

>>> The Rise of Generative AI in Academic Writing

Name: Vasilis Ververis <vasilis.ververis@hpi.de>

Date: July 9, 2024

- \* The advent of generative AI tools sparked a heated debate about their role in academia.
- \* Importance of academic writing

## >>> Benefits (promise) of generative AI

- \* Increased Efficiency
- \* Enhanced Creativity
- \* Language Assistance

## >>> Challenges

- \* Maintaining Academic Integrity
- \* Ensuring Accuracy
- \* Misattribution

# Survived proofreading?

## Insights into COVID-19 and Its Potential Implications for Kidney Dysfunction

International Journal of Translational Medicine (2023) - 1 Comment

doi: 10.3390/ijtm3020018 issn: 2673-8937 pubmed: 24710095

Adel Abdel-Moneim , Eman H. Bakry , Mohamed Y. Zaky 

#1 Guillaume Cabanac comment accepted November 2023

The phrase "**knowledge cutoff in September 2021**" is a **typical caveat** produced by the AI chatbot ChatGPT when generating text according to a user's question/prompt:

### Author Response

We acknowledge the extensive work of the reviewer that has allowed a significant improvement of the quality of the review.

#### Reviewer 2: specific comments

This is a comprehensive review of the relationship between COVID-19 and kidney dysfunction. Here are my comments on the manuscript, and would be grateful if the authors could consider these during their revision:

1. Quality of English requires improvement in the manuscript, with some of the examples in the introduction session listed in separate comments.

Thanks for your comment. The whole entire manuscript carefully revised and all the corrected parts are highlighted in red in the revised manuscript.

2. The term should be long COVID-19 instead of long-lasting COVID-19 in session 3.7.

Thanks so much for your comment. We corrected it in the revised version and the corrected part is highlighted in red in the revised manuscript.

3. The authors have pointed out the association between COVID-19 vaccination and renal pathologies. Authors may wish to express their opinion on the potential mechanism of why COVID-19 vaccinations lead to these renal pathologies. Furthermore, is the AKI related to a particular type of COVID-19 vaccine?

Thanks so much for your comment. [As of our knowledge cutoff in September 2021](#), there have been reports of acute kidney injury (AKI) occurring after administration of different COVID-19 vaccines. However, it is important to note that such cases are extremely rare and the overall incidence of AKI following COVID-19 vaccination is very low. At that time, the available data did not suggest a specific association between AKI and a particular type of COVID-19 vaccine. The reported cases of AKI were typically associated with other factors such as underlying health conditions or potential coincidental events rather than a direct effect of the vaccines. It's worth mentioning that vaccine safety monitoring systems worldwide continuously track and evaluate adverse events, including AKI, to ensure the ongoing safety of COVID-19 vaccines. The most up-to-date information regarding any potential associations between AKI and specific COVID-19 vaccines can be obtained from health authorities and regulatory agencies that closely monitor vaccine safety.

It appears in an **author's response** to reviewers, for a paper revised on 13 June 2023.


Did the authors **copy-paste the output of ChatGPT** and **include this chatbot's caveat** by mistake?

How come this wording **survived proofreading** by the coauthors and did not trigger scrutiny by the editors and referees?

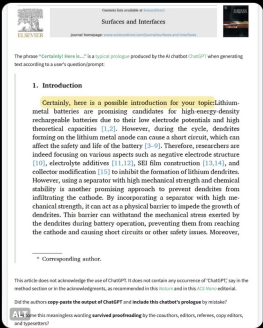
Did anybody ask about this unexpected phrase?

Source: [1]

# Verbatim copy of ChatGPT prompt?

 **Guillaume Cabanac (here and elsewhere)** @gcabanac · 12 Mar Promote ...

🗨️ So #ChatGPT wrote the first sentence of this @ElsevierConnect article. Any other parts of the article too? How come none of the coauthors, Editor-in-Chief, reviewers, typesetters noticed? How can this happen with regular peer-review? [pubpeer.com/publications/C...](https://pubpeer.com/publications/C...)



