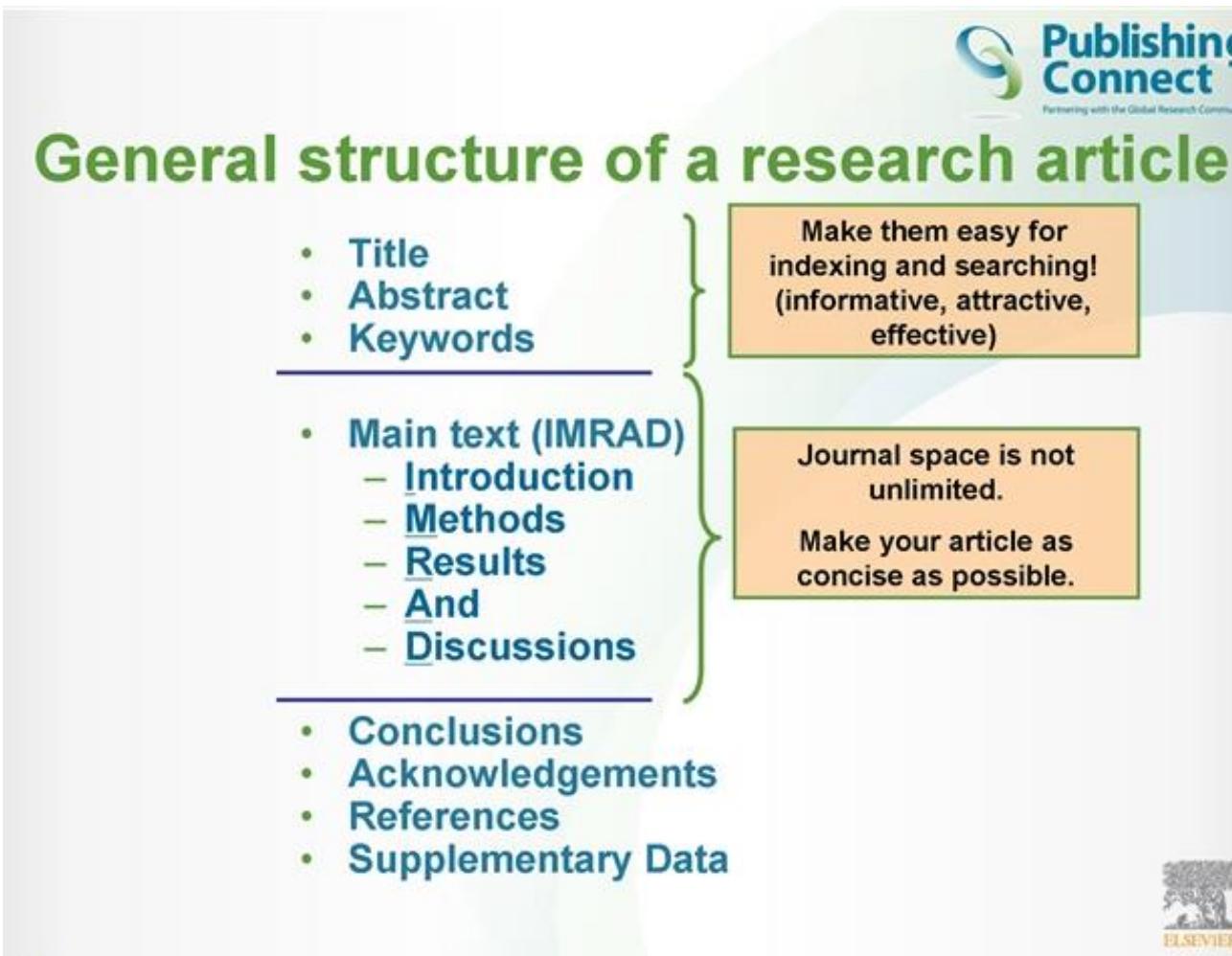


## A good scientific paper answers the following issues

- What is the problem that is addressed? ... introduction
- Why is it important? ... introduction
- How did you study the problem? .... methods
- What are your results? ... results
- What are the implications of the results? ... discussion
- What do you recommend as further study for others? ... discussion

