The Scopus Radar Readiness Model for Mitigating Algorithmic Discontinuation Risks

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Abstract
The integrity of the global academic record is under unprecedented threat due to the industrialization of scientific misconduct, driven by paper mills, citation cartels, and identity theft, prompting major bibliographic databases to replace manual curation with algorithmic systems. This study examines the operational mechanics of the Scopus Radar tool, an unsupervised anomaly detection system designed to identify and eliminate articles exhibiting anomalous behavior. We reconstruct the bibliometric indicators that lead to discontinuation by triangulating data from the November 2025 Scopus Discontinued Titles list, public Elsevier policy papers, and independent bibliometric research. Our study of 62 cancelled journals shows that Publication Concerns (59.7%) and Outlier conduct (14.5%) are the top grounds for removal. There are definite tendencies when it comes to hyper-concentrated authorship, quick volume velocity spikes, and citation stacking that does not make sense. We also see a "contagion effect," where certain publications have far greater rates of quitting than others. Based on these findings, we propose the Scopus Radar Readiness Model (SRRM). The model is based on the Core Practices of the Committee on Publication Ethics (COPE) and has four stages of growth. This roadmap gives editorial boards the tools they need to go from reactive compliance to proactive integrity assurance. They can do this by using internal bibliometric audits to find and fix problems before they lead to external algorithmic enforcement. The results show that journals need to use Level 4 Optimized integrity practices to stay alive in a time when automated gatekeeping is common.

[a]Sadly, Muhammad Ratodi passed away on December 24th, 2025. This is our tribute to our dear friend.

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1. Introduction

The academic publishing ecosystem is dependent on trust, but this trust is becoming weaker because of the "industrialization" of scientific deception (COPE, n.d.-b; COPE, n.d.-c). The institutional drive to "publish or perish" has made "paper mills" a profitable business. These are firms that make fake papers, change the peer review process, and sell authorship slots to academics who need them (COPE & STM, 2022). These groups have gone beyond simple plagiarism to more complex operations that use artificial intelligence (AI) to make fake text, change photos, and make up data, frequently getting around standard ways of finding them (Cabanac et al., 2021; Proofig, n.d.). Recent estimates indicate that the yearly magnitude of fraudulent publications in biomedicine alone may surpass 100,000 papers, a level that jeopardizes the efficacy of the peer review system (Sabel et al., 2024).

In this competitive environment, bibliographic indexes like Scopus and Web of Science (WoS) have become the unofficial judges of scientific authenticity. Getting your name in these databases is not just about getting the word out; it is often a necessary step for getting ahead in academia, getting grants, and ranking schools in different parts of the world, especially in the Global South and Eastern Europe (Macháček & Srholec, 2022). So, it is very crucial that these databases be safe. To maintain the "trust ledger" of research, Elsevier, the company that owns Scopus, has moved from human curation to computerized monitoring. In 2017, the firm utilized "Radar," a data analytics tool that checks for strange behavior in the whole Scopus corpus all the time (Scientific Publications, 2020; Steiginga, 2017).

People know about the Radar tool, but they do not know the particular algorithmic parameters, weighting techniques, and detection thresholds that it utilizes (Elsevier, 2020). It is challenging for journal editors and publishers to understand what is going on because of this lack of clarity. Legitimate journals may unintentionally activate algorithmic flags due to fast organic growth or changes in author demographics, but predatory organizations continually adapt their strategies to remain under the detection threshold. The categorization of Outlier behavior in Scopus discontinuance lists constitutes a statistical assessment. It means that something is not normal, which might cause indexing to stop suddenly, taking away a journal's impact metrics and ruining its submission pipeline (Futurity Publishing, 2025; Sita Pub, 2025).

It is very important to know the difference between Outlier behavior and Publication Concerns. Publication concerns usually come from qualitative studies that are started by whistleblower complaints or community comments about particular ethical violations, including manipulating peer review (Elsevier, n.d.-a). On the other hand, Outlier behavior is a quantitative flag that comes from unsupervised machine learning models that find strange patterns in metadata, including citation velocity, self-citation rates, or publishing volume trajectories (DataRobot, n.d.; Elsevier, 2020). Editors must know these different trigger mechanisms in order to put in place the right preventative measures.

This research aims to correlate the obscure enforcement mechanisms of the Scopus Radar tool with the real operational needs of article editors. We reverse-engineer the probable parameters of the detection algorithms by using the end of journals as a "failure signal." The particular aims of this study include

a. To examine the bibliometric attributes of journals removed from Scopus in November 2025, particularly distinguishing the frequency of Outlier behavior from Publication Concerns (Scopus, 2025).

b. To analyze the probable detection vectors of the “Radar” method by integrating public Elsevier documentation with independent bibliometric literature on anomaly detection, including citation stacking, volume spikes, and geographic concentration (Kojaku et al., 2021; Hanson et al., 2023).

c. To provide a strategic framework that integrates algorithmic anomaly mitigation with COPE Core Practices, so furnishing editors with a maturity model for institutional resilience (COPE, 2019; WCRI, 2024).

This study reveals that integrity in contemporary publishing encompasses not just ethical conduct but also the maintenance of clean bibliometrics. Editors need to be proactive and use data to operate a journal. They should verify its metadata as carefully as Scopus does.

2. Method

This research integrates quantitative analysis of private dataset artifacts with a qualitative synthesis of policy frameworks and bibliometric literature. The approach aims to infer the operational logic of the Scopus Radar tool by examining its outputs, namely terminated journals, and to reconcile these inferences with established ethical standards.