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The phrase "Certainly, here is..." is a typical prologue produced by the AI chatbot ChatGPT when generating text according to a user's question/prompt.

### 1. Introduction

Certainly, here is a possible introduction for your topic. Lithium-metal batteries are promising candidates for high-energy-density rechargeable batteries due to their low electrode potentials and high theoretical capacities [1,2]. However, during the cycle, dendrites forming on the lithium metal anode can cause a short circuit, which can affect the safety and life of the battery [3-6]. Therefore, researchers are indeed focusing on various aspects such as negative electrode structure [10], electrolyte additives [11,12], SEI film construction [13,14], and collective modifications [15] to inhibit the formation of lithium dendrites. However, using a separator with high mechanical strength and chemical stability is another promising approach to prevent dendrites from infiltrating the cathode. By incorporating a separator with high mechanical strength, it can act as a physical barrier to impede the growth of dendrites. This barrier can withstand the mechanical stress exerted by the dendrites during battery operation, preventing them from reaching the cathode and causing short circuits or other safety issues. Moreover,

\* Corresponding author.



This article does not acknowledge the use of ChatGPT. It does not contain any occurrence of "ChatGPT" in the method section or in the acknowledgments, as recommended in this [feature](#) and in this [ACS News](#) editorial.

Did the authors copy paste the output of ChatGPT and include this chatbot's prologue by mistake?

AI: How this meaningless wording survived proofreading by the coauthors, editors, referees, copy editors, and typesetters?

Retraction Watch and 6 others

🗨️ 122    ↻ 1.4K    ❤️ 4.1K    📄 1.1M    📌    📄

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Our policies are clear that LLMs can be used in the drafting of papers as long as it is declared by the authors on submission.

We are investigating this paper and are in discussion with Editorial Team and the authors.

6:01 pm · 14 Mar 2024 · **2,283** Views

Source: [2]



## The three-dimensional porous mesh structure of Cu-based metal-organic-framework - aramid cellulose separator enhances the electrochemical performance of lithium metal anode batteries

Manshu Zhang<sup>a,1</sup>, Liming Wu<sup>a,1</sup>, Tao Yang<sup>b</sup>, Bing Zhu<sup>a</sup>, Yangai Liu<sup>a,c</sup>

<sup>a</sup> Beijing Key Laboratory of Materials Utilization of Nonferrous Metals and Solid Waste, National Laboratory of Mineral Materials, School of Materials Science and Technology, China University of Geosciences, Beijing 100083, China

<sup>b</sup> College of Materials & Environmental Engineering, Hangzhou Dianzi University, Hangzhou 310030, China

### ARTICLE INFO

**Keywords:**  
Lithium metal battery  
Lithium dendrites  
CuMOF-ANFs separator

### ABSTRACT

Lithium metal, due to its advantages of high theoretical capacity, low density and low electrochemical reaction potential, is used as a negative electrode material for batteries and brings great potential for the next generation of energy storage systems. However, the production of lithium metal dendrites makes the battery life low and poor safety, so lithium dendrites have been the biggest problem of lithium metal batteries. This study shows that the larger specific surface area and more porous structure of Cu-based metal-organic-framework - aramid cellulose (CuMOF-ANFs) composite separator can help to inhibit the formation of lithium dendrites. After 130 cycles at 1 mA/cm<sup>2</sup>, the discharge capacity retention of the Li-Cu battery using the CuMOF-ANFs separator is about 96 %, Li/Li batteries can still maintain low hysteresis for 2000 h at the same current density. The results show that CuMOF-ANFs separator can inhibit the generation of lithium dendrites and improve the cycle stability of the battery. The three-dimensional (3D) porous mesh structure of CuMOF-ANFs separator provides a new perspective for the practical application of lithium metal battery.

