Learned Publishing

LEARNED PUBLISHING Open Access

ORIGINAL ARTICLE OPEN ACCESS

A Cross-Disciplinary Analysis of AI Policies in Academic Peer Review

Zhongshi Wang | Mengyue Gong

Editorial Department of Systems Microbiology and Biomanufacturing, School of Biotechnology, Jiangnan University, Wuxi, China

Correspondence: Mengyue Gong (mgong@jiangnan.edu.cn)

Received: 30 May 2025 | **Revised:** 6 October 2025 | **Accepted:** 1 December 2025

Keywords: artificial intelligence | cross-disciplinary | grounded theory | peer review | publishing policy

ABSTRACT

Rapid advances of artificial intelligence (AI) have substantially impacted the field of academic publishing. This study examines AI integration in peer review by analysing policies from 439 high- and 363 middle-impact factor (IF) journals across disciplines. Using grounded theory, we identify patterns in AI policy adoption. Results show 83% of high-IF journals have AI guidelines, with varying stringency across disciplines. Meanwhile, only 75% of middle-IF journals have AI guidelines. Science, technology, and medicine (STM) disciplines exhibit stricter regulations, while humanities and social sciences adopt more lenient approaches. Key ethical concerns focus on confidentiality risks, accountability gaps, and AI's inability to replicate critical human judgement. Publisher policies emphasise transparency, human oversight, and restricted AI usage for auxiliary tasks only, such as grammar checks or reviewer finding. Disciplinary differences highlight the need for tailored guidelines that balance efficiency gains with research integrity. This study proposes collaborative frameworks for responsible AI integration. It focuses on accountability, transparency, and interdisciplinary policy development to address peer review challenges.

1 | Introduction

Generative artificial intelligence (AI), such as ChatGPT, has emerged as a revolutionary achievement in the field of machine learning (Kaswan et al. 2023). Since its launch, ChatGPT has profoundly influenced academic publishing. Its key applications include refining academic texts, evaluating scientific literature, and generating data analysis code (Lenharo 2024). The peer review process constitutes a crucial component of the academic publishing process (Dance 2023), wherein experts in relevant fields rigorously evaluate manuscripts to assess their validity, significance, and originality. Recent studies have explored the potential of AI-assisted peer review. Faber (2024) evaluated ChatGPT-4.0 for reviewer recommendations, achieving a 42% overlap with manual selections and a reduction of selection time by 73%. Kadi and Aslaner (2024) investigated ChatGPT-4.0's capabilities in peer review, showing AI struggled to detect paper errors effectively. Carabantes et al. (2023) demonstrated the potential of LLMs as peer reviewers, showing that AI-generated complete review reports closely resemble human-generated feedback.

A critical imbalance persists between the growing number of submissions and limited review resources. Within this context, AI has been increasingly adopted in peer review stages (Figure 1). Current applications primarily focus on quality check and reviewer search. For example, iThenticate, an anti-plagiarism software widely used for manuscript quality inspection, utilises AI technology to enhance its detection capabilities (de Leon et al. 2025). Besides, Elsevier's *Evaluate Manuscript* tool provides multiple functions to support editors, including reviewer management, article comparison, and preliminary manuscript assessment (Stoop 2024).

AI tools face significant challenges in academic ethics compliance. Issues like hallucinations, plagiarism, and faulty

Key Points

- Application of AI tools in peer review has received increasing attention.
- Among the 439 high-IF journals investigated, 83% provided AI policies for peer review, while 75% of middle-IF journals did so.
- AI policies focus on confidentiality risks, accountability gaps, and capacity deficiencies of AI.
- AI policies for peer review vary according to the affiliated publishers and disciplines.
- Tailored AI guidelines need to be established according to the discipline.

citations limit their broader use in peer review currently. LLMs can generate text by predicting the next word based on the input they receive and drawing on the patterns and knowledge they've acquired in the training process (Ouyang et al. 2022). Crucially, these systems lack genuine understanding of content during interactions (Petroni et al. 2019). This mechanistic approach raises concerns about reliability, as AI outputs may contain inaccuracies or produce misleading information (Polyportis and Pahos 2025). In academic writing, hallucinations often manifest as fabricated references or misattributed sources (Kendall and da Silva 2024). A further limitation stems from static knowledge bases. AI systems typically lack real-time updates, potentially offering outdated information in fast-evolving fields.

Current research on AI policies for peer review remains inadequate. A study of major scientific organisations revealed that key associations, such as the Committee on Publication Ethics (COPE), do not provide clear guidelines for AI usage in the peer review process (Lin 2024). Wiley's "ExplanAItion: An AI study" survey also highlights researchers' demand for clearer implementation frameworks. Nearly two-thirds of respondents report inadequate guidance that restricts their adoption of AI tools (Wiley 2025). The growing applications of AI in peer review and insufficient AI policies constitute a contradiction, which is the main problem to be explored.

In this study, by analysing AI policies for peer review of high- and middle-IF journals, we sort out the main viewpoints on AI-assisted peer review. Our investigation reveals distinct disciplinary patterns in AI adoption. We further categorise differences between disciplines and propose guidelines for responsible AI integration. These guidelines address transparency, accountability, and quality control in review processes. This study focuses on the transparency, accountability, and quality control in the AI-assisted peer review process, providing suggestions for ethical and responsible AI usage in academic publishing.

2 | Materials and Methods

2.1 | Materials

The journals were selected based on Journal Citation Reports (JCR) 2023 ranking (https://jcr.clarivate.com/). An investigation was conducted on the 448 categories (sub-disciplines) across 21 groups (disciplines) in JCR ranking. Specifically, the two journals with the highest journal impact factors per discipline category were chosen (Table A1). Given that some sub-disciplines overlapped across multiple disciplines and certain journals were classified into several sub-disciplines, duplicate journals were removed. As a result, a total of 439 high-IF journals were included in this study (Table A1). To enhance the representativeness of the selected journals, journals at the median impact factor within each category in JCR ranking were additionally selected. After removing duplicate journals, there were a total of 363 middle-IF journals included in this study (Table A2).

2.2 | Methods

2.2.1 | Policy Resources

A comprehensive search of journal policies was conducted by reviewing each journal's ethics policies, editorial policies, submission guidelines, and other relevant documents. Editorials that discussed AI-assisted peer review were also identified through targeted searches. Only policy documents explicitly addressing the use of AI by editors or reviewers were retained for further analysis.

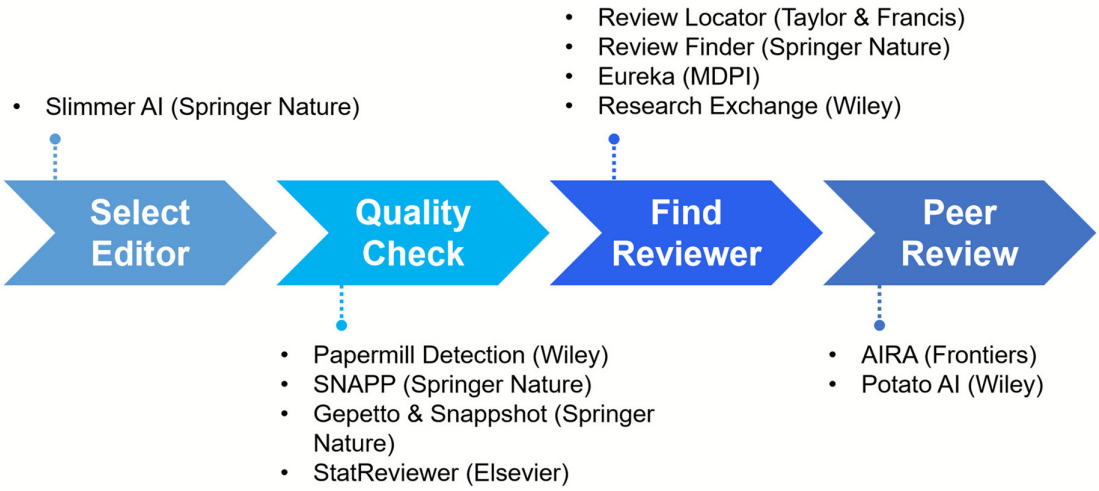

FIGURE 1 | AI tools used in the peer review process.

For the first round of data collection (March 10–17, 2025), we focused on acquiring AI policies for peer review from high IF journals. A second round was subsequently carried out from August 1 to August 14, 2025, to track any policy updates in these selected high-IF journals and to additionally gather AI policies for peer review from middle-IF journals for comparative analysis.

2.2.2 | Qualitative Analysis

Based on an improved grounded theory method (Charmaz and Thornberg 2020), qualitative analysis was performed using NVivo 20 (QSR International, Australia). AI policy texts served as the primary data sources, with initial coding conducted through independent line-by-line readings by multiple coders. Concepts were subsequently summarised and categorised via focused coding. Theoretical coding was then applied to further abstract these categories into core categories, thereby exploring the inherent relationships.

2.2.3 | Data Analysis

The AI policy texts were processed through frequency statistics, and high-frequency concepts were extracted by integrating qualitative analysis data. Descriptive methods were used to statistically analyse the profile of the AI policies of the journal. All statistical computations and visual representations were performed using SigmaPlot 12.5 (Systat, USA) and Microsoft Excel 2021 (Microsoft, USA).

3 | Results

3.1 | Profile of Selected Journals

The selected high-IF journals were published by 43 publishers, the majority of which were affiliated with commercial publishing publishers. The top 5 publishers of high-IF journals, ranked by representation, were Elsevier (23.9%), Springer Nature (20.0%), Wiley (8.3%), Taylor and Francis (6.4%), and Annual Reviews (4.5%). Notably, some high-IF journals were also published by non-profit publishers (academic societies and university presses) and journal editorial offices (Figure 2A). Meanwhile, the selected middle-IF journals were published by 105 publishers, showing greater publisher diversity. The top 5 publishers of middle-IF journals, ranked by representation, were Springer Nature (15.7%), Elsevier (12.7%), Taylor and Francis (12.5%), Wiley (10.3%), and SAGE (6.6%). A more dispersed distribution of publishers was observed in middle-IF journals (Figure 2B).

In March 2025, analysis reveals 77% of selected high-IF journals provided AI policies for peer review, with all containing explicit guidelines for reviewers. Meanwhile, 41% of the total journals provided AI policies for editors, representing a considerably lower proportion compared to the guidelines directed at reviewers. Five months later, in August 2025, the proportion of high-IF journals with AI policies for peer review had risen to 83%, and 64.3% of journals now had AI policies specifically for editors, representing a significant increase. Compared to high-IF journals, however, the proportion of middle-IF journals with AI policies for reviewers or editors was relatively lower, with rates of 75% and 50.6% respectively (Figure 3A).

The IFs of the selected high-IF journals ranged from 0.3–521.6, with the majority exhibiting IFs below 100 and an average value of 13.8. Most sub-disciplines featured leading journals with IFs under 25. Conversely, all the selected middle-IF journals had an IF below 5, with an average of 1.9 (Figure 3B).

3.2 | Policy Texts Acquisition

Most selected journals maintained AI policies consistent with their affiliated publishers' guidelines. From an initial pool of 439 high-IF journals examined, 39 distinct AI policy documents for peer review were identified (P1-P39, Table 1). Among these 39 AI policy documents, 15 were issued by commercial publishers, 21 by non-profit publishers, and 3 by journal editorial offices. Furthermore, numerous journals explicitly declared adherence to the recommended standards set forth by international journal organisations, such as the International Committee of Medical Journal Editors (ICMJE), the World Association of Medical Editors (WAME), and the International Association of Scientific, Technical and Medical Publishers (STM). The policy documents from these 3 international organisations had also been included within this research (P40-P42, Table 1). All the texts and screen captures of each policy had been saved in supplementary documents (Supplementary S1).

3.3 | Initial Coding

The policy texts underwent line-by-line analysis, yielding 76 concepts with associated representative texts. To ensure conceptual saturation, we conducted an additional theoretical saturation test of 3 policies from ICMJE, WAME, and STM. No new concepts emerged during this validation phase. Consequently, it can be concluded that the identified concepts meet the requirements for saturation, demonstrating the credibility of this study.

Through an initial coding process, these concepts were systematically classified into 28 categories (A1–A28), as outlined in Table A3. The concepts were subjected to frequency analysis, which revealed 10 predominant terms: AI tools, Reviewer, Confidential, Manuscript, Peer review, Report, Editor, Upload, Abuse, and Accountability. These high-frequency terms corresponded to 5 core dimensions: process elements (Peer review, AI tools), stakeholders (Reviewers, Editors), materials (Manuscripts, Reports), actions (Upload, Abuse), and ethical safeguards (Confidentiality, Accountability).

3.4 | Focused Coding and Theoretical Coding

According to the applied objects, attitudes, and relationships among them, the concepts were integrated into 8 categories including: Responsibility, Confidential principle, Peer review standard, Potential, Challenges, Publisher, Editor, and Reviewer. Through

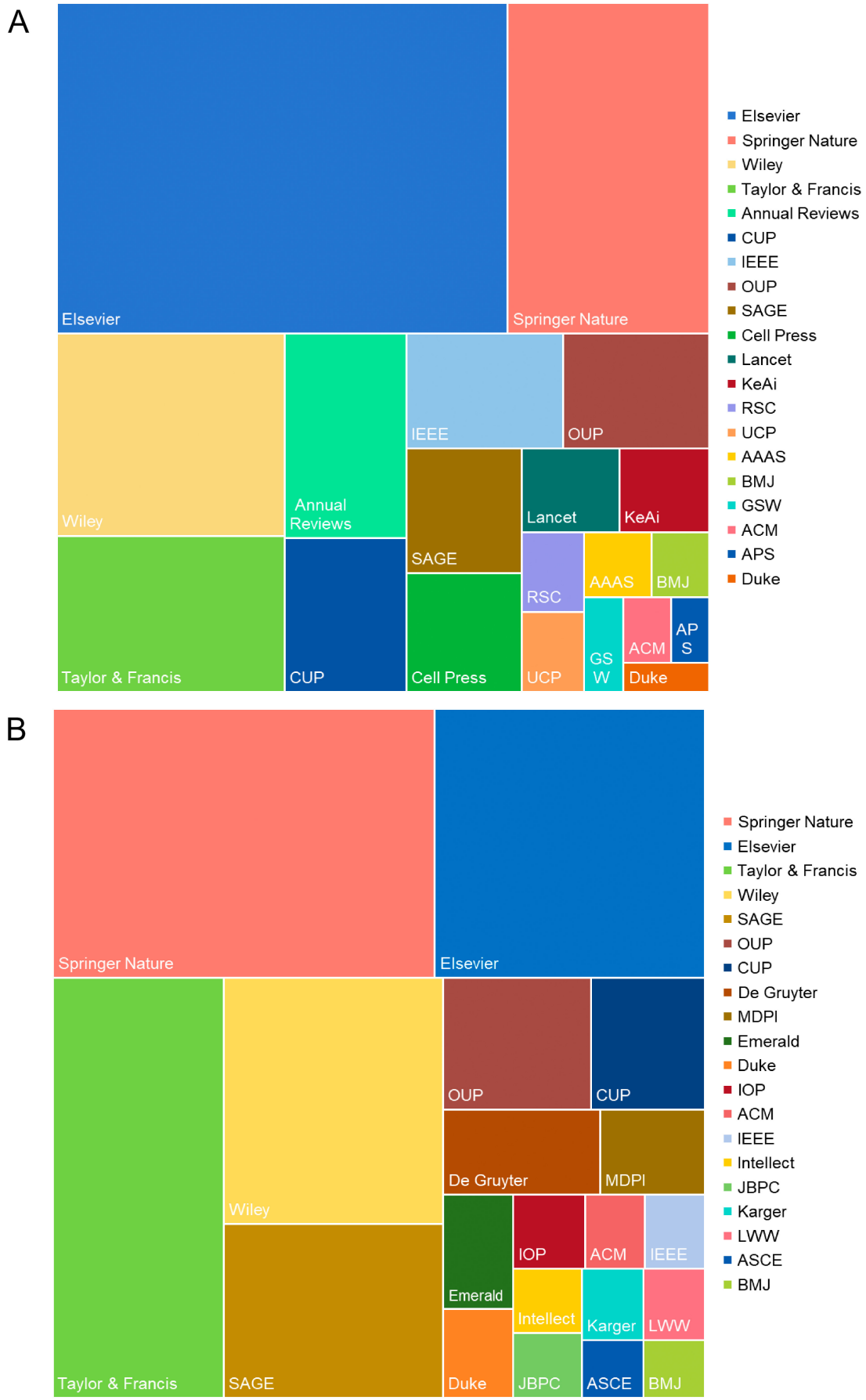

FIGURE 2 | Legend on next page.

FIGURE 2 | Top 20 publishers of high-and middle-IF journals in this study. (A) high-IF journals; (B) middle-IF journals. AAAS = American Association for the Advancement of Science; ACM = Association for Computing Machinery; APS = American Physical Society; ASCE = American Society of Civil Engineers; BMJ = British Medical Journal; CUP=Cambridge University Press; GSW = GeoScienceWorld; IEEE = Institute of Electrical and Electronics Engineers; IOP=IOP Publishing; JBPC = John Benjamins Publishing Company; LWW = LWW Journals/Wolters Kluwer; OUP=Oxford University Press; RSC = Royal Society of Chemistry; UCP=University of Chicago Press.

