RetractBASE 2025 insights

Retract BASE
CORRECTING SCIENCE

Table of Contents

RetractBASE 2025 insights **1**

About the Project **3**

Authors *4*

Countries *5*

Organizations *6*

Journals *7*

Disciplines *8*

Reasons *9*

About the Project

RetractBASE is an open database that aims to compile the most thorough list of publications that have been retracted or withdrawn, linked to their corresponding retraction notices from 2000 onward. More than 130,000 records are made publicly available to the scholarly community with the purpose of creating an open infrastructure that promotes the study of research integrity and misconduct. Our commitment to Open Science principles leads us to consider it necessary to develop a tool that warns about this type of publications to prevent improper usage and citation.

This database is based on open bibliographic sources. A large range of scholarly databases (Crossref–Retraction Watch, Google Scholar, PubMed, The Lens, Scilit, among others) is searched to identify retracted or withdrawn literature. Then, using their DOI, bibliographic information is downloaded from the public API of OpenAlex. RetractBASE connects retracted publications and their retraction notices to check the reasons for the retraction. Links to the original publication are also provided to verify the retraction. We also find it interesting to link these publications with their comments in PubPeer and other media that broaden the information about these papers. Finally, RetractBASE categorizes the reasons for retraction using the tags assigned by Retraction Watch and the comments on PubPeer.

The new 2025 update in RetractBASE reports 12,380 new publications, 4.3% fewer than the previous year. 6,844 retraction notices were issued in 2025, 18.5% fewer than in 2024, and 1,473 publications were retracted, in contrast to the 3,715 retracted articles of 2024 (151% fewer). This decline could be explained by several massive retractions in 2024 and/or by the fact that some retractions or retracted articles may not yet be included in the databases. Withdrawals experienced a slight rebound in 2025, with an increase of 69.6% compared with 2024.

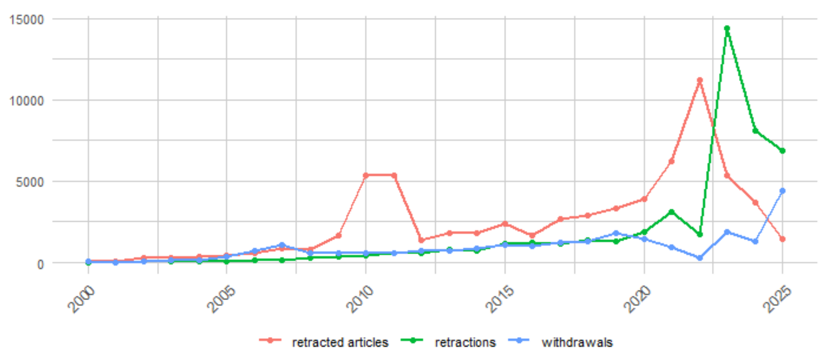

Figure 1. Longitudinal trend of retracted articles, retraction notices and withdrawals

Authors

Didier Raoult, with 242 documents, of which 162 are investigated and 53 are retracted articles, overtakes Hironobu Ueshima, with 225 documents (119 retracted articles and 106 retractions), as the author with the most publications in the database. Joachim Boldt, with 222 documents (164 retracted articles), takes third place from Hiroshi Otake, who has 200 (105 retracted articles). The authors who most increased their records are Didier Raoult (13.3%) and Pierre-Edouard Fournier (7.6%), spurred primarily by their high number of investigated papers. Joachim Boldt (6.3%) and Ahmad Salar Elahi (4.5%) are the other researchers with the highest growth.