# Structure of Scientific paper

## IMRAD VS NON-IMRAD



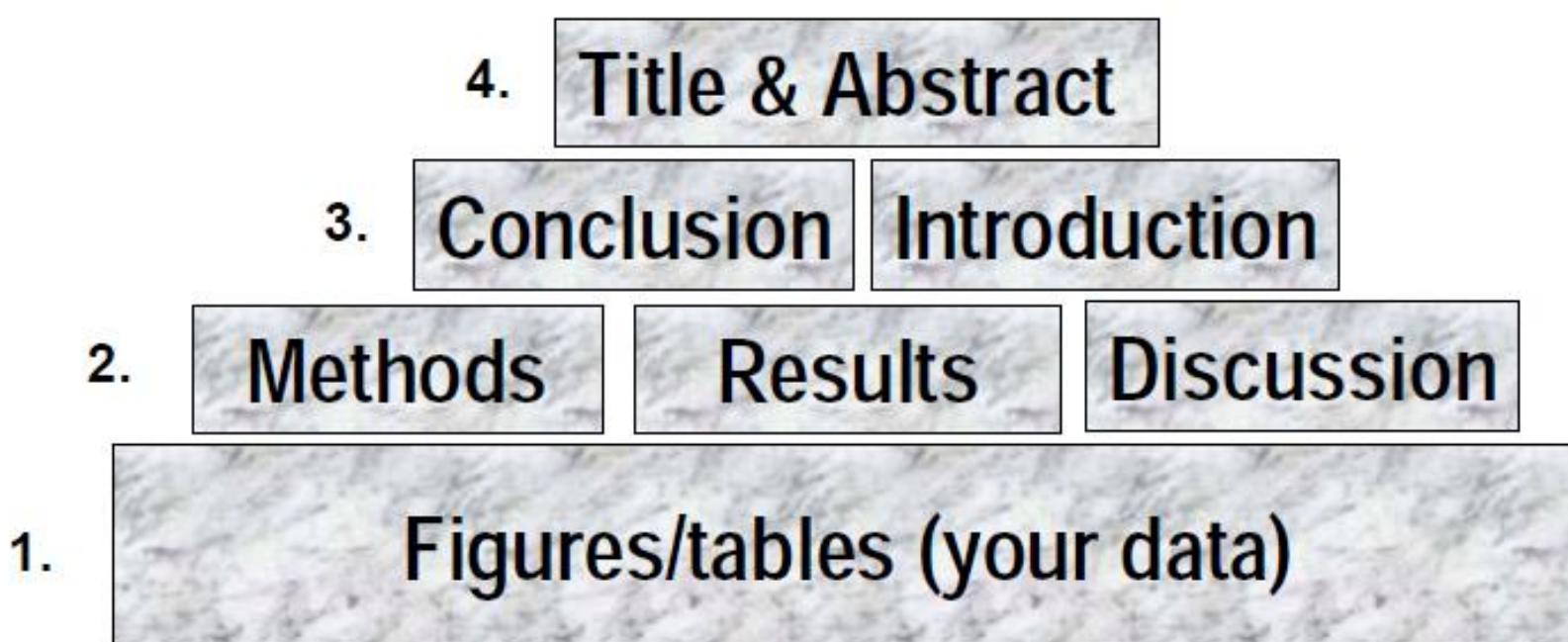
Four of the most common mistakes made include :

- (i) papers without a clear and logical structure,
- (ii) failure to state the aims/purpose of the article,
- (iii) lack of in-depth review of the literature
- (iv) conclusions that are disproportionate to the results from data analysis