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2.1. Data Sources and Collection

The study relies on four primary streams of data:

a. Scopus Discontinuation Dataset (Primary Quantitative Source): We used the dataset in the file ext_list_Nov_2025.xlsx, which is called "Discontinued Titles Nov. 2025." This dataset has metadata for 62 different journal titles that have been discontinued or marked for re-evaluation as of November 2025. The variables taken out for study are "Source Title," "Publisher," "Reason for Re-evaluation," "Year," "Volume," and "Issue" (Scopus, 2025). This dataset provides the basis for current enforcement priorities.

b. Official Scopus/Elsevier Documentation (Policy Source): To base our study on official policy, we carefully looked over public documentation about how Scopus chooses material, the CSAB (material Selection and Advisory Board) re-evaluation process, and the Radar tool. The "Content Policy and Selection" homepage (Elsevier, n.d.-b), talks by Scopus product managers on the "Rule of Three" and Radar implementation (Steiginga, 2017), and white papers on high-quality content curation (Elsevier, n.d.-c) are also important references.

c. We looked at the main guiding texts from the Committee on Publication Ethics (COPE) to build the preparedness model. The paper contains the "Core Practices," as well as rules for "Citation Manipulation," "Systematic Manipulation of the Publication Process," and "Guest Edited Collections" (COPE, 2019; COPE, 2024; COPE, n.d.-b; COPE & STM, 2022). We also used ideas from the Commonwealth and STM Association's "Integrity Maturity Framework" to help us organize our suggested model (National Anti-Corruption Commission, n.d.; STM, n.d.).

d. Bibliometric Research Literature (Theoretical Foundation): A selection of peer-reviewed works published from 2015 to 2025 was chosen to provide the mathematical and theoretical basis for anomaly identification. The collection contains literature on citation stacking algorithms, including the CIDRE algorithm (Kojaku et al., 2021), paper mill detection signals such as "tortured phrases," Gini indices of authorship (Cabanac et al., 2021; Podlubny, 2024; Scanff et al., 2021), and the traits of "predatory" publishing growth patterns (Hanson et al., 2023; Macháček & Srholec, 2022).

2.2. Analytical Procedures

The analysis of the data was done in three steps:

2.2.1. Phase 1: Descriptive Statistical Analysis

We conducted a frequency analysis on the November 2025 dataset to quantify the distribution of re-evaluation reasons, including “Outlier behavior,” “Publication Concerns,” and “Metrics.” Additionally, we examined publisher data to identify “clusters” of discontinuation. We posited that elevated levels of withdrawn titles from a single publisher indicate systemic issues at the portfolio level (Scopus, 2025).

2.2.2. Phase 2: Algorithmic Reverse-Engineering

This step includes linking the individual Outlier behavior flags in the dataset to Elsevier's published descriptions of Radar signals and independent bibliometric research.

a. Volume Velocity: We connected flags for "rapid and unexplainable changes to the number of articles" (Elsevier, 2020) to bibliometric studies that set "mega-journal" growth criteria, including a rise of more than 140% (Hanson et al., 2023; Srholec, 2021).

b. Geographic Anomalies: We connected the "unexplainable changes in geographical diversity" signal (Elsevier, n.d.-c) to studies on how paper mills work in certain areas, such Russia and China, as well as Gini index methods (Scanff et al., 2021; Thelwall, 2022).

c. Citation Anomalies: We connected "high self-citation rates" (Elsevier, 2020) with studies that set "excessive" self-citation limits, such those that go beyond 20%, and network analysis methods for finding citation cartels (Kojaku et al., 2021; Szomszor et al., 2020).

2.2.3. Phase 3: Model Development

We put together the "Scopus Radar Readiness Model (SRRM)" by combining the risk factors we found. This meant connecting certain algorithmic triggers, like citation stacking, to the right editorial actions, like checking the reference list, and ethical governance structures, like independent peer review. The model was based on a maturity scale that ranged from "Reactive" to "Optimized," which made it easy to see how to use it (PeerJ, 2022; WCRI, 2024).

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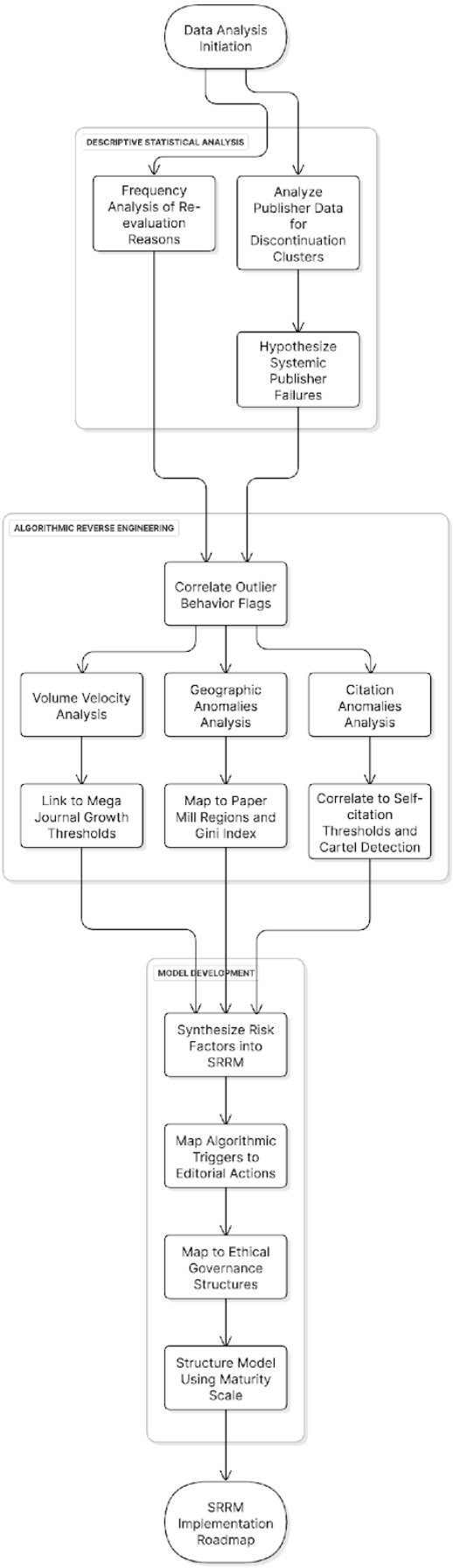

Figure 1. Data Analysis

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3. Results and Discussion

3.1. Results

3.1.1. Analysis of Scopus Discontinued Titles (November 2025)

The examination of the ext_list_Nov_2025.xlsx dataset shows that the Scopus CSAB is definitely going to enforce its rules, since 62 journals are either no longer publishing or are being re-evaluated. The reasons given for these measures clearly show the current risk level for journal editors.

3.1.1.1. Frequency of Discontinuation Reasons

The study indicates that challenges in qualitative integrity have surpassed shortcomings in quantitative measures as the primary reason for discontinuation.

