



ELSEVIER

How to write a scientific article



Paula Milewska, Customer Success Manager





Scholarly publishing and publisher role



Origins of scholarly publishing



1439

Gutenberg and
moveable type



1580

Founding of
the House of
Elzevir



Henry Oldenburg

(1618- 1677)

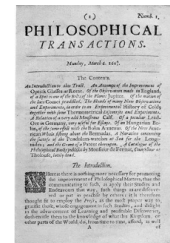
Founding Editor
and Commercial
Publisher of the
first scientific
journal



March 6, 1665

Philosophical
Transactions
of the Royal Society

First true scholarly
journal



Role of scientific publications

- **Registration**

The timestamp to officially note who submitted scientific results first

- **Certification**

Perform peer-review to ensure the validity and integrity of submissions

- **Dissemination**

Provide a medium for discoveries and findings to be shared

- **Preservation**

Preserving the minutes and record of science for posterity



Publishing as a service: We add value to articles throughout the publication process



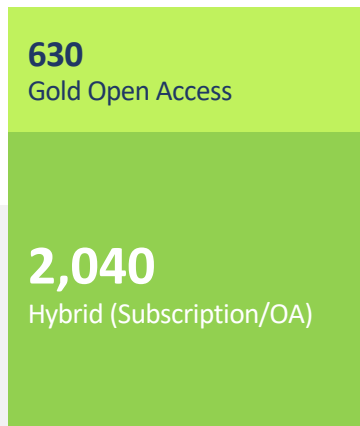
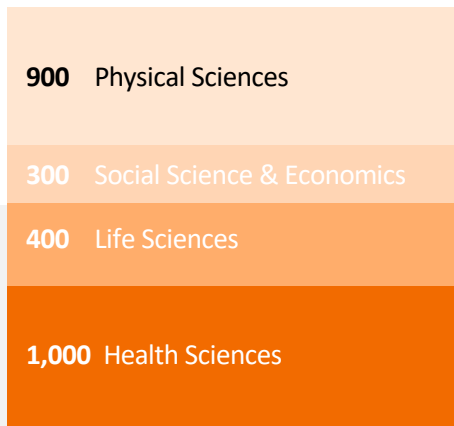
What is peer review

- Peer review consists of the evaluation of articles by experts in the field
- It was first used in 1665, by the Royal Society in London
- Peer review places the reviewer, with the author, at the heart of scientific publishing
- Reviewers make the editorial process work by examining and commenting on manuscripts
- Without peer review there is no control in scientific communication
- Reviewers are the backbone of the whole process