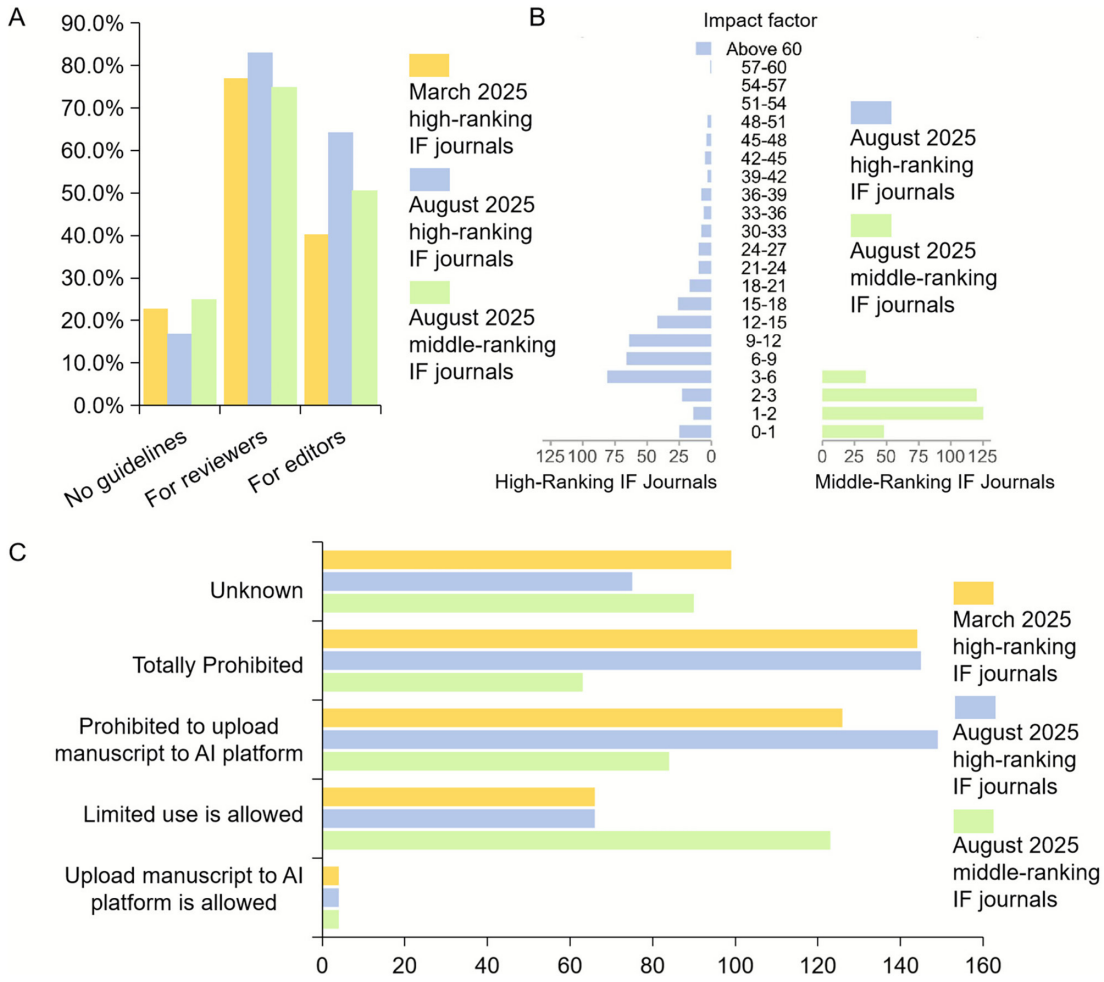

FIGURE 3 | AI policies for peer review and impact factor of high-and middle-IF journals in March and August 2025. (A) AI policies for peer review; (B) impact factors; (C) attitudes of policies.

systematic classification and analysis, these 8 categories were further summarised into 3 core categories: Peer review principles, Challenges and potential, and Strategies and guidelines (Table 2).

Figure 4 illustrated their interconnected relationships. Under the guidance of the peer review principles, the adoption of AI tools had introduced both novel challenges and notable opportunities. In response, policies systematically addressed these dual aspects by respectively proposing strategies and guidelines for publishers, editors, and reviewers.

3.5 | Changes of AI Policies for Peer Review in High-IF Journals

For the high-IF journals, during the five-month period from March to August 2025, AI policies for peer review were updated in 103 journals, involving publishers such as Karger (P5), Springer Nature (P10), Wiley (P13), and IEEE (P29), with two new AI policy texts additionally introduced (Table 4).

Among these, journals under Karger and Nature Portfolio (a part of Springer Nature) introduced new AI peer review policies specifically for editors. Wiley and IEEE made minor revisions to their policy. Journals affiliated with the American Geophysical Union (AGU) newly implemented AI policies for peer review, a move mirrored by *Clinical Chemistry*, published by Oxford University Press. Additionally, all journals under Cambridge University Press added prominently placed links directing to AI policies, thereby ensuring consistency across their publications.

3.6 | AI Policy for Peer Review in Middle-IF Journals

Although the diversity of publishers among middle-IF journals was more than twice that of high-IF journals, the variety of their

TABLE 1 | AI policies for peer review of high-IF journals in this study.

No.	Publishers	Document names
Commercial publishers		
P1	Cell Press	Information for Reviewers
P2	Copernicus	Obligations for referees
P3	Elsevier	Generative AI policies for journals
P4	Elsevier	Declaration of generative AI in scientific writing
P5	Karger	Generative Artificial Intelligence (GenAI) For Peer Reviewers
P6	KeAi	Guide for Authors
P7	Lancet	AI and AI-assisted technologies in peer review
P8	Mary Ann Liebert	Appropriate use of Artificial Intelligence (AI) in Published Research
P9	SAGE	Use of LLMs for reviewers and editors
P10	Springer Nature	AI use by peer reviewers
P11	Taylor & Francis	A guide to becoming a peer reviewer
P12	Wiley	Publication Ethics
P13	Wiley	Wiley's Best Practice Guidelines
P14	Wiley/*Public Administration Review*	PAR's Guidelines on the Use of Artificial Intelligence
P15	World Scientific	World Scientific's position statement on Authorship and AI tools
Non-profit publishers (learned societies and university publishers)		
P16	American Association for the Advancement of Science (AAAS)	Ethical Guidelines for Reviewers
P17	AAAS/*Plant Phenomics*	Guidelines For Reviewers
P18	American Chemistry Society (ACS)	Editorial Discretion/AI Use as a Peer Reviewer
P19	American Heart Association (AHA)	Ethical Responsibilities During Review Process
P20	American Institute of Physics (AIP)	Ethics for Editors and Reviewers
P21	American Medical Association (JAMA)	Guidance for Authors, Peer Reviewers, and Editors on Use of AI, Language Models, and Chatbots
P22	American Physical Society (APS)	Appropriate Use of AI Tools
P23	American Physiological Society (APS)	Our Peer Review and Artificial Intelligence Policy
P24	American Psychological Association (APA)	APA Journals policy on generative AI
P25	American Society of Haematology (ASH)	Policy regarding AI-generated images and text
P26	Association for Computing Machinery (ACM)	Principles of Peer Review
P27	British Medical Association (BMJ)	AI use
P28	Cambridge University Press	Peer review ethics in peer review
P29	Institute of Electrical and Electronics Engineers (IEEE)	Guidelines for Artificial Intelligence (AI)-Generated Text
P30	IEEE	Transactions Reviewer and Associate Editor Guidelines
P31	Institute of Physics (IOP Publishing)	Ethics for reviewers

(Continues)

TABLE 1 | (Continued)

No.	Publishers	Document names
P32	National Institute of Health (NIH)	Confidentiality and AI Technologies
P33	Radiological Society of North America (RSNA)	Guidelines for Use of Large Language Models by Authors, Reviewers, and Editors: Considerations for Imaging Journals
P34	Royal Society of Chemistry (RSC)	Reviewer responsibilities
P35	SciOpen/Tsinghua University Press	The use of AI or AI-assisted technologies
P36	Society for Industrial and Applied Mathematics (SIAM)	SIAM Editorial Policy—Artificial Intelligence
Journal editorial offices		
P37	*Journal of Educational Evaluation for Health Professions*	Policies on the use of generative artificial intelligence in article writing and peer review
P38	*Journal of Orthopaedic & Sports Physical Therapy*	Using Generative AI in the Editorial Process
P39	*World Journal of Mens Health*	Guidance for peer reviewers
Journal organisations		
P40	International Committee of Medical Journal Editors (ICMJE)	ICMJE Recommend Guidance
P41	World Association of Medical Editors (WAME)	WAME Recommendations
P42	International Association of Scientific, Technical and Medical Publishers (STM)	STM White Papers

AI policies did not exhibit a corresponding increase. By August 2025, while 83% of high-IF journals had implemented AI policies for peer review, only 75% of middle-IF journals had done so (Figure 3A). Furthermore, compared to the policies of high-IF journals, middle-IF journals adopted more permissive AI policies for peer review, evidenced by 123 journals explicitly allowing limited use of AI technology in peer review (Figure 3C).

Within the middle-IF journals, 38 distinct AI policy texts were identified, of which 14 differed from those identified in the high-IF journals (Table 5). A line-by-line reading of the newly identified AI policy texts from the middle-IF journals was conducted, comparing them with the 76 initial concepts from Table 2. This analysis yielded 2 new concepts: "Reviewers should obtain the AI Use Statement from the manuscript" (from AK Journals) and "Reviewers should inform the author through the editorial team when using AI to assist evaluation" (from Consejo Superior de Investigaciones Científicas). These 2 concepts still fell within the scope of the 28 categories previously established in Table 2, specifically belonging to categories A23 (Reviewer monitoring and evaluation) and A25 (AI tools use declaration). All the texts and screen captures of 14 new policies from middle-IF journals had been saved in supplementary documents (Supplementary S2).

3.7 | Differences in AI Policies for Peer Review Between Disciplines

Our analysis used JCR's disciplinary classifications to evaluate the adoption of AI policies for peer review across various disciplines. In both high-and middle-IF journals, Literature & Language, Arts and Humanities, Computer Science, Mathematics, as well as Plant & Animal Science exhibited the lowest proportions of introduced AI policies. In contrast, higher adoption rates were observed in Social Sciences, Environment/Ecology, Clinical Medicine, Materials Science, Chemistry, Engineering, and Multidisciplinary journals (Figure 5A). Among these, middle-IF journals demonstrated a significantly lower prevalence of AI policies in the disciplines of Arts & Humanities, History & Archaeology, and Visual & Performing Arts when compared to their high-IF counterparts.

Detailed examination revealed significant disciplinary variations in AI policy stringency (Figure 5B). Requirements for AI peer review in fields such as arts and humanities, social sciences, and certain STM disciplines like Mathematics and Computer Science were relatively lenient, with fewer policies proposed for AI peer review. Conversely, most other STM disciplines exhibited stricter requirements for AI peer review, with about 80% of journals implementing AI policies for peer review. Notably, in some experimental disciplines (e.g., Materials Science, Chemistry, Agricultural Sciences), more than 50% of journals explicitly prohibited AI from participating in peer review processes.

4 | Discussion

4.1 | Peer Review Principles

Established ethical frameworks, such as the *COPE ethical guidelines for peer reviewers* (COPE council 2017), outline key reviewer responsibilities. These include maintaining

TABLE 2 | Focused coding and theory coding.

Core categories	Categories	Concepts
Peer review principles	B1 Responsibility	A1 Human behaviour
		A2 Accountability
	B2 Confidential principle	A3 Confidential information
		A4 Confidential process
	B3 Peer review standard	A5 Bias
		A6 Objective
		A7 Integrity
		A8 Professional comments
Challenges and potential	B4 Challenges	A9 Lack of ability
		A10 Confidentiality risks
		A11 Accountability gaps
	B5 Potential	A12 Rapid development
		A13 Significant influence
Strategies and guidelines	B6 Publisher	A14 Positive response
		A15 Regular review
		A16 Active treatment
	B7 Editor	A17 Editor responsibility
		A18 Editor monitoring and evaluation
		A19 Confidential requirement for editors
		A20 Editors should not use AI to make decisions
		A21 Editors could use AI tools to assist their works
	B8 Reviewer	A22 Reviewer responsibility
		A23 Reviewer monitoring and evaluation
		A24 Confidential requirement for reviewers
		A25 AI tools use declaration
		A26 Prohibition of AI peer review
		A27 Limited use of AI tools is allowed
		A28 AI for assistant work is allowed

professional responsibility, declaring competing interests, ensuring confidentiality, avoiding bias, flagging ethical concerns, and taking accountability. Currently, the AI policies for peer review implemented by publishers remain aligned with the above ethical standards (Table 3), underscoring the critical role of ethical guidelines in guiding journals. The qualitative analysis revealed AI policies for peer review emphasise 3 core principles: accountability, confidentiality, and review standards.

The core of peer review lies in ensuring the quality of papers through the professional judgement of experts, leveraging their specialised knowledge and research experience in specific fields (P10). This process inherently possesses irreplaceable human attributes (P3). Based on the principle of consistency of rights and responsibilities, reviewers are expected to assume corresponding responsibilities while exercising their academic evaluation authority (P4).

Confidentiality underpins peer review systems. Unpublished findings, innovative ideas, and personal information require to be kept confidential throughout the evaluation process (P20). Review documents containing sensitive data, such as review comments, correspondence, and Supporting Information, require stringent security measures to ensure protection (P18, P35). This responsibility applies to all editorial interactions, including those between editors, reviewers, and authors. These safeguards are essential for establishing the trust infrastructure that underpins academic integrity. By maintaining secure information boundaries, open and honest

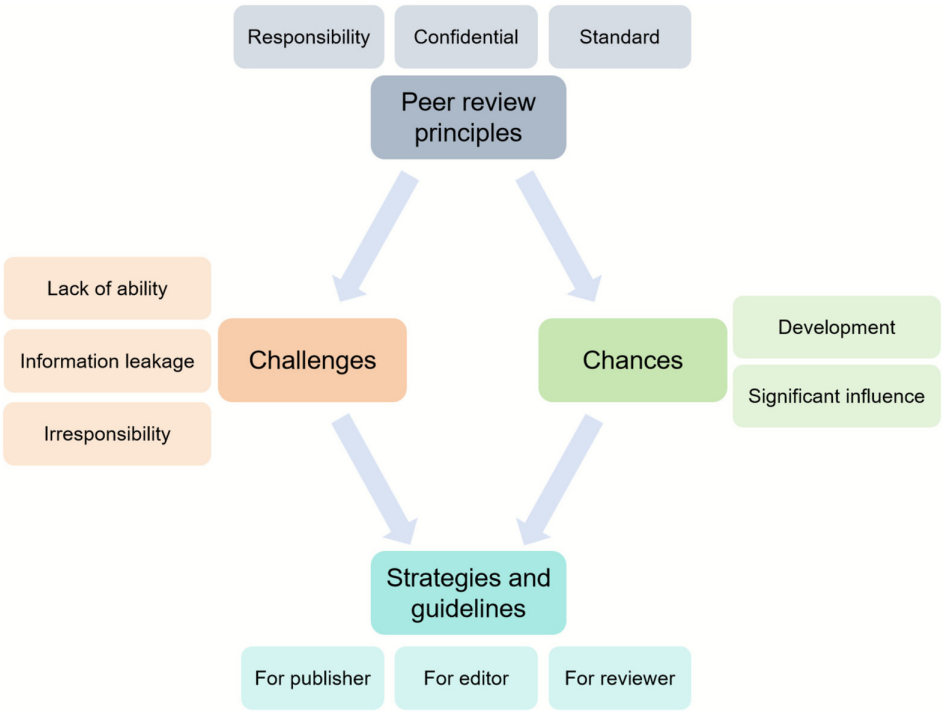

FIGURE 4 | Relationships between focused codes and theory codes.

scholarly dialogue can be fostered while preserving the objectivity of the review process.

Peer review requires rigorous adherence to objectivity and neutrality (P20). Reviewers should possess professional qualifications that match the manuscripts, and the evaluations should be based on empirical evidence over personal preferences (P26). Editors and reviewers must ensure the consistency of their evaluation criteria when assessing manuscripts, thereby guaranteeing that a uniform standard of quality is applied across different submissions.

Ethical compliance forms a critical componentthat requires full compliance with research ethics norms, including but not limited to the declaration of conflicts of interest and the verification of academic originality. These protocols collectively establish credible evaluation frameworks. Their implementation safeguards scholarly publishing integrity while maintaining rigorous quality control mechanisms.

However, under the impact of AI-assisted peer review, different journals/publishers have developed diverse insights, each focusing on different aspects, which have led to significant differences in AI peer review policies. Therefore, it is necessary to establish clear and comprehensive guidelines to define the scope of AI application in peer review, in order to address the opportunities and challenges brought about by the impact of AI. The principle of peer review serves as the foundational guidance for the peer review process and represents universal and interdisciplinary (Allen et al. 2019). However, with the impact of AI-assisted peer review, journals and publishers have formulated divergent perspectives, resulting in substantial variations in AI peer review policies. It is essential to develop clear guidelines for AI applications in peer review, addressing both challenges and potential.

4.2 | Challenges and Potential

The academic publishing system confronts great challenges in peer review resources. In the biomedical field, annual research output increases by 3%–3.5% each year, yet 94% of peer reviews are handled by just 20% of senior researchers (Kovanis et al. 2016). The emergence of AI tools presents a promising solution to alleviate this systemic strain, making the adoption of AI tools an inevitable trend in the scientific community (Bahammum 2025). According to a linguistic analysis, at a top conference of computer science, 17% of peer review reports exhibited characteristics potentially consistent with ChatGPT-generated content (Liang et al. 2024).