Table 1. Frequency of Scopus Re-evaluation Reasons (November 2025)

Reason for Re-evaluation	Count	Percentage	Description & Context
Publication Concerns	37	59.7%	This group is the main reason for most of the discontinuations. It usually involves specific allegations of malpractice, such as manipulating peer review or breaking ethical rules. These claims are typically backed up by the CSAB's own investigation after complaints or Radar warnings (Elsevier, n.d.-b; Scopus, 2025).
Metrics	12	19.4%	These journals did not achieve quantitative standards, including citation rates compared to the field, for a long time, usually two years (Elsevier, 2020; Scopus, 2025).
Outlier behavior	9	14.5%	These journals were flagged by the Radar algorithm for statistically improbable patterns, such as sudden volume spikes or citation anomalies. These patterns deviate from the journal's baseline or field norms (Scopus, 2025).
Continuous curation	2	3.2%	Journals are removed following routine ongoing quality monitoring by the CSAB, independent of specific flags (Scopus, 2025).
Not Listed	2	3.2%	Data fields were blank in the source document (Scopus, 2025).

Documented Finding: According to Scopus (2025), Publication Concerns is responsible for over 60% of all discontinuations. This part supports longitudinal studies that say Scopus has changed its priority from only getting rid of low-impact publications to finding "predatory" actions and ethical failings (Wilches-Visbal et al., 2024).

Inference: Outlier behavior makes up just 14.5% of the total (9 titles), yet it is an important "early warning" category. Radar works on a continuous monitoring cycle instead of a yearly review (Steiginga, 2017; Elsevier, 2020), thus journals that are detected for outlier behavior are frequently handled more rapidly than those that do not satisfy conventional criteria. The fact that established titles like American Surgeon (which ended at Volume 90) are in the Outlier behavior category (Scopus, 2025) shows that longevity and brand recognition do not protect against algorithmic flags if recent data patterns are very different from the norm.

3.1.1.2. Publisher Concentration and Contagion Risks

The dataset shows that discontinuations do not happen randomly; they tend to happen in groups within certain publication portfolios. The research indicates that "outlier" conduct or insufficient ethical standards may be prevalent at the publisher level.

Table 2. Top Publishers with Discontinued Titles (November 2025)

Publisher	Count	Primary Reason	Key Titles
Science Publications	7	Publication Concerns	*American Journal of Applied Sciences*, *American Journal of Immunology*, *American Journal of Environmental Sciences* (Scopus, 2025).
Academic Journals Inc.	4	Publication Concerns	*American Journal of Biochemistry and Molecular Biology*, *American Journal of Food Technology* (Scopus, 2025).
E-Century Publishing Corp.	4	Publication Concerns & Outlier Behavior	*American Journal of Translational Research* (Outlier), *American Journal of Cancer Research* (Concerns) (Scopus, 2025).

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Publisher	Count	Primary Reason	Key Titles
Allied Business Academies	3	Publication Concerns	*Academy of Entrepreneurship Journal*, *Academy of Strategic Management Journal* (Scopus, 2025).
AMSE Press	2	Publication Concerns	*Advances in Modelling and Analysis A*, *Advances in Modelling and Analysis C* (Scopus, 2025).

Documented Finding: The publisher "Science Publications" has the highest number of discontinued titles (7), all attributed to Publication Concerns (Scopus, 2025). This clustering effect is consistent with the behavior of "predatory" publishers who operate fleets of journals with identical lax standards to maximize Article Processing Charge (APC) revenue (Macháček & Srholec, 2022).

Inference: Outlier behavior and publication concerns may effect any level of publishing, as shown by major publishers like Springer (2 titles) and Sage (1 title). The combination of Publication Concerns and Outlier behavior at E-Century Publishing Corp. implies that standards are falling across the board. This is because algorithmic flags (Outlier) probably led to more comprehensive human checks (Concerns) (Scopus, 2025).

3.1.2. Deconstructing Scopus "Radar": Algorithmic Signals and Thresholds

The Scopus Radar program works as a method for finding multivariate abnormalities, based on a combination of Elsevier's public documents and independent bibliometric forensics. It sets a standard baseline for each journal and topic area by marking deviations that go above statistical limits.

3.1.2.1. Volume Velocity Anomalies (The "Mega-Journal" Effect)

Documented Signal: Radar monitors for rapid and unexplainable changes to the number of articles published (Elsevier, 2020; ResearchGate, 2025).

Evidence: Journals like the American Journal of Translational Research (which was discontinued because of Outlier behavior) often have a "hockey stick" growth curve, where the number of articles published doubles or triples in just one or two years, but the impact of those articles on citations or the field does not grow (Hanson et al., 2023; Ouvrir la Science, 2023). In 2021, the journal published 150 articles, a figure consistent with its historical baseline. By 2023, this volume had surged to 650 articles, a 333% increase in just two years. This rapid expansion far exceeds the organic growth cap of 8-10% typically observed in established medical journals. Such velocity is a statistical impossibility for a legitimate peer-review process without a commensurate scaling of the editorial board, effectively acting as a "smoking gun" for the Radar algorithm.

Inference: The "predatory" business strategy depends on improving acceptance rates to boost APC income (Srholec, 2021). A growth rate of more than 140% over 5 years, or a rapid yearly increase of more than 50% without explanation, seems to be a key point for Radar to start, especially when it comes to Special Issues (Hanson et al., 2023; Ouvrir la Science, 2023).

3.1.2.2. Geographical Diversity Anomalies (The Paper Mill Footprint)

Documented Signal: Scopus marks changes in the geographical variety of authors or connections that cannot be explained (Elsevier, 2020; Elsevier, n.d.-c).

Evidence: Paper mills usually work in certain areas, such China, Russia, or the Middle East, and they aim to publish a lot of articles in journals. This causes a sudden, statistically unlikely concentration of authorship from one nation in a publication that used to concentrate on a worldwide or distinct area (Scanff et al., 2021; Thelwall, 2022).

Inference: Radar probably uses a Gini coefficient of authorship or something like it to measure concentration. If the Gini index for a journal goes up quickly toward 1 (which means high inequality or concentration) or if one country's contribution goes over a certain level (for example, if it changes by more than 30-50% in one year), the journal is marked for "hijacked" or paper mill activity (Scanff et al., 2021; World Bank, 2024).