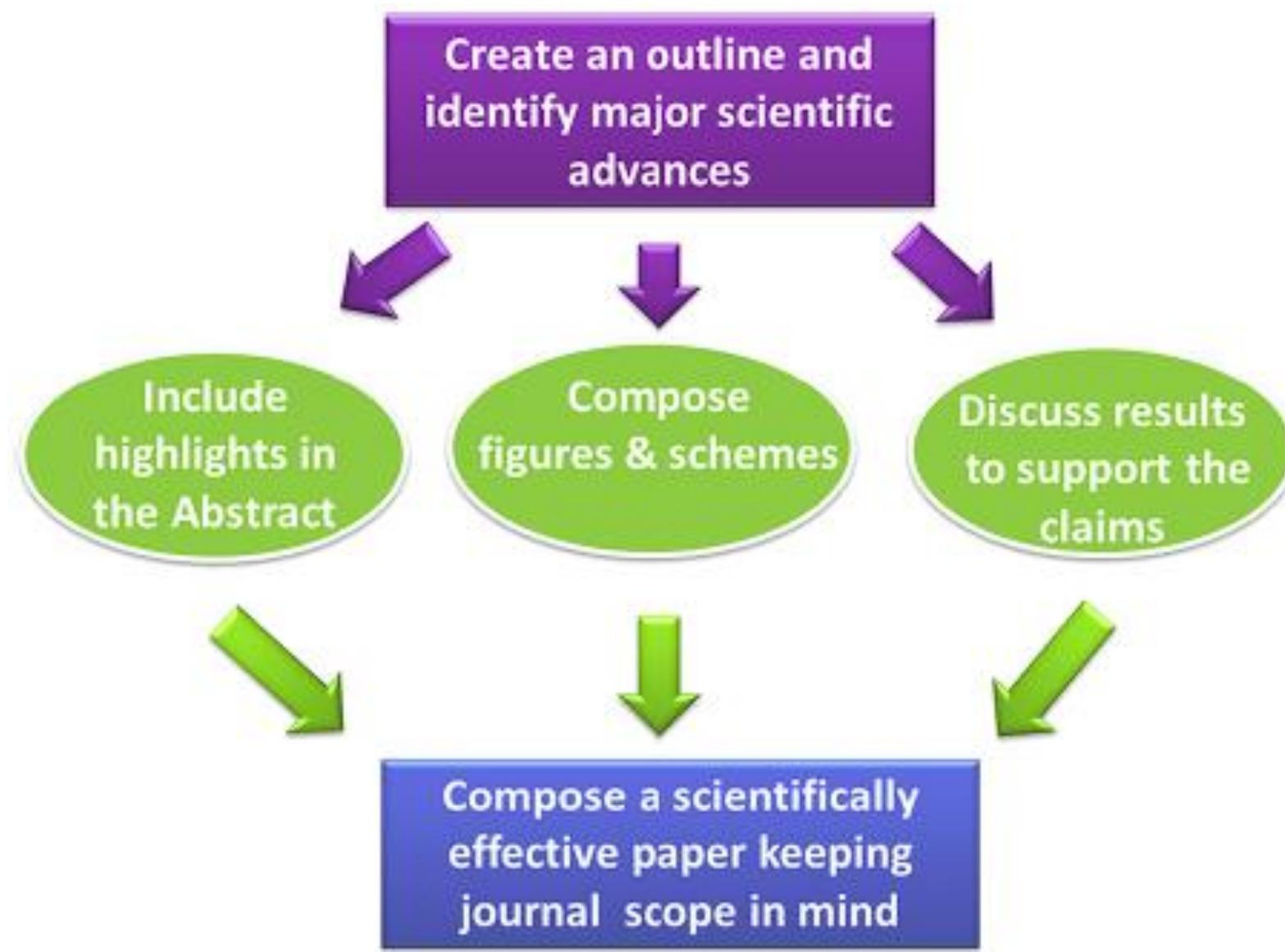
# The process of writing

## The process of writing – building the article

This is a very individual process, and you should do it in the way that suits you best. Many find it easiest to start spinning the story starting with figures/tables, the actual data.



# The process of writing



## Penulis/author(s)

- Jika penulis jamak, masalah tentang kepenulisan dapat sederhana dan dapat komplek.
- Bagaimana urutan penulis yang benar? Tidak ada kesepakatan aturan atau konvensi yang berlaku umum
- Beberapa penulis, mungkin untuk menghindari argumen di antara mereka sendiri, setuju untuk membuat daftar nama mereka berdasar “abjad”
- Daftar penulis harus mencakup orang-orang yang aktif berkontribusi pada paper.
- Penulis pada makalah yang diterbitkan harus diputuskan sebelum penelitian dimulai
- Makalah ilmiah memasukkan daftar penulis hanya mereka yang memberikan kontribusi besar terhadap paper.
- No ghost author(s) and honorable author(s)

## Afiliasi (Alamat)

- Berfungsi untuk korespondensi dan pembentukan jaringan kerjasama peneliti
- Penulis harus memberikan identitas (nama dan alamat laboratorium di mana pekerjaan dilakukan)
- Jika sebelum publikasi penulis telah pindah ke alamat yang berbeda, alamat baru harus ditunjukkan dalam "catatan kaki".
- Jika alamat penulis berbeda maka harus dicantumkan sesuai urutan nama penulis

