



**AUTHOR:**  
Linda Fick<sup>1</sup>

**AFFILIATION:**  
<sup>1</sup>Academy of Science of South Africa (ASSAf), Pretoria, South Africa

**CORRESPONDENCE TO:**  
Linda Fick

**EMAIL:**  
linda@assaf.org.za

**HOW TO CITE:**  
Fick L. On becoming an electronic-only, diamond open access journal, through the lens of a managing editor. *S Afr J Sci.* 2024;120(Special issue: Celebrating 120 years), Art. #20278. <https://doi.org/10.17159/sajs.2024/20278>

**ARTICLE INCLUDES:**  
 Peer review  
 Supplementary material

**KEYWORDS:**  
digital publishing, open science, research communication, research integrity, *South African Journal of Science*

**PUBLISHED:**  
07 November 2024

# On becoming an electronic-only, diamond open access journal, through the lens of a managing editor

*If I have seen further, it is by standing on the shoulders of giants.*  
Sir Isaac Newton

When joining a journal that is over 100 years old (as I did in 2009), you understand that you are “standing on the shoulders” of all those who came before you.

In my 16 years of working at the *South African Journal of Science (SAJS)*, I have been privileged to work with many talented, hard-working and inspiring people, some of whom have reflected on their experiences elsewhere in this special issue. I was fortunate to join ASSAf at a time of significant changes for SAJS – the expansion of the editorial model to include associate editors and the adoption of open access being the two changes that would drive growth in both the multidisciplinary content and the digital footprint of the flagship journal of South Africa’s national academy. It was a time of immense potential, but also an immense responsibility to ‘inherit’ such a national treasure and be tasked (alongside others) with building upon its strong foundations.

When I started in 2009, it was as editorial assistant; my role quickly evolved to assistant editor and then managing editor, concurrently with the journal evolving from a print-first to an electronic-only journal.

Other contributions in this issue cover the history of the Journal before 2009, and the contributions and perspectives of others over the last few decades. This Commentary provides the perspectives of a managing editor on the evolving technical and operational aspects of publishing the SAJS since 2009 – the start of its journey from a print-first to a diamond open-access electronic-only journal – in an evolving publishing landscape.

## From print to digital: Expanding reach and access

Many assume that publishing a digital journal is easier than publishing a print journal. The opposite is true, at least in my experience. There is much more involved in electronic publishing than authors and readers ever see or realise.

Figure 1 presents an infographic summarising the digital evolution of the SAJS. Below, I briefly chronicle some of the major developments in transforming the SAJS from a print-first to an electronic-only publication.

The SAJS became available online – behind a paywall – from the late 1990s to early 2000s. Up until 2010, the print (PDF) files were uploaded after the journal issue had been printed. As a print-first journal, this meant that articles sometimes started or ended halfway on the page. It was only with the adoption of digital-first publishing that journal articles all started on a new page – a rather small, but significant, sign of the shift to electronic publishing.

In 2010, the Journal adopted an online content management system (Open Journal Systems, or OJS) for submission, peer review and publication.<sup>1</sup> Prior to this development, submissions were emailed and catalogued using a Microsoft Access spreadsheet. An online system allowed for some functionality, such as reviewer reminders, to be automated, and for easier recording, monitoring and reporting of assigned tasks and manuscript status changes. New electronic publishing file formats – HTML, XML and EPUB – were introduced thereafter. From 2010, Digital Object Identifiers (DOIs) – unique and persistent links – were added to published articles and registered with Crossref, for easier and persistent access to the digital articles. In addition to accessibility, DOIs allowed reciprocity and interoperability with other Crossref services – Cited-by linking, CrossCheck (now Similarity Check), FundRef (now Open Funder Registry), and text and data mining – which were progressively adopted. Together with the introduction of ORCID IDs and other digital tools such as citation export and social share buttons, these tools – although not all noticeable to users – function to ensure the interoperability of the Journal and to optimise the visibility, accessibility, indexability and searchability of the content; in short – they extend the reach of the journal articles within the digital landscape. Increased visibility and accessibility were evidenced through a 93% increase in website views over the 5 years from 2013 to 2017. Website views continued to increase, stabilising at about 100 000 views per annum from 2020 onwards.