3.1.2.3. Strange Citation Patterns (Stacking and Cartels)

Documented Signal: Radar finds high rates of self-citation by journals and authors and changes in the number of citations received (Elsevier, 2020; Elsevier, n.d.-c).

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Evidence: Discontinued publications, such as Annals of Applied Sport Science, often display citation patterns characteristic of "cartels," whereby a limited number of journals reference one another to enhance their metrics (Scopus, 2025; Kojaku et al., 2021).

Inference: **Self-Citation**: A Journal Self-Citation (JSC) rate surpassing 20% is an often mentioned red flag in bibliometrics and a probable threshold for worry (Szomszor et al., 2020; Davis, 2017). **Citation Stacking**: Radar probably uses algorithms that are similar to CIDRE (CItation Donors and REcipients), which finds when a "donor" journal gives a "recipient" journal a lot more citations than expected (>15-20%), which is a big change from the normal citation flow (Kojaku et al., 2021; Davis, 2017).

3.1.2.4. Content Forensics (Tortured Phrases)

Documented Signal: Radar is mostly a tool for metadata, but content analysis sometimes backs up Publication Concerns by showing "tortured phrases," which are AI-generated synonyms intended to avoid plagiarism detection (Futurity Publishing, 2025).

Evidence: The cessation of publications from American Scientific Publishing Group (ASPG) and Econjournals (Futurity Publishing, 2025) aligns with autonomous discoveries of paper mill material inside these portfolios.

Inference: The identification of expressions such as "counterfeit consciousness" for "artificial intelligence" or "bosom peril" for "breast cancer" is a clear forensic indicator. Radar picks up on the metadata abnormality (like fast output), but the existence of these phrases verifies the mechanism (paper mills) during the CSAB re-evaluation (Cabanac et al., 2021; arXiv, 2025).

3.2. Discussions

3.2.1. Inferred Scopus Radar Detection Thresholds

Based on our reverse-engineering of discontinued titles and cross-referencing with bibliometric literature, we have established a set of risk thresholds. These metrics serve as a diagnostic rubric for editors to assess their vulnerability to algorithmic flagging.

3.2.1.1. Volume Velocity:

High Risk: >50% annual growth or >140% growth over a 5-year period.

Indicator: Suggests a "predatory" expansion to maximize Article Processing Charges (APC).

3.2.1.2. Journal Self-Citation (JSC):

High Risk: >20% of total citations.

Indicator: Signals an insular citation network or artificial inflation of Impact Factors.

3.2.1.3. Author Concentration:

High Risk: Gini Coefficient > 0.7 or a single-country contribution increase of >30% in one calendar year.

Indicator: A hallmark of "hijacked" journals or targeted paper mill operations.

3.2.1.4. Citation Stacking:

High Risk: >15% of incoming citations originating from a single "donor" journal.

Indicator: Evidence of a citation cartel or "citation farm" arrangement.

3.2.2. The Scopus Radar Readiness Model (SRRM)

Journal editors need to assume a defensive stance that expects algorithmic monitoring in order to manage this climate. We suggest the Scopus Radar Readiness Model (SRRM), which is a way to group a journal's integrity activities into four stages of maturity. This model is based on the Commonwealth Integrity Maturity Framework and has been updated to fit the unique risks of the academic publishing ecosystem (WCRI, 2024; National Anti-Corruption Commission, n.d.).

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Table 3. Scopus Radar Readiness Model (SRRM)

Maturity Level	Operational Characteristics	Radar Risk Profile	Key Deficiencies
Level 1: Reactive	Ethics checks occur only *after* a complaint is filed. No automated screening. The system relies on "trust" and author declarations.	Critical	The company is highly vulnerable to paper mills, citation cartels, and identity fraud. Radar is likely to flag this company for volume or diversity anomalies.
Level 2: Defined	Basic plagiarism checks (e.g., Turnitin/iThenticate) are mandatory. The editorial board has written diversity guidelines but lacks enforcement mechanisms.	High	The system detects gross plagiarism but overlooks sophisticated fraud, such as AI-generated text, image manipulation, and citation stacking.
Level 3: Integrated	Routine use of image forensics (e.g., Proofig) and citation analysis tools. Regular audits of acceptance rates, turnaround times, and volume growth.	Moderate	The system is capable of detecting the majority of individual undesirable actors. However, the system may still overlook systemic issues or "sophisticated" paper mill products that mimic legitimate research.
Level 4: Optimized	Continuous algorithmic monitoring of the journal's own metadata (mimicking Radar). Independent ethics board/ombudsperson. The board employs dynamic workflows to adapt to emerging threats such as GenAI.	Low	Proactively identifies and resolves anomalies *before* they become “outliers.” The system aligns with the best-in-class COPE and STM standards.

Inference: Most of the journals that discontinued in the November 2025 update (Scopus, 2025) probably worked at Level 1 (Reactive) or Level 2 (Defined). The journals did not have any internal controls to find the "rapid and unexplainable changes" (Elsevier, 2020) that set off the Radar algorithm. They were basically blind until they got the notification to stop.