Offering ~2,800 journals to the research and health communities

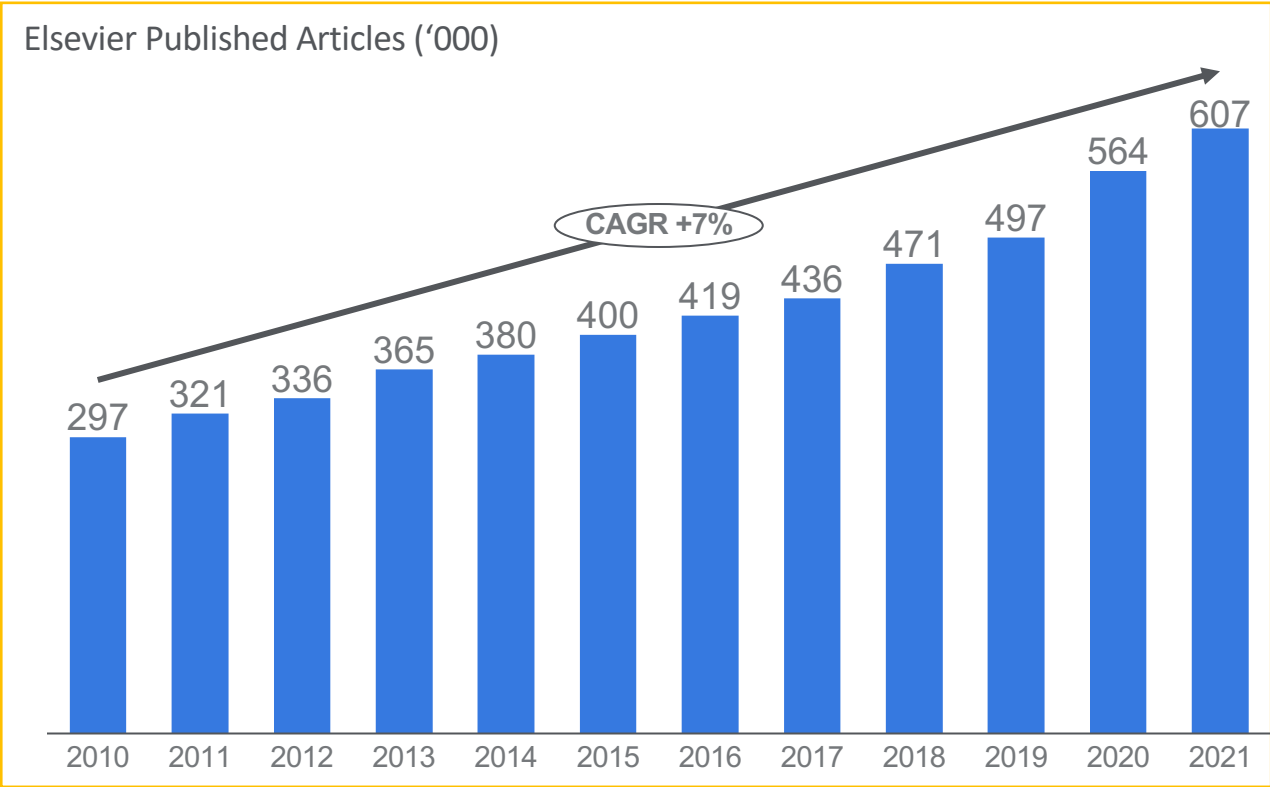
journals per discipline

journals per publishing model



Article Volume Growth: Published Articles

Consistent published articles volume growth



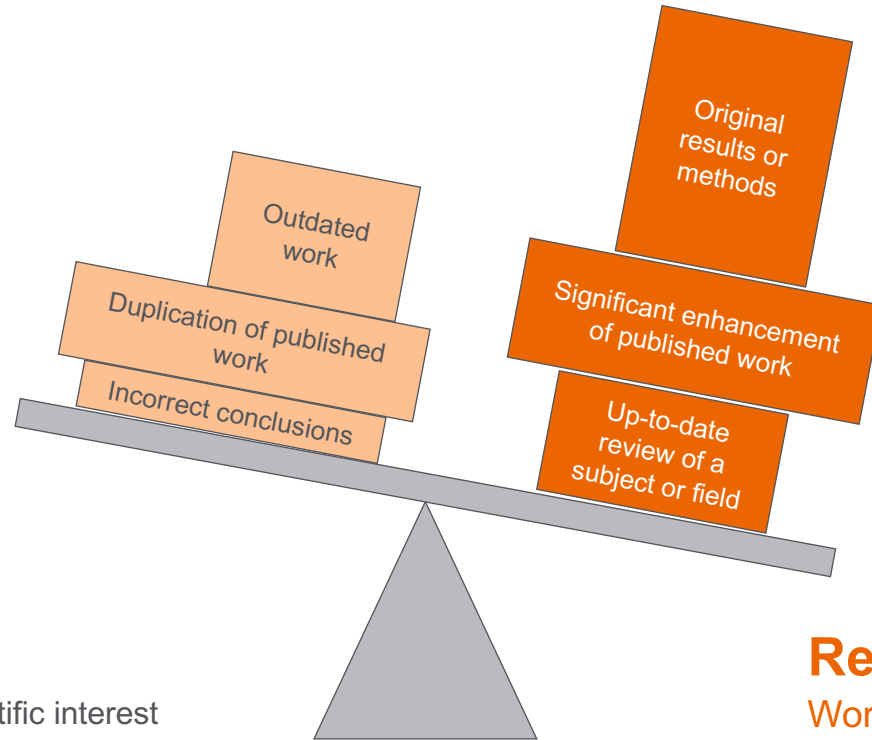


Best practices in creating a successful scientific article



Planning your article

Are you ready to publish?