With the focus shifted to developing the Journal as an electronic publication, the print edition was downscaled and eventually discontinued altogether in 2016. The evolution to an electronic-only journal was not without resistance and some on the Council of the Academy of Science of South Africa (ASSAf) needed convincing. So, to ease what was an uneasy transition for some, print subscriptions were gradually decreased and full digital issues were introduced in three formats – PDF, EPUB and flipbook – in 2014 to eventually replace the print version. The full digital issues, together with the Table of Contents and Editors’ Choice for each issue, were (and still are) distributed via email to readers who signed up to receive these email notifications of each new issue. The number of digital subscribers grew from about 1200 recipients in 2014 to 15 000 in 2017, where it has remained, with the number of new subscribers signing up balancing the number of those who do not open the emails being removed from the mailing list.

The reach of a digital (open access) publication is far greater than that of a print copy, because of the ease with which it can be shared. Although it is not possible to measure the full reach and impact through all online platforms, harvesters and indexers, electronic publishing also enabled the generation of new metrics such as

© 2024. The Author(s). Published under a Creative Commons Attribution Licence.

## SAJS: A digital evolution

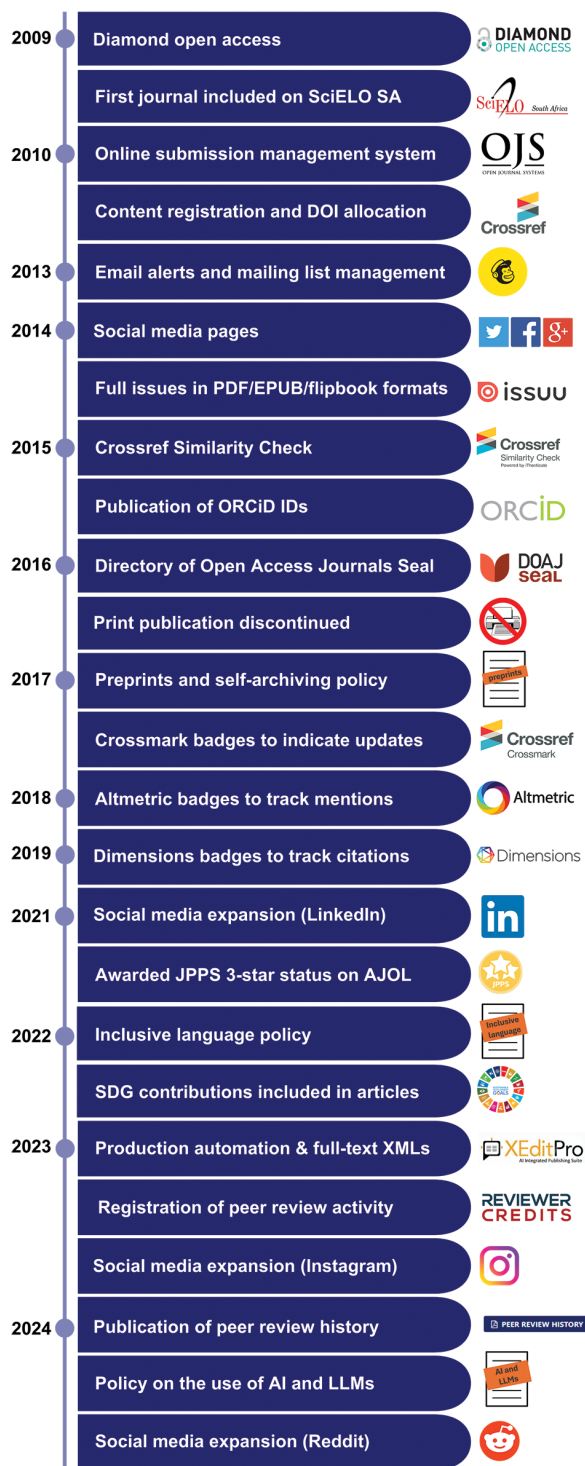


Figure 1: Infographic summarising significant changes that occurred in the digital evolution of the South African Journal of Science (SAJS), 2009–2024.

views, downloads and the Altmetric score (which quantifies usage via mainstream and social media). The advantage of these metrics is that they are article-level metrics as opposed to the impact factor, which is a journal-level metric.

In parallel with the development of the Journal into an electronic publication, the number of submissions continued to grow – from 220

submissions in 2009 to 700 in 2015, stabilising at 400–450 in the last few years.