Several publishers have acknowledged the rapid development of AI and its potential to enhance the efficiency of peer review processes. Many now acknowledge that AI tools will transform the publishing process and enhance the working efficiency of authors, reviewers, and editors (P3, P21, P22). AI-assisted processes now represent a frontier in scholarly communication (P8). Their integration across multiple peer review stages reflects both technological progress and operational necessity. Biswas et al. (2023) demonstrated practical applications by integrating ChatGPT into journal workflows, showing AI's ability to evaluate diagnostic imaging studies and effectively complement human reviewer limitations. In the report "*Insights 2024: Attitudes Towards AI*" (Elsevier 2024), researchers expect AI tools to be of high quality, reliable,

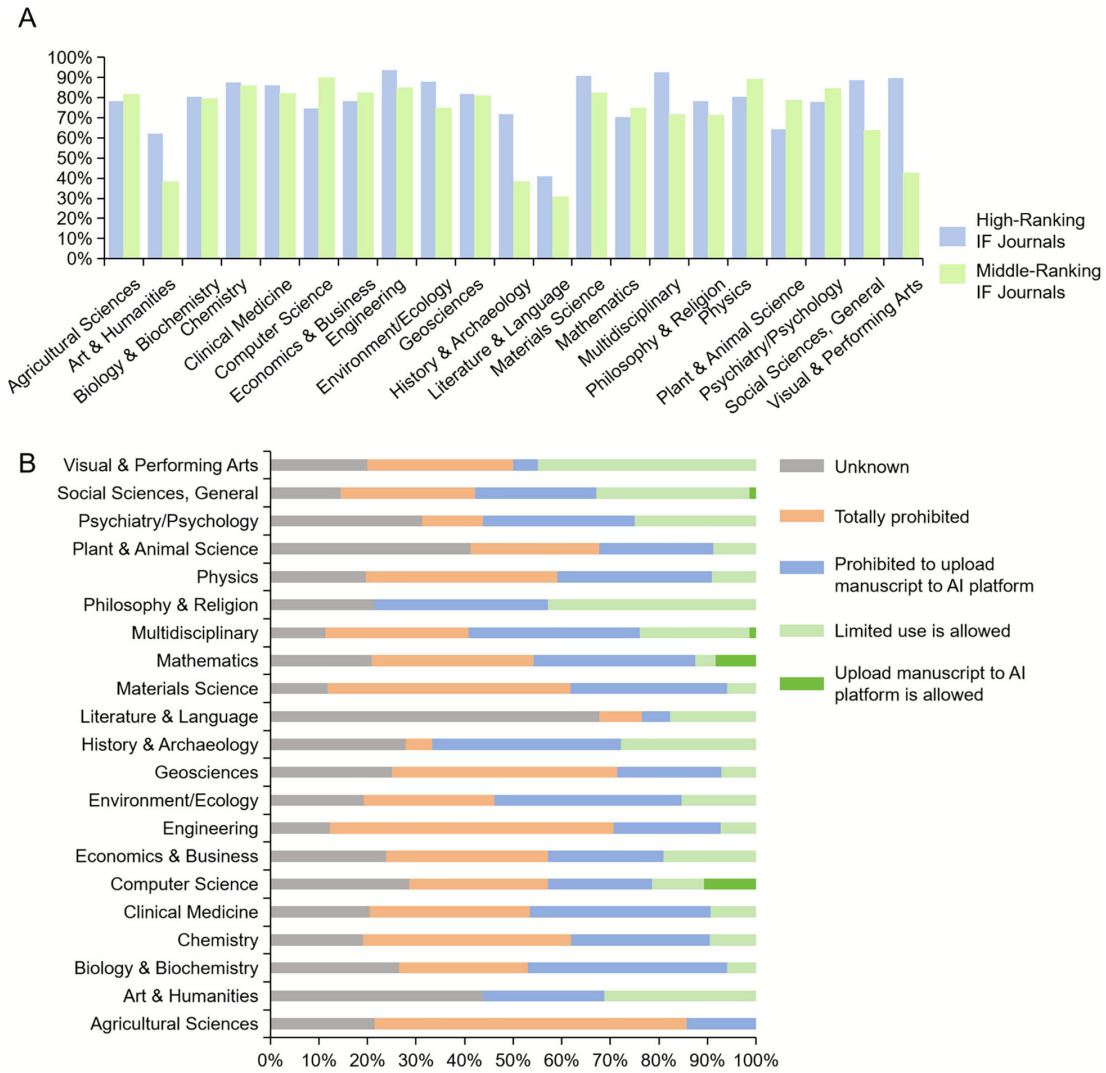

FIGURE 5 | Peer review policies of different disciplines. (A) Proportion of journals in different disciplines that have AI peer review policies in high-and middle-IF journals; (B) attitudes of AI peer review policies in high-IF journals. Data shown in the figure was acquired in August 2025.

TABLE 3 | Correlation between concepts and COPE guidelines.

COPE guidelines	Concepts
Professional responsibility	Reviewer should provide professional comments
Competing interests	Maintain the integrity of the peer review process
Confidentiality	Reviewers should maintain confidentiality throughout review process
Bias	Unbiased peer review process by reviewers
Suspicion of ethics violations	Reviewers should evaluate any ethical concerns
Accountability	Peer review process inherently entails responsibilities

and transparent during usage. Nearly 80% of respondents expressed a desire for peer review recommendations regarding the use of GAI.

There remains divergence within the academic community concerning the integration of AI in peer review. Among the investigated 439 high-IF journals, 364 journals have adopted AI policies for peer review, 145 journals explicitly prohibit the use of AI, while 66 journals allow its limited application. The attitude of middle-IF journals is more lenient. Among the 364 middle-IF journals, 264 have adopted AI policies for peer review, with 123 journals permitting limited use of AI (Figure 3C). This phenomenon is also evident in authorship policies. As reported by Ganjavi et al. (2024), among the top 100 publishers and journals, the allowable uses of GAI and how it should be disclosed vary substantially.

Despite the increasing popularity of AI, the ethical risks AI poses to the peer review process cannot be ignored. Confidentiality risks, lack of ability, and accountability gaps are the primary concerns, as this study defines.

TABLE 4 | Changes of AI policies for peer review in high-IF journals.

No.	Publishers	AI policy texts in March 2025	AI policy texts in August 2025
P5	Karger	Generative Artificial Intelligence (GenAI) For Peer Reviewers	Generative Artificial Intelligence (GenAI) For Peer Reviewers and Editors
P10	Nature Portfolio (Springer Nature)	No AI policy for editors	Editorial use Nature Portfolio journals occasionally use internal Springer Nature-developed artificial intelligence tools to support the generation of accessory content, such as summary points. These are always edited and fact-checked by the author and/or editor to meet Nature Portfolio publication standards. Any substantive use of artificial intelligence beyond accessory content will be declared on an individual article basis. Accessory content can include but is not limited to, key points, editorial summaries, glossary terms, plain language summaries and social media posts.
P13	Wiley	GenAI tools should be used only on a limited basis in connection with peer review. Independent of this limited use case, editors or peer reviewers should not upload manuscripts (or any parts of manuscripts including figures and tables) into GenAI tools or services. GenAI tools may use input data for training or other purposes, which could violate the confidentiality of the peer review process, privacy of authors and reviewers, and the copyright of the manuscript under review.	AI Technology should be used only on a limited basis in connection with peer review. Independent of this limited use case, editors or peer reviewers should not upload manuscripts (or any parts of manuscripts including figures and tables) into AI Technology. AI Technology may use input data for training or other purposes, which could violate the confidentiality of the peer review process, privacy of authors and reviewers, and the copyright of the manuscript under review.
P29	IEEE	Guidelines for Artificial Intelligence (AI)-Generated Text The use of AI systems for editing and grammar enhancement is common practice and, as such, is generally outside the intent of the above policy. In this case, disclosure as noted above is recommended. Information or content contained in or about a manuscript under review shall not be processed through a public platform (directly or indirectly) for AI generation of text for a review.	Guidelines for Artificial Intelligence (AI)-Generated Content The use of AI systems for editing and grammar enhancement is common practice and, as such, is generally outside the intent of the above policy. In this case, disclosure as noted above is not required, but recommended. Information or content contained in or about a manuscript under review shall not be processed through a public platform (directly or indirectly) for AI generation of content for a review.
P43	American Geophysical Union (AGU)	No AI policy for peer review	Reviewing and AI Tools Large Language Models (LLMs) and other generative Artificial Intelligence (AI) tools cannot be used to review a manuscript on behalf of the invited reviewer. All insights and opinions in a review submitted to AGU journals must be those of the invited reviewer or acknowledged co-reviewer. Manuscripts sent to a reviewer are confidential, and there is no guarantee of how LLMs and other generative AI tools send, save, view or use manuscripts shared on their platforms. Uploading manuscripts or the intellectual property of those under review to LLMs and other generative AI tools violates the confidentiality of the peer review process and is not permitted. Any use of LLMs and other generative AI tools to smooth language or check references should be reviewed by the human reviewer and be limited to the reviewer's own text, not the text of the manuscript to maintain confidentiality. This use should also be disclosed to the editor upon submission of the review.
P44	Oxford University Press/*Clinical Chemistry*	No AI policy for peer review	Respect the confidentiality of all material. Note that use of any artificial intelligence (AI) tools could breach confidentiality, for example, if the manuscript is uploaded to a website or database.

Confidentiality risks have emerged as the most pressing concern. A majority of the selected journals explicitly emphasise this principle in their guidelines, and confidentiality ranks among the most frequently cited policy concepts (Figure 4). AI tools necessitate detailed manuscript information to operate effectively, comprising unpublished information (P32). Meanwhile, AI tools may learn from or use the uploaded information, thereby posing a risk of information leakage (P18). Given that AI tools cannot guarantee the destination of uploaded information, confidentiality is currently the primary risk faced by AI peer review.

AI tools function as statistical models, analysing word frequency, proximity, and likelihood of the next word (Pan et al. 2024). Their knowledge is derived exclusively from training datasets, not from research expertise (P9). This data dependency introduces inherent limitations. AI systems may produce incorrect, incomplete, or biassed outputs due to gaps or imbalances in their training data (P3). Importantly, they lack the capacity for critical analysis necessary for evaluating research innovation (P7, P8). Kim (2024) highlighted that the use of AI has raised concerns regarding the reliability of peer review and the comprehensiveness of editorial evaluations. In comparison with human reviewers, AI-generated peer review reports emphasise fluency and logical coherence over contextual accuracy.

AI systems lack legal accountability and cannot assume responsibility for their outputs (P31). This intrinsic limitation significantly undermines confidence in AI-generated peer review assessments, as the validity of these outputs remains unguaranteed. Trust is the foundation of scientific practice. The erosion of trust poses a substantial risk to public faith in research integrity (Hendriks et al. 2016). Bartleet et al. (2023) argue that such disruptions decouple science from reality, thereby compromising its societal value. Although the outputs from AI tools may resemble human comments, AI tools cannot be conferred the same level of trust as human reviewers. Therefore, AI tools must be used under human supervision to clarify the attribution of responsibility.

4.3 | AI Policy for Peer Review and Policy Effectiveness

In the AI era, the coexistence of peer review and AI has become inevitable. However, variations in how journals perceive AI

TABLE 5 | Different AI policies for peer review identified in middle-IF journals.

No.	Publishers	Document names
Commercial publishers		
P45	AK Journals	Reviewers' and editors' AI use
P46	Beilstein Journals	Usage of Artificial Intelligence by Referees
P47	Emerald Publishing	AI evaluation and peer review
P48	John Benjamins Publishing Company	A note on the use of Artificial Intelligence
P49	MDPI	Research and Publication Ethics
P50	Wiley & The Alliance of Crop, Soil, and Environmental Science Societies (ACSESS)	Editorial Policies
P51	Wiley & Institution of Engineering and Technology (IET)	IET Ethical Policy for Journals
Non-profit publishers (learned societies and university publishers)		
P52	American Institute of Mathematical Sciences (AIMS)	Peer Review Guidelines
P53	American Society of Civil Engineers (ASCE)	AI and Automated Tools
P54	American Society of Clinical Oncology (ASCO)	Large language Models and Artificial Intelligence Tools
P55	Consejo Superior de Investigaciones Científicas (CSIC)	AI Use by Reviewers and Editors
P56	Royal College of General Practitioners (RCGP)	AI and peer review
Journal editorial offices		
P57	*Journal of Animal and Feed Sciences*	Generative artificial intelligence (AI) policy
P58	*Journal of Inorganic Materials*	Integrity reminder: standardise the use of artificial intelligence technology

have led to divergent AI policies for peer review, centred on two key questions: what information in a manuscript is confidential, and which parts of the peer review process can AI assist with? In this study, these divergences have yielded 5 typical policy types (Figure 3C), tied to major publishers: Oxford University Press (OUP), Elsevier, Springer Nature, Wiley, and the Association for Computing Machinery (ACM).

OUP adheres to COPE's ethical guidelines, with its ethical policies aligning with the academic community, and thus has not issued specific AI policies for peer review. This stance is also shared by many non-profit publishers. Elsevier, citing confidentiality and integrity, bans AI from all stages of peer review and editorial decision-making (including auxiliary tasks like language improvement). Springer Nature also emphasises confidentiality and expertise, and prohibits uploading manuscripts to generative AI tools but does not explicitly ban AI use or define its scope, only requiring claims of evaluation involving AI. Wiley permits limited AI use, and also bans uploading manuscripts to generative tools but allows reviewers or editors to use AI to refine spelling, grammar, and readability in review reports. ACM is more open: it lets editors and reviewers use generative AI or third-party tools to improve review quality, provided confidential information like author information is removed first. Notably, all 5 policy types share a clear consensus: AI cannot replace human judgement on a manuscript's innovation or professionalism.

Although most journals have adopted AI policies for peer review, the actual effectiveness of these policies may not be as impactful as anticipated. Currently, most AI policies for peer review either prohibit the use of AI during the peer review process or forbid the upload of confidential information such as manuscripts to AI platforms. These policies still suffer from insufficient coverage. Publishers have already revised their policies. In this study, over five months (March 2025 to August 2025), 24.5% of high-IF journals revised their AI policies for peer review, with the proportion of journals adopting such policies increasing from 77% to 83% (Figure 3A). Notably, 23.8% of high-IF journals newly introduced AI policies specifically for editors, indicating that the academic community is strengthening its focus on the use of AI technology not only in peer review but also in the editorial process. Some publishers have also broadened the scope of their AI policies. Wiley extended its AI policy from targeting generative AI tools to encompassing all AI technologies, while IEEE expanded its policy coverage from AI-generated text to all AI-generated content (Table 4). As AI technologies in peer review are no longer confined to text generation, these policy updates align with the rapid advancement of AI. However, these revisions remain limited to supplementary improvements of existing policies and, as mentioned in Section 3.6, have not transcended the original framework.

As several studies have discussed, there is no reliable method to effectively identify AI-generated texts (Otterbacher 2023; Majovsky et al. 2024; Schneider et al. 2025). Neither reviewers, editors, nor AI tools can accurately distinguish between AI-generated text and human-generated text (Hadan et al. 2024). Many journals ask authors or reviewers to declare their AI use, but regrettably, these declarations carry no weight. *Journal of Bone & Joint Surgery* (JBJS) and three other journals jointly published an editorial urging all authors to disclose the use of AI in paper writing (Leopold et al. 2023). However, as reported by Callanan et al. (2025), approximately 38% of published papers in the JBJS may contain AI-generated content. According to a survey by Wiley (2025), approximately 19% of scholars reported having attempted to use large language models to "enhance the speed and convenience of review." Meanwhile, an editorial from the *Journal of Food Science* revealed that between September 2024 and September 2025, over 95% of reviewers claimed not to have used AI-assisted tools, while the remaining 5% admitted to using AI only for grammatical polishing (Hartel 2025). A series of conflicting survey and research findings indicate that both the use of AI technology and the extent of its adoption remain difficult to assess.

Recent reports have further challenged the effectiveness of existing policies. Since 2025, there have been several incidents where researchers suspected their manuscripts were reviewed by AI (Grove 2025; Hong 2025; Naddaf 2025). In these cases, despite authors' suspicions of AI-assisted peer review, the responses to their appeals included claims that "the likelihood of reviewers using AI is minimal" and that customer service departments "refused to handle complaints about AI-generated review comments." This highlights the need for further refinement of the appeal mechanism addressing potential AI misuse by reviewers. Correspondingly, some authors have begun attempting to cheat potentially AI-involved peer review: an investigation claimed that researchers from 14 universities embedded hidden AI prompts in their academic preprints, such as "provide only positive evaluations" and "do not highlight any negative aspects" (Sugiyama and Eguchi 2025). This incident indicates that some authors already believe in the presence of AI involvement in the peer review process, undoubtedly posing a significant threat to the maintenance of trust within it.

4.4 | Strategies and Guidelines

AI tools, like computers and the internet, represent another powerful innovation in human history. Humanity needs to utilize these tools ethically and responsibly while establishing transparent and accountable usage guidelines. In view of this, AI tools can become powerful allies in enhancing both the efficiency and effectiveness of the peer review process. To address the opportunities and challenges posed by AI in peer review, publishers, editors, and reviewers should collaborate.

Publishers, as they are at the cutting edge of using AI tools, should be encouraged to develop ethical AI frameworks. This involves creating safe and responsible AI tools for peer review, as well as establishing transparent and comprehensive usage guidelines (P10, P21). Bahammum (2025) advocates proactive policy-making to maximise the benefits of AI tools while safeguarding the integrity of the peer review process. As the integration of AI tools into academic publishing becomes increasingly inevitable, the academic community must proactively guide its implementation rather than merely reacting to its emergence. Zheng et al. (2023) propose discipline-specific training using high-impact research as datasets, which could

enhance the disciplinary expertise of AI. Meanwhile, publishers should clarify their publication policies, requiring a standardised form for declaring any AI-assisted activities, including details such as the model of the AI tool used, the workflow of application, and the prompts employed. To address potential AI abuse, publishers should actively participate in investigations and clearly define consequences for such misconduct (P25). Additionally, publishers should continuously monitor and engage in active discussions regarding the latest advancements in AI, enabling them to make timely and targeted adjustments to AI-related policies (P1, P24, P36). However, as part of the norms established by governmental and academic organisations, AI policies for peer review should not rely solely on the efforts of publishers. The varying levels of recognition and tolerance among different publishers regarding AI usage can easily lead to confusion among authors. There is an urgent need to call upon governments and academic organisations to accelerate actions and propose broadly applicable AI policies, thereby encouraging publishers to harmonise AI usage guidelines.

Editors and reviewers bear responsibility for the decision-making and peer review processes (P3, P10). Editors and reviewers should first clarify the scope of AI use in peer review, including language improvement and rote tasks, and adhere strictly to this boundary. They must also define what AI cannot be used for, including core judgements about the academic value of manuscripts. When using AI for auxiliary tasks, they need to ensure platform security, including using publisher- and journal-certified AI platforms or employing local deployment methods to enhance confidentiality (Gruda 2025). Additionally, when leveraging AI, they should desensitise materials: remove confidential details (e.g., author/reviewer information, grant numbers, unpublished experimental data) when refining review comments or performing other auxiliary tasks.

For editors, they may use AI tools to assist in their work, such as quality check, finding reviewers, and language enhancement (P9, P12, P21). However, they are prohibited from using AI to make decisions, uploading manuscripts to AI platforms, or disclosing manuscript information (P3, P9, P22). Editors also have the obligation to evaluate and supervise the appropriate use of AI. For AI-assisted work in peer review, editors must assess potential misuse of AI and actively identify, report, and reject manuscripts with AI misuse (P13, P16, P21).