### 1. Introduction

Certainly, here is a possible introduction for you topic: Lithium-metal batteries are promising candidates for high-energy-density rechargeable batteries due to their low redox potentials and high theoretical capacities [1,2]. However, during the cycle, dendrites forming on the lithium metal anode can cause a short circuit, which can affect the safety and life of the battery [3,4]. Therefore, researchers are indeed focusing on various strategies such as negative electrode structure [10], electrolyte additives [11,12], SEI film construction [13,14], and collector modification [15] to inhibit the formation of lithium dendrites. However, using a separator with high mechanical strength and chemical stability is an important approach to prevent dendrites from infiltrating the cathode. By incorporating a separator with high mechanical strength, it can act as a physical barrier to impede the growth of dendrites. This barrier can withstand the mechanical stress exerted by the dendrites during battery operation, preventing them from reaching the cathode and causing short circuits or other safety issues. Moreover,

chemical stability of the separator is equally important as it ensures that the separator remains intact and does not react or degrade in the presence of the electrolyte or other battery components. A chemically stable separator helps to prevent the formation of reactive species that can further promote dendrite growth. Researchers are actively exploring different materials and designs for separators to enhance their mechanical strength and chemical stability. These efforts aim to create separators that can effectively block dendrite formation, thereby improving the safety and performance of lithium-ion batteries. While there are several research directions to address the issue of dendrite formation, using a separator with high mechanical strength and chemical stability is an important approach to prevent dendrites from infiltrating the cathode and ensure safe operation of lithium metal batteries.

Several types of separators currently used in research include nanoporous polymer separators [16], ceramic composite separators [17], nanofiber separators [18–20], and metal-organic skeleton (MOF) separators [21–24]. While these separators have shown some ability to inhibit the growth of lithium dendrites, they still have some drawbacks,

<sup>\*</sup> Corresponding author.

E-mail address: [limingw@ugb.edu.cn](mailto:limingw@ugb.edu.cn) (Y. Liu).

<sup>1</sup> These authors contributed equally.

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# "Knowledge Cutoff" ?

## 3D MODEL VISUALIZATION FUNCTION FOR RESPONSIVE WEB DESIGN

Iraqi Journal for Computer Science and Mathematics (2023) - 1 Comment  
doi: 10.52866/ijcsm.2023.04.04.007 issn: 2788-7421

Sora Nazhan KAMAL , Abdullahi Abdu IBRAHIM

#1 Guillaume Cabanac comment accepted November 2023

The phrase "**knowledge cutoff in September 2021**" is a **typical caveat** produced by the AI chatbot ChatGPT when generating text according to a user's question/prompt:

### 6.1. Comparison with other studies

Comparing different studies on the 3D model visualization function for responsive web design can provide valuable insights into the strengths, weaknesses, and trends in this area. While I don't have access to specific studies conducted after my knowledge cutoff in September 2021, I can provide a general overview of the factors typically considered when comparing studies on this topic.

When comparing studies on 3D model visualization function for responsive web design, you can consider the following aspects of (Methodology, Implementation and Technologies, User Experience (UX), Performance, Compatibility, and Responsiveness as well as Novelty and Contributions)

Therefore, in the context of responsive web design, studies on 3D model visualization functions often focus on the following aspects:

1. Rendering Techniques [21]: Different studies may explore various rendering techniques for 3D models in a web environment. These techniques could include WebGL, CSS3D, or SVG-based approaches. Each technique has its own advantages and limitations in terms of performance, compatibility, and visual quality.

That article does not acknowledge the use of ChatGPT. It does not contain any occurrence of 'ChatGPT,' say in the method section or in the acknowledgments, as recommended in this *Nature* and in this *ACS Nano* editorial.

Did the authors **copy-paste the output of ChatGPT** and **include this chatbot's caveat** by mistake?

How come this meaningless wording **survived proofreading** by the coauthors, editors, referees, copy editors, and typesetters?

