



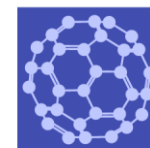
Academic Open Access Publishing  
since 1996

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# Publications Ethics for Authors

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*Paulina Maziarz*



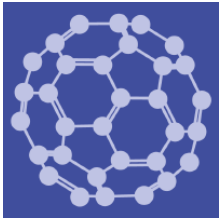
***nanomaterials***

an Open Access Journal by MDPI



# Table of contents

1. A few words about *Nanomaterials* journal
2. Publications ethics
  - 2.1 Common author misconduct situations
  - 2.2 How Editors Detect and Handle Problem Papers
  - 2.3 Publication Ethics and AI



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# Nanomaterials

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an Open Access Journal by MDPI

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Impact Factor 4.4

CiteScore 9.2

Indexed in PubMed

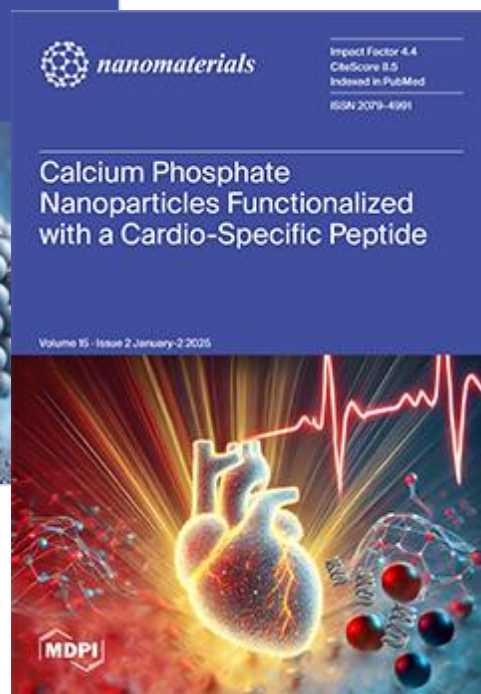
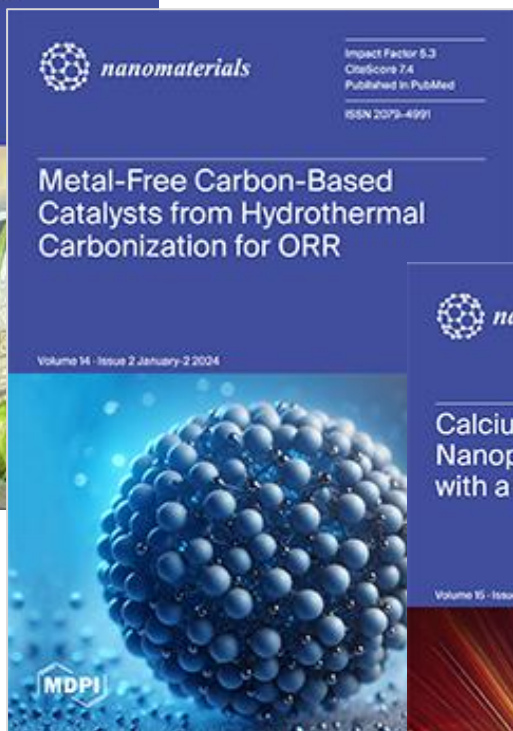
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**Editor-in-Chief**

Prof. Dr. Eugenia Valsami-Jones







An international peer-reviewed open-access journal published semi-monthly online by MDPI. Funded in 2010.

**Journal Scope:** Nanomaterials, Methodologies, Applications

**CiteScore category rank**

Q1: General Chemical Engineering  
Q1: General Materials Science

**JCR category rank**

Q2: Chemistry, Multidisciplinary  
Q2: Nanoscience and Nanotechnology  
Q2: Physics, Applied  
Q2: Materials Science, Multidisciplinary



**Laboratory X-ray Microscopy of 3D Nanostructures in the Hard X-ray Regime Enabled by a Combination of Multilayer X-ray Optics**

by Bartłomiej Lechowski <sup>1</sup>, Kristina Kutukova <sup>1</sup>, Joerg Grenzer <sup>1</sup>, Iuliana Panchenko <sup>2,3</sup>, Peter Krueger <sup>4</sup>, Andre Clausner <sup>4</sup> and Ehrenfried Zschech <sup>1,5,\*</sup>

## Author Benefits

- ❖ **Open access:** unlimited and free access for readers; with article processing charges (APC, 2900 CHF, 2400 CHF until 31 Dec 2025) paid by authors or their institutions; authors hold the copyright
- ❖ **High Visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPLus / SciFinder, Inspec, and other databases.
- ❖ **Thorough peer review**