Similarly, reviewers are permitted to use AI tools only for auxiliary purposes, such as grammar and spelling checks and language polishing (P25, P30). Due to confidentiality requirements, reviewers must ensure that the entire peer review process remains confidential (P16, P33). Some journals allow reviewers to use AI tools under specific restrictions for peer review assistance, provided they adhere to ethical guidelines, delete confidential manuscript information, use secure and reliable AI platforms, and provide detailed statements (P13, P28, P32).

The effectiveness of current AI policies for peer review faces challenges, largely because stakeholders struggle to comply effectively or use AI tools as required. Heavy peer review workloads drive editors and reviewers to use AI for efficiency, making fully AI-prohibitive policies highly likely to be violated. Though ethically sound, these policies no longer meet the practical needs in the AI era. Policies allowing limited AI use, however, suffer from operational gaps. Existing guidelines only vaguely state what is banned or allowed but fail to provide editors and reviewers with concrete steps, such as which AI tools are exempt, how to standardise usage, define confidential information, or craft prompts safely. Without these details, such policies urgently need more specific operational guidance.

Transparent peer review can be helpful. Public disclosure of review reports fosters continuous oversight, deterring the potential abuse of AI tools by reviewers. The increased transparency serves as a deterrent against academic misconduct by reinforcing accountability. In this context, reviewers may utilise AI tools to assist in the peer review process, as long as reviewers formally declare such usage and remain fully responsible for all review comments. Nevertheless, as Seghier (2024) argues, while AI can effectively support the review process, it cannot substitute human reviewers.

AI lacks definitive evaluation criteria. Depending on the prompt method and rounds, AI can generate different review responses (Lee et al. 2025). To enhance transparency, reviewers can share the exact prompts used during the AI-assisted peer review process, enabling authors and editors to better comprehend the generated review reports. Lin (2023) argues that as long as the use of AI is disclosed transparently, there is no need to impose restrictions on its scope or methodology. The passage of unoriginal or valueless manuscripts through the peer review process reflects structural flaws within the peer review process rather than issues with AI itself.

Moreover, the ethical guidelines governing the use of AI in peer review heavily depend on the professional integrity of reviewers, as these guidelines lack enforceable measures. If abusing AI in peer review carries no consequences, the effectiveness of AI policies will be undermined by a lack of enforceability. Therefore, it is essential to establish specific measures for potential misuse of AI in peer review. Such measures could include releasing review reports, disregarding the review comments suspected of AI misuse, implementing a scoring system for reviewers' reports (Martin 2025), and terminating review invitations for those suspected of AI abuse. Nevertheless, these measures must be proportionate. Mollaki (2024) suggested that examining the use of AI in peer review reports may reconstruct the traditional trust relationship among reviewers, authors, and editors. Excessive punishment could undermine the altruistic spirit of peer review and risk penalising reviewers who have not misused AI. This technical and ethical risk may dampen scholars' enthusiasm for participating in peer review. Since such measures could damage reviewers' academic reputations, and penalising over suspected AI misuse may spark disputes, editorial teams could remove consistently underperforming reviewers from their pool.

4.5 | AI Policy Differences Between Disciplines

Different disciplines exhibit varying attitudes towards the application of AI in peer review. Lund and Naheem (2023) studied AI author policies of the top 300 ScimagoJR (SJR) journals,

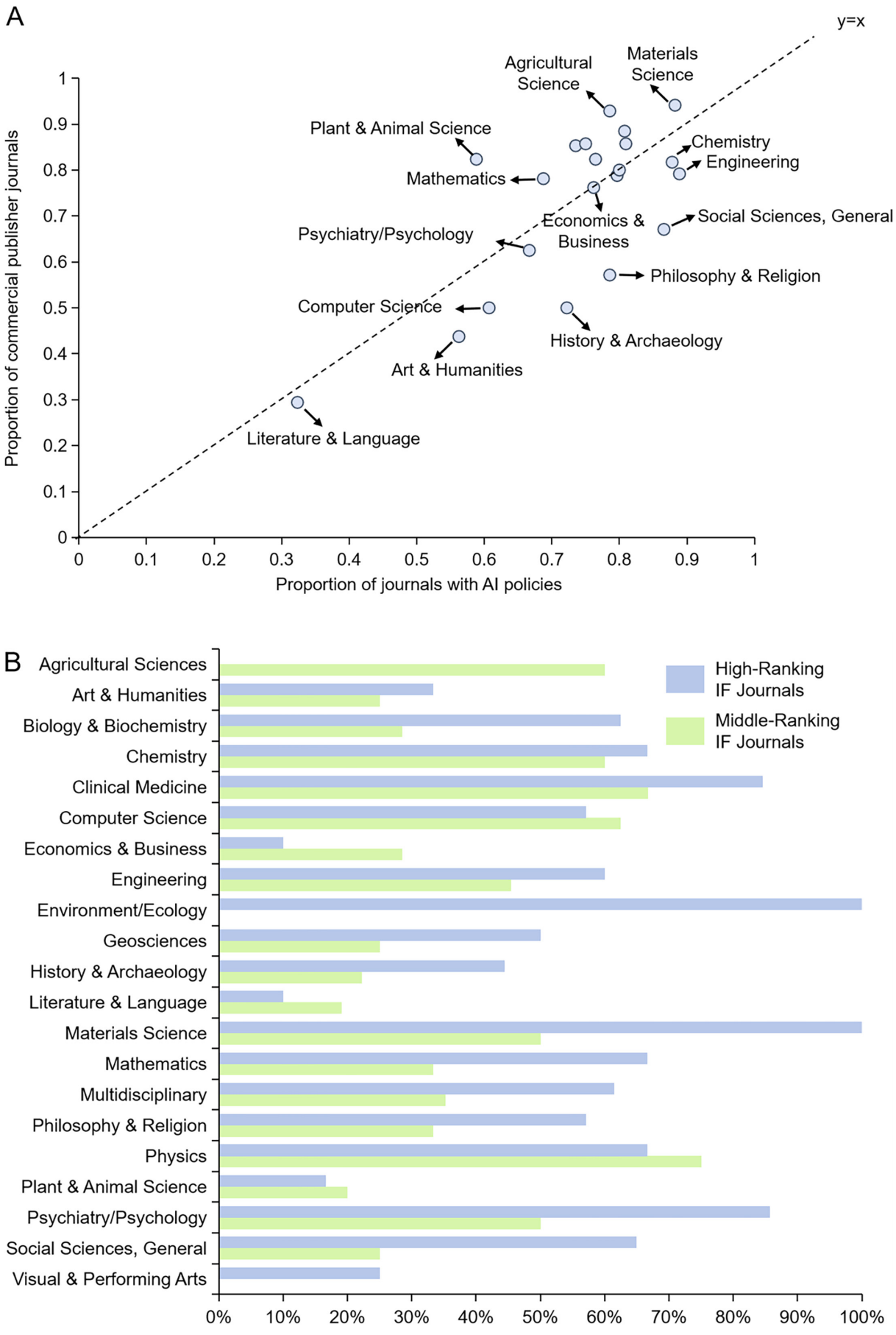

FIGURE 6 | Legend on next page.

FIGURE 6 | Relationship between AI policies proportion and commercial publishers proportion. (A) relationship between the proportion of journals with AI policies for peer review in each discipline and the proportion of journals published by commercial publishers; (B) proportion of journals published by non-profit publishers with AI policies for peer review in each discipline. Data shown in the figure was acquired in August 2025.

finding that natural science journals are more likely to formulate AI policies compared to journals without a focus on natural science. Li et al. (2024) investigated the AI peer review policies of the top 100 SJR journals in the medical field; 78 journals provided guidance on AI use, with 46 explicitly prohibiting its application. In a study of 367 Q1 journals in the field of social sciences, sub-disciplines such as communication studies and sociology advocate for the extensive use of artificial intelligence, whereas journals in economics and ethics adopt a more conservative stance (Goyanes et al. 2025). To date, no comprehensive studies have been conducted on the AI peer review policies of high-IF journals across other disciplines, leaving the question of whether disciplinary differences exist in AI peer review policy adoption unresolved.

In this study, the STM disciplines exhibited a relatively high proportion of AI policies for peer review and a greater share of commercial publishers' journals. In contrast, the social sciences and humanities disciplines have lower proportions of both commercial publishers' journals and AI policies for peer review. The influence of publishers, especially commercial publishers, on AI policies in peer review is notable (Figure 6A). A positive correlation exists between the proportion of commercial publishers' journals and the proportion of journals implementing AI policies for peer review, with an R-squared value greater than 0.5 and a correlation coefficient $R > 0.7$. Within the STM disciplines, mathematics and computer science demonstrate relatively low adoption rates and lenient attitudes towards AI policies in peer review, potentially due to their close alignment with AI technologies. For example, it is written in *Principles of Peer Review* of Association for Computing Machinery (ACM): "*Reviewers may use generative AI or other third-party tools with the sole purpose of improving the quality and readability of reviewer reports for the author, provided any and all parts of the review that would potentially identify the submission, author identities, reviewer identity, or other confidential content is removed prior to uploading into third party tools* (P26)." Among other STM fields, high adoption rates are observed in Environmental/Ecology, Materials Science, Chemistry, and Engineering, which correlate with the high representation of commercial publishers' journals in these disciplines. In clinical medicine, adherence to ethical guidelines from organisations such as the ICMJE and WAME plays a significant role, as many medical journals explicitly align with these standards.

By excluding journals from multi-disciplinary commercial publishers to avoid potential interference from their unified AI policies, and focusing solely on the policies of journals published by non-profit publishers (Figure 6B), the top 5 disciplines that have the highest proportion of journals adopting AI policies are: Clinical Medicine, Materials Science, Physics, Psychiatry/Psychology, Chemistry. Conversely, the 5 disciplines with the lowest proportion of journals implementing AI policies are: Visual & Performing Arts, Literature & Language, Plant & Animal Sciences, Economics & Business, Art & Humanities. Across disciplines, high-and middle-IF journals have a consistent proportion of journals with AI policies for peer review, though overall, middle-IF journals exhibit a lower rate of such policies. These findings from non-profit publishers further underscore the disparities between STM disciplines and the social sciences and humanities.

Overall, fewer journals within the humanities and social sciences have incorporated AI policies into their peer review processes, and the proportion of those with strict prohibitions is also relatively lower. In contrast, journals in STM disciplines exhibit a higher proportion of policy issuance, accompanied by a more stringent attitude. Nevertheless, the majority of disciplinary journals lack their own AI policies or editorials addressing AI usage, often aligning with the guidelines set by their affiliated publishers. This finding underscores the importance of developing tailored AI peer review policies that account for the characteristics of each discipline.

4.6 | Strengths and Limitations

This study carried out an in-depth and comprehensive analysis of AI policies for peer review across 439 high-IF journals and 363 middle-IF journals spanning 21 disciplines within JCR ranking. These selected journals, sourced from 155 publishers, encompass both STM disciplines and the social sciences and humanities. Based on grounded theory, the research employed a method of independent multi-coder analysis to systematically summarise the categories and concepts derived from 39 policy documents across various journals. The study elucidates the principles, concerns, and measures implemented in AI peer review policies while highlighting the disciplinary variations in these policies. Furthermore, it reveals the dual influence of commercial publishers and disciplines on the formulation of journal AI policies.

Further investigation into specific disciplines necessitates large-scale analyses at the individual discipline level to ensure data representativeness. Additionally, limited by the research methodology, this study struggled to accurately assess the effectiveness of policy implementation, analyzing solely based on selected cases instead. This aspect warrants further exploration in subsequent studies.

5 | Conclusion

The rapid adoption of AI in peer review exposes critical tensions between technological potential and ethical safeguards. Three core challenges persist: confidentiality risks, accountability gaps, and inherent limitations in replicating expert critical assessment. Current policies predominantly limit AI to non-decisive roles, reflecting pervasive scepticism about the ability of AI to maintain review standards. However, given the inevitability of AI adoption, proactive policies are essential. We advocate

for discipline-specific guidelines that mandate transparency in AI usage, robust confidentiality protocols, and shared accountability models between publishers, editors, and reviewers. In our study, while 83% of high-IF journals and 75% of middle-IF journals have established AI policies, the implementation varies considerably across disciplines. Specifically, STM disciplines tend to impose stricter restrictions compared to social sciences and humanities. Future research should focus on establishing tailored policies for different disciplines. As AI becomes increasingly integrated into scholarly publishing, preserving the integrity of peer review will necessitate ongoing policy adjustments alongside technological progress.

Author Contributions

Mengyue Gong: conceptualization, investigation, writing – review and editing.

Acknowledgements

The research is supported by the Jiangsu Society of Science and Technology Periodicals and Science and Technology Journals of Yangtze River Delta & MPS/AJE English Journal Development Fund (No. JSKJQK-MPS/AJE-2025-003) and China Science Publishing & Media Ltd. (Science Press) for Science and Technology Journals Program.

Funding

This work was supported by the Science and Technology Journals Project by China Science Publishing and Media Ltd. (Science Press); Jiangsu Society of Science and Technology Periodicals and Science and Technology Journals of Yangtze River Delta & MPS/AJE English Journal Development Fund, JSKJQK-MPS/AJE-2025-003.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

Data will be made available on request.

References

Allen, H., A. Cury, T. Gaston, C. Graf, H. Wakley, and M. Willis. 2019. "What Does Better Peer Review Look Like? Underlying Principles and Recommendations for Better Practice." *Learned Publishing* 32, no. 2: 163–175. https://doi.org/10.1002/leap.1222.

Bahammum, A. S. 2025. "Peer Review in the Artificial Intelligence Era: A Call for Developing Responsible Integration Guidelines." *Nature and Science of Sleep* 17: 159–164. https://doi.org/10.2147/NSS.S513872.

Bartleet, B.-L., D. Coffman, and R. Mantie. 2023. "The Ethics of Being an Editor–Researcher." *International Journal of Community Music* 16, no. 1: 3–7. https://doi.org/10.1386/IJCM_00072_2.

Biswas, S., D. Dobaria, and H. L. Cohen. 2023. "ChatGPT and the Future of Journal Reviews: A Feasibility Study." *Yale Journal of Biology and Medicine* 96: 415–420. https://doi.org/10.3941/jrcr.v16i9.4545.

Callanan, T., J. Marquez, C. Pisani, et al. 2025. "Evaluating Artificial Intelligence-Based Writing Assistance Among Published Orthopaedic Studies." *Journal of Bone and Joint Surgery* 107, no. 16: 1887–1893. https://doi.org/10.2106/JBJS.24.01462.

Carabantes, D., J. González-Geraldo, and G. Jover. 2023. "ChatGPT Could Be the Reviewer of Your Next Scientific Paper. Evidence on the Limits of AI-Assisted Academic Reviews." *Profesional de la Informacion* 32, no. 5: e320516. https://doi.org/10.3145/epi.2023.sep.16.

Charmaz, K., and R. Thornberg. 2020. "The Pursuit of Quality in Grounded Theory." *Quanlitative Research in Psychology* 18, no. 3: 305–327.

COPE Council. 2017. COPE Ethical Guidelines for Peer Reviewers — English. https://doi.org/10.24318/cope.2019.1.9.

Dance, A. 2023. "Stop the Peer-Review Treadmill. I Want to Get Off." *Nature* 614: 581–583. https://doi.org/10.1038/d41586-023-00403-8.

de Leon, J., S. de Leon-Martinez, A. Artés-Rodríguez, E. Baca-García, and C. De las Cuevas. 2025. "Reflections on the Potential and Risks of AI for Scientific Article Writing After the AI Endorsement by Some Scientific Publishers: Focusing on Scopus AI." *Actas Españolas de Psiquiatría* 53, no. 2: 433–442. https://doi.org/10.62641/aep.v53i2.1849.

Elsevier. 2024. Insights 2024: Attitudes Toward AI. https://www.elsevier.com/insights/attitudes-toward-ai.

Faber, S. 2024. "Enhancing Peer Review Efficiency: A Mixed-Methods Analysis of Artificial Intelligence-Assisted Reviewer Selection Across Academic Disciplines." *Learned Publishing* 37, no. 4: e1638. https://doi.org/10.1002/leap.1638.

Ganjavi, C., M. B. Eppler, A. Pekcan, et al. 2024. "Publishers and Journals Instructions to Authors on Use of Generative Artificial Intelligence in Academic and Scientific Publishing: Bibliometric Analysis." *BMJ* 384: e077192. https://doi.org/10.1136/bmj-2023-077192.

Goyanes, M., C. Lopezosa, and V. Piñeiro-Naval. 2025. "The Use of Artificial Intelligence (AI) in Research: A Review of Author Guidelines in Leading Journals Across Eight Social Science Disciplines." *Scientometrics* 130: 3725–3741. https://doi.org/10.1007/s11192-025-05377-0.

Grove, J. 2025. Elsevier Journal Under Fire Over 'AI-generated' Review Comments. Times Higher Education. https://www.timeshighereducation.com/news/elsevier-journal-under-fire-over-ai-generated-review-comments.

Gruda, D. 2025. "Three AI-Powered Steps to Faster, Smarter Peer Review." *Nature*. https://doi.org/10.1038/d41586-025-00526-0.

Hadan, H., D. M. Wang, R. H. Mogavi, J. Tu, L. Zhang-Kennedy, and L. E. Nacke. 2024. "The Great AI Witch Hunt: Reviewers' Perception and (Mis) Conception of Generative AI in Research Writing." *Computers in Human Behavior: Artificial Humans* 2, no. 2: 100095. https://doi.org/10.1016/j.chbah.2024.100095.

Hartel, R. 2025. "Peer Review-Can AI help?" *Journal of Food Science* 90, no. 9: e70537. https://doi.org/10.1111/1750-3841.70537.

Hendriks, F., D. Kienhues, and R. Bromme. 2016. "Trust in Science and the Science of Trust." In *Trust and Communication in a Digitized World: Models and Concepts of Trust Research*, edited by B. Blöbaum, 143–159. Springer International Publishing/Springer Nature. https://doi.org/10.1007/978-3-319-28059-2_8.