Not ready

Work has no scientific interest

Ready

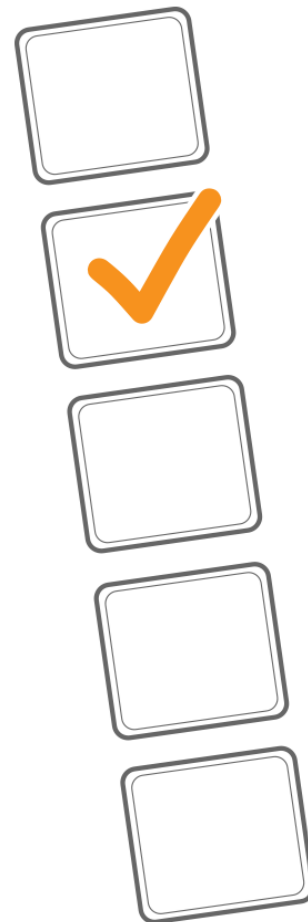
Work advances the field

Planning Your Article

What makes a strong manuscript?

- Clear and useful message
- A logical manner
- Readers grasp the research

Editors, reviewers and readers all want to receive well presented manuscripts that fit within the aims and scope of their journal.



Planning Your Article

Types of manuscripts



Full articles

- Substantial, complete and comprehensive pieces of research
Is my message sufficient for a full article?



Letters or short communications

- Quick and early communications
Are my results so thrilling that they should be shown as soon as possible?



Review papers

- Summaries of recent developments on a specific top
- Often submitted by invitation

Your supervisor or colleagues are also good sources for advice on manuscript types.

Planning Your Article

New types of manuscripts



- Adaptations and customizations to methods
(Example journal: **MethodsX**)



- Published datasets: available for sharing and reuse (Example journal: **Data in Brief**)



- Articles that acknowledge the impact of software on research
(Example journal: **SoftwareX**)

Ask your supervisor and colleagues for advice on manuscript type.
Sometimes outsiders see things more clearly than you.

Preparing your manuscript

Guide for Authors



- Find it on the journal homepage of the publisher, e.g. **ScienceDirect.com**
- Keep to the Guide for Authors in your manuscript
- It will save your time

A screenshot of the Cell journal homepage. The page features a blue header with the Cell logo and the text "Open archive". Below the header is a navigation bar with several links: "Articles & Issues", "About", "Publish", "Search in this journal", "Submit your article", and "Guide for authors". The "Publish" and "Guide for authors" links are circled in orange. A dropdown menu is open under "Publish", showing options: "Submit your article", "Guide for Authors", "Language Editing services", and "Author Services". The "Guide for Authors" option is also circled in orange. The main content area shows the latest issue information: "Volume 185, Issue 21" dated "13 October 2022". The CellPress logo is visible in the bottom left corner.

Recap

Before writing your paper



- Determine** if you are ready to publish your work
- Decide** on the best type of manuscript
- Choose** the target journal
- Check** the Guide for Authors

General structure of a research article

- Title
- Abstract
- Keywords

- Introduction
- Methods
- Results and Discussion

- Conclusion
- Acknowledgements
- References
- Supporting Materials

Read the Guide for Authors for the specific criteria of your target journal.

Effective manuscript titles

- Attract reader's attention
- Contain fewest possible words
- Adequately describe content
- Are informative but concise
- Identify main issue
- Do not use technical jargon and rarely-used abbreviations

Editors and reviewers do not like titles that make no sense or fail to represent the subject matter adequately. Additionally, if the title is not accurate, the appropriate audience may not read your paper.

Keywords

- Are the labels of the manuscript
- Are used by indexing and abstracting services
- Should be specific
- Should use only established abbreviations (e.g. DNA)

Check the Guide for Authors for specifics on which keywords should be used.