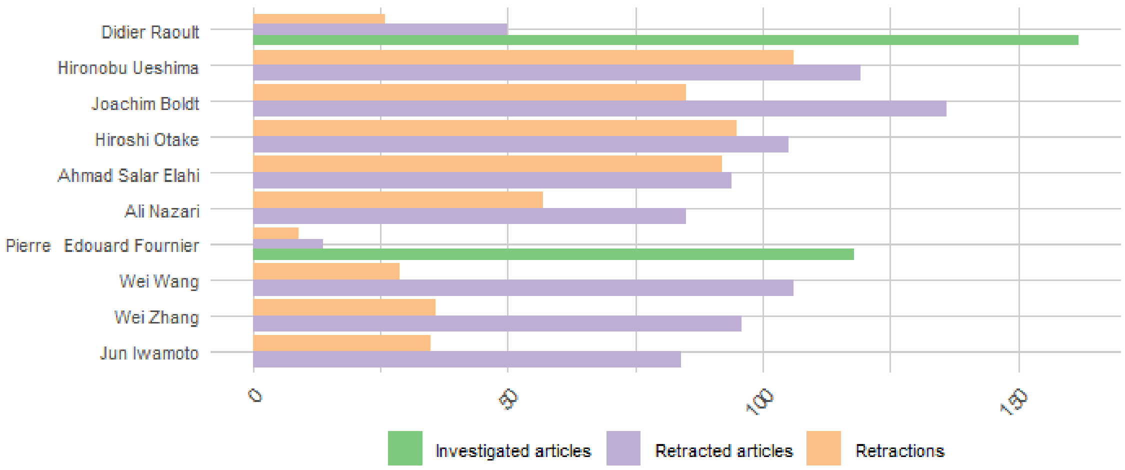

Figure 2. Top 10 authors with more documents in RetractBASE

Countries

China is the country with the most retracted publications in the database, with 56,951 (50.3%) publications, followed by the United States with 12,906 (11.4%) and India with 11,770 (10.4%) articles. However, the countries that experienced the highest increases among the top 20 are Turkey (12.5%), Pakistan (9.2%), and Iran (8.5%). Observing the proportion of retracted publications relative to the total production of each country (rate ‰), Saudi Arabia (4.8‰), Pakistan (4.7‰), and China (3.9‰) are the countries with the highest proportions. These results make evident how emerging Asian countries are leading the production of erroneous science and the need to reform their evaluation processes and scientific integrity policies.

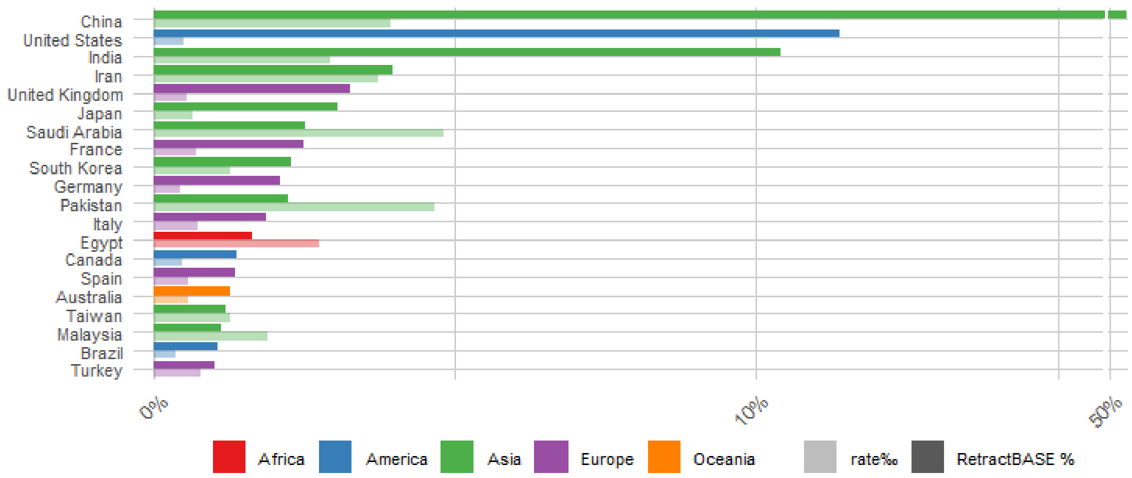

Figure 3. Top 20 countries that the most contribute to RetractBASE and rate regarding the total production.

Organizations

Among the 20 top organizations with the most papers, excluding withdrawals, in the database, 15 belong to China, which makes clear the magnitude of the problem of scientific integrity in this country and its institutional dimension. Jilin University, with 789 retracted articles and retractions, is the first organization, followed by Central South University with 655 publications and Islamic Azad University in Iran with 642 papers. According to the increase rate, the universities that most increased their presence in the database are all Chinese, such as China Medical University (9.7%), Central South University (7.9%), and Sichuan University (7.1%).