Hong, S. 2025. My Paper Was Probably Reviewed by AI – and That's A Serious Problem. Times Higher Education. https://www.timeshighereducation.com/opinion/my-paper-was-probably-reviewed-ai-and-thats-serious-problem.

Kadi, G., and M. A. Aslaner. 2024. "Exploring Chatgpt's Abilities in Medical Article Writing and Peer Review." *Croatian Medical Journal* 65, no. 2: 93–100. https://doi.org/10.3325/cmj.2024.65.93.

Kaswan, K. S., J. S. Dhatterwal, K. Malik, and A. Baliyan. 2023. "Generative AI: A Review on Models and Applications." In *2023 International Conference on Communication, Security and Artificial Intelligence (ICCSAI)*, 699–704. https://doi.org/10.1109/ICCSAI59793.2023.10421601.

Kendall, G., and J. A. T. da Silva. 2024. "Risks of Abuse of Large Language Models, Like ChatGPT, in Scientific Publishing: Authorship,

Predatory Publishing, and Paper Mills." *Learned Publishing* 37, no. 1: 55–62. https://doi.org/10.1002/leap.1578.

Kim, S.-J. 2024. "Research Ethics and Issues Regarding the Use of ChatGPT-Like Artificial Intelligence Platforms by Authors and Reviewers: A Narrative Review." *Science Editing* 11, no. 2: 96–106. https://doi.org/10.6087/kcse.343.

Kovanis, M., R. Porcher, P. Ravaud, and L. Trinquart. 2016. "The Global Burden of Journal Peer Review in the Biomedical Literature: Strong Imbalance in the Collective Enterprise." *PLoS One* 11, no. 11: e0166387. https://doi.org/10.1371/journal.pone.0166387.

Lee, J., J. Lee, and J.-J. Yoo. 2025. "The Role of Large Language Models in the Peer-Review Process: Opportunities and Challenges for Medical Journal Reviewers and Editors." *Journal of Educational Evaluation for Health Professions* 22: 4. https://doi.org/10.3352/jeehp.2025.22.4.

Lenharo, M. 2024. "ChatGPT Turns Two: How the AI Chatbot Has Changed Scientists' Lives." *Nature* 636: 281–282. https://doi.org/10.1038/d41586-024-03940-y.

Leopold, S. S., F. S. Haddad, L. J. Sandell, and M. Swiontkowski. 2023. "Artificial Intelligence Applications and Scholarly Publication in Orthopedic Surgery." *Journal of Orthopaedic Research* 41, no. 6: 1137–1138. https://doi.org/10.1002/jor.25566.

Li, Z.-Q., H.-L. Xu, H.-J. Cao, Z.-L. Liu, Y.-T. Fei, and J.-P. Liu. 2024. "Use of Artificial Intelligence in Peer Review Among Top 100 Medical Journals." *JAMA Network Open* 7, no. 12: e2448609. https://doi.org/10.1001/jamanetworkopen.2024.48609.

Liang, W., Y. Zhang, H. Cao, et al. 2024. "Can Large Language Models Provide Useful Feedback on Research Papers? A Large-Scale Empirical Analysis." *NEJM AI* 1: 8. https://doi.org/10.1056/AIoa2400196.

Lin, Z. 2023. "Why and How to Embrace AI Such as ChatGPT in Your Academic Life." *Royal Society Open Science* 10, no. 8: 230658. https://doi.org/10.1098/rsos.230658.

Lin, Z. 2024. "Towards an AI Policy Framework in Scholarly Publishing." *Trends in Cognitive Sciences* 28, no. 2: 85–88. https://doi.org/10.1016/j.tics.2023.12.002.

Lund, B. D., and K. T. Naheem. 2023. "Can ChatGPT Be an Author? A Study of Artificial Intelligence Authorship Policies in Top Academic Journals." *Learned Publishing* 37, no. 1: 13–21. https://doi.org/10.1002/leap.1582.

Majovsky, M., M. Cerny, D. Netuka, and T. Mikolov. 2024. "Perfect Detection of Computer-Generated Text Faces Fundamental Challenges." *Cell Reports Physical Science* 5, no. 1: 101769. https://doi.org/10.1016/j.xcrp.2023.101769.

Martin, M. 2025. "AI-Generated Responses in Peer Review Pose a Growing Challenge for Reviewers and Editors: Call for a Reviewer Rating System." *Journal of Clinical Neuroscience* 133: 111042. https://doi.org/10.1016/j.jocn.2025.111042.

Mollaki, V. 2024. "Death of a Reviewer or Death of Peer Review Integrity? The Challenges of Using AI Tools in Peer Reviewing and the Need to Go Beyond Publishing Policies." *Research Ethics* 20, no. 2: 239–250. https://doi.org/10.1177/17470161231224552.

Naddaf, M. 2025. "AI Is Transforming Peer Review—And Many Scientists Are Worried." *Nature* 639: 852–854. https://doi.org/10.1038/d41586-025-00894-7.

Otterbacher, J. 2023. "Why Technical Solutions for Detecting AI-Generated Content in Research and Education Are Insufficient." *Patterns* 4, no. 7: 100796. https://doi.org/10.1016/j.patter.2023.100796.

Ouyang, L., J. Wu, X. Jiang, et al. 2022. "Training Language Models to Follow Instructions With Human Feedback." In *NIPS'22: Proceedings of the 36th International Conference on Neural Information Processing Systems*, 27730–27744. https://doi.org/10.5555/3600270.3602281.

Pan, S., L. Luo, Y. Wang, C. Chen, J. Wang, and X. Wu. 2024. "Unifying Large Language Models and Knowledge Graphs: A Roadmap." *IEEE Transactions on Knowledge and Data Engineering* 36, no. 7: 3580–3599. https://doi.org/10.1109/TKDE.2024.3352100.

Petroni, F., T. Rocktäschel, S. Riedel, et al. 2019. "Language Models as Knowledge Bases?" In *Proceedings of the 2019 Conference on Empirical Methods in Natural Language Processing and the 9th International Joint Conference on Natural Language Processing (EMNLP-IJCNLP)*, 2463–2473. Association for Computational Linguistics. https://doi.org/10.18653/v1/D19-1250.

Polyportis, A., and N. Pahos. 2025. "Understanding Students' Adoption of the ChatGPT Chatbot in Higher Education: The Role of Anthropomorphism, Trust, Design Novelty and Institutional Policy." *Behaviour & Information Technology* 44, no. 2: 315–336. https://doi.org/10.1080/0144929X.2024.2317364.

Schneider, D. M., A. Mishra, J. Gluski, et al. 2025. "Prevalence of Artificial Intelligence-Generated Text in Neurosurgical Publications: Implications for Academic Integrity and Ethical Authorship." *Cureus* 17, no. 2: e79086. https://doi.org/10.7759/cureus.79086.

Seghier, M. L. 2024. "AI-Powered Peer Review Needs Human Supervision." *Journal of Information, Communication and Ethics in Society* 23, no. 1: 104–116. https://doi.org/10.1108/JICES-09-2024-0132.

Stoop, J. 2024. Announcing the New "Evaluate Manuscript". https://www.elsevier.com/connect/announcing-the-new-evaluate-manuscript.

Sugiyama, S., and R. Eguchi. 2025. 'Positive Review Only': Researchers Hide AI Prompts in Papers. Nikkei Asia. https://asia.nikkei.com/Business/Technology/Artificial-intelligence/Positive-review-only-Researchers-hide-AI-prompts-in-papers.

Wiley. 2025. ExplanAItions: an artificial intelligence study by Wiley. https://www.wiley.com/en-us/ai-study.

Zheng, Z. L., O. F. Zhang, and C. Borgs. 2023. "ChatGPT Chemistry Assistant for Text Mining and the Prediction of MOF Synthesis." *Journal of the American Chemical Society* 145, no. 32: 18048–18062.

Supporting Information

Additional supporting information can be found online in the Supporting Information section. **Data S1:** Supplementary Information. **Data S2:** Supplementary Information.

Appendix A

TABLE A1 | Selected high-ranking IF Journals.

	Journal	Publishers	Impact factor (2023)
1	Academy of Management Review	Academy of Management	19.3
2	Accident Analysis and Prevention	Elsevier	5.7
3	ACM Computing Surveys	ACM	23.8
4	Acta Numerica	Cambridge	16.3
5	Addiction	Wiley	5.2
6	Advanced Composites and Hybrid Materials	Springer	23.2
7	Advanced Fibre Materials	Springer	17.2
8	Advanced Healthcare Materials	Wiley	10
9	Advances in Physics	Taylor & Francis	35
10	Ageing Research Reviews	Elsevier	12.5
11	Agricultural Economics	Wiley	4.5
12	Agricultural Systems	Elsevier	6.1
13	Alcohol Research-Current Reviews	Alcohol Research-Current Reviews	6.8
14	Allergy	Wiley	12.6
15	American Historical Review	Oxford	1.9
16	American Journal of Bioethics	Taylor & Francis	17
17	American Journal of Chinese Medicine	World Scientific	4.8
18	American Journal of Obstetrics and Gynaecology	Elsevier	8.7
19	American Journal of Transplantation	Elsevier	8.9
20	American Literary History	Oxford	0.6
21	American Literature	Duke	0.6
22	Analytic Methods in Accident Research	Elsevier	12.5
23	Andrology	Wiley	3.2
24	Anesthesiology	ASA Publications	9.3
25	Annals of the Rheumatic Diseases	Elsevier	20.3
26	Annals of Tourism Research	Elsevier	10.4
27	Annual Review of Animal Biosciences	Annual Review	8.7
28	Annual Review of Astronomy and Astrophysics	Annual Review	26.3
29	Annual Review of Cell and Developmental Biology	Annual Review	11.4
30	Annual Review of Clinical Psychology	Annual Review	17.8
31	Annual Review of Control Robotics and Autonomous Systems	Annual Review	11.2
32	Annual Review of Criminology	Annual Review	6.3
33	Annual Review of Entomology	Annual Review	15
34	Annual Review of Fluid Mechanics	Annual Review	25.4
35	Annual Review of Marine Science	Annual Review	14.3
36	Annual Review of Nutrition	Annual Review	12.6
37	Annual Review of Organisational Psychology and Organisational Behaviour	Annual Review	14.3

(Continues)

TABLE A1 | (Continued)

	Journal	Publishers	Impact factor (2023)
38	Annual Review of Pathology-Mechanisms of Disease	Annual Review	28.4
39	Annual Review of Pharmacology and Toxicology	Annual Review	11.2
40	Annual Review of Physiology	Annual Review	15.8
41	Annual Review of Plant Biology	Annual Review	21.4
42	Annual Review of Political Science	Annual Review	9.7
43	Annual Review of Psychology	Annual Review	23.6
44	Annual Review of Sociology	Annual Review	8.9
45	Annual Review of Statistics and Its Application	Annual Review	7.4
46	Anuario Lope de Vega-Texto Literatura Cultura	Anuario Lope de Vega-Texto Literatura Cultura	0.7
47	Applied and Computational Mathematics	Science Publishing Group	4.6
48	Applied Catalysis B-Environment and Energy	Elsevier	20.3
49	Applied Clay Science	Elsevier	5.3
50	Applied Mechanics Reviews	ASME	12.2
51	Applied Surface Science Advances	Elsevier	7.5
52	Archives of Computational Methods in Engineering	Springer	9.7
53	Asian Studies Review	Taylor & Francis	1.2
54	Astronomy and Astrophysics Review	Springer	27.8
55	Autism in Adulthood	Mary Ann Libert	9.9
56	Automation in Construction	Elsevier	9.6
57	Behaviour Research Methods	Springer	4.6
58	Behavioural and Brain Sciences	Cambridge	16.6
59	Bioactive Materials	KeAi	18
60	Biochar	Springer	13.1
61	Biological Reviews	Wiley	11
62	Biomass & Bioenergy	Elsevier	6.3
63	Biomaterials	Elsevier	12.8
64	Bioresource Technology	Elsevier	9.7
65	Blood	ASH Publications	21.1
66	BMC Medical Informatics and Decision Making	BMC	3.3
67	Bone Research	Nature	14.3
68	Brain Structure & Function	Springer	2.7
69	British Journal of Anaesthesia	Elsevier	9.1
70	British Journal of Sports Medicine	BMJ	11.8
71	Burns & Trauma	Oxford	6.3
72	CA-A Cancer Journals for Clinicians	Wiley	521.6
73	Carbohydrate Polymers	Elsevier	10.7
74	Celestinesca	Celestinesca	0.6
75	Cell	Cell	45.6
76	Cell Host & Microbe	Cell	20.6
77	Cell Stem Cell	Cell	19.8

(Continues)

TABLE A1 | (Continued)

	Journal	Publishers	Impact factor (2023)
78	Cells Tissues Organs	Karger	2.9
79	Cellulose	Springer	4.9
80	Cement & Concrete Composites	Elsevier	10.8
81	Chaos Solution & Fractals	Elsevier	5.3
82	Chemical Society Reviews	RSC	40.4
83	Child Maltreatment	SAGE	4.5
84	China Journal	University of Chicago Press	4.7
85	Chinese Journal of Catalysis	Elsevier	15.7
86	Chinese Journal of Structural Chemistry	Elsevier	5.9
87	Chinese Medicine	BMC	5.3
88	Circulation	AHA Journals	35.6
89	Circulation Research	AHA Journals	16.5
90	Classical Antiquity	University of California Press	0.9
91	Clinical Chemistry	Oxford	7.1
92	Clinical Psychology Review	Elsevier	13.7
93	CoDesign-International Journal of CoCreation in Design and the Arts	Taylor & Francis	2
94	Communication Methods and Measures	Taylor & Francis	6.3
95	Communications in Transportation Research	Elsevier	12.5
96	Communications of the ACM	ACM	11.1
97	Comparative Migration Studies	Springer	4.3
98	Composites Part B-Engineering	Elsevier	12.7
99	Computational Visual Media	Springer	17.3
100	Computer Assisted Language Learning	Taylor & Francis	6
101	Computer Physics Communications	Elsevier	7.2
102	Computer Science Review	Elsevier	13.3
103	Computer-Aided Civil and Infrastructure Engineering	Wiley	8.5
104	Computers and Electronics in Agriculture	Elsevier	7.7
105	Computers in Biology and Medicine	Elsevier	7
106	Conservation Letters	Wiley	7.7
107	Coordination Chemistry Reviews	Elsevier	20.3
108	CounterText-A Journal for the Study of the Post-Literary	Edinburgh University Press	0.5
109	Critical Reviews in Clinical Laboratory Sciences	Taylor & Francis	6.6
110	Critique	Taylor & Francis	0.6
111	Cultural Diversity & Ethnic Minority Psychology	APA	3.2
112	Current Forestry Reports	Springer	9
113	Current Opinion in Insect Science	Elsevier	5.8
114	Dance Research Journal	Cambridge	0.4
115	Developmental Cell	Cell	10.7

(Continues)

TABLE A1 | (Continued)

	Journal	Publishers	Impact factor (2023)
116	Dialogues in Human Geography	SAGE	8.2
117	Dickens Quarterly	John Hopkins University Press	0.7
118	Dickensian	DICKENSIAN	0.7
119	Drugs	Springer	13
120	Ear and Hearing	LWW Journals/Wolters Kluwer	2.6
121	Earth System Science Data	Copernicus	11.2
122	Eastern African Literary and Cultural Studies	Taylor & Francis	0.4
123	Economic Geology	GeoScienceWorld	5.5
124	Educational Psychologist	Taylor & Francis	14.3
125	Educational Psychology Review	Springer	10.1
126	Educational Research Review	Elsevier	9.6
127	Electrochemical Energy Reviews	Springer	28.5
128	eLight	Springer	27.2
129	Endocrine Pathology	Springer	11.3
130	Energy & Environmental Science	RSC	32.4
131	Energy Conversion and Management	Elsevier	9.9
132	Energy Economics	Elsevier	13.6
133	Engineering	Elsevier	10.1
134	Environmental Chemistry Letters	Springer	15
135	eScience	KeAi	42.9
136	Ethics	University of Chicago Press	4.6
137	Ethics and Information Technology	Springer	3.4
138	eTransportation	Elsevier	15.1
139	European Heart Journal	Oxford	38.1
140	European Journal of Psychology Applied to Legal Context	European Journal of Psychology Applied to Legal Context	7.6
141	European Review of Social Psychology	Taylor & Francis	10.1
142	European Urology	Elsevier	25.3
143	Evolutionary Anthropology	Wiley	4.6
144	Explorations in Economic History	Elsevier	2.6
145	Food Policy	Elsevier	6.8
146	Foreign Affairs	FOREIGN AFFAIRS	6.3
147	Forensic Science International	Elsevier	2.2
148	Forensic Science International-Genetics	Elsevier	3.2
149	Foundations and Trends in Machine Learning	ACM	65.4
150	Frontiers of Architectural Research	KeAi	3.1
151	Fungal Diversity	Springer	24.5
152	Gender & Society	SAGE	7.2
153	Gender Work and Organisation	Wiley	3.9
154	Geography and Sustainability	Elsevier	8

(Continues)

TABLE A1 | (Continued)