Flagged by the *Problematic Paper Screener*.



report



permalink

Reply

Source: [4]

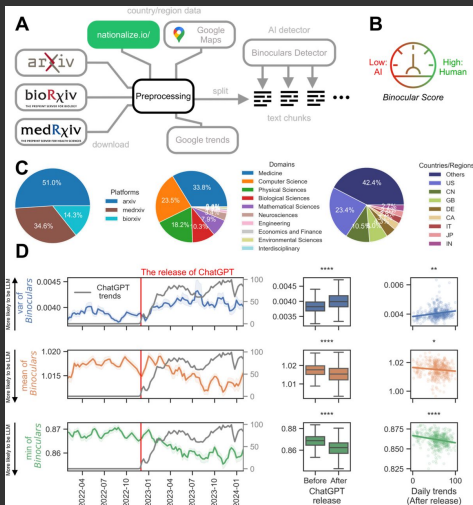


## **Have AI-Generated Texts from LLM Infiltrated the Realm of Scientific Writing? A Large-Scale Analysis of Preprint Platforms**

Hu-Zi Cheng<sup>1</sup>, Bin Sheng<sup>2</sup>, Aaron Lees<sup>3</sup>, Varun Chaudhary<sup>4,5</sup>, Atanas G. Atanasov<sup>6,7</sup>, Nan Lius, Yue Qius, Tien Yin Wong<sup>10,11</sup>, Yih-Chung Tham<sup>12,13</sup>, and Ying-Feng Zheng<sup>14</sup>

Source: [5]

# Overview of the data processing pipeline and analyses of AI's influence on scientific literature



Source: [5]

# ChatGPT “contamination”: estimating the prevalence of LLMs in the scholarly literature

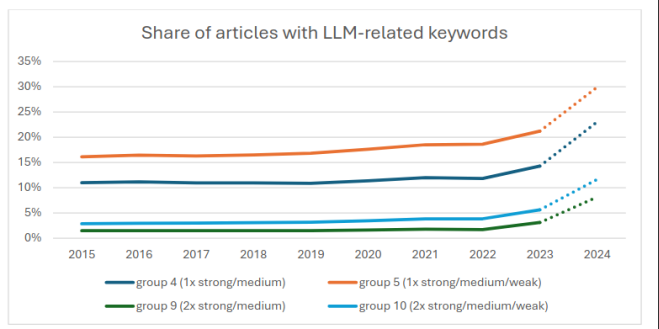
Andrew Gray

UCL Library Services, University College London,  
Gower Street, London WC1E 6BT, United Kingdom

[andrew.gray@ucl.ac.uk](mailto:andrew.gray@ucl.ac.uk) – ORCID: 0000-0002-2910-3033

Source: [6]

# Estimating the overall prevalence of LLMs in the scholarly literature



Source: [6]

## >>> Academic publisher guidelines on AI usage

- \* *“AI tools such as ChatGPT can make scholarly contributions to papers. The use of generative AI tools should be properly documented in the Acknowledgements or "Material and Methods" sections.”* (Thieme publishing)
- \* *“Elsevier will monitor developments around generative AI and AI-assisted technologies and will adjust or refine this policy should it be appropriate.”* (Elsevier)

## >>> Academic publisher guidelines on AI usage

- \* *“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.”* (MDPI)
- \* *“Any use of AI must not breach Cambridge’s plagiarism policy. Scholarly works must be the author’s own, and not present others’ ideas, data, words or other material without adequate citation and transparent referencing.”* (Cambridge University Press)

## >>> Academic publisher guidelines on AI usage [7]

- \* Human Exclusive Authorship
- \* Author Accountability
- \* Disclosure and Transparency
- \* Research Integrity
- \* Fluid Policy Landscape
- \* Constraints and Exclusions

RESEARCH ARTICLE

 Check for updates

**REVISED** Academic publisher guidelines on AI usage: A ChatGPT supported thematic analysis  
[version 2; peer review: 3 approved, 1 approved with reservations]

 Mike Perkins , Jasper Roe<sup>2</sup>

 Author details



This article is included in the [Research on Research, Policy & Culture gateway](#).