### Key Numbers of *Nanomaterials*

**36**

Average days from submission to publication

**13.7**

Average days from submission to revision

**2.9**

Average days from acceptance to publication

**>18,000**

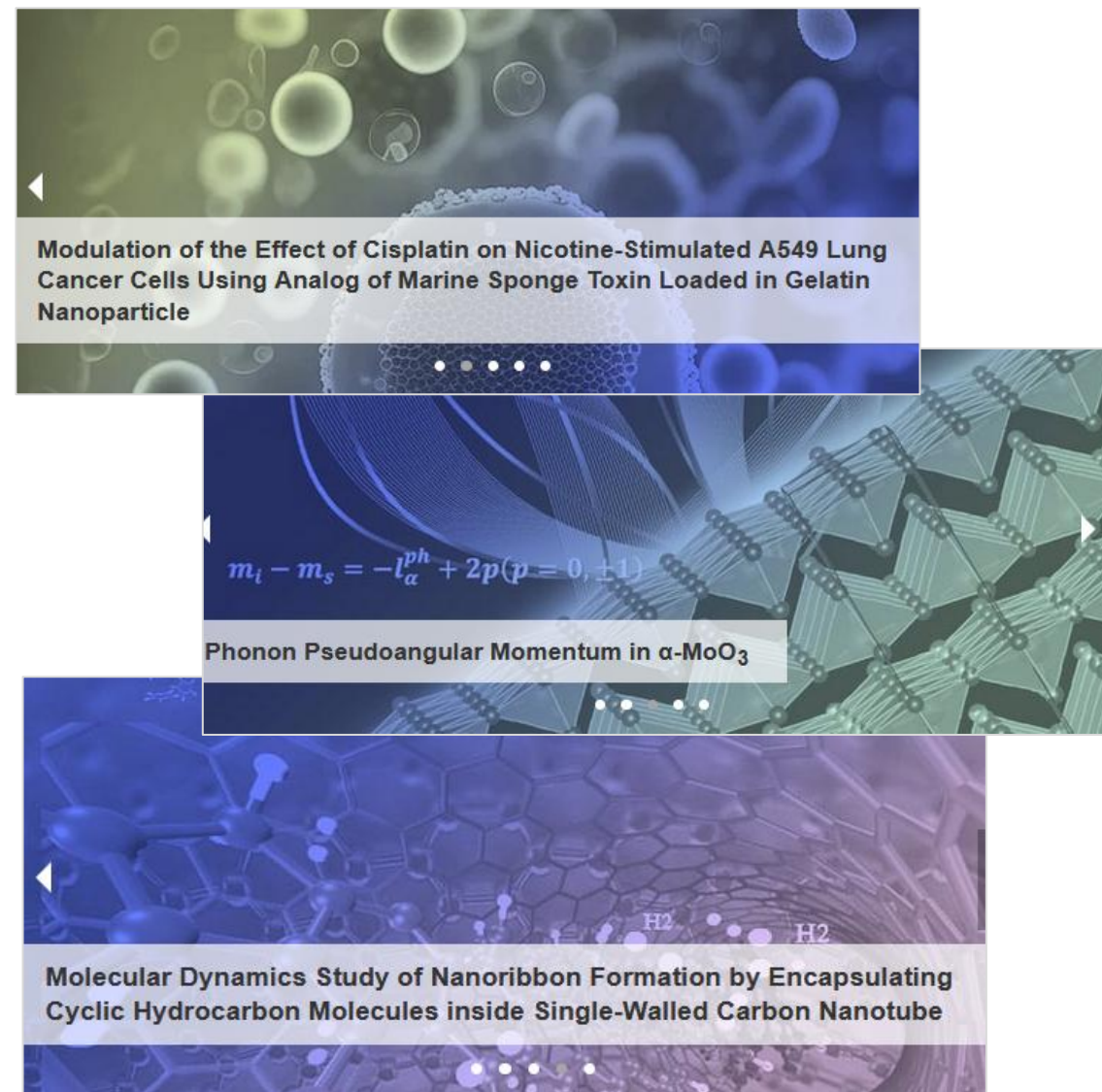
Papers published

**> 7,000**

Papers cited 10 times or more

**4,7**

5-year Impact Factor







# Table of contents

1. A few words about *Nanomaterials* journal

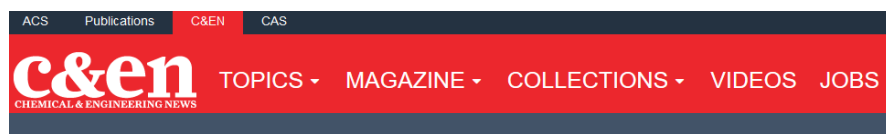
2. Publications ethics

2.1 Common author misconduct situations

2.2 How Editors Detect and Handle Problem Papers

2.3 Publication Ethics and AI

## Publication ethics is a nonnegotiable issue



MISCONDUCT

### Retracted chemistry studies most often plagued with plagiarism

Data and authorship come next for chemistry, engineering papers published in 2017 and 2018  
by Dalmeet Singh Chawla  
MAY 31, 2019

### Trouble at paper mill

4 July 2023

By Roger Watson

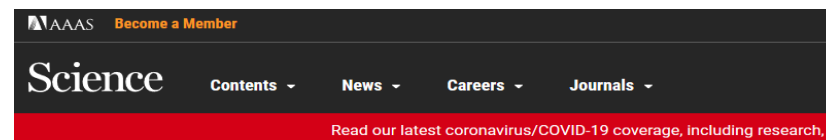
- This guest blog has been kindly written for HEPI by Roger Watson, Academic Dean, School of Nursing, Southwest Medical University, China.
- For information about HEPI's remaining events in the 2022/23 academic year, see [here](#).

NEWS FEATURE | 23 March 2021

### The fight against fake-paper factories that churn out sham science

Some publishers say they are battling industrialized cheating. A *Nature* analysis examines the 'paper mill' problem – and how editors are trying to cope.

By Holly Else & Richard Van Noorden



### Russian journals retract more than 800 papers after 'bombshell' investigation

By Dalmeet Singh Chawla | Jan. 8, 2020, 6:25 AM

Academic journals in Russia are retracting more than 800 papers following a probe into unethical publication practices by a commission appointed by the Russian Academy of Sciences (RAS). The move comes in the wake of several other queries suggesting the vast Russian scientific literature is riddled with plagiarism, self-plagiarism, and so-called gift authorship, in which academics list names as co-authors without having contributed any work.