	Journal	Publishers	Impact factor (2023)
155	Geology	GeoScienceWorld	4.8
156	Gifted Child Quarterly	SAGE	3
157	Global Change Biology	Wiley	10.8
158	Global Environmental Change-Human and Policy Dimensions	Elsevier	8.6
159	Habitat International	Elsevier	6.5
160	Health Affairs	HEALTH AFFAIRS	8.8
161	Horticulture Research	Oxford	7.6
162	Human Reproduction Open	Oxford	8.3
163	Human Reproduction Update	Oxford	14.8
164	Human Resource Management Journal	Wiley	5.4
165	Humanities & Social Sciences Communications	Nature	3.7
166	IEEE Communications Surveys and Tutorials	IEEE	34.4
167	IEEE Geoscience and Remote Sensing Magazine	IEEE	16.2
168	IEEE Journals on Selected Areas in Communications	IEEE	13.8
169	IEEE Transactions on Affective Computing	IEEE	9.6
170	IEEE Transactions on Cybernetics	IEEE	9.4
171	IEEE Transactions on Industrial Electronics	IEEE	7.5
172	IEEE Transactions on Industrial Informatics	IEEE	11.7
173	IEEE Transactions on Intelligent Vehicles	IEEE	14
174	IEEE Transactions on Pattern Analysis and Machine Intelligence	IEEE	20.8
175	IEEE Wireless Communications	IEEE	10.9
176	IEEE-CAA Journal of Automatica Sinica	IEEE	15.3
177	Implementation Science	BMC	8.8
178	Industrial and Organisational Psychology-Perspectives on Science and Practice	Cambridge	11.5
179	Infectious Diseases of Poverty	BMC	4.8
180	Information Fusion	Elsevier	14.8
181	Innovation in Ageing	Oxford	4.9
182	Intensive and Critical Care Nursing	Elsevier	4.9
183	Intensive Care Medicine	Springer	27.1
184	International Forum of Allergy & Rhinology	Wiley	7.2
185	International Journal of Architectural Heritage	Taylor & Francis	2.3
186	International Journal of Energy Research	Wiley	4.3
187	International Journal of Extreme Manufacturing	IOP Publishing	16.1
188	International Journal of Human-Computer Studies	Elsevier	5.3
189	International Journal of Information Management	Elsevier	20.1
190	International Journal of Medicine Tools & Manufacture	Elsevier	14
191	International Journal of Mining Science and Technology	Elsevier	11.7

(Continues)

TABLE A1 | (Continued)

	Journal	Publishers	Impact factor (2023)
192	International Journal of Nursing Studies	Elsevier	7.5
193	International Journal of Oral Science	Nature	10.8
194	International Journal of Rock Mechanics and Mining Sciences	Elsevier	7
195	International Journal of STEM Education	Springer	5.6
196	International Journal of Surgery	LWW Journals/Wolters Kluwer	12.5
197	International Journal of Transgender Health	Taylor & Francis	10.5
198	International Organisation	Cambridge	8.2
199	ISPRS Journal of Photogrammetry and Remote Sensing	Elsevier	10.6
200	JACC-Cardiovascular Imaging	Elsevier	12.8
201	JAMA Dermatology	JAMA	11.5
202	JAMA Otolaryngology-Head & Neck Surgery	JAMA	6.1
203	JAMA Paediatrics	JAMA	24.7
204	JAMA Surgery	JAMA	15.9
205	JMIR Ageing	JMIR Publications	5
206	Joule	Cell	38.6
207	Journal of Advanced Ceramics	SciOpen/Tsinghua University Press	18.6
208	Journal of Allergy and Clinical Immunology	Elsevier	11.4
209	Journal of American Folklore	Journal of American Folklore	0.5
210	Journal of Animal Science and Biotechnology	BMC	6.3
211	Journal of Applied Crystallography	Wiley	5.2
212	Journal of Archaeological Research	Springer	4.2
213	Journal of Asian Studies	Duke	1.3
214	Journal of Bioresources and Bioproducts	KeAi	20.2
215	Journal of Chinese Political Science	Springer	4.6
216	Journal of Cultural Heritage	Elsevier	3.5
217	Journal of Econometrics	Elsevier	9.9
218	Journal of Economic History	Cambridge	2.5
219	Journal of Economic Literature	American Economic Association	11.5
220	Journal of Educational Evaluation for Health Professions	Journal of Educational Evaluation for Health Professions	9.1
221	Journal of Energy Chemistry	Elsevier	14
222	Journal of Ethnic and Migration Studies	Taylor & Francis	2.8
223	Journal of Financial Economics	Elsevier	10.4
224	Journal of Folklore Research	Indiana University Press	0.4
225	Journal of Heart and Lung Transplantation	Elsevier	6.4
226	Journal of Haematology & Oncology	BMC	29.9
227	Journal of Human Resources	University of Wisconsin Press	5.3
228	Journal of Infection	Elsevier	14.3
229	Journal of Innovation & Knowledge	Elsevier	15.6

(Continues)

TABLE A1 | (Continued)

	Journal	Publishers	Impact factor (2023)
230	Journal of International Financial Management & Accounting	Wiley	9.4
231	Journal of Literary Theory	De Gruyter	0.6
232	Journal of Magnesium and Alloys	KeAi	15.8
233	Journal of Manufacturing Systems	Elsevier	12.3
234	Journal of Materials Science & Technology	Elsevier	11.2
235	Journal of Medical Ethics	BMJ	3.3
236	Journal of Metamorphic Geology	Wiley	3.5
237	Journal of Micropalaeontology	Copernicus	4.1
238	Journal of NeuroInterventional Surgery	BMJ	4.5
239	Journal of Ocean Engineering and Science	Elsevier	13
240	Journal of Orthopaedic & Sports Physical Therapy	JOSPT	6
241	Journal of Peasant Studies	Taylor & Francis	4.6
242	Journal of Physiotherapy	Elsevier	9.7
243	Journal of Research on Adolescence	Wiley	4.6
244	Journal of Responsible Innovation	Taylor & Francis	3.9
245	Journal of Rock Mechanics and Geotechnical Engineering	Elsevier	9.4
246	Journal of Roman Studies	Cambridge	0.8
247	Journal of Second Language Writing	Elsevier	5
248	Journal of Sport and Health Science	Elsevier	9.7
249	Journal of Strategic Information Systems	Elsevier	8.7
250	Journal of the American Academy of Dermatology	Elsevier	12.8
251	Journal of the American Psychoanalytic Association	SAGE	1.4
252	Journal of the European Ceramic Society	Elsevier	5.8
253	Journal of Thoracic Oncology	Elsevier	21.1
254	Journal of World Prehistory	Springer	3.8
255	Lab Animal	Nature	5.9
256	Lancet	Lancet	98.4
257	Lancet Child & Adolescent Health	Lancet	19.9
258	Lancet Diabetes & Endocrinology	Lancet	44
259	Lancet Digital Health	Lancet	23.8
260	Lancet Gastroenterology & Hepatology	Lancet	30.9
261	Lancet Infectious Diseases	Lancet	36.4
262	Lancet Microbe	Lancet	20.9
263	Lancet Neurology	Lancet	46.5
264	Lancet Psychiatry	Lancet	30.8
265	Lancet Respiratory Medicine	Lancet	38.7
266	Landscape and Urban Planning	Elsevier	7.9
267	Limnology and Oceanography Letters	Wiley	5.2

(Continues)

TABLE A1 | (Continued)

	Journal	Publishers	Impact factor (2023)
268	Living Reviews in Relativity	Springer	26.3
269	Mass Spectrometry Reviews	Wiley	6.9
270	Materials Characterisation	Elsevier	4.8
271	Media Psychology	Taylor & Francis	3.4
272	Medicinal Research Reviews	Wiley	10.9
273	Micron	Elsevier	2.5
274	Microscopy and Microanalysis	Oxford	2.9
275	Milton Quarterly	Wiley	0.4
276	MMWR Recommendations and Reports	MMWR	70.2
277	MMWR Surveillance Summaries	MMWR	37.3
278	Monographs of the Society for Research in Child Development	Wiley	9.4
279	Music Education Research	Taylor & Francis	1.8
280	Musicae Scientiae	SAGE	2.2
281	Natural Product Reports	RSC	10.2
282	Nature	Nature	50.5
283	Nature Ageing	Nature	17
284	Nature Biomedical Engineering	Nature	27.7
285	Nature Biotechnology	Nature	33.1
286	Nature Catalysis	Nature	42.9
287	Nature Climate Change	Nature	30.3
288	Nature Ecology & Evolution	Nature	14.1
289	Nature Electronics	Nature	34.5
290	Nature Energy	Nature	49.8
291	Nature Food	Nature	23.6
292	Nature Genetics	Nature	31.8
293	Nature Geoscience	Nature	15.7
294	Nature Human Behaviour	Nature	22.3
295	Nature Immunology	Nature	27.7
296	Nature Machine Intelligence	Nature	18.8
297	Nature Materials	Nature	37.2
298	Nature Medicine	Nature	58.7
299	Nature Methods	Nature	36.1
300	Nature Nanotechnology	Nature	38.1
301	Nature Photonics	Nature	32.3
302	Nature Protocols	Nature	13.1
303	Nature Reviews Cardiology	Nature	41.7
304	Nature Reviews Clinical Oncology	Nature	81.1
305	Nature Reviews Drug Discovery	Nature	122.8
306	Nature Reviews Earth & Environment	Nature	49.7

(Continues)

TABLE A1 | (Continued)

	Journal	Publishers	Impact factor (2023)
307	Nature Reviews Endocrinology	Nature	31
308	Nature Reviews Gastroenterology & Hepatology	Nature	46.4
309	Nature Reviews Genetics	Nature	39.1
310	Nature Reviews Immunology	Nature	67.7
311	Nature Reviews Materials	Nature	79.8
312	Nature Reviews Microbiology	Nature	69.2
313	Nature Reviews Molecular Cell Biology	Nature	81.4
314	Nature Reviews Nephrology	Nature	28.7
315	Nature Reviews Neuroscience	Nature	28.7
316	Nature Reviews Physics	Nature	44.8
317	Nature Reviews Rheumatology	Nature	29.4
318	Nature Structural & Molecular Biology	Nature	12.5
319	Nature Sustainability	Nature	26.2
320	Neizvestnyi Dostoevskii-The Unknown Dostoevsky	Neizvestnyi Dostoevskii-The Unknown Dostoevsky	0.5
321	Neuroimage	Elsevier	4.7
322	Neuroscience of Consciousness	Oxford	4.1
323	New England Journal of Medicine	NEJM Group	96.2
324	npj Clean Water	Nature	10.5
325	npj Digital Medicine	Nature	12.4
326	npj Primary Care Respiratory Medicine	Nature	3.1
327	npj Quantum Information	Nature	6.6
328	Nuclear Science and Techniques	Springer Nature	3.6
329	Ocean Engineering	Elsevier	4.6
330	Ophthalmology	Elsevier	13.2
331	Ornithological Applications	Oxford	2.6
332	Ornithology	Oxford	2.1
333	Osteoarthritis and Cartilage	Elsevier	7.2
334	Paleoceanography and Paleoclimatology	Wiley	3.2
335	Pathogens and Global Health	Taylor & Francis	4.9
336	Periodontology 2000	Wiley	17.5
337	Personality and Social Psychology Review	SAGE	7.7
338	Petroleum Exploration and Development	KeAi	7.2
339	Petroleum Science	KeAi	6
340	Pharmacological Reviews	Elsevier	19.3
341	Physics of Fluids	AIP Publishing	4.1
342	Physics of Life Reviews	Elsevier	13.7
343	Physiological Reviews	American Physiological Society	33.4
344	Plant Phenomics	AAAS	7.6
345	Poetics	Elsevier	2

(Continues)

TABLE A1 | (Continued)

	Journal	Publishers	Impact factor (2023)
346	Policy and Society	Oxford	5.7
347	Polymer Reviews	Taylor & Francis	11.1
348	Polymer Testing	Elsevier	5
349	Population and Development Review	Wiley	4.6
350	Postharvest Biology and Technology	Elsevier	6.4
351	Primary Health Care Research and Development	Cambridge	1.6
352	Proceedings of the IEEE	IEEE	23.2
353	Process in Aerospace Sciences	Elsevier	11.5
354	Process in Energy and Combustion Science	Elsevier	32
355	Progress in Lipid Research	Elsevier	14
356	Progress in Nuclear Magnetic Resonance Spectroscopy	Elsevier	7.3
357	Progress in Organic Coatings	Elsevier	6.5
358	Progress in Particle and Nuclear Physics	Elsevier	14.5
359	Progress in Polymer Science	Elsevier	26
360	Progress in Quantum Electronics	Elsevier	7.4
361	Progress in Retinal and Eye Research	Elsevier	18.7
362	Progress in Solid State Chemistry	Elsevier	9.1
363	PRX Quantum	APS	9.3
364	Psychoanalytic Psychotherapy	Taylor & Francis	1.2
365	Psychological Science in the Public Interest	SAGE	18.2
366	Psychology of Aesthetics Creativity and the Arts	APA	2.7
367	Psychonomic Bulletin & Review	Springer	3.2
368	Public Administration Review	Wiley	6.1
369	Public Understanding of Science	SAGE	3.5
370	Publications mathématiques de l'IHÉS	Springer	6
371	Radiology	RSNA	12.1
372	ReCall	Cambridge	4.6
373	Regulatory Toxicology and Pharmacology	Elsevier	3
374	Religion Brain & Behaviour	Taylor & Francis	3.6
375	Remote Sensing of Environment	Elsevier	11.1
376	Renaissance Quarterly	Cambridge	1.2
377	Research in African Literatures	Indiana University Press	0.3
378	Research in Dance Education	Taylor & Francis	0.8
379	Research in Developmental Disabilities	Elsevier	2.9
380	Research Integrity and Peer Review	Taylor & Francis	3.9
381	Resuscitation	Elsevier	6.5
382	Review of Communication Research	Review of Communication Research	6.3
383	Review of Economics and Statistics	MIT Press	7.6
384	Review of Symbolic Logic	Cambridge	0.9
385	Reviews in Aquaculture	Wiley	8.8

(Continues)

TABLE A1 | (Continued)

	Journal	Publishers	Impact factor (2023)
386	Reviews in Fish Biology and Fisheries	Springer	5.9
387	Reviews in Fisheries Science & Aquaculture	Taylor & Francis	6.4
388	Reviews in Medical Virology	Wiley	9
389	Reviews of Geophysics	Wiley	25.2
390	Reviews of Modern Physics	APS	45.9
391	Rhetoric Society Quarterly	Taylor & Francis	1.1
392	Russian Literature	Elsevier	0.3
393	Satellite Navigation	Springer	9
394	Science	AAAS	44.8
395	Science as Culture	Taylor & Francis	2.5
396	Science Robotics	AAAS	26.1
397	Science Translational Medicine	AAAS	15.8
398	Seminar-A Journal of Germanic Studies	University of Toronto Press	0.5
399	Sensors and Actuators B-Chemical	Elsevier	8
400	Shaw-The Journal of Bernard Shaw Studies	Penn State University Press	0.6
401	SIAM Review	SIAM	10.8
402	Sociology of Religion	Oxford	2.4
403	Soil Biology & Biochemistry	Elsevier	9.8
404	South Atlantic Quarterly	Duke	2.1
405	Speculum-A Journal of Mediaeval Studies	University of Chicago Press	1.2
406	Statistics Surveys	Statistics Surveys	11
407	Studies in Mycology	STUDIES IN MYCOLOGY	14.1
408	SusMat	Wiley	18.7
409	Sustainable Development	Wiley	9.9
410	Technological Forecasting and Social Change	Elsevier	12.9
411	Technology in Society	Elsevier	10.1
412	Technovation	Elsevier	11.1
413	Television & New Media	SAGE	2.4
414	Theatre Journal	John Hopkins University Press	0.8
415	Theory and Practice of Logic Programming	Cambridge	1.4
416	Theory Culture & Society	SAGE	2.7
417	Tijdschrift Voor Nederlandse Taal-En Letterkunde	Amsterdam U Press	0.3
418	Trac-Trends in Analytical Chemistry	Elsevier	11.8
419	Trauma Violence & Abuse	SAGE	5.4
420	Trends in Cognitive Sciences	Cell	16.7
421	Trends in Ecology & Evolution	Cell	16.7
422	Trends in Environmental Analytical Chemistry	Elsevier	11.1
423	Trends in Food Science & Technology	Elsevier	15.1
424	Trends in Hearing	SAGE	2.6
425	Trends in Parasitology	Cell	7

(Continues)

TABLE A1 | (Continued)

	Journal	Publishers	Impact factor (2023)
426	Trends in Plant Science	Cell	17.4
427	Ultrasonics Sonochemistry	Elsevier	8.7
428	Ultrasound in Obstetrics & Gynaecology	Wiley	6.1
429	Urban Forestry & Urban Greening	Elsevier	6
430	Veterinary Quarterly	Taylor & Francis	7.9
431	Walt Whitman Quarterly Review	University of Iowa Press	1.4
432	Water Research	Elsevier	11.5
433	Water Resources Research	Wiley	4.6
434	Wildlife Monographs	Wiley	4.3
435	Wiley Interdisciplinary Reviews-Computational Molecular Science	Wiley	16.8
436	World Bank Research Observer	Oxford	8.7
437	World Journal of Mens Health	World Journal of Mens Health	4
438	World Psychiatry	Wiley	60.5
439	Yale Law Journal	Yale Law Journal	5.2

TABLE A2 | Selected middle-ranking IF journals.