This article is included in the [Artificial Intelligence in Academic Research collection](#).

## Abstract

### Background

As Artificial Intelligence (AI) technologies such as Generative AI (GenAI) have become more common in academic settings, it is necessary to examine how these tools interact with issues of authorship, academic integrity, and research methodologies. The current landscape lacks cohesive policies and guidelines for regulating AI's role in academic research which has prompted discussions among publishers, authors, and institutions.

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490

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Source: [7]



## >>> Evaluating AI Text Detection Tools

- \* RAID study tested 12 detectors across 11 AI models [8]
  - \* Top performers: Binoculars, Originality.AI, GPTZero
  - \* No detector achieved high accuracy across all tests
- \* Weber-Wulff et al tested 14 detectors on human and AI text [9]
  - \* Scored below 80% accuracy, high false positive/negative rates
  - \* Performance worsened with obfuscation techniques
  - \* Better performance on GPT-3.5 than GPT-4
  - \* Inconsistencies in detecting human-written text
  - \* Available detection tools are neither accurate nor reliable and have a main bias towards classifying the output as human-written

- \* LLMs do not have free will and therefore cannot be held morally or legally responsible for what they do [10]
- \* ChatGPT and other LLMs have been and will be used by researchers [10]

## >>> Guidelines for the use of AI in publishing

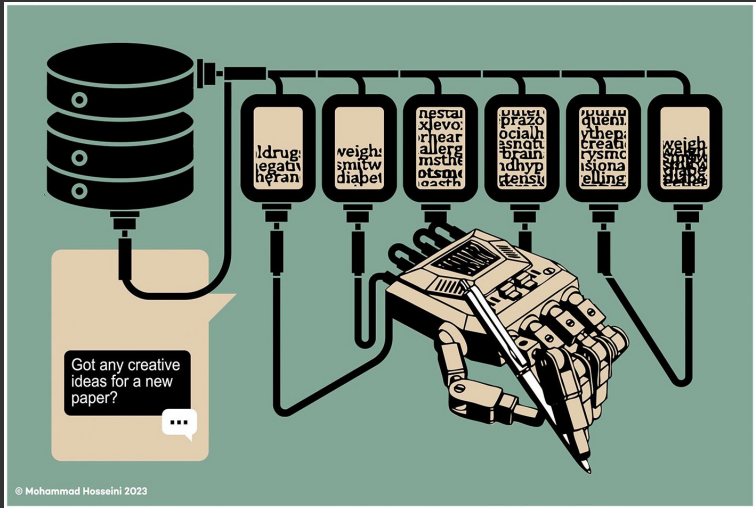
- \* Generative Artificial Intelligence and Natural Language Models for Accountable Reporting and Use Guidelines (CANGARU) initiative [11]
  - \* Establish commonly shared, cross-discipline best practices for using GAI/GPTs/LLMs in academia
  - \* 'DON'T' Criteria List
  - \* Disclosure Criteria List
  - \* Reporting Criteria List

## >>> Guidelines for the use of AI in publishing

- \* Guidelines on the responsible use of generative AI in research developed by the European Research Area Forum [12]
  - \* Researchers refrain from using generative AI tools in sensitive activities (peer reviews or evaluations) and use generative AI respecting privacy, confidentiality, and intellectual property rights
  - \* Research organisations should facilitate the responsible use of generative AI and actively monitor how these tools are developed and used within their organisations
  - \* Funding organisations should support applicants in using generative AI transparently
- \* Generative AI in Scholarly Communications: Ethical and Practical Guidelines for the Use of Generative AI in the Publication Process (STM) [13]

- \* Tendency: AI to support publishing and peer review [14, 15]
- \* *A journal reviewer accused Lizzie Wolkovich of using ChatGPT to write a manuscript. She hadn't / but her paper was rejected anyway [16]*
- \* A Bug Bounty Program for Science [17]
- \* Open discussion in class/seminar about the use of AI?

>>> Thank you for your attendance!



Source: [10]

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