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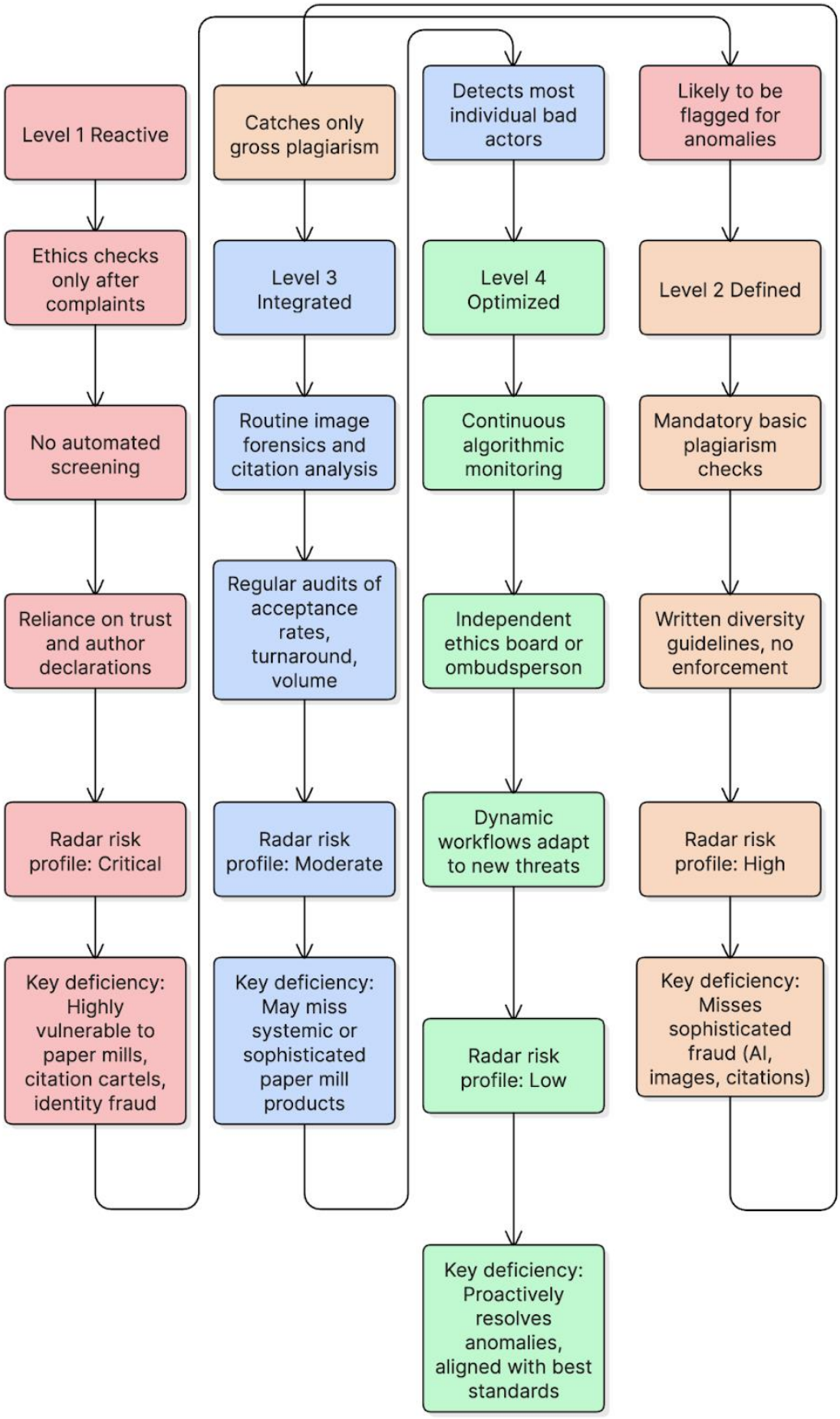

Figure 2. Scopus Radar Readiness Model (SRRM) framework

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3.2.3. Editorial Roadmap for Anomaly Mitigation

The editing method has to be substantially different in order to reach "Level 4 Optimized." The following roadmap outlines exactly what has to be done at each stage of the publishing cycle to cancel out the specific signals that Scopus Radar is looking for.

3.2.3.1. Phase 1: Pre-Submission & Triage (The Filter)

Objective: Prevent the ingress of fraudulent content before it enters the peer review system.

a. **Identity** Verification: Paper mills frequently use fake identities or hijacked profiles.

Action: Make it necessary for all authors to have ORCID iDs. Set up an Identity Confidence Check (ICC) that finds email accounts (such Gmail or Yahoo) or domains associated to known mills (Elsevier, n.d.-d). Retraction Watch (2025) says that unverifiable researchers are a hint that paper mills are in business.

b. **Scope & Volume Control**: A sudden increase in loudness is one of the main triggers for Radar (ResearchGate, 2025).

Action: Make sure that the journal's Aims and Scope are strictly followed. If submissions go up three times in a year, maybe because of a big problem like COVID-19, put a short restriction or limit on Special Issues to make sure the quality stays high (Georgia Tech, n.d.).

Tooling: Use the STM Integrity Hub to find duplicate submissions from different publishers. This is a big symptom of "shotgunning" by paper mills (STM, n.d.).

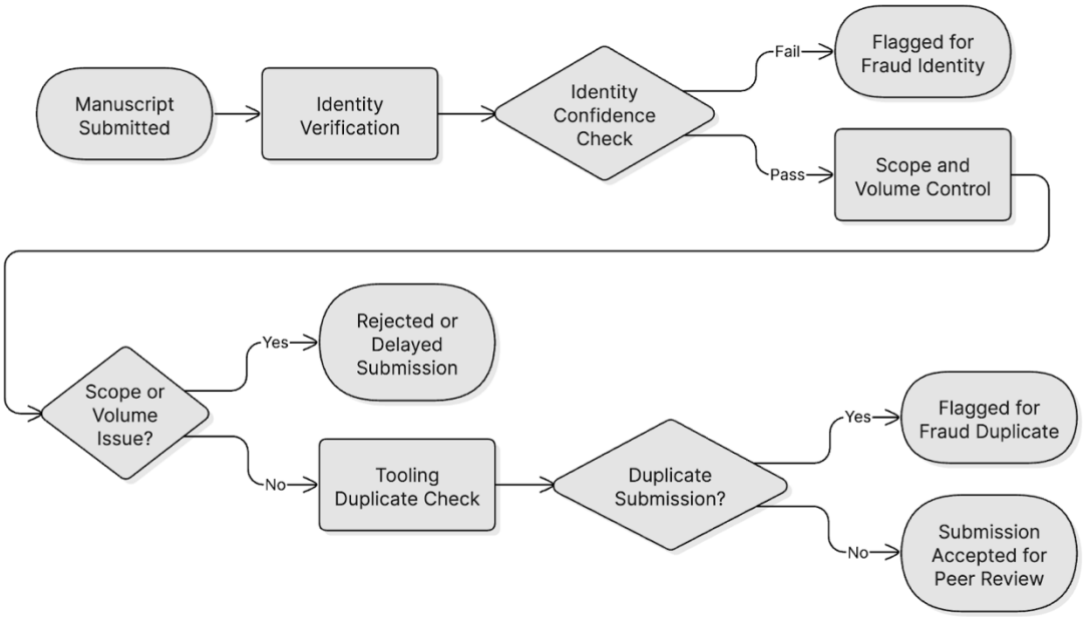

Figure 3. Phase 1: Pre-Submission & Triage

3.2.3.2. Phase 2: Peer Review (The Validation)

Objective: Find out whether the assessment method is being changed.

a. **Reviewer Auditing**: Reviewer Rings, which are fake accounts that provide good reviews, are a common way to commit fraud (Taylor & Francis, n.d.).