Although discontinuing the print edition reduced production costs, electronic publishing is not free. The digital tools were acquired at a very reasonable cost; however, their implementation required greater human input. Ongoing digital development of the Journal therefore required an expansion of capacity: the creation of a new position, Online Publishing Administrator, in 2013. Nadine Wubbeling was the first incumbent in this role, first part time and then full time. This position was later upgraded to Online Publishing Systems Administrator, and Nadia Grobler took over this role in 2020.

Gone were the days of receiving manuscripts in the mail, of imposition guides, of sorting reprints for authors, and of posting copies to a few hundred subscribers. Now the manuscripts were submitted, reviewed and published online – and could be read, translated and shared *globally* by anyone with an Internet connection. Users could comment on and interact with the content, and all of these interactions – views, downloads, social shares – could be measured and quantified as an indication of the impact of the content. The inevitable shift to a digital landscape enabled rapid expansion globally in terms of the visibility, searchability and accessibility of the Journal.

### From postbox to inbox: Communicating published research digitally

The evolution to a digital publication also opened up options for sharing the published content more widely – with the media as well as the public. The creation of the Online Publishing Administrator role also enabled the introduction of social media – Facebook and Twitter (now X) in 2014, and later YouTube, LinkedIn, Instagram, and, more recently, Reddit. These platforms have shown steady, albeit modest, growth.

A formal communications strategy was developed in 2016 to further the reach of the published articles, and has been effective in terms of garnering media exposure. Because of its scope and multidisciplinary, non-specialist style, the Journal is well positioned to deliver South African science to the media and wider public in a manner that is both understandable and trustworthy. In addition to the above-mentioned announcements of each new issue, the communications strategy has included embargoed media releases and social media posts for each published article. In 2023, the social media posts were expanded to include translations, primarily in Zulu and Afrikaans, but also in other languages, as provided by the authors. The articles in each issue which receive the most interest – as determined through views and engagements on the website and social media, respectively – are highlighted in the ‘Readers’ choice’ section on the website. The articles featured in the Editors’ choice consistently receive more online views than other articles in the same issue, in part because they are subsequently featured in media reports. An article on fossil cancer published in 2016 – and featured in the Editors’ and Readers’ choice – was reported on extensively in local and international media and appeared in the *Altmetric Top 100 articles of 2016*. All mainstream news coverage of articles is shared under the ‘SAJS in the news’ section on the website. Since July 2016, when this section was first introduced, there have been over 600 media mentions of articles published in the SAJS. Over the last 5 years, the print, online and broadcast media coverage of SAJS articles has had a reach of 56 million, amounting to an advertising value equivalent (i.e. what it would cost to place an equivalent ‘sized’ advertisement) of ZAR43 million.

### From closed to open: Open access, open data and open policies

After establishing the Journal as an electronic journal, the focus shifted – in line with the global paradigm shift – to making the Journal more open, not just in regard to accessibility, but also in regard to open data, open peer review, and greater transparency.

SAJS – as the flagship journal of ASSAf, the official national academy, is funded by ASSAf as its publisher, and ASSAf, as an entity of the national



Department of Science, Technology and Innovation, is funded by this Department. This funding ensures the sustainability of the Journal as a diamond open-access journal – that is, neither authors nor readers pay to submit to or publish in or to read the Journal.

This support from ASSAf has been unflinching and unquestionable – the Journal and Journal staff are fortunate to have a publisher for which open access and open science, in parallel with transparency and integrity, are a given, and not something to be compromised or negotiated. And ASSAf’s role as publisher of *SAJS* is critical to the strategic direction and successful implementation of its scholarly publishing and open science activities.

In March 2009, *SAJS* became the first journal on ASSAf’s newly launched SciELO South Africa (SciELO SA) platform – a premier full-text database of selected peer-reviewed, open-access South African scholarly journals. SciELO SA is part of the global SciELO Network and has grown to 111 journals in the last 15 years. Inclusion in SciELO SA marked the paradigm shift to open access and *SAJS* was openly accessible for the first time. Back issues (to 2007) were also included, and thus open access, on SciELO SA. In 2010, ASSAf entered into an agreement with Sabinet to digitise the older (1905–2007) hard copies as part of the *African Journal Archive*, an open-access collection funded by the Carnegie Corporation of New York, thus ensuring open access to the full digital archive.