# Abstrak

**merupakan ringkasan informasi artikel / versi mini dari artikel**



- Untuk menyusun abstrak sebelumnya paper dibaca keseluruhan lalu ditentukan dasar materi yg dipilih utk disampaikan
- Tidak lebih dari 250 kata, dibuat singkat dan jelas maknanya, dengan kata kunci supaya mudah ditemukan (searches)

# Menyusun Pendahuluan

1. Memuat pentingnya penelitian/review dilakukan
2. Penjelasan tentang objek dan ruang lingkup yg diteliti.
3. Menyampaikan literatur terkini terkait dengan topik yang diteliti (**perhatikan teknik mensitasi**), menganalisis (kelebihan dan kekurangan) publikasi sebelumnya, menyampaikan prinsip-prinsip dari hasil penelitian (*state of the art*)
4. Sampaikan tujuan dan kebaruan. Tujuan dan kebaruan biasanya disampaikan pada bagian akhir pendahuluan
5. PENTING: antara state of the art dengan tujuan harus jelas terkait.

# Metode

- Untuk menjawab keraguan terhadap kebenaran pelaksanaan penelitian
- Menerangkan bagaimana penelitian dilakukan untuk mencapai tujuan ... rinci, jelas, kronologis
- Menyampaikan jenis dan spesifikasi bahan/alat yang digunakan
- Menerangkan pengukuran atau analisis yang digunakan
- Bukan Metodologi
- Perlu menyebutkan sumber rujukan jika kita mengikuti metode yang telah dikembangkan oleh peneliti sebelumnya termasuk metode yang telah kita kembangkan
- Ditulis dalam past tense (B. Inggris)

# Hasil

- Hasil merupakan inti dari artikel ilmiah (berupa data).
- Mempunyai proporsi yang signifikan dalam artikel
- Bagian awal dari paper (Pendahuluan, Bahan dan Metode) dirancang untuk mengatakan mengapa dan bagaimana mendapat Hasil
- Bagian akhir dari paper (Diskusi) dirancang untuk menerangkan Hasil (mengapa demikian, arti, manfaat, dll)
- Seluruh bagian dari paper harus berhubungan dengan Hasil
- Hasil harus memuat pengetahuan baru yang berkontribusi kepada pengembangan Iptek

# Hasil

- Data yang disajikan harus representatif, tidak berulang-ulang
- Hasil harus disajikan (Gambar dan Tabel) dan ditulis dengan jelas
- Jika data yang akan disajikan satu atau sedikit (terbatas), cukup dituliskan secara diskriptif dalam teks (e.g., hindari Tabel yang memuat hanya satu baris)
- Jika data yang akan disajikan banyak, maka harus dibuat dalam bentuk tabel atau grafik
- Jangan melakukan redundansi, yaitu mengulangi apa yang sudah jelas dalam tabel atau grafik dengan kata-kata terlalu banyak
- Aspek-aspek kelemahan/kekurangan dari percobaan perlu dinyatakan

# Pembahasan

- ❖ Merupakan bagian yang paling sulit untuk ditulis.
- ❖ Tujuan utama pembahasan adalah untuk menunjukkan hubungan antara fakta-fakta yang diamati (data yang diperoleh)
- ❖ Pembahasan harus berdasarkan data pada hasil bukan bersifat dugaan atau spekulasi
- ❖ Penulisan pembahasan yang tidak baik menyebabkan paper terlihat tidak baik, walaupun mungkin data yang ditampilkan valid dan menarik.
- ❖ Mengaitkan dengan publikasi terdahulu yang terkait baik hasilnya sesuai atau hasilnya berbeda

# Pembahasan

1. Sajikan prinsip-prinsip, hubungan dan generalisasi yang ditunjukkan oleh Hasil, fenomena yang dapat menerangkan hasil
2. Tidak diperbolehkan menutupi atau memalsukan data
3. Tunjukkan bagaimana hasil dan interpretasi, apakah sesuai (atau kontras) dengan karya yang diterbitkan sebelumnya
4. Jangan ragu untuk mendiskusikan implikasi teoritisnya, serta kemungkinan aplikasi praktis.
5. Nyatakan kesimpulan sejelas mungkin.
6. Meringkas bukti-bukti untuk setiap kesimpulan.