### For Better Science

BY LEONID SCHNEIDER, ON RESEARCH INTEGRITY, BIOMEDICAL ETHICS AND ACADEMIC PUBLISHING

ACADEMIC PUBLISHING | MU YANG | RESEARCH INTEGRITY

### Journal of Molecular Liquids vs One-Man Papermills

Mu Yang catches two crooks, Ayman Atta and S Muthu, who flooded one Elsevier journal (and several others) with ridiculous hand-drawn fraud. Whom to believe, the peer review, or your own eyes?

# 1. Common Author Misconduct Situations





# 1.1 Data fabrication

**Fabrication is making up data or results and recording or reporting them.**

“... the fabrication of research data ... *hits at the heart of our responsibility to society*, the reputation of our institution, the trust between the public and the research community, and our personal credibility and that of our mentors, colleagues...”

“It can *waste the time of others*, trying to replicate false data or designing experiments based on false premises, and can lead to therapeutic errors. It can never be tolerated.”

*Professor Richard Hawkes*

*Department of Cell Biology and Anatomy, University of Calgary*



Imagem: Dilbert e a utilização de dados.

# 1.1 Image fabrication or falsification

- Keep images/data unchanged to maintain original information.
- Any concerns raised over undisclosed data alterations will be investigated.
- Authors should provide original images and raw data at submission in the Supplementary material or through Data availability statements.

## Common image manipulation includes:

- *Duplications*
- *Image splicing, cloning, erasing, cropping*
- *Enhancing a specific feature*
- *Uneven brightness/contrast adjustments*
- *Background cleaning up*
- *Gross misrepresentation*

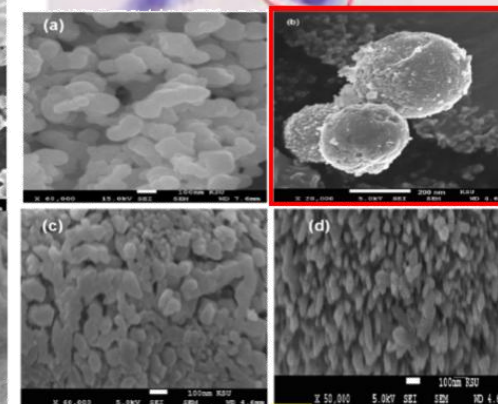
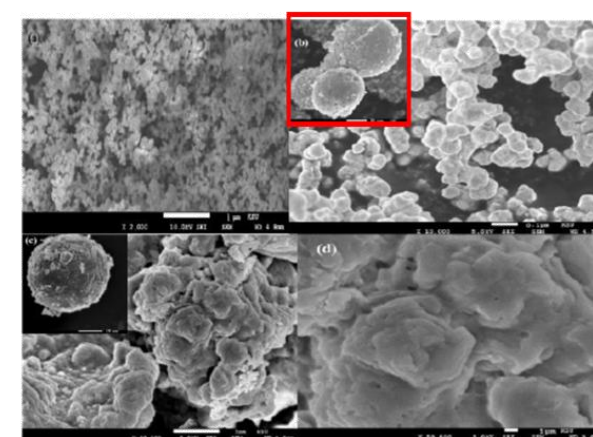
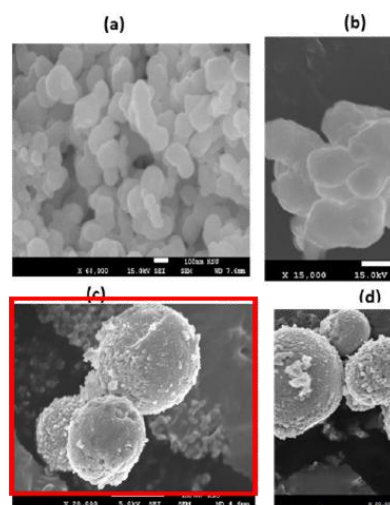
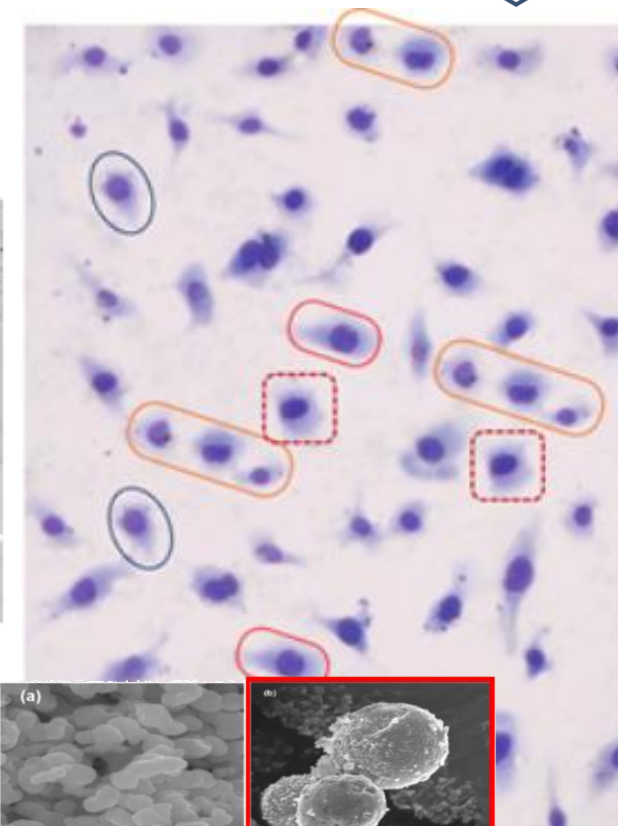
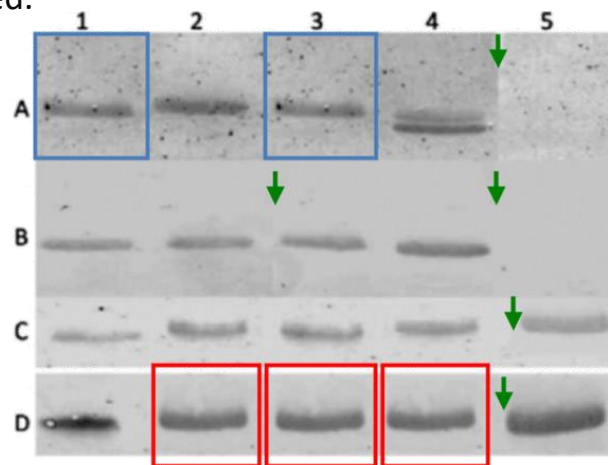