Action: Verify the identification of each reviewer. Do not only read reviews that the author suggests. Look out for reviewers that write reports in less than 24 hours or who always assess papers from the same set of authors.

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b. **Citation Analysis**: Coercive citation and stacking are big dangers in citation analysis (COPE, 2024).

Action*:* Tell editors and reviewers to look for Citation Stacking. It is necessary to look into a manuscript if it cites the editor's own work or an unrelated journal too often, since this might be a sign of a donor/recipient cartel. Follow COPE's strict rules on citation manipulation (COPE, 2019).

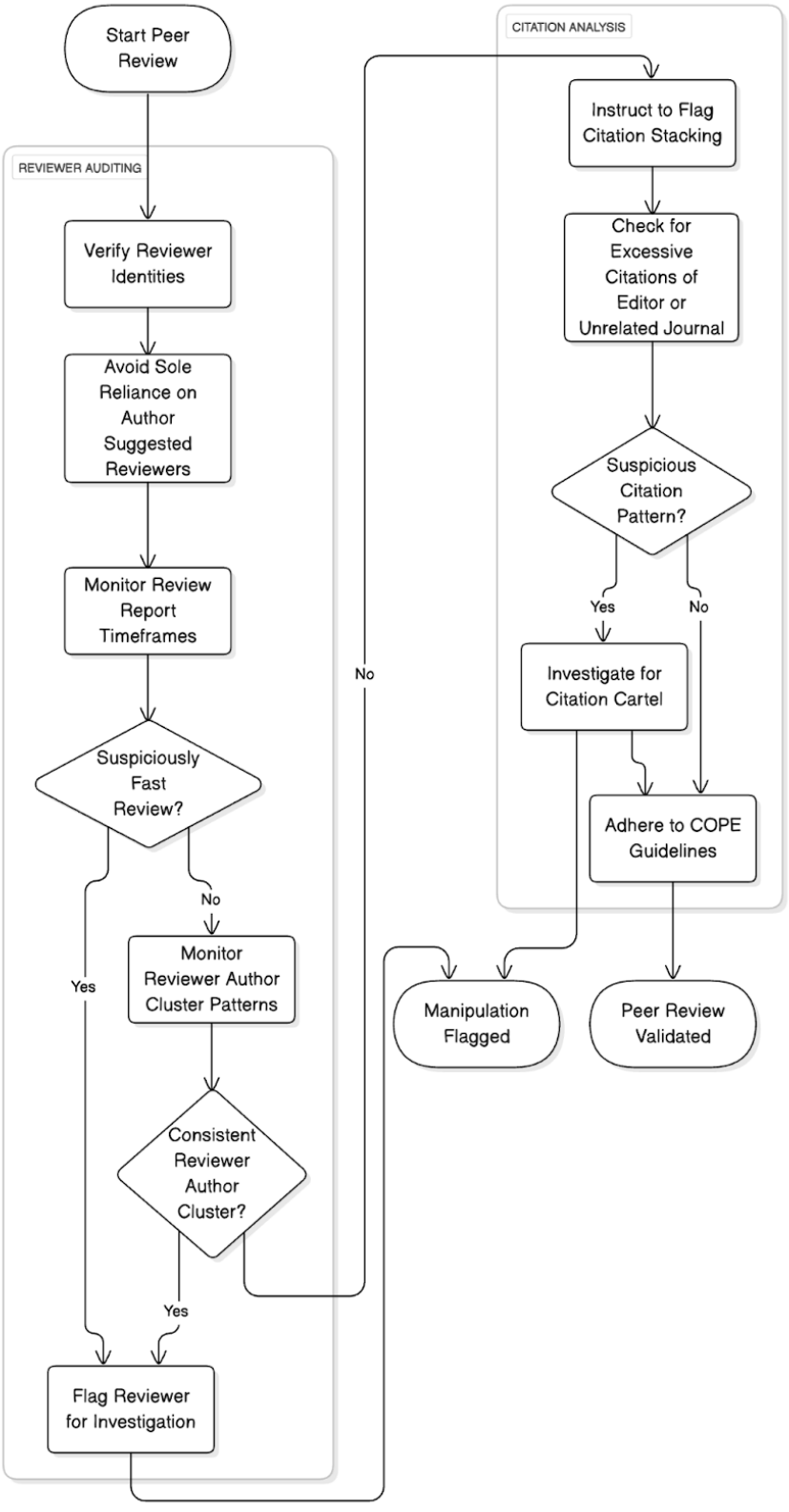

Figure 4. Phase 2: Peer Review

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3.2.3.3. Phase 3: Post-Acceptance (The Audit)

Objective: Do a final forensic investigation before the Version of Record is frozen.

a. **Tortured Phrases Scan**: AI-generated documents commonly utilize synonym substitution to get around plagiarism detection systems (Cabanac et al., 2021).

Action*:* Set up a screening process that uses tools or manual keyword searches to find well-known "tortured phrases," such "colossal information" for "big data" or "bosom peril" for "breast cancer" (arXiv, 2025; Signals, 2025).

b. **Image Forensics:**

Action: Use AI-powered image analysis tools like Proofig and ImageTwin to find duplication, rotation, or splicing in images that human reviewers may miss (Proofig, n.d.).

c. **Bibliometric Self-Audit**:

Action: Do a yearly computation of the journal's Self-Citation Rate (SCR). If the SCR is close to or above 20%, or if it is double the average of similar journals in the same field, quick action is needed to stop Radar from flagging (Elsevier, 2020; Szomszor et al., 2020).