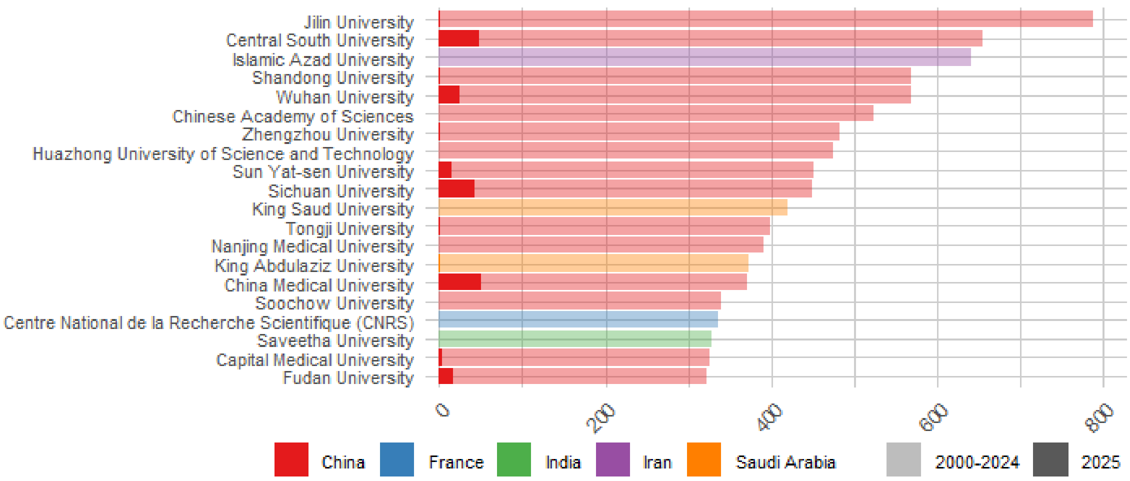

Figure 4. Top 20 organizations that the most publications include in RetractBASE, highlighting the contribution of 2025.

Journals

The ranking of venues presents more significant changes. PLOS ONE is the journal with the highest number of papers in the database (2,191), with 1,095 retracted articles and 1,096 retractions. It is followed by Computational Intelligence and Neuroscience (Hindawi) with 2,115 (1,058 retracted articles and 1,057 retractions) and Journal of Healthcare Engineering (Hindawi) with 2,049 (1,027 retracted articles and 1,022 retractions). However, the journal that most increases its contribution is Heliyon (Elsevier BV), with a massive retraction of 620 articles through 612 retraction notices in 2025, compared with only 24 retractions in 2024 (5,033%). International Wound Journal (Wiley) is the second source with the highest percentage growth, with 988 papers (494 retracted articles and retractions) in 2025 (790%). Finally, Journal of Intelligent & Fuzzy Systems (IOS Press), with 1,808 documents (1,293 retracted articles and 515 retractions; 55.2%), and PLOS ONE (PLOS), with an increase of 39.3%, are the third and fourth venues with the greatest increases.

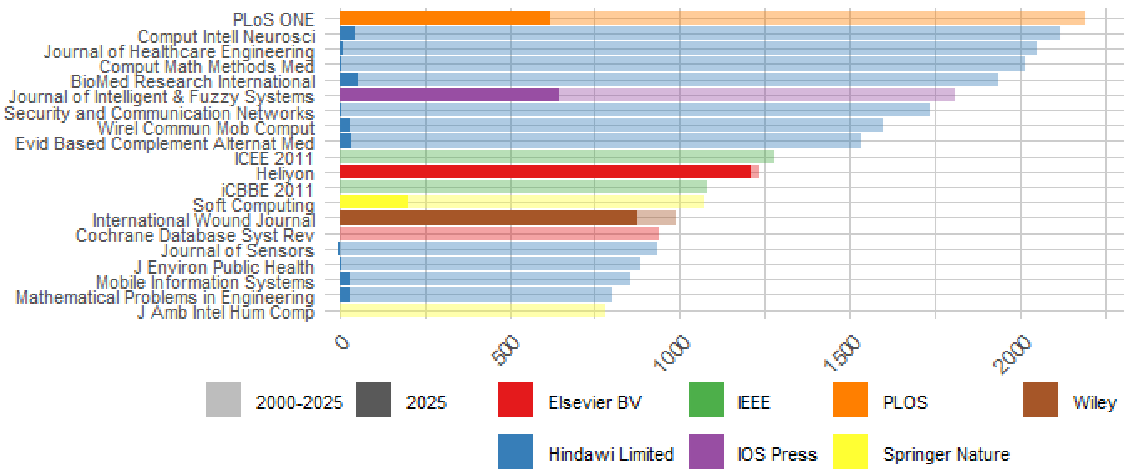

Figure 5. Top 20 journals with more publications included in RetractBASE, highlighting the contribution of 2025.

These results illustrate the aftermath of the mass retractions by Hindawi journals in 2023, where their journals continue to dominate the top rankings even though many have disappeared or been integrated into Wiley. The continued growth of PLOS ONE calls into question the editorial rigor of general-interest open access journals, as does Elsevier's recent commitment to this model (Heliyon) and its subsequent mass retraction in 2025. Finally, we must highlight the significant increase in the number of retractions in the International Wound Journal and the continued growth of the Journal of Intelligent & Fuzzy Systems, journals that warrant close monitoring due to their problematic status.

Disciplines

By ASJC disciplines, 30,277 (26.7%) retracted articles and retractions belong to Medicine, 20,216 (17.9%) to Engineering, and 19,495 (17.2%) to Biochemistry, Genetics and Molecular Biology. In general, there are no major growing differences at this level. However, when descending to the level of subfields, Molecular Biology is the field with the most retracted literature (16,749; 14.8%), almost doubling the proportion of Artificial Intelligence (8,827; 7.8%) and Cancer Research (8,732; 7.7%). The subfields with the greatest increases are Surgery (15.2%), Materials Chemistry (14.2%), and Biomedical Engineering (14.7%).