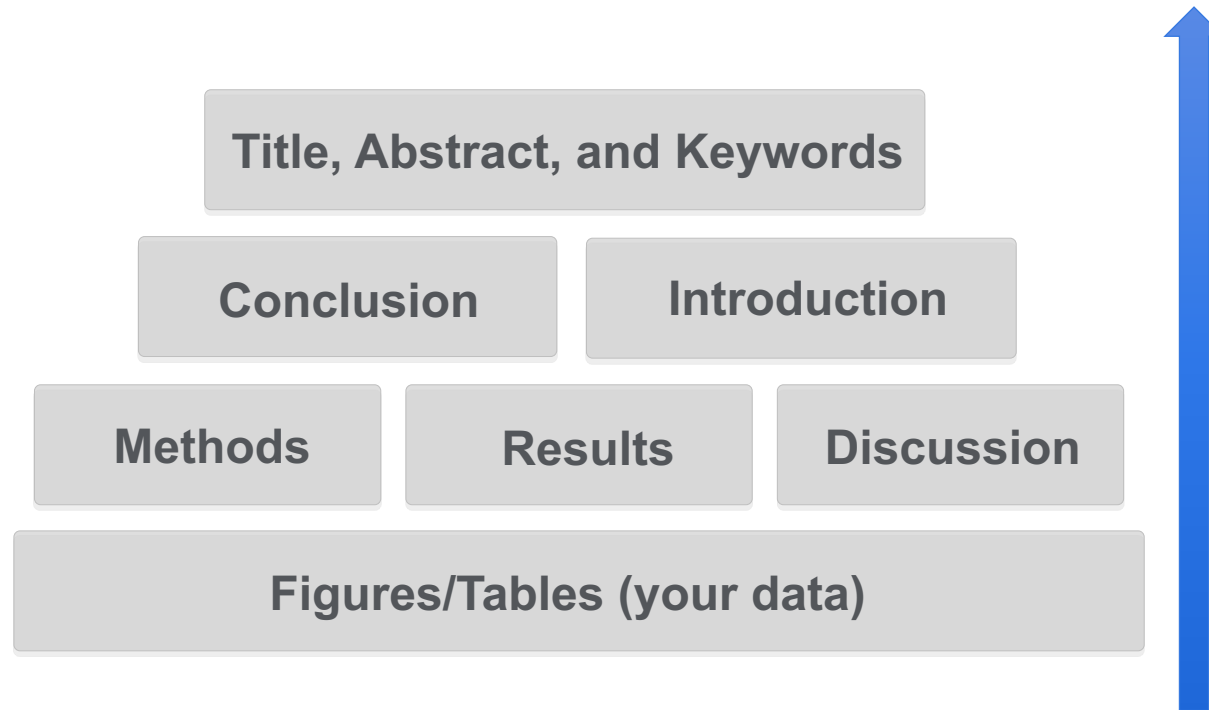
Article title	Keywords
“An experimental study on evacuated tube solar collector using supercritical CO ₂ ”	Solar collector; supercritical CO ₂ ; solar energy; solar thermal utilization

Abstract

- Summarize the problem, methods, results, and conclusions in a single paragraph
- Make it interesting and understandable
- Make it accurate and specific
 - A clear abstract will strongly influence whether or not your work is considered
- Keep it as brief as possible

Take the time to write the abstract very carefully. Many authors write the abstract last so that it accurately reflects the content of the paper.

The process of writing – building the article



Introduction

- Provide a brief context to the readers
- Address the problem
- Identify the solutions and limitations
- Identify what the work is trying to achieve
- Provide a perspective consistent with the nature of the journal



Write a unique introduction for every article. DO NOT reuse introductions.

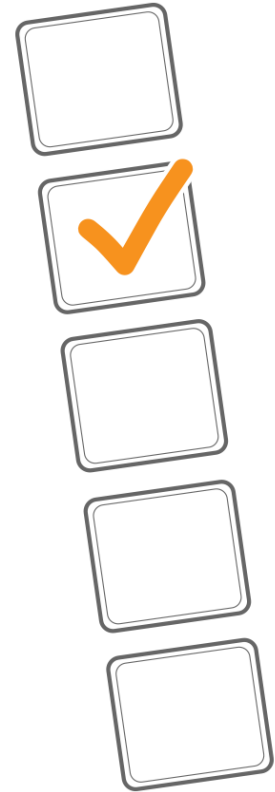
Methods

- Describe how the problem was studied
- Include detailed information
- Do not describe previously published procedures
- Identify the equipment and materials used