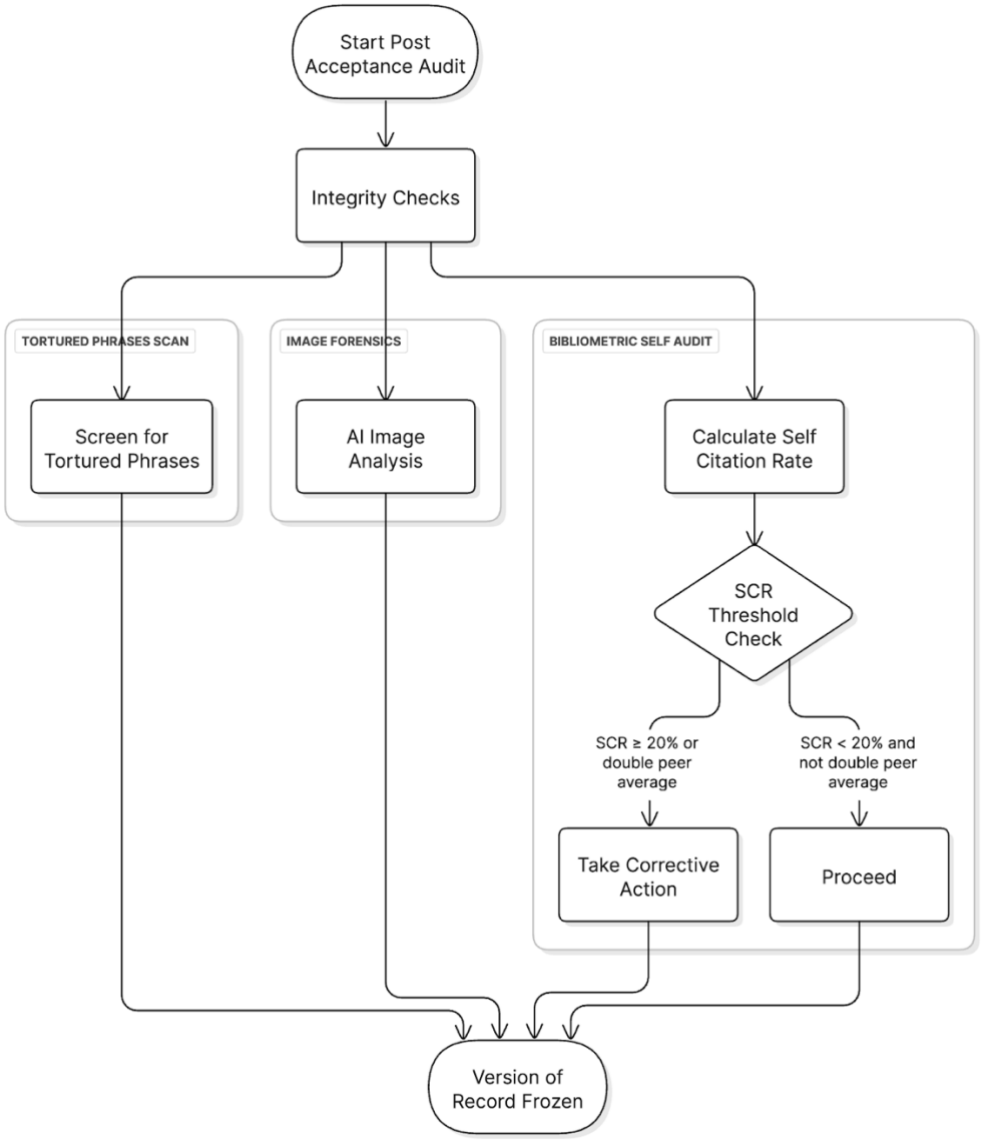

Figure 5. Phase 3: Post-Acceptance

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3.2.3.4. Phase 4: Governance (The Culture)

Objective: Establish integrity as a fundamental principle.

a. **Editorial Board Diversity**: A lack of geographical diversity may suggest a flawed journal (Espin et al., 2017).

Action: Use the Gini index to check the editorial board's geographical distribution once a year. Make sure that the board is made up of people from a wide range of backgrounds and is not overly focused on one country, unless the journal is expressly for that area (Baccini et al., 2023).

b. **Transparency**:

Action: Send out an annual Transparency Statement that includes information on acceptance rates, review times, and retraction rates. This proactive disclosure builds trust with the Scopus CSAB at any future re-evaluation (Elsevier, n.d.-b).

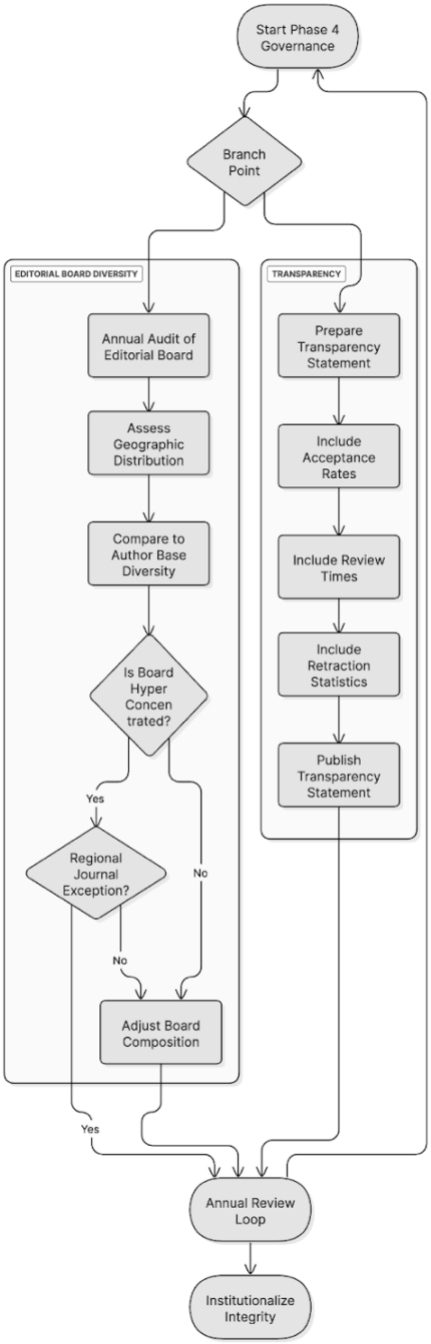

Figure 6. Phase 4: Governance

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3.2.4. Strategic Positioning: SRRM vs. STM Integrity Hub

It is essential to distinguish the proposed Scopus Radar Readiness Model (SRRM) from existing industry solutions, such as the STM Integrity Hub. While both aim to safeguard the scholarly record, they operate at different levels of the publishing ecosystem and serve distinct operational functions.