Figure 1. SEM micrographs of (a) silica; (b) silica poly(sodium 2-acrylamido-2-methylpropane sulfonate) (PAMPS-Na) included high resolution SEM at 10 nm on left top; (c) silica PAMPS-Na / acrylamide (AAm) included high resolution SEM at 10 nm on left top; and (d) poly(acrylamide) (PAAm) nanogels.

Fig. 5. SEM micrographs of (a) e-silica NPs, (b) NIPAM-VTS-polysiloxane, (c) CSiO<sub>2</sub>-NH<sub>2</sub> and

Fig. 4. SEM micrographs of (a) HSNPs, (b) HSNPs, (c) HSNPs, and (d) HSNPs.

# 1.2 Plagiarism



Copying of text, ideas, images, or data from another source, even from the author's own publications, **without proper permission, credit, or acknowledgment**.

## How to avoid plagiarism?



### Keep track of sources

- Compile a list as you go
- Be organized
- Label ideas and corresponding sources
- If possible, use primary sources



### Quote and paraphrase correctly

- Fully rewrite the source text when you paraphrase
- Use quotation marks for quotes
- Always add a correct citation
- Don't take information out of context



### Add correct citations

- Follow the guidelines of your citation style
- Always add a shortened in-text citation or footnote
- Always add a full citation on the reference page
- Use a reliable citation generator, such as Scribbr's

### Authors should ensure:

- ✓ **Short quotes** from a previously published article should be set off in quotation marks and the original version cited
- ✓ Permission must be requested when large sections are reproduced
- ✓ Methods and literature reviews generally need to be paraphrased
- ✓ Text recycling or overlap is not allowed in the Results, Discussion, and Conclusion sections

All MDPI submissions are checked for plagiarism using the industry-standard software ([Plagiarism Detection Software | iThenticate](#)).



# 1.3 Ethic violations



MDPI upholds ethical standards for **human and animal welfare**.

Research reporting on human subjects must follow the rules of **the Declaration of Helsinki of 1975** (<https://www.wma.net/what-we-do/medical-ethics/declaration-of-helsinki/>)

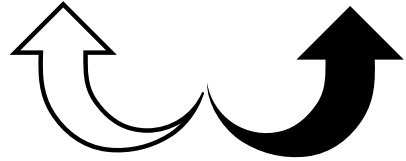
For research involving the use of animals, authors should particularly ensure that their research complies with the '3Rs' principles – **Replacement, Reduction, Refinement**.

Approval from the local **institutional review board (IRB)** must be obtained before undertaking the research on human and animal subjects.

For non-interventional studies (e.g. surveys, questionnaires, social media research), all participants must be fully informed if anonymity is assured, why the research is being conducted, how their data will be used, and if there are any risks associated.

Example of an Institutional review board statement: *“The study was conducted in accordance with the Declaration of Helsinki, and the protocol was approved by the Ethics Committee of XXX (Project identification code) on [date of approval].”*

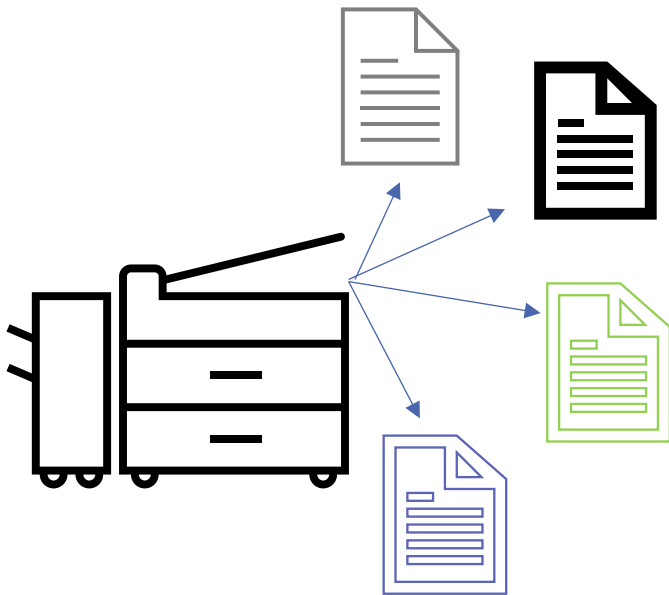
# 1.4 Multiple publication



- **Simultaneous submission:** occurs when a person submits a paper to different journals at the same time, which can result in more than one journal publishing that particular paper.

- **Duplicate/multiple publication:** occurs when two or more papers, without full cross-reference, share essentially the same hypotheses, data, discussion points, and/or conclusions. This can occur in varying degrees: literal duplication, partial but substantial duplication, or even duplication by paraphrasing.