Methods – ethics committee approval

- Experiments on humans or animals must follow applicable ethics standards
- Approval of the local ethics committee is required and should be specified in the manuscript, covering letter, or the online submission system
- Editors can make their own decisions on ethics



Results

- Include only data of primary importance
- Use sub-headings to keep results of the same type together
- Be clear and easy to understand
- Highlight the main findings
- Feature unexpected findings
- Provide statistical analysis
- Include illustrations and figures



Discussion

- Interpretation of results
- Most important section
- Make the discussion correspond to the results and complement them
- Compare published results with your own



Be careful not to use the following:

- Statements that go beyond what the results can support
- Non-specific expressions
- New terms not already defined or mentioned in your paper
- Speculations on possible interpretations based on imagination

Conclusion

- Be clear
- Provide justification for the work
- Explain how your work advances the present state of knowledge
- Suggest future experiments



Acknowledgments

- Advisors
- Financial supporters and funders
- Proof readers and typists
- Suppliers who may have donated materials



References

- Do not use too many references
- Always ensure you have fully absorbed the material you are referencing
- Avoid excessive self citations
- Avoid excessive citations of publications from the same region or institute
- Conform strictly to the style given in the Guide for Authors



Help with your article

- Writing an article is hard work – finding and sorting research, preparing references, sourcing feedback...
- You can get help from Mendeley (www.mendeley.com), a free reference manager and academic social network.
- The Mendeley Reference Manager generates citations and bibliographies in MS Word.
- You can also use Mendeley to connect with colleagues and securely share papers, notes, and annotations.



Recap - building up your article properly (I)

Title

Abstract

Keywords

Main text
(IMRAD)

Recap - building up your article properly (II)

Conclusion

Acknowledgements

References

Supporting
materials



Valuable resources for authors



Researcher Academy

Researcher Academy

Learn Career path Blog James Picken    

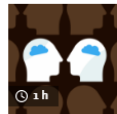
Unlock your research potential

Navigate your research journey with Researcher Academy. Free e-learning modules developed by global experts. Career guidance and advice. Research news on our blog.

Start learning >

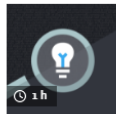


Latest



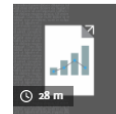
RESEARCH COLLABORATIONS
Making academia-industry collaborations work
Register Now

20 JUN



TECHNICAL WRITING SKILLS
Systematic reviews 101

1 h



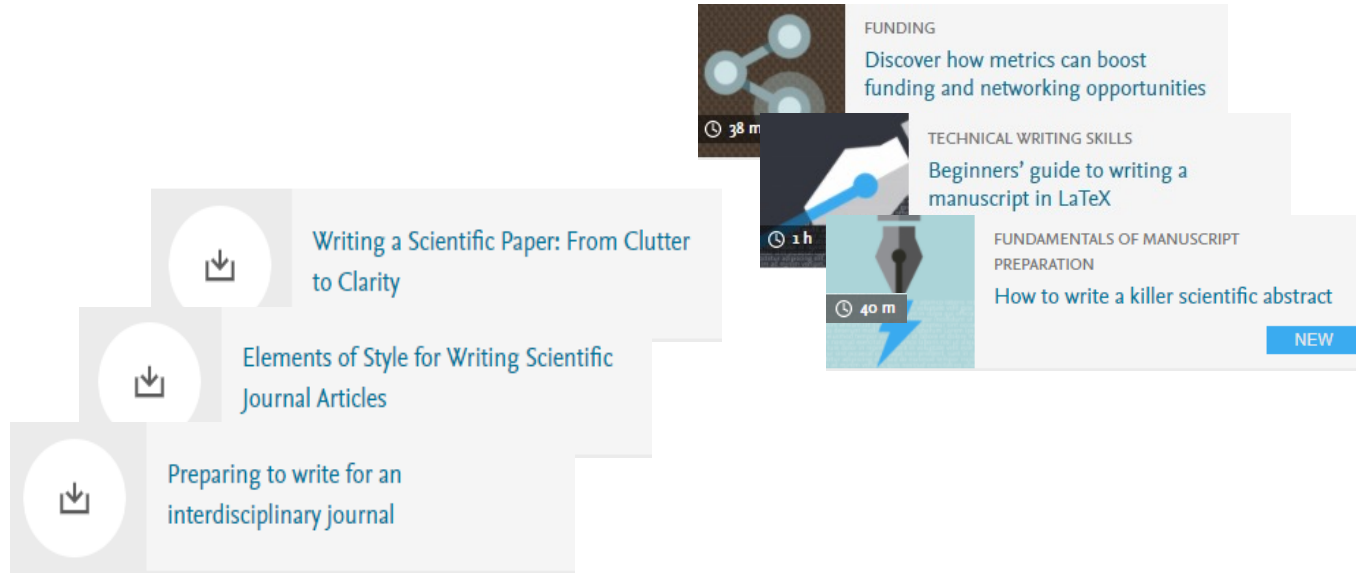
TECHNICAL WRITING SKILLS
Make the most of your research: publish your data & methods