In line with SciELO requirements, and the recommendations of the Budapest Open Access Declaration to ensure unrestricted access to and re-use of material<sup>2</sup>, a Creative Commons Attribution licence was adopted in 2010; *SAJS* authors retain copyright of their material and give the Journal a non-exclusive, irrevocable licence to publish the material under a Creative Commons Attribution licence, which means that anyone can read, download, copy, distribute, adapt and search and link to the content without needing permission, provided that the authors are acknowledged and cited. The Budapest Open Access Declaration extends free access to literature to unreviewed preprints that authors place online “for comment or to alert colleagues to important research findings”<sup>3</sup>. In keeping with removing barriers to access, the *SAJS* requirement of originality was amended in 2017 to exclude preprints on recognised preprint servers such as arXiv, thus allowing authors to share preprints without compromising subsequent submission to *SAJS*.

As a newly open-access journal, the *SAJS* was included in the Directory of Open Access Journals (DOAJ) in 2010. However, in March 2014, DOAJ implemented stricter criteria for inclusion, which meant that all listed journals had to reapply for inclusion. From more than 10 000 journals originally listed, only 3700 were accepted after reapplication.<sup>4</sup> *SAJS* was not only accepted for re-indexing in 2016, it was also awarded the DOAJ Seal – a mark of certification granted only to open-access journals that achieve a high level of openness and adhere to best practice and high publishing standards.

During International Data Week in 2016, we announced that *SAJS* authors would be able to publish a link to the open data supporting their published articles. Authors are encouraged to deposit their data in a reputable open repository that follows the principles of data management and citation and the link to the data set in the repository is published on the *SAJS* website together with the article, ensuring that the data set is visible and accessible to readers to promote data sharing and re-use and to facilitate compliance with funding mandates. The accompanying open data sets are indicated in the published articles through an open data icon. Later, we added an icon to indicate preregistration of a study protocol on a recognised portal. These icons are based on the ‘badges to acknowledge open practices’ initiative of Blohowiak et al.<sup>5</sup> Published articles with open data sets and pre-registration still are in the minority in the *SAJS*.

One aspect of openness that has not been readily adopted is open peer review. The *SAJS* follows a double-anonymous peer review model in accordance with the recommendation of ASSAf’s *Code of Best Practice in Scholarly Journal Publishing, Editing and Peer Review*.<sup>6</sup> Whilst open review models enhance transparency and accountability, a double-anonymous model is most likely to reduce status, gender, institutional and other bias in peer review.<sup>7–9</sup> An online, open survey conducted in

2017 to assess *SAJS* users’ readiness for an open peer review model yielded only six responses; although the responses received were supportive of open peer review, the lack of responses was indicative of a mismatch at that time in the uptake of open science initiatives between authors and the drivers of open science – funders and publishers.

As a ‘best of both worlds’ approach, the peer review policy was amended in 2023 to allow for the publication of anonymised review reports and the authors’ response to the reviewers of published articles. This approach promotes openness and transparency and retains the benefit of the objectivity of double-anonymous review. Reviewers and authors of accepted manuscripts are encouraged to give permission to publish anonymised review reports and the response letter. Since adoption in October 2023 for implementation from 2024, 80% of authors and 70% of reviewers have agreed to publication of the peer review history, which is then published alongside the PDF and EPUB of the article and can be accessed from the article page on the Journal’s website.

## An evolving publishing landscape: The good, the bad and the ugly

An African proverb says, “It takes a village to raise a child.” And it takes a community to publish a journal. A community of authors, reviewers, editors, advisory board members, copyeditors, typesetters, and publishing professionals, all with the common goal of creating a journal volume of high-quality research – in our case, high-quality original research with a relevance to Africa, for a wide local and global audience, to showcase African research to the world.

The scholarly publishing landscape is continually changing, and the last 16 years have witnessed several major changes. Many of these have been mentioned above: the digital transformation, the rise of open access, preprints, data sharing and reproducibility concerns, open peer review and article-level metrics. Challenges that have emerged or risen, in part as a result of the ease of online publishing, include plagiarism, predatory and hijacked journals, paper mills, image manipulation, and, more recently, AI-generated text, images and peer review reports.