- **Salami slicing:** two or more articles based on data collected from a single study



# 1.5 Undisclosed conflicts of interest



*“relationships or activities that readers could perceive to have influenced, or that give the appearance of potentially influencing, what you wrote in the submitted work”.*

Authors can **disclose potential conflicts of interest via the online submission system** during the submission process. Declarations regarding conflicts of interest can also be collected via the [MDPI disclosure form](#).

*Conflict of interest is not in itself wrongdoing. However, an undisclosed conflict of interest is unethical, and potentially harmful.*

## **Conflict of interest:**

**Financial interests:** membership, employment, consultancies, stocks/shares ownership; honoraria; grants or other funding;

**Non-financial interests:** personal or professional relationships, affiliations, personal beliefs, etc.



[https://medium.com/@glenn\\_6066/navigating-and-managing-conflicts-of-interest-as-the-ceo-27b44841fc0a](https://medium.com/@glenn_6066/navigating-and-managing-conflicts-of-interest-as-the-ceo-27b44841fc0a)



# 1.5 Example of CoI Statement in a published paper



“The funding sponsors had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, and in the decision to publish the results. Andre Dekker, leader of the Knowledge Engineering division at MAASTRO Clinic, and Seán Walsh declare that in a separate research project they received financial support from Varian Medical Systems, a company developing a rapid learning health-care system. Erik Roelofs and Yvonka van Wijk consult for ptTheragnostic B.V., a company developing biomarkers and software to individualize radiotherapy treatment. Philippe Lambin is co-inventor of several radiomics patents.”

(<http://www.mdpi.com/2072-6694/10/2/55/htm>).

# 1.6 Improper authorship



- “ghost” authors – contribute substantially but are not acknowledged.
- “guest” authors – made no discernible contributions, but are listed to help increase the chances of publication.
- “gift” authorship – a type of research misconduct where a person is credited as an author on a publication despite not making a significant contribution. It often involves individuals being added to the author list for reasons of prestige or as a reward for other contributions to the project (did not fulfil the ICMJE criteria).

# 1.7 Summary



## Common author misconduct situations

### Before the manuscript is finished

- Dishonesty, fabrication, falsification, e.g., fabricated data, modifying images, especially Western Blot gels; removing outliers from data.
- Plagiarism, reusing their own earlier wording
- Ethic violations in research involving human and animal subjects

### After the manuscript is finished

- Multiple publication
- Undisclosed conflicts of interest
- Improper authorship



## 2. How Editors Detect and Handle Problem Papers



# 2.1 International Guidelines



- **The Committee on Publication Ethics (COPE)** has guidelines for editors and peer reviewers (substantive) and authorship (substantive).  
<http://publicationethics.org/>
- **International Committee of Medical Journal Editors (ICMJE)** Includes guidelines for authorship (substantive), peer review (not substantive), conflict of interest (substantive), and redundant publications (substantive).  
<http://www.icmje.org/>
- **MDPI Ethics policies and guidelines**  
<https://www.mdpi.com/ethics>

## Ethical Guidelines for Authors

Authorship

Plagiarism, Data Fabrication and Image Manipulation

Research Involving Human Subjects

Research Involving the Use of Animals in Research

Research Involving Cell Lines

Research Involving Plants

Clinical Trials Registration

Sex and Gender in Research

Borders and Territories

Potential Conflicts of Interest

Intellectual Property i.a. Copyright, Patent and Licensing

MDPI Research Data Policies

Ethical Guidelines for Reviewers and Editors

Comments and Complaints

Updating Published Papers

## 2.2 Tools



**iThenticate** compares a manuscript to their proprietary CrossRef database, which contains a large number of documents from scientific conferences, journals, and books.

### **Acceptable Cases**

- Common words or phrases, or definitions in the math or physics field, etc.
- Materials or methods descriptions with a citation in the chemistry field, etc.
- Conference papers with enough extension and permissions.
- Content from arXiv or preprints.



## 2.3 Editors' work



### How Journals Detect and Handle Problem Papers



iThenticate report/  
Automatic and manual  
checks



Concerns from reviewers,  
readers, etc.



Whistleblowers/ \Retraction Watch/  
Pubpeer/WoS/NIH

### The rules for handling problem papers:

1. Withdrawal of a paper (for a paper under processing)
2. Correct the literature via Correction or Retraction (for published papers)

COPE recommends an educational approach in the first instance. If the author demonstrates a repeat pattern of misconduct, then the editor might consider contacting the institution.

# Cases sharing—Case 1



Reader alerts journal to apparent plagiarism in a published article  
The reader calls for retraction: what should the journal do?

## Journal's considerations:

1. Where in the text do the similarities occur?
  2. Direct copying and theft? Or use of prior published article as 'inspiration'?
  3. Is the data authentic? Are the results new?
- If yes, a **correction** could be appropriate citing the previous publication
  - If no, a **retraction** might be appropriate

## Levels of Severity

Experiments & Methods < Introduction & Discussion < Conclusions



# Cases sharing—Case 2



## When a paper duplicates one in another language, how can editors spot it?



Same tea, different mug. *Biomolecules*, an MDPI journal, has retracted a 2018 paper by on the salubrious effects of tea because the authors had previously published the same article in a Chinese-language journal.

The paper, “Evaluation of anti-obesity activity, acute toxicity, and subacute toxicity of probiotic dark tea,” came from researchers in China and one from Harvard University (oddly, a post-doc in applied physics).