Table 5. Comparison of SRRM and STM Integrity Hub

Feature	Scopus Radar Readiness Model (SRRM)	STM Integrity Hub
Primary Nature	Strategic Framework: A maturity model and rubric for internal governance and process improvement.	Technology Platform: A cloud-based IT collaboration tool for real-time detection.
Operational Scope	Internal & Single-Journal: Focuses on the metadata hygiene and editorial policies of a specific journal or publisher portfolio.	External & Cross-Publisher: Focuses on data sharing between competing publishers to detect duplicate submissions ("shotgunning").
Key Objective	Algorithmic Survival: Aims to prevent the journal from being flagged as an "outlier" by the Scopus Radar algorithm.	Fraud Detection: Aims to catch specific acts of misconduct (e.g., simultaneous submissions, manipulated images) at the point of entry.
Data Source	Bibliometric Metadata: Analyzes the journal's own output metrics (e.g., volume growth, self-citation rates, Gini index).	Submission Content: Analyzes manuscripts and submission logs across multiple publishers' systems.
Role of the Editor	Auditor: The editor uses SRRM to self-audit and "health check" their journal against risk thresholds.	User: The editor (or publisher) uses the Hub as a screening tool to vet incoming manuscripts.

The STM Integrity Hub acts as a powerful tactical tool for detecting individual bad actors at the submission stage (Phase 1). In contrast, the SRRM serves as a strategic governance framework for managing the journal's overall health and relationship with indexers like Scopus. Implementing the STM Integrity Hub is, in fact, a key action item within "Level 3: Integrated" of the SRRM, demonstrating that the two are not competing solutions but complementary components of a comprehensive integrity infrastructure. While the Hub stops fraudulent papers from entering, the SRRM ensures the journal's resulting metadata remains within the statistical safety zones required for continued indexing.

3.3. Limitations

This study is subject to several limitations inherent to the nature of reverse-engineering proprietary systems. First and foremost, we lack direct access to the source code, specific weighting parameters, or training data of the Scopus Radar algorithm. Consequently, our findings are inferential and based on statistical correlation rather than definitive causation. While we have identified strong associations between specific bibliometric behaviors, such as volume velocity spikes and high Gini coefficients, and subsequent journal discontinuation, we cannot rule out the influence of other, unobservable variables or qualitative assessments made by the Content Selection & Advisory Board (CSAB) during their manual review process.

Furthermore, our analysis is constrained by the sample size and temporal scope of the dataset, which consists of 62 titles discontinued in the November 2025 update. This snapshot may not capture the full spectrum of detection vectors employed by Elsevier, particularly those related to emerging or less common forms of misconduct. Finally, algorithmic detection systems are dynamic and continuously evolving. The "risk thresholds" identified in this study represent the enforcement landscape as of late 2025 and may require recalibration as detection technologies advance. Future research should aim to validate these findings across larger, longitudinal datasets and potentially control groups of active journals to further isolate the specific determinants of algorithmic flagging.

3.4. Navigating Ethical Tensions

Following this plan creates a tradeoff between efficiency (how quickly things are published) and integrity (how thorough the reviews are). Paper manufacturers take advantage of academics' need for faster publication (Srholec, 2021). Editors must resist financial demands, sometimes from publishers or organizations, to increase productivity at the expense of review rigor. The case of the American Surgeon (Scopus, 2025), a once-respected title that was taken away because of Outlier behavior, is an example of a cautionary story: previous prestige does not shield against algorithmic enforcement when current data patterns show that standards are dropping. Furthermore, Scopus's potential to retroactively erase articles (ResearchGate, 2025) creates major ethical problems about the permanence of the scientific record. This means that editors have a moral duty to stop fraudulent publication.

A critical limitation of automated gatekeeping is the potential for "false positives," where legitimate editorial practices inadvertently mimic fraudulent patterns. For instance, a highly specialized niche journal (e.g.,

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Etruscan Archaeology) may legitimately exhibit a self-citation rate approaching 25% simply because there are no other relevant venues in the field to cite. Similarly, a journal publishing a special issue on a global crisis, such as COVID-19, might experience a justifiable 50% spike in volume. Editors of such publications operate in a "grey zone" of algorithmic risk. To mitigate this, it is no longer sufficient to merely be honest; editors must proactively justify these metrics in their public Transparency Statements. Editors can provide the "ground truth" necessary to preemptively defuse an automated Radar flag by explicitly contextualizing their data, such as explaining that a volume spike is due to a funded special series.

4. Conclusion

The Scopus Radar tool marks a major change in how academic publishing is regulated. Instead of static, periodic evaluations, it uses dynamic, continuous algorithmic monitoring. The list of things that will no longer be available in November 2025 shows that this system is active, aggressive, and does not tolerate Outlier behavior. The time of "benign neglect" for journal editors when it comes to publishing ethics is over. To maintain their indexing position and the integrity of the scientific record, journals must change. Editors may utilize the Scopus Radar Readiness Model (SRRM) to copy the monitoring methods employed by the databases that index their work. Editors should always keep an eye on important bibliometric indicators including publishing speed, citation networks, and geographic diversity. They should also use advanced forensic methods in their work to find problems before they set off a Radar alarm. In this way, they protect their publications from being stopped and make the global scientific community stronger against the threat of fraud that comes with industrialization.

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The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Data Availability

The dataset is available from the "Title Re-evaluation Process" section of the Content Policy and Selection page at https://www.elsevier.com/products/scopus/content/content-policy-and-selection. This study's data can also be found at https://docs.google.com/spreadsheets/d/1onGur3TkLyg3GZQDetErxJDii5JkzFT2/edit?usp=sharing&ouid=117517548849718357334&rtpof=true&sd=true in the sheet Discontinued Titles Nov. 2025.

Declaration on AI Use

The authors declare that no artificial intelligence (AI) or AI-assisted tools were used in the preparation of this manuscript.

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