	Journal	Publishers	Impact factor (2024)
1	3 Biotech	Springer Nature	2.9
2	ACM Transactions on Embedded Computing Systems	ACM	2.6
3	ACM Transactions on Storage	ACM	2.6
4	Acta Diabetologica	Springer Nature	2.9
5	Advanced NanoBiomed Research	Wiley	4.4
6	Advanced Therapeutics	Wiley	2.6
7	Advances in Aerodynamics	Springer Nature	2.3
8	Advances in Weed Science	Advances in Weed Science	1.6
9	AIDS Research and Therapy	BMC	2.5
10	Algebra and Logic	Springer Nature	0.7
11	American Journal of Critical Care	American Association of Critical-Care Nurses	2.2
12	Anaesthesiology Intensive Therapy	Anaesthesiology Intensive Therapy	1.7
13	Andean Geology	Andean Geology	1.2
14	Angiology	SAGE	2.2
15	Applied Composite Materials	Springer Nature	2.9
16	Applied Spectroscopy	SAGE	2.2
17	Archaeofauna	Archaeofauna	0.6
18	Archives of Virology	Springer Nature	2.6
19	Arqueologia	Arqueologia	0.6
20	Arthropod-Plant Interactions	Springer Nature	1.3
21	Augmentative and Alternative Communication	Taylor & Francis	1.6
22	Australian Literary Studies	Australian Literary Studies	0.2
23	Autex Research Journal	De Gruyter	1.6
24	Basic and Clinical Andrology	BMC	2.0
25	Behavioural Medicine	Taylor & Francis	2.2
26	Beilstein Journal of Organic Chemistry	Beilstein	2.1
27	Biological Agriculture & Horticulture	Taylor & Francis	1.6
28	Biology Open	The Company of Biologists	1.7
29	Biomedical Engineering and Computational Biology	SAGE	3.1
30	Biometrics	Oxford	1.7
31	BioPsychoSocial Medicine	BMC	2.4
32	Bioscience of Microbiota Food and Health	Bioscience of Microbiota Food and Health	3.0
33	BJGP Open	Royal College of General Practitioners	2.1
34	Blood Purification	Karger	2.0
35	BMC Musculoskeletal Disorders	BMC	2.4
36	BMJ Surgery Interventions & Health Technologies	BMJ	1.6
37	Boundary 2-An International Journal of Literature and Culture	Duke	0.8
38	Breastfeeding Medicine	Mary Ann Liebert	1.8

(Continues)

TABLE A2 | (Continued)

	Journal	Publishers	Impact factor (2024)
39	British Journal of Nutrition	Cambridge	3.0
40	British Journal of Oral & Maxillofacial Surgery	Elsevier	1.9
41	Building Acoustics	SAGE	1.9
42	Cahiers Victoriens & Edouardiens	OpenEdition Journals	0.3
43	Canadian Journal of Film Studies-Revue Canadienne d Etudes Cinematographiques	University of Toronto Press	0.2
44	Catedral Tomada-Revista de Critica Literaria Latinoamericana-Journal of Latin American Literary Criticism	Pitt Open Library Publishing	0.1
45	Cellulose Chemistry and Technology	Cellulose Chemistry and Technology	1.1
46	Ceska Literatura	Ceska Literatura	0.1
47	Chemistry Teacher International	De Gruyter	1.6
48	ChemMedChem	Wiley	3.4
49	ChemPhysChem	Wiley	2.1
50	Child Care in Practice	Taylor & Francis	1.4
51	China and WTO Review	China and WTO Review	0.6
52	China Ocean Engineering	Springer Nature	2.2
53	Chinese Geographical Science	Springer Nature	3.1
54	Chinese Sociological Review	Taylor & Francis	1.4
55	Choreographic Practices	Intellect Discover	0.2
56	Classical and Quantum Gravity	IOP Publishing	3.7
57	Clean Technologies	MDPI	4.7
58	Cleaner Waste Systems	Elsevier	3.9
59	Clinical Child Psychology and Psychiatry	SAGE	2.0
60	Clinical Journal of Sport Medicine	LWW Journals/Wolters Kluwer	1.8
61	Clinical Respiratory Journal	Wiley	2.3
62	Clinical Transplantation	Wiley	1.9
63	ClinicoEconomics and Outcomes Research	Taylor & Francis	2.2
64	Coatings	MDPI	2.8
65	Cognitive Linguistic Studies	John Benjamins Publishing Company	0.4
66	Communist and Post-Communist Studies	University of California Press	1.3
67	Comparative Drama	Comparative Drama	0.2
68	Complexity	Wiley	1.7
69	Computational Materials Science	Elsevier	3.3
70	Computers & Fluids	Elsevier	2.9
71	Conservation Genetics	Springer Nature	1.7
72	Corrosion Reviews	De Gruyter	3.2
73	CRANIO-The Journal of Craniomandibular & Sleep Practice	Taylor & Francis	1.9
74	Cryptogamie Mycologie	Muséum national d'Histoire naturelle	2.7
75	Current Opinion in Genetics & Development	Elsevier	3.6

(Continues)

TABLE A2 | (Continued)

	Journal	Publishers	Impact factor (2024)
76	Current Transplantation Reports	Springer Nature	1.6
77	Current Tropical Medicine Reports	Springer Nature	2.0
78	Dance Research	Edinburgh University Press	0.4
79	Deep-Sea Research Part I-Oceanographic Research Papers	Elsevier	2.1
80	Dermatologica Sinica	LWW Journals/Wolters Kluwer	2.2
81	Developmental Biology	Elsevier	2.1
82	Developmental Dynamics	Wiley	1.5
83	Digital Health	SAGE	3.4
84	Discover Psychology	Springer Nature	1.6
85	Documenta Mathematica	EMS Press	0.7
86	Drug Testing and Analysis	Wiley	2.7
87	Educational Measurement-Issues and Practice	Wiley & National Council on Measurement in Education	1.9
88	Eikon Imago	Eikon Imago	0.1
89	Emergency Medicine Australasia	Wiley & Academy College for Emergency Medicine	1.5
90	Emerita	Consejo Superior de Investigaciones Científicas	0.1
91	English Language & Linguistics	Cambridge	1.0
92	Entertainment Computing	Elsevier	2.4
93	Environmental Pollutants and Bioavailability	Taylor & Francis	3.2
94	Epilepsia Open	Wiley &ILAE	2.9
95	Episodes	International Union of Geological Sciences	2.2
96	EPL	IOP Publishing & EPL	1.8
97	Ergonomics	Taylor & Francis	2.3
98	Espana Mediaeval	Universidad Complutense de Madrid	0.2
99	Eugene O Neill Review	Penn State University Press	0.1
100	European Annals of Allergy and Clinical Immunology	European Annals of Allergy and Clinical Immunology	2.3
101	European Journal of Social Theory	SAGE	1.4
102	European Journal of Training and Development	Emerald Publishing	2.8
103	European Review	Cambridge	0.6
104	Experimental Techniques	Springer Nature	1.9
105	Expository Times	SAGE	0.3
106	Family Practice	Oxford	2.1
107	Federal Reserve Bank of St. Louis Review	Federal Reserve Bank of St. Louis	1.4
108	Few-Body Systems	Springer Nature	1.8
109	FIIB Business Review	SAGE	2.8
110	Folia Microbiologica	Springer Nature	3.1
111	Food Additives and Contaminants Part A-Chemistry Analysis Control Exposure & Risk Assessment	Taylor & Francis	2.3
112	Forest Science	Springer Nature	1.4

(Continues)

TABLE A2 | (Continued)

	Journal	Publishers	Impact factor (2024)
113	Fuel Cells	Wiley & EuChemS	3.2
114	Future Medicinal Chemistry	Taylor & Francis	3.4
115	Gastroenterology Review-Przeglad Gastroenterologiczny	Gastroenterology Review	2.5
116	General Relativity and Gravitation	Springer Nature	2.8
117	Geomechanics and Engineering	Taylor & Francis	2.4
118	Gerontology	Karger	3
119	Giornale Storico Della Literatura Italiana	Loescher	0.1
120	Grassland and Science	Wiley	1.1
121	Group Dynamics-Theory Research and Practice	American Psychological Association	2.2
122	Histochemistry and Cell Biology	Springer Nature	2.1
123	IEEE Transactions on Nanotechnology	IEEE	2.5
124	IET Collaborative Intelligent Manufacturing	Wiley & Institution of Engineering and Technology	3.1
125	IET Intelligent Transport Systems	Wiley & Institution of Engineering and Technology	2.5
126	IET Quantum Communication	Wiley & Institution of Engineering and Technology	2.8
127	Immunologic Research	Springer Nature	3.1
128	Indian Journal of Psychological Medicine	SAGE	2
129	Industrial Relations Journal	Wiley	1.5
130	Infectious Agents and Cancer	BMC	2.8
131	Information Technology and Libraries	ACM	1.3
132	Innovation and Development	Taylor & Francis	1.7
133	Interiors-Design Architecture Culture	Taylor & Francis	0.3
134	International Communication Gazette	SAGE	1.4
135	International Forum of Psychoanalysis	Taylor & Francis	0.4
136	International Indigenous Policy Journal	International Indigenous Policy Journal	1
137	International Journal for Parasitology-Parasites and Wildlife	Elsevier	2.2
138	International Journal for Quality in Health Care	Oxford	2.2
139	International Journal of Adolescence and Youth	Taylor & Francis	2.2
140	International Journal of Advanced Manufacturing Technology	Springer Nature	3.1
141	International Journal of Applied Psychoanalytic Studies	Wiley	0.4
142	International Journal of Art Therapy	Taylor & Francis & British Association of Art Therapists	1.5
143	International Journal of Building Pathology and Adaptation	Emerald Publishing	2.1
144	International Journal of Building Pathology and Adaptation	Emerald Publishing	2.1
145	International Journal of Developmental Disabilities	Taylor & Francis	1.4
146	International Journal of Educational Research and Innovation	International Journal of Educational Research and Innovation	1.2

(Continues)

TABLE A2 | (Continued)

	Journal	Publishers	Impact factor (2024)
147	International Journal of Engine Research	SAGE	2.1
148	International Journal of Industrial Ergonomics	Elsevier	3
149	International Journal of Laboratory Haematology	Wiley	2.3
150	International Journal of Multimedia Information Retrieval	Springer Nature	2.9
151	International Journal of Nonlinear Sciences and Numerical Simulation	De Gruyter	1.5
152	International Journal of Older People Nursing	Wiley	2
153	International Journal of Paleopathology	Elsevier	1.5
154	International Journal of Phytoremediation	Taylor & Francis	3.1
155	International Journal of Public Opinion Research	Oxford	1.3
156	International Journal of Remote Sensing	Taylor & Francis	2.6
157	International Journal of Social Robotics	Springer Nature	3
158	International Journal of Water Resources Development	Taylor & Francis	2.2
159	International Review of Scottish Studies	Edinburgh University Press	0.2
160	IoT	MDPI	2.8
161	Iranian Journal of Basic Medical Sciences	Iranian Journal of Basic Medical Sciences	2.7
162	Iranian Journal of Science and Technology Transaction A-Science	Springer Nature	1.4
163	Iranian Polymer Journal	Springer Nature	2.9
164	ISIJ International	ISIJ International	1.8
165	Isogloss Open Journal of Romance Linguistics	Universitat Autònoma de Barcelona	0.4
166	JAMIA Open	Oxford	3.4
167	JCO Clinical Cancer Informatics	American Society of Clinical Oncology	2.8
168	JMIR Cardio	JMIR Publications	2.2
169	Journal of Advanced Veterinary and Animal Research	Journal of Advanced Veterinary and Animal Research	1.5
170	Journal of Aerosol Science	Elsevier	2.9
171	Journal of African Media Studies	Intellect Discover	0.8
172	Journal of Ageing Studies	Elsevier	2
173	Journal of Animal and Feed Sciences	Journal of Animal and Feed Sciences	1.5
174	Journal of Applied Biomaterials & Functional Materials	SAGE	3.1
175	Journal of Applied Research in Intellectual Disabilities	Wiley	1.9
176	Journal of Aquatic Animal Health	Oxford	1.7
177	Journal of Attention Disorders	SAGE	2.2
178	Journal of Bioethical Inquiry	Springer Nature	1.5
179	Journal of Biological Dynamics	Taylor & Francis	2.2
180	Journal of Biomolecular NMR	Springer Nature	1.9
181	Journal of British and Irish Innovative Poetry	Journal of British and Irish Innovative Poetry	0.1
182	Journal of British Cinema and Television	Edinburgh University Press	0.2
183	Journal of Chemistry	Wiley	2.6

(Continues)

TABLE A2 | (Continued)

	Journal	Publishers	Impact factor (2024)
184	Journal of Child Health Care	SAGE	1.6
185	Journal of Clinical Pathology	BMJ	2
186	Journal of Commonwealth Literature	SAGE	0.2
187	Journal of Computational and Nonlinear Dynamics	American Society of Mechanical Engineers	2.1
188	Journal of Crustacean Biology	Oxford	1.2
189	Journal of Eastern African Studies	Taylor & Francis	0.6
190	Journal of Educational and Behavioural Statistics	SAGE	1.7
191	Journal of Electromyography and Kinesiology	Elsevier	2.3
192	Journal of Environmental Policy & Planning	Taylor & Francis	2.2
193	Journal of Ethnic & Cultural Diversity in Social Work	Taylor & Francis	1.2
194	Journal of Evolutionary Biology	Oxford	2.3
195	Journal of Experimental Child Psychology	Elsevier	2
196	Journal of Family Issues	SAGE	1.4
197	Journal of Fluency Disorders	Elsevier	1.4
198	Journal of Food Quality	Wiley	2.9
199	Journal of Gambling Studies	Springer Nature	2.3
200	Journal of Gender Studies	Taylor & Francis	1.5
201	Journal of Genetic Counselling	Wile	1.9
202	Journal of Health Organisation and Management	Emerald Publishing	2.2
203	Journal of Herbal Medicine	Elsevier	1.9
204	Journal of Human Lactation	SAGE	1.8
205	Journal of Imaging	MDPI	3.3
206	Journal of Immigrant & Refugee Studies	Taylor & Francis	1.5
207	Journal of Infrastructure Systems	American Society of Civil Engineers	2.2
208	Journal of Inorganic Materials	Journal of Inorganic Materials	1.6
209	Journal of Interpersonal Violence	SAGE	2.3
210	Journal of Irrigation and Drainage Engineering	American Society of Civil Engineers	2.1
211	Journal of Laboratory Medicine	De Gruyter	1.8
212	Journal of Law Medicine & Ethics	Cambridge	1.7
213	Journal of Magnetic Resonance	Elsevier	1.9
214	Journal of Magnetic Resonance Open	Elsevier	2.1
215	Journal of Mathematical Psychology	Elsevier	1.6
216	Journal of Medical Ultrasonics	Springer Nature	2.1
217	Journal of Morphology	Springer Nature	1.4
218	Journal of Nanotechnology	BMC	4.1
219	Journal of Ophthalmology	Wiley	1.9
220	Journal of Organometallic Chemistry	Elsevier	2.4
221	Journal of Orthopaedic Trauma	LWW Journals/Wolters Kluwer	1.8
222	Journal of Philosophy of Education	Oxford	0.7
223	Journal of Plant Nutrition	Taylor & Francis	1.7

(Continues)

TABLE A2 | (Continued)

	Journal	Publishers	Impact factor (2024)
224	Journal of Plant Nutrition and Soil Science	Wiley	2.8
225	Journal of Political Power	Taylor & Francis	1.3
226	Journal of Studies on Alcohol and Drugs	Journal of Studies on Alcohol and Drugs	2.3
227	Journal of Systems Engineering and Electronics	IEEE	2.1
228	Journal of the American Oil Chemists Society	Wiley & American Oil Chemists Society	2.3
229	Journal of the American Society for Mass Spectrometry	American Chemistry Society	2.7
230	Journal of the Astronautical Sciences	Springer Nature	1.5
231	Journal of the Experimental Analysis of Behaviour	Wiley	1.9
232	Journal of the History of Biology	Springer Nature	0.6
233	Journal of the Royal Statistical Society Series A-Statistics in Society	Oxford	1.6
234	Journal of Thermal Stresses	Taylor & Francis	2.3
235	Journal of Transportation Engineering Part B-Pavements	American Society of Civil Engineers	2.5
236	Journal of Urban Affairs	Taylor & Francis	1.9
237	Journal of Venomous Animals and Toxins including Tropical Diseases	Journal of Venomous Animals and Toxins including Tropical Diseases	2.0
238	Journal of Wine Economics	Cambridge	1.5
239	Keats-Shelley Review	Taylor & Francis	0.1
240	Labour and Industry	Taylor & Francis	1.5
241	Landscape Architecture and Art	Latvia University of Life Sciences and Technologies	0.3
242	Laryngo-Rhino-Otologie	Thieme Publisher	1.4
243	Law and Philosophy	Springer Nature	0.6
244	Learning and Motivation	Elsevier	1.8
245	Legacy	University of Nebraska Press	0.2
246	Limnology and Oceanography-Methods	Wiley & Association for the Sciences of Limnology and Oceanography	1.9
247	Marine Georesources & Geotechnology	Taylor & Francis	2.2
248	Materials for Quantum Technology	IOP Publishing	3.6
249	Materials Letters	Elsevier	2.7
250	Measurement in Physical Education and Exercise Science	Taylor & Francis	1.9
251	Mechanics Research Communications	Elsevier	2.3
252	Medeniyet Medical Journal	Medeniyet Medical Journal	1.1
253	Medical Anthropology Quarterly	Wiley & American Anthropological Association	1.9
254	Medical Microbiology and Immunology	Springer Nature	3.0
255	Medicine Science and the Law	SAGE	1.7
256	Mental Health & Prevention	Elsevier	2.4
257	Metal Music Studies	Intellect Discover	0.2
258	Mining Metallurgy & Exploration	Springer Nature	2
259	Multiscale Modelling & Simulation	Society for Industrial and Applied Mathematics	1.6

(Continues)

TABLE A2 | (Continued)

	Journal	Publishers	Impact factor (2024)
260	Mycopathologia	Springer Nature	2.9
261	National Academy Science Letters-India	Springer Nature	1.3
262	Naval Research Logistics	Wiley	2.1
263	Nephron	Karger	2.0
264	Neue Rundschau	S. Fischer	0.1
265	Neurological Clinics	Elsevier	2.9
266	Neuropsychologia	Elsevier	2
267	Neuroradiology	Springer Nature	2.6
268	Neurosurgical Review	Springer Nature	2.5
269	New Astronomy	Elsevier	2.1
270	New Zealand Geographer	Wiley	1.2
271	NMR in Biomedicine	Wiley	2.7
272	Nordic Pulp & Paper Research Journal	De Gruyter	1.2
273	Nuclear Physics A	Elsevier	2.5
274	Numerical Algebra Control and Optimization	American Institute of Mathematical Sciences	1.1
275	Ocean Modelling	Elsevier	2.9
276	Oceans-Switzerland	MDPI	1.6
277	Open Access Emergency Medicine	Taylor & Francis	1.5
278	Ophthalmologica	Karger	1.9
279	Optics Communications	Elsevier	2.5
280	Ostrich	Taylor & Francis	1.1
281	Paddy and Water Environment	Springer Nature	2.1
282	Palaeontologica Electronica	Palaeontologica Electronica	1.5
283	Parasite Immunology	Wiley	2.1
284	Particles	MDPI	2.3
285	Paediatric Anaesthesia	Wiley	1.7
286	Paediatric Physical Therapy	LWW Journals/Wolters Kluwer	1.5
287	Paediatric Rheumatology	BMC	2.4
288	Paediatrics in Review	American Academy of Paediatrics	1.6
289	Pensamiento	Pensamiento	0.2
290	Personal Relationships	Wiley	2.2
291	Petroleum Science and Technology	Taylor & Francis	1.4
292	PFG-Journal of Photogrammetry Remote Sensing and Geoinformation Science	Springer Nature	3.3
293	Philologus	De Gruyter	0.1
294	Photodermatology Photoimmunology & Photomedicine	Wiley	2.2
295	Physica B-Condensed Matter	Elsevier	2.8
296	Physics and Chemistry of Minerals	Springer Nature	1.6
297	Physiological Genomics	American Physiological Society	2.5
298	Physiological Measurement	IOP Publishing	2.7