The case highlights a plagiarism problem that may may be difficult to spot, it turns out. According to the retraction notice, the authors were using the same tea leaves in a different cup:

*The Biomolecules Editorial Office has been made aware that the published paper [1] was previously published in chinese in China Tea Processing by the same authors [2]. In order to preserve academic integrity, the title paper [1] will be marked as retracted. We apologize to the readership of Biomolecules for any inconvenience caused. The decision to retract has been made in cooperation with the authors of the article [1].*

# Cases sharing—Case 2



## Translations

MDPI journals may choose to publish high-quality content that has been previously published in a different language, provided that the original study is appropriately referenced in the acknowledgments section.

- Authors should clearly declare their paper is a translated version in the cover letter at submission;
- All authors from the original publication must appear on the submitted manuscript;
- Appropriate permission must be sought and granted from the publisher, copyright holders, and/or authors of the original article prior to manuscript submission;
- Relevant documentation relating to these permissions must be uploaded in the supplementary material section during submission;
- The journal editor must be informed about the publishing history of the previously published content;
- The original article must be referenced in the acknowledgments section.

This is a translation/reprint of (insert title here) originally published in (insert language) by (insert publisher) (insert journal name, year, issue/volume number, page numbers). This translation was prepared by (insert name) with support from (insert name of funding source, if any). Permission was granted by (insert publisher, copyright holder, and/or authors name).

Any translated articles that do not follow the above guidelines are unacceptable.

<https://www.mdpi.com/ethics#10>



## 2.4.4. Authorship Issues

addition, deletion, or change in the order of authors

### Author should:

- Discuss authorship when research is planned
- Decide authorship before article is started
- Stick to facts

### Editor's view:

- *Before acceptance*: Consent of all authors; [Authorship change form](#)
- *After acceptance*: **Changes are not advisable**



## 2.4.4 Authorship Requirements



### Who should be an Author?

- ✓ **Substantial contributions** to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND
- ✓ **Drafting the work or revising it critically** for important intellectual content; AND
- ✓ **Final approval of the version** to be published; AND
- ✓ **Agreement to be accountable for all aspects of the work** in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

## 2.4.4 Authorship Requirements



### Authorship - CRediT Taxonomy

Contributor Roles Taxonomy

CRediT (Contributor Roles Taxonomy) is a high-level taxonomy, including 14 roles, that can be used to represent the roles typically played by contributors to research outputs

- |                      |                                |
|----------------------|--------------------------------|
| 1. Conceptualization | 8. Data curation               |
| 2. Methodology       | 9. Writing – original draft    |
| 3. Software          | 10. Writing – review & editing |
| 4. Validation        | 11. Visualization              |
| 5. Formal analysis   | 12. Supervision                |
| 6. Investigation     | 13. Project administration     |
| 7. Resources         | 14. Funding acquisition        |

**Original:** S.C.P. and S.Y.W. conceived and performed experiments, wrote the manuscript, and secured funding. M.E., A.N.V., and N.A.V. performed experiments. M.E.V and C.K.B. provided reagents. A.B., N.L.W., and A.A.D. provided expertise and feedback.

**Revised:** Conceptualization, S.C.P. and S.Y.W.; Methodology, A.B., S.C.P., and S.Y.W.; Investigation, M.E., A.N.V., N.A.V., S.C.P., and S.Y.W.; Writing – Original Draft, S.C.P. and S.Y.W.; Writing – Review & Editing, S.C.P. and S.Y.W.; Funding Acquisition, S.C.P. and S.Y.W.; Resources, M.E.V and C.K.B.; Supervision, A.B., N.L.W., and A.A.D.



# 3. Publication Ethics and AI



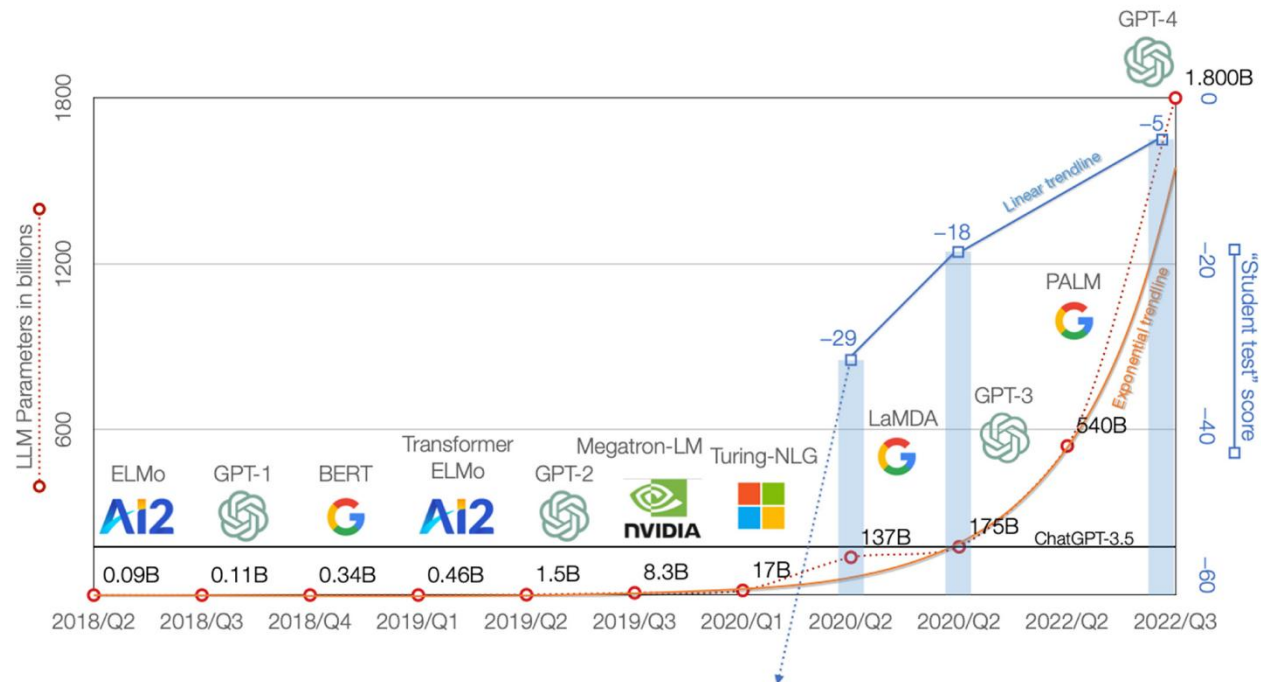
# 3.1 State-of-art of AI

Article

## Fluent but Not Factual: A Comparative Analysis of ChatGPT and Other AI Chatbots' Proficiency and Originality in Scientific Writing for Humanities