# Acknowledgement dan Daftar Pustaka

1. Pemberi dana
2. Pihak-pihak yang membantu/mendukung pelaksanaan penelitian
3. Pemberi beasiswa (bagai mahasiswa)

- a. Menggunakan pustaka yang dipublikasikan dan berkualitas.

Paper yang telah diterima untuk dipublikasikan dapat dijadikan referensi. Sitasi nama jurnal diikuti kata “*In press*”.

- b. Pastikan semua pustaka yang disitasi dalam teks ada di daftar pustaka, dan semua yang ada dalam daftar pustaka telah disitasi dalam teks.
- c. Penulisan Pustaka: (i) Sistem nama dan tahun, (ii) sistem abjad-nomor dan (iii) sistem urutan sitasi

# Penulisan Daftar Pustaka

## SISTEM NAMA DAN TAHUN

Day, R. A. 1998. How to write and publish a scientific paper. 5th ed. Phoenix:  
Oryx Press.

Huth, E. J. 1986. Guidelines on authorship of medical papers. Ann. Intern. Med.  
104:269-274.

Sproul, J., H. Klaaren, and F. Mannarino. 1993. Surgical treatment of Freiberg's  
infraction in athletes. Am. J. Sports Med. 21:381-384.

## SISTEM ABJAD-NOMER

1. Day, R. A. 1998. How to write and publish a scientific paper. 5th ed. Phoenix: Oryx Press.
2. Huth, E. J. 1986. Guidelines on authorship of medical papers. Ann. Intern. Med. 104:269-274.
3. Sproul, J., H. Klaaren, and F. Mannarino. 1993. Surgical treatment of Freiberg's infraction in athletes. Am. J. Sports Med. 21:381-384.

## Software:

Endnote  
Reference Manager  
Mendeley

## SISTEM URUTAN SITASI

1. Huth EJ. Guidelines on authorship of medical papers. Ann Intern Med 1986; 104:269-74.
2. Sproul J, Klaaren H, Mannarino F. Surgical treatment of Freiberg's infraction in athletes. Am J Sports Med 1993; 21:381-4.
3. Day RA. How to write and publish a scientific paper. 5th ed. Phoenix: Oryx Press, 1998.

# **Guide to Publication:** Writting/prepare the paper

## **Languange is not the main part but it is very important**

- Without proper language, the editor and reviewers will not understand what you mean
- Poor languange will lead to rejection of your paper
- International journal: English language should be used throughout the entire manuscript including figures, charts, graphs and photos.
- Publishers do not correct language
- Common errors: Sentence construction, incorrect tenses, inaccurate grammar, mixing language
- Write direct and short sentences, one idea or piece of information per sentence is sufficient
- Avoid multiple statement in one sentenece
- For English: Use “free” software translation and modify the result

## Kegagalan menjadi artikel yang baik

- There is no novelty
- Submission of papers which are clearly out of scope
- Failure to format the paper according to the Guide for Authors
- Inadequate standard of English
- Clear indication of scientific misconduct**
- Citation vs. reference**
- Written in non-reputable journal**

# Kegagalan menjadi artikel yang baik

1. Too narrow or to broad. Does your article have problems with focus?
2. Off topic. Is my article appropriate for the journal I have selected?
3. Not scholarly. Does my article have problems with scholarliness?
4. Too defensive. Does my article have problems with defensiveness?
5. Not sufficiently original. Does my article have problems with originality?
6. Poor structure. Does my article have problems with structure?
7. Not significant. Does my article have problems with significance?
8. Theoretically or methodologically flawed. Does my article have theoretical or methodological problems?
9. Too many misspellings and grammatical errors. Does my article have problems with spelling and grammar?
10. No argument stated early and clearly

# Kegagalan menjadi artikel yang baik

## 1. It fails the technical screening

- Scientific misconduct
- Is not complete
- The English is not sufficient
- The article does not conform to the GfA
- References are incomplete or very old

## 2. It does not fall within the aims and scope

## 3. It's incomplete

- The article contains observations but is not a full study.
- It discusses findings in relation to some of the work in the field but ignores other important work

## 4. The procedures and/or analysis of the data is seen to be defective

## 5. The conclusions cannot be justified on the basis of the rest of the paper

- The arguments are illogical, unstructured or invalid.
- The data does not support the conclusions.
- The conclusions ignore large portions of the literature.

## 6. It's simply a small extension of a different paper, often from the same authors

## 7. It's incomprehensible

## 8. It's boring