

SCAMMERS IMPERSONATE GUEST EDITORS TO GET SHAM PAPERS PUBLISHED

Hundreds of articles retracted after fraudsters used 'special issues' to manipulate publication.

By Holly Else

Hundreds of articles published in peer-reviewed research journals are being retracted after scammers exploited the processes for publishing special issues to get poor-quality papers into established titles. In some cases, fraudsters posed as scientists and offered to guest-edit issues that they then filled with sham papers.

Elsevier is withdrawing 165 articles currently in press and plans to retract 300 more that have been published as part of 6 special issues in one of its journals. Springer Nature is retracting 62 articles published in a special issue of one journal. The retractions come after the publishers each issued expressions of concern earlier this year, covering hundreds of articles.

Science-integrity experts expect more investigations in the months ahead as other titles realize that they have been duped.

"It is very worrying," says Guillaume Cabanac, a computer scientist at the University of Toulouse in France, who has worked to uncover nonsense science papers in special issues.

A Springer Nature spokesperson said that an investigation had revealed "deliberate attempts to subvert the trust-based editorial process and manipulate the publication record". They added that they did not yet know who was responsible. (*Nature* is editorially independent of its publisher.) Elsevier says that it has put measures in place to stop similar problems happening in future.

Special-issue scam

Many journals publish special issues: collections of articles that focus on a particular topic. These issues are often overseen by guest editors who are experts in the research topic, but are not usually involved in the day-to-day editorial work of the journal.

Fraudsters have been caught several times in recent years trying to use special issues as a way to get low-quality papers published in legitimate journals. In 2016, the website *Retraction Watch* reported that scammers had posed as a known scientist to trick *The Scientific World Journal*, published by Hindawi, into appointing them as the guest editor of a special issue on metaheuristics. A subsequent investigation by the publisher found that several peer-review

reports for papers published in the special issue had come from compromised e-mail accounts. Hindawi told *Retraction Watch* that it had no idea who was behind the scam and said it had put measures in place to help prevent the problem reoccurring.

In December 2020, Springer Nature's *Journal of Nanoparticle Research* wrote that it had been "attacked in a new way by a sophisticated and organized network" (N. Pinna *et al.* *J. Nanopart. Res.* **22**, 376; 2020). A group of what seemed to be eminent computer scientists and engineers from well-known institutions in Germany and the United Kingdom had written to the journal's editors suggesting a special issue about the role of nanotechnology in health care in September 2019. The editorial board accepted the proposal, created a special-issue entry in its editorial management system and gave three members of the group access to it so they could handle the manuscripts.

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Months later, some members of the editorial board noticed that most of the manuscripts submitted for the special issue were of poor quality or did not fit the theme. They launched an investigation, but by then 19 of the 80 submissions had already been accepted or published. These papers have since been retracted.

The investigation revealed that the people who had suggested the special issue were not who they claimed to be, but scammers using Internet-domain names that looked very similar to the real scientists' institutional e-mail addresses. These included an e-mail suffix with 'univ' instead of 'uni' and '-ac.uk' instead of '.ac.uk'. There were also anomalies concerning reviewers' identities and peer-review reports.

"All of the evidence points to an organized network that tries – in this case successfully – to infiltrate scientific journals with the objective of easily publishing manuscripts," wrote three members of the journal's editorial board in the December article.

It is not yet clear why scammers are manipulating the system to publish sham articles.

Cabanac suggests that it might be due to the pressure on researchers to publish papers to continue their careers. The ability to publish in specific journals – even if the papers are clearly nonsense – could allow some researchers to "get publications for their CV and a green card to stay in academia", he says.

But the motivations remain a mystery to Ivan Oransky, a journalist who runs *Retraction Watch*. "The papers are so obviously terrible, so why would you want them on your CV?" he says. He adds that it is not clear whether special-issue scamming is becoming more common, or just more visible. "I do think that the journals are waking up to it, actually looking for it and having systems in place," he says.

Expressions of concern

The latest retractions from Springer Nature and Elsevier suggest that the practice is becoming more sophisticated and prevalent. In July, Elsevier issued expressions of concern for more than 400 papers published in 6 special issues of *Microprocessors and Microsystems* after the title's editor had concerns about the integrity and peer review of the papers. Many of the papers were from authors at Chinese institutions, and most contained nonsensical phrases that Elsevier thinks came from the use of reverse-translation software to disguise plagiarism.

Elsevier says that the issue occurred owing to a temporary configuration error in its editorial system, which was corrected as soon as it was discovered. The publisher has withdrawn 165 papers in press and plans to retract 300 others. It says it validates the identities and qualifications of guest editors, and now asks the editor-in-chief or editorial-board members to confirm each paper's acceptance.

Springer Nature has so far retracted 62 of the 436 papers published in 'topical collections' of the *Arabian Journal of Geoscience* that it flagged with expressions of concern in September. The prose in many of the affected papers switches between two seemingly unrelated topics. For example, 71 articles have abstracts or titles that contain the words 'dance', 'aerobics' or 'sports' in relation to geoscience, including the article 'Sea level height based on big data of Internet of Things and aerobics teaching in coastal areas'. A further 24 papers in a special issue of *Personal and Ubiquitous Computing* are also being investigated at Springer Nature.

The publisher says that, as well as putting extra checks in place, it is developing artificial-intelligence tools that can identify and prevent attempts to deliberately manipulate the system. It is also gathering evidence about how the deceptions are carried out, to share with other publishers. "We will not tolerate deliberate attempts to subvert the publication process," a spokesperson said in a statement.