Edisa Lozić  and Benjamin Štular 

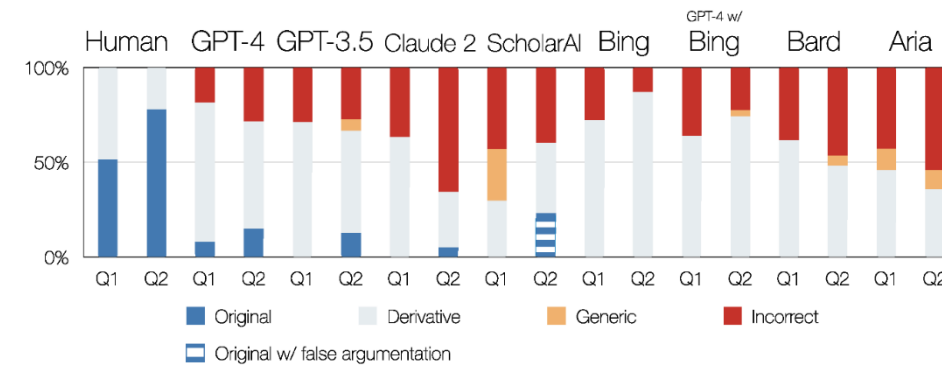
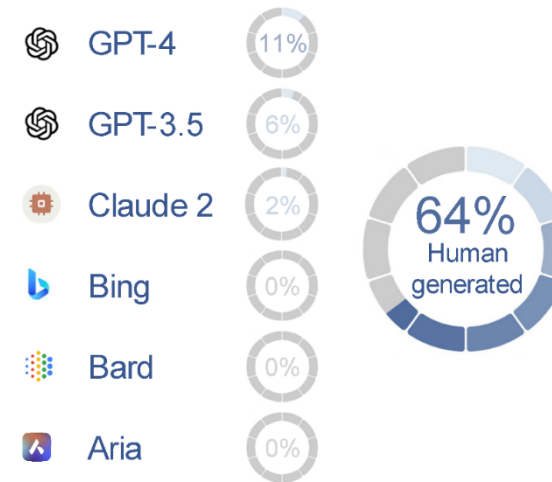
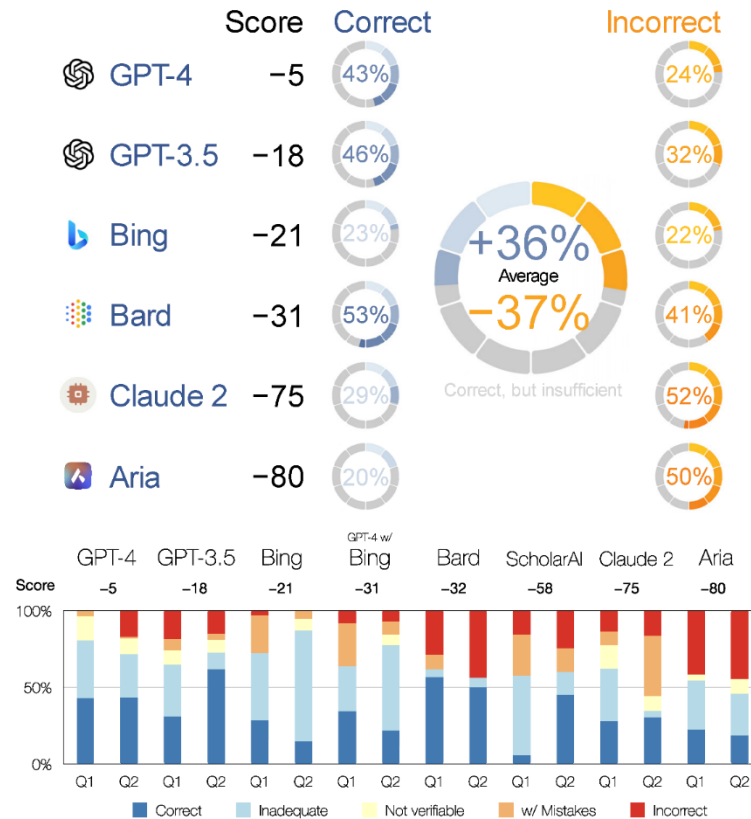
The main focus of this article was on whether the tested AI chatbots were able to generate original scientific contributions