28 m

What is Researcher Academy?

A free e-learning platform designed to guide and support Early and Mid-Career Researchers throughout their research journey. In doing so we hope to unlock their potential.

- 45% PhD/Postdoc
- 30% Masters
- 25% Other



Reach the highest standard with Elsevier Author Services



Language Editing services

🕒 1-7 business days

Ensure that your work is written in correct English before submission.

[Explore >](#)

Starts at

\$115

Translation services

🕒 12 business days

Have your work translated in your target language.

[Explore >](#)

Webshop products

Journal issues, article offprints, journal cover posters and more

[> Explore](#)

Illustration services

Turn your ideas or sketches into professional illustrations.

[> Explore](#)

Elsevier Online Training Hub



<https://bit.ly/TrainingHubElsevier>

The screenshot shows the Elsevier Online Training Hub page for Central and Eastern Europe. The page features a navigation bar with the Elsevier logo and menu items: 'O Elsevier', 'Produkty i rozwiązania', 'Usługi', 'Kupuj i odkrywaj', a search icon, a shopping cart icon, and a user profile icon. Below the navigation bar, the breadcrumb trail reads 'Strona główna > Wydarzenia > Elsevier Webinars for Central & Eastern Europe'. The main heading is 'Elsevier Online Training Hub' followed by 'Webinars for Central and Eastern Europe'. A section titled 'What do you want to learn today?' provides information about improving research work and getting new insights from research information in many languages. It encourages following country pages for local webinars in English, Bulgarian, Croatian, Czech, Polish, Romanian, and Ukrainian. A 'Quick links' sidebar on the right contains 'Upcoming Webinars', 'Recorded Webinars', and 'Find us on Facebook'. Below this, the 'Upcoming live Webinars in English' section contains a table of webinars.

Title	Topic	Date	Hour (CEST)
How to publish an eBook? »	Publishing; eBooks	14/09/2021	12:00
How to use Scopus and SciVal to support Open Science? » Learn about functionalities that you can use to analyse the impact of open Science at the level of researcher, institution or country.	Scopus; SciVal; Open Science	28/09/2021	10:00
How Scopus ensures it covers high-quality content? » Join us to learn about new functionalities in Scopus and how it constantly monitors the quality of indexed sources	Scopus	05/10/2021	10:00
Updating your Scopus Author Profile - step by step instruction » Learn how Scopus Author Profiles are created and curated, and how you can request corrections if needed.	Scopus	07/10/2021	10:00
ScienceDirect: tips and tricks »	ScienceDirect	07/10/2021	12:00



Certificates

Go to: <https://bit.ly/ElsevierRA>

Workshop code: SPWLPA

1. Take a survey
2. Get Researcher Academy Certificate*

*You need to be logged in on Researcher Academy website, registration is free





ELSEVIER

Thank you!

Visit our Facebook pages

facebook.com/ElsevierCEE

Paula Milewska
p.milewska@elsevier.com

