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Editorial

Scientific Publishing is Still Awaiting for AI to be Geared Up

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Artificial Intelligence (AI) is gaining a major role in all layers of life and business. The leading nations adopt it to all governing mechanisms. The burden is better differentiation of the workload to reach the specified task by using deep learning systems. Applications such as ChatGPT have been popularized to facilitate the use of AI. There are also fallbacks of these applications when human-like content is generated it may misguide the users leading to wrong and harmful judgements.

AI has great potential at all stages of scientific publishing, from submission to peer review to publication and beyond.

There appears to be a concept that artificial intelligence accelerates knowledge discovery and advances the growth of academic and scientific research. Its impact grows when AI solutions are grounded in reputable sources and robust quality checks. Definitely, AI will expedite the peer-review process, offering critical insights to define and uphold rigorous publication standards.

Data management, keyword searching, dataset analysis, efficient content aggregation, and sophisticated search capabilities within databases are the capabilities that have been offered by AI for the authors.

Generative AI can also produce concise summaries of academic articles, extracting the most relevant insights for readers. Images can be generated quickly.

AI will create new avenues to refine the editorial process are poised to drive the evolution of scholarly publishing.

Conversely, detecting AI-generated text remains a significant challenge in scientific publishing, particularly for publishers striving to uphold research integrity. So, the regulations differ among the publisher to manage the AI- generated texts. Generally, AI tools are not permitted in the preparation of peer-review reports.[1]

AI has the potential to assist researchers in detecting and avoiding predatory journals; however, current AI tools are not yet fully reliable in distinguishing legitimate journals from predatory ones.[2]

Selecting the right journal for a manuscript should not be left entirely to AI-driven tools or publisher systems. While AI and publishers may have different approaches, authors must take an active role, making informed decisions to ensure the best fit for their work.

Detecting the AI generated manuscripts can still be difficult which becomes a disadvantage for the publisher. There are models to detect AI-generated text; however, their reliability remains inconsistent.

Paper mills are profit-driven, unregulated, and potentially illicit operations that generate and sell fraudulent or manipulated manuscripts presented as legitimate research. AI can make the problem of paper mills worse by helping create fake or low-quality

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research papers more easily. This makes it even more important to develop better AI detection tools so publishers can spot and stop AI-generated fake research.[3]

There are pros and cons of using preprints in scientific publication as they are not peer reviewed. AI may not differentiate it. ChatGPT cannot accurately identify self-citations, especially when non-English names are involved.

Gemini now appears as an alternative to ChatGPT in terms of finding the self-citations and the outdated references. ChatGPT and Gemini were also differentiated in terms of finding the relevant reviewers for a specific topic.

So at present, determining whether scientific publishing is fully prepared to embrace AI remains challenging.

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