# 3.1 State-of-art of AI

-The short and expected answer was no

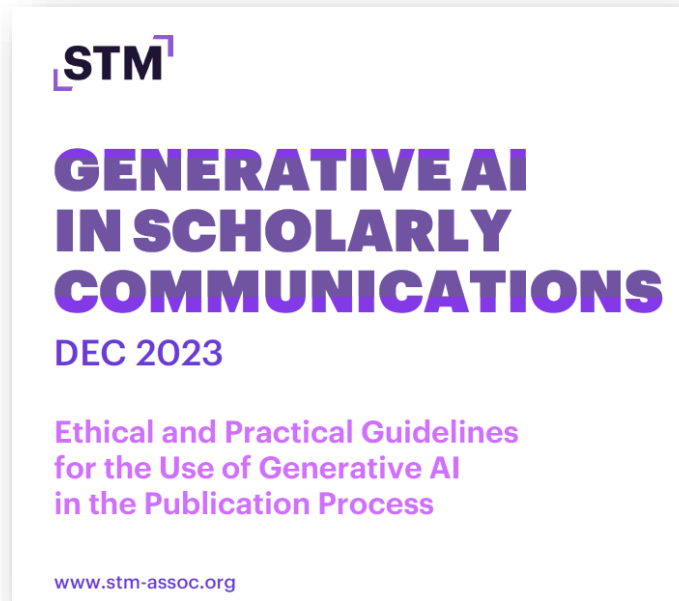


## 3.2 STM White Paper



*International Association of Scientific,  
Technical, and Medical Publishers*

Assist publishers and their authors in their activities in disseminating the results of research in the fields of **Science, Technology and Medicine**



- **Developments in GenAI are highly dynamic and changing with unprecedented speed.** For this reason, predicting how this technology will progress is difficult
- **This document reflects STM recommendations** for best practices in the use of GenAI in the publication process that are **based on the state of the technology at the time of its completion** and, it is hoped, reflects general principles that will remain relevant in the near term
- **STM expects to update these recommendations regularly** because of the highly dynamic nature of these technologies

## 3.2 STM White Paper



### Ethical and Practical Guidelines for the Use of Generative AI in the Publication Process

#### Can GenAI be used in preparing a manuscript?

Policies differ by publisher and journal, so authors must consult the relevant guide for authors before submitting a manuscript.

In general, the following principles are recommended:

- Using publicly available GenAI as a basic tool that supports authors in refining, correcting, formatting, and editing texts and documents is permissible.
- Authors must disclose any use of GenAI that transcends those use cases so an editorial decision can be made as to its legitimacy.
- GenAI cannot be used to create, alter, or manipulate original research data and results, such as images, blots, photographs, x-rays, and measurements.
- GenAI cannot be credited as an author of a published work.

Uses of GenAI by Authors

Key Indicator	Permitted—disclosure not necessary	Disclosure necessary—permission by editorial teams	Not permitted
Basic author support tool (refine, correct, edit, and format text and documents)	✓		
Uses transcending basic author support tool		✓	
Create, alter, or manipulate original research data and results			✗
Credit GenAI as an author of a published work <sup>1</sup>			✗

<sup>1</sup> See also Tom McKay, “US Copyright Office Makes the First Move in the Battle over Generative AI and Copyright,” IT Brew (Mar. 29, 2023), <https://www.itbrew.com/stories/2023/03/29/us-copyright-office-makes-the-first-move-in-the-battle-over-generative-ai-and-copyright>



## 3.2 STM White Paper



### Ethical and Practical Guidelines for the Use of Generative AI in the Publication Process

Where **using GenAI** is allowed, authors must **always consider copyright, privacy, and confidentiality** implications before **uploading text and other information to GenAI** platforms for the purposes permitted. **They must ensure that the necessary rights to all material** to be uploaded (including third-party copyrighted content) **have been obtained** in advance.

If third-party copyrighted content is included as a block quote in an author's final text, it may infringe the third party's rights to authorize any GenAI ingestion of that content.

Likewise, translating a copyrighted work creates a derivative work, and making or authorizing a translation is the exclusive right of the original copyright owner; this right must be respected in the GenAI context.

## 3.2 STM White Paper



### Ethical and Practical Guidelines for the Use of Generative AI in the Publication Process

Note that the terms and conditions of **public GenAI tools often permit the reuse of inputs** in training, and any training data may inadvertently or intentionally show up as output from a GenAI tool without appropriate licensing messages or conditions.

Authors could take actions to minimize risks, such as, for example, obtaining all rights necessary, using an AI with guarantees of confidentiality in its terms of use, or anonymizing their data before input.

If such safeguards cannot be put in place, it is recommended that authors consider alternative ways to use GenAI.

**In all cases, the integrity of the content generated by GenAI tools remains the author's responsibility.**



# 3.3 MDPI Regulations



What are your rules regarding editing using AI?

## Authorship and the Use of AI or AI-Assisted Technologies

MDPI follows the Committee on Publication Ethics (COPE) position statement when it comes to the use of Artificial Intelligence (AI) and AI-assisted technology in manuscript preparation. Tools such as ChatGPT and other large language models (LLMs) do not meet authorship criteria and thus cannot be listed as authors on manuscripts.

In situations where AI or AI-assisted tools have been used in the preparation of a manuscript, this must be appropriately declared with sufficient details at submission via the cover letter. Furthermore, authors are required to be transparent about the use of these tools and disclose details of how the AI tool was used within the "Materials and Methods" section, in addition to providing the AI tool's product details within the "Acknowledgments" section.

Authors are fully responsible for the originality, validity, and integrity of the content of their manuscript and must ensure that this content complies with all of MDPI's publication ethics policies. MDPI reserves the right to request further information, and editorial decisions will be made in line with MDPI's **Editorial Process** and our **Terms and Conditions.**


1. AI cannot be listed as an author
2. Details of AI use should be disclosed
3. Use of AI should be mentioned in the Cover Letter

# Thank you!

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 [MDPI AG – YouTube](https://MDPI AG – YouTube)

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[www.mdpi.com](https://www.mdpi.com)



Satisfaction Survey