How can scholarly journals combat these challenges? Among others,

1. By having clear policies and guidelines and ensuring adherence thereto. And regularly reviewing and revising these, both pre-emptively and responsively.
2. Through providing training and capacity-building. Since 2021, the Journal has been hosting annual journal writing and peer review workshops and a monthly ‘Journal writing and peer review forum’ (an open forum for emerging researchers in all disciplines to discuss related issues and receive support and guidance).<sup>10</sup>
3. By recognising and rewarding excellent scholarship. Annual awards for an outstanding article and outstanding reviewer were introduced in 2021 to recognise outstanding contributions of authors and reviewers. Recognising the work of reviewers is an ongoing endeavour, and an important one. Finding willing and responsive reviewers has become an increasing challenge for all journals globally. In 2023, *SAJS* joined Reviewer Credits, a platform to recognise registered reviewers who review for the Journal. Through integration with ORCID, the review activity is also reflected in the reviewer’s ORCID profile.
4. And by showing authors and readers that the journal is trustworthy, through maintaining quality and integrity, evidenced through inclusion in reputable indexes such as SciELO SA, Web of Science, Scopus and DOAJ. Inclusion in these indexes is through meeting strict evaluation criteria. In addition to inclusion in SciELO SA, Web of Science and Scopus and receiving the DOAJ Seal in 2016, the *SAJS* was awarded a 3-star Journal Publishing Practices and Standards (JPPS) rating (the highest rating) through African Journals Online (AJOL) in 2021. According to the JPPS framework, journals that receive a 3-star rating are “consistently excellent in all the technical and editorial publishing best practices set out in the JPPS assessment criteria”<sup>11</sup>. *SAJS* is currently the only journal on AJOL with a 3-star JPPS rating.<sup>11</sup>



There has also been a much-needed focus on diversity, equity, accessibility and inclusion in scholarly publishing in more recent years. The Journal published its [Inclusive Language Policy](#) in 2022. This policy has two main features: the importance of using accessible, clear language and writing in an inclusive way.<sup>12</sup> Equity and diversity are more difficult to achieve but are given consideration in appointment of editorial board members. In addition, the [Associate Editor Mentorship Programme](#) was initiated in 2018 as an opportunity for early career researchers to gain valuable editorial experience working with an experienced Associate Editor in a discipline represented in the Journal. Since 2018, 15 early career researchers have joined the SAJS editorial team as Associate Editor Mentees – an experience which should afford them greater success in future editorial roles.

Initiatives like the [SDG Publishers Compact](#)<sup>13</sup> have brought to the fore the role and relevance of scholarly publishers in accelerating progress in achieving the Sustainable Development Goals (SDGs) by 2030. From 2022, all SAJS articles have included the SDGs to which they contribute.

The journal of the 21st century is a dynamic entity; and seems to fulfil an ever-increasing number of roles with ever-increasing responsibility as a guardian of published research integrity.

## Last words

As we celebrate the 120th volume of SAJS this year, I am struck by how quickly the last 16 years have passed by, by how much has changed in that time, and especially by how much change still awaits the SAJS – not least of which are the potential and pitfalls of generative AI in scholarly publishing.

Publishing a high-quality, multidisciplinary, non-specialist, open-access journal that all South Africans (including researchers, policymakers and the general public) will want to read – whilst meeting best practice and tight deadlines – is no small task for a small publishing team, and has not become any easier over the years. We have sometimes failed, or failed at first, but we are continuously learning and striving to do better.

To all past and present SAJS colleagues, I owe my gratitude for a journal that I feel proud to be a part of. To my successors (whoever and whenever they may be), I wish you success and all the opportunities and challenges from which I had the benefit of learning. To all whom I have had the privilege of working with in the last 16 years, my thanks for our interactions and for making this one incredible journey (so far!).

## Acknowledgements

It is not possible to list all the editors, colleagues and service providers I have had the good fortune of working directly with over the last 16 years, but I acknowledge each of them for their contributions, not only to the SAJS but also to my professional development. In particular, I thank the current 'SAJS team' – Leslie Swartz, Nadia Grobler and Phumlani Mncwango – for making a challenging job fun, their predecessors, Nadine van der Merwe (née Wubbeling) and Xolani (Sbonga) Dlamini, and all my ASSAf colleagues for being part of the SAJS village. I am grateful to Nadia Grobler for creating the infographic for this article,

and for her many other contributions through her role as SAJS Online Publishing Systems Administrator.

## Declarations

This paper was written in my capacity as Managing Editor of the SAJS, and as such, a full-time employee of ASSAf; I have no competing interests to declare. This paper contains no AI-generated content.