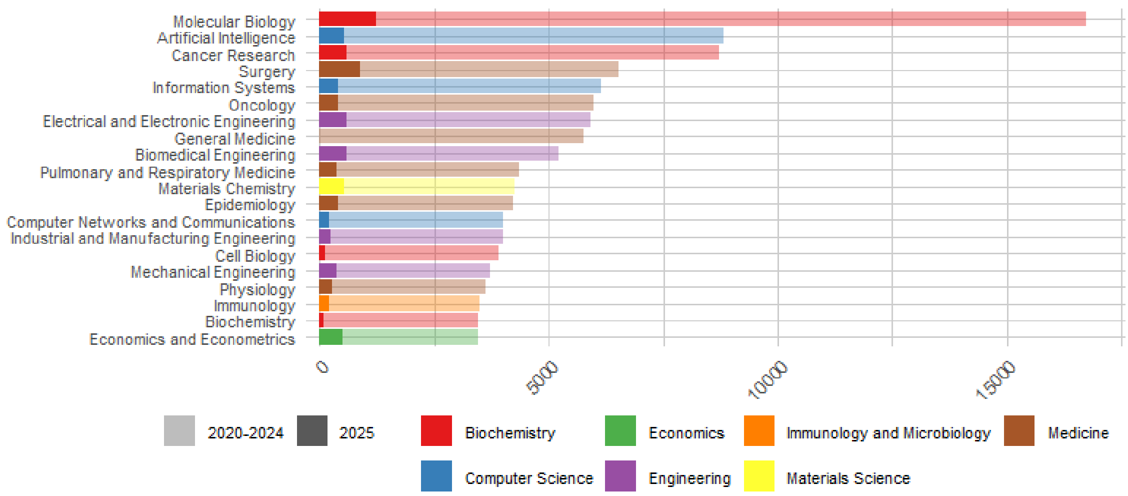

Figure 6. Top 20 subdisciplines with more publications included in RetractBASE, highlighting the contribution of 2025.

In general, the fields of biomedicine occupy the top spots in the ranking of the most retracted subdisciplines, a situation stemming from the significant problem of image manipulation that plagues these areas of knowledge. Computer science and Engineering also show problems arising from the use of artificial intelligence and the proliferation of paper mills.

Reasons

RetractBASE classifies the reasons for retraction into 11 categories. This classification is based on the tags assigned by Retraction Watch and the comments on PubPeer. The main reasons for the retraction of publications are Fake Peer Review (18,846; 16.6%), data and image manipulation (12,296; 10.9%), and Plagiarism (7,674; 6.8%), all of them considered fraudulent practices. In this group, Fake Peer Review is the reason that increased the most (13.1%) in 2025. In the group of serious errors, Ethical issues (2%) and Methodological flaws (1.9%) are the largest categories. However, the reasons with the greatest growth are Citation issues (221%) and Computer-Generated Content (210%).

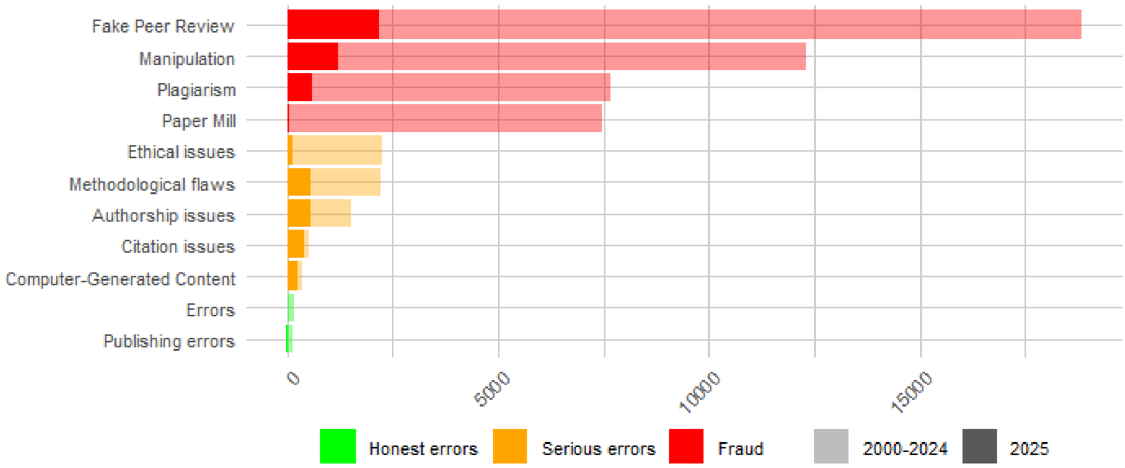

Figure 7. Publications in RetractBASE grouped by reasons for retraction and the proportion of new contributions in 2025.