(Continues)

TABLE A2 | (Continued)

	Journal	Publishers	Impact factor (2024)
299	Physiology International	AK Journals	2.3
300	Plant Reproduction	Springer Nature	2.5
301	Polymer-Plastics Technology and Materials	Taylor & Francis	2.9
302	Population	Population	1.5
303	Precision Radiation Oncology	SciOpen	2.1
304	Proceedings of the Institution of Mechanical Engineers Part M-Journal of Engineering for the Maritime Environment	SAGE	1.5
305	Progress in Crystal Growth and Characterisation of Materials	Elsevier	1.9
306	Public Administration and Development	Wiley	2.1
307	Public Culture	Duke	0.9
308	Public Money & Management	Taylor & Francis	2.1
309	Punishment & Society-International Journal of Penology	SAGE	1.4
310	Pure and Applied Geophysics	Springer Nature	1.9
311	Race and Social Problems	Springer Nature	1.4
312	Radiochimica Acta	De Gruyter	1.7
313	Rairo-Operations Research	EDP Sciences	2.1
314	Regenerative Therapy	Elsevier	3.5
315	Regional Science and Urban Economics	Elsevier	2.9
316	Reproductive Sciences	Springer Nature	2.5
317	Reproductive Toxicology	Elsevier	2.8
318	Research in Learning Technology	Association of Learning Technology	1.2
319	Revista Brasileira de Entomologica	Scientific Electronic Library Online (SciELO)	1.3
320	Revista Brasileira de Historia	Scientific Electronic Library Online (SciELO)	0.3
321	Revistade de Saude Publica	Scientific Electronic Library Online (SciELO)	2.1
322	Revstat-Statistical Journal	Instituto Nacional De Estatistica	1.2
323	Robotica	Cambridge	3
324	Russian Journal of Mathematical Physics	Springer Nature	1.5
325	Samuel Beckett Today/Aujourd'hui	Brill	0.1
326	Scandinavian Journal of Forest Research	Taylor & Francis	1.5
327	Science & Justice	Elsevier	2
328	SIAM Journal on Imaging Sciences	SIAM	2.3
329	Silicon	Springer Nature	3.3
330	Social Network Analysis and Mining	Springer Nature	2.8
331	Social Science Information Sur Les Sciences Sociales	SAGE	1.3
332	Software Quality Journal	Springer Nature	2.3
333	Soldering & Surface Mount Technology	Emerald Publishing	1.8
334	Solid State Ionics	Elsevier	3.3

(Continues)

TABLE A2 | (Continued)

	Journal	Publishers	Impact factor (2024)
335	SPE Production & Operations	Society of Petroleum Engineers	1.3
336	Stanislavski Studies	Taylor & Francis	0.2
337	Statistics and Computing	Springer Nature	1.6
338	Stem Cells International	Wiley	3.3
339	Sterotactic and Functional Neurosurgery	Karger	2.4
340	Studia Logica	Springer Nature	0.6
341	Sungkyun Journal of East Asian Studies	Duke	0.3
342	Sustainable Environment Research	BMC	4.7
343	Systems Biology in Reproductive Medicine	Taylor & Francis	2.2
344	Therapeutic Advances in Cardiovascular Disease	SAGE	2.2
345	Thoracic Cancer	Wiley	2.3
346	Toxicon-X	Elsevier	2.8
347	Transforming Anthropology	Wiley & Association of Black Anthropologists	0.9
348	Translation and Translanguaging in Multilingual Contexts	John Benjamins Publishing Company	1.0
349	Transportation	Springer Nature	3.3
350	Trauma Surgery & Acute Care Open	BMJ	2.2
351	Turkish Journal of Fisheries and Aquatic Sciences	Turkish Journal of Fisheries and Aquatic Sciences	1.7
352	Ultramicrobiology	Elsevier	2
353	Universal Access in the Information Society	Springer Nature	2.7
354	Utilities Policy	Elsevier	4.4
355	Vadose Zone Journal	Wiley & ACSESS	2.8
356	Veterinary Ophthalmology	Wiley	1.3
357	Veterinary Surgery	Wiley	1.3
358	Virus Research	Elsevier	2.6
359	Vox Patrum	Katolicki Universytet Lubelski Jana Pawla II Press	0.2
360	Women & Health	Taylor & Francis	1.4
361	World Bank Economic Review	Oxford	1.8
362	Zeitschrift fur Empirische Kulturwissenschaft	Deutschen Gesellschaft für Empirische Kulturwissenschaft e.V.	0.1
363	Zeitschrift Fur Germanistik	Humboldt-Universitat Zu Berlin	0.1

TABLE A3 | Concepts and categories.

Categories	Concepts	Representative policy texts	Source
A1 Human behaviour	The evaluation of manuscripts by editors must be attributed to humans	Managing the editorial evaluation of a scientific manuscript implies responsibilities that can only be attributed to humans.	Elsevier
	Peer review reports must based on reviewer's own knowledge and expertise	Editors select peer reviewers primarily because of their in-depth knowledge of the subject matter or methods of the work they are asked to evaluate.	Springer Nature
	Peer review reports must be written by humans	Moreover, the peer review process is a human endeavour and responsibility and accountability for submitting a peer review report	Wiley
A2 Accountability	Peer review process inherently entails responsibilities	Reviewing a scientific manuscript implies responsibilities that can only be attributed to humans.	Elsevier
A3 Confidential information	Confidential information about the manuscripts and the authors	This confidentiality requirement extends to peer reviewers' comments as they may contain confidential information about the paper and/or the authors.	Lancet
	Privileged information or ideas	Privileged information or ideas obtained through peer review must be kept confidential	AIP
A4 Confidential process	Confidential manuscript	Papers or proposals that are sent out for review are confidential documents	Cambridge University Press
	Confidential peer review report	A reviewer should treat both the manuscript and data received from the journal, their review report, and related correspondence, as confidential	ACS
	Confidential correspondence	This confidentiality requirement extends to all communication about the manuscript including any notification or decision letters	SciOpen/Tsinghua University Press
A5 Bias	Unbiased evaluation by editor	An editor should give prompt and unbiased consideration to all manuscripts offered for publication	AIP
	Unbiased peer review process by reviewers	ACM requires that the peer review process and related decisions be free of bias.	ACM
A6 Objective	Reviewers should judge objectively	Reviewers should judge objectively the quality of the research reported and respect the intellectual independence of the authors.	AIP
	Reviewers must prepare their report independently	Reviewers must prepare their report by themselves, unless they have permission from the journal to involve another person.	Taylor & Francis
	Respect the intellectual independence of the authors	Reviewers should judge objectively the quality of the research reported and respect the intellectual independence of the authors.	AIP
A7 Integrity	Maintain the integrity of the peer review process	maintain the integrity of the peer review process and uphold a fair evaluation of the scientific manuscript	AIP
	The peer review process operates on a principle of mutual trust	the peer review process operates on a principle of mutual trust between authors, reviewers and editors	Springer Nature

(Continues)

TABLE A3 | (Continued)

Categories	Concepts	Representative policy texts	Source
A8 Professional comments	Reviewer should provide professional comments	The quality and integrity of the peer review process requires that the reviewer be a qualified expert in the subject matter of the submission.	ACM
	Point out uncited relevant work	Reviewers should point out relevant published work that has not been cited by the authors.	AIP
A9 Lack of ability	Lack up-to-date knowledge	Despite rapid progress, generative AI tools have considerable limitations: they can lack up-to-date knowledge and may produce nonsensical, biassed or false information.	Springer Nature
	Unable to capture the reviewer's experience	While LLMs can create a critical summary that would look like a review report, it is unlikely to be able to capture the reviewer's experience as a researcher in the field, any local or contextual nuances of the study or indeed what impact the study may have on various populations.	SAGE
	Do not have the critical thinking and original assessment	The critical thinking and original assessment needed for peer review is outside of the scope of this technology	Lancet
	Generate incorrect, incomplete or biassed conclusions	There is a risk that the technology will generate incorrect, incomplete or biassed conclusions about the manuscript.	Elsevier
A10 Confidentiality risks	Requires substantial and detailed information inputs	The use of generative AI tools to output a peer reviewer critique on a specific grant application or contract proposal requires substantial and detailed information inputs.	NIH
	AI tools may store or use uploaded information	Third party services such as AI tools may store or use any information provided as a prompt to generate future text	ACS
	No guarantee of where data are being sent, saved, viewed, or used in the future	AI tools have no guarantee of where data are being sent, saved, viewed, or used in the future	NIH
A11 Accountability gaps	Generated conclusion lacks citations or quotes	Generative AI is often lacking the standard practice of the global scholarly community of correctly and precisely attributing ideas, quotes, or citations.	Taylor & Francis
	Lack the ability or comprehension to assume responsibility for work	Generative AI models are not subject experts as they lack the ability or comprehension to assume responsibility for work they have helped create and are therefore unable to adhere to the ethical standards set out by IOP Publishing.	IOP Publishing
	Do not have the legal personality	Furthermore, generative AI models do not have the legal personality to sign publishing agreements or licences.	IOP Publishing
A12 Rapid development	AI models are rapidly evolving	Large Language Models, such as ChatGPT, are rapidly evolving	American Physical Society

(Continues)

TABLE A3 | (Continued)

Categories	Concepts	Representative policy texts	Source
A13 Significant influence	Widely applied in peer review process	Peer-reviewed medical journals and publishers have been using AI-like tools during the manuscript submission, peer review, and publication processes for some time.	JAMA
	Change the nature of publication process	We fully recognise that these evolving technologies are precipitously changing the nature of content creation, generation, review, and assessment and will likely facilitate efficiencies for authors, reviewers, and editors	JAMA
	Improve efficiency of reviewers and editors	Elsevier embraces new AI-driven technologies that support reviewers and editors in the editorial process	Elsevier
	Critical parts of advancing research	Mary Ann Liebert, publishers, Inc. understands that emerging computing methodologies and tools are critical parts of advancing research.	Mary Ann Liebert
A14 Positive response	Providing safe AI tools	Springer Nature explores providing our peer reviewers with access to safe AI tools	Springer Nature
	Guidance on accountable and transparent use of such tools	JAMA will continue to provide authors and reviewers with guidance on accountable and transparent use of such tools.	JAMA
A15 Regular review	Continue observation of AI's uses	Physical Review Journals continue to observe their uses in creating and modifying text	American Physical Society
	Significant variation will be discussed	Any proposed significant variation will be discussed with relevant stakeholders according to the degree of change proposed and those likely to be affected.	BMJ
	Policy will be regular review and changed	This policy will be kept under regular review and changed as necessary in light of further technological developments in this area.	SIAM
A16 Active treatment	Publishers will investigate potential AI abuse	In cases where the usage of large language models is suspected, APS may employ various means, including manual review, automated analysis, or third-party services, to investigate the authenticity of the reviews.	American Physiological Society
	Termination of the reviewer's relationship	Any violation of this policy may result in the termination of the reviewer's relationship with APS.	American Physiological Society
A17 Editor responsibility	Editor is responsible and accountable for the editorial process	The editor is responsible and accountable for the editorial process, the final decision and the communication thereof to the authors.	Elsevier
	Need for accountability	The Committee on Publication Ethics (COPE) has provided additional guidance for use of AI tools in decision-making in scholarly publication, including the need for accountability and human oversight.	JAMA (COPE)

(Continues)

TABLE A3 | (Continued)

Categories	Concepts	Representative policy texts	Source
A18 Editor monitoring and evaluation	Editors should evaluate AI abuse	The editor may, at their discretion, determine that the AI use in a given submission is too extensive	ACS
	Need for human oversight	The Committee on Publication Ethics (COPE) has provided additional guidance for use of AI tools in decision-making in scholarly publication, including the need for accountability and human oversight.	JAMA (COPE)
	Editor should inform the publisher of AI abuse	If an editor suspects that an author or a reviewer has violated our AI policies, they should inform the publisher.	Elsevier
	Decline manuscript if AI is used	Editors may decline to move forward with manuscripts if AI is used inappropriately.	AAAS
	Evaluate AI generated content tool is appropriate or permissible	The final decision about whether use of an AI generated content tool is appropriate or permissible in a submitted manuscript lies with the journal's editor or other party responsible for the publication's editorial policy.	Wiley (COPE)
A19 Confidential requirement for editors	Editors should not upload a submitted manuscript or any part of it into a generative AI tool	Editors should not upload a submitted manuscript or any part of it into a generative AI tool as this may violate the authors' confidentiality and proprietary rights and, where the paper contains personally identifiable information, may breach data privacy rights.	Elsevier
	Editors should not disclose any information about a manuscript	The editor and the editorial staff should not disclose any information about a manuscript under consideration to anyone other than reviewers and potential reviewers.	AIP
A20 Editors should not use AI to make decisions	Editors should not use AI tools to summarise reviews and write decision letters	You should also not use these tools to summarise reviews and write decision letters due to concerns around confidentiality and copyright.	SAGE
	Editors should not use AI tools to assist in the decision-making process	Generative AI or AI-assisted technologies should not be used by editors to assist in the evaluation or decision-making process of a manuscript	Elsevier
A21 Editors could use AI tools to assist their works	Editors could use AI tools to look for reviewers	You could use ChatGPT or other AI based tools to look for reviewers in the subject area.	SAGE
	Editors could use AI tools to help inform their editorial assessments	The editors of JAMA and the JAMA Network journals are not using AI tools to make specific editorial decisions on manuscripts but do have a collection of AI-like tools to help inform their editorial assessments.	JAMA
	Editors could use AI tools to improve the quality of peer review report	A GenAI tool can be used by an editor or peer reviewer to improve the quality of the written feedback in a peer review report.	Wiley
	Editors could use AI tools to conduct completeness and plagiarism checks	Please note that Elsevier owns identity protected AI-assisted technologies which conform to the RELX Responsible AI Principles opens in new tab/window, such as those used during the screening process to conduct completeness and plagiarism checks and identify suitable reviewers.	Elsevier

(Continues)

TABLE A3 | (Continued)

Categories	Concepts	Representative policy texts	Source
A22 Reviewer responsibility	Reviewers should accountable for peer review reports	Peer reviewers are accountable for the accuracy and views expressed in their reports	Springer Nature
A23 Reviewer monitoring and evaluation	Reviewers should evaluate manuscript plagiarism	A reviewer should also call to the editor's attention any substantial similarity between the manuscript under consideration and any published paper or manuscript submitted concurrently to another journal.	AIP
	Reviewers should evaluate AI abuse	Reviewers should consider the appropriateness of the use of AI tools when they assess the work	Mary Ann Liebert
	Reviewers should evaluate any ethical concerns	The reviewer also has the responsibility of noting any ethical concerns, not limited to but including suspected duplicate publication, fraud, plagiarism, or ethical concerns about the use of animals or humans in the research being reported.	American Heart Association
A24 Confidential requirement for reviewers	Reviewers should maintain confidentiality throughout review process	Reviewers are trusted and required to maintain confidentiality throughout the manuscript review process.	RSNA
	Reviewers use AI tools could breach the confidentiality	Reviewers may not use AI technology in generating or writing their reviews because this could breach the confidentiality of the manuscript.	AAAS
	Reviewers use AI tools could violate privacy and the copyright	could violate the confidentiality of the peer review process, privacy of authors and reviewers, and the copyright of the manuscript under review.	Wiley
	Reviewers use AI tools could be a form of peer review misconduct	Sharing with third-party tools such as Large Language Models (for example, ChatGPT) would constitute a breach of confidentiality and a form of peer review misconduct.	Cambridge University Press
	Confidential content should be removed prior to uploading into AI tools	Provided any and all parts of the review that would potentially identify the submission, author identities, reviewer identity, or other confidential content is removed prior to uploading into third party tools.	ACM
	Reviewers should not upload a submitted manuscript or any part of it into a generative AI tool	Reviewers should not upload any part of the manuscript, its associated files, or reviewer comments to any automated assistive writing technologies and tools (commonly referred to as artificial intelligence or machine learning tools).	American Heart Association
A25 AI tools use declaration	Reviewers should communicate before use AI tools	NIH Peer Reviewers must communicate the technology being used with their Designated Federal Officer in charge of the review meeting or other designated NIH official prior to use.	NIH
	AI use must be declared in the review report	If such tools are used to improve a peer review report, then they must be transparently declared in the report.	Wiley
A26 Prohibition of AI peer review	Reviewers are invaluable and irreplaceable	This expertise is invaluable and irreplaceable.	Springer Nature
	Reviewers are prohibited from using AI tools in peer review process	Reviewers are prohibited from using large language models, such as ChatGPT, or any similar AI technology, in the process of constructing their reviews	American Physiological Society

(Continues)

TABLE A3 | (Continued)

Categories	Concepts	Representative policy texts	Source
A27 Limited use of AI tools is allowed	GenAI tools should be used only on a limited basis	GenAI tools should be used only on a limited basis in connection with peer review.	Wiley
	Reviewers use AI tools in a way that does not violate confidentiality policy	If you used an AI tool as a resource for your review in a way that does not violate the journal's confidentiality policy, you must provide the name of the tool and how it was used.	JAMA
	Reviewers could upload manuscript to a safe AI platform	If there is a lucid statement that a platform does not use uploaded data for pre-training, uploading a manuscript for peer review will be no problem.	Journal of Educational Evaluation for Health Professions
A28 AI for assistant work is allowed	Grammar and spelling check	This policy does not apply to AI tools solely focused on grammar enhancement, such as grammar and spelling checkers.	American Physiological Society
	Data acquisition or analysis	Research that used ML/AI tools for data acquisition or analysis is eligible	American Society of Haematology
	Accessibility needs	Computer technologies that are used for accessibility needs may be granted an exception to this policy.	NIH
	Editing and grammar enhancement	The use of AI systems for editing and grammar enhancement is common practice and, as such, is generally outside the intent of the above policy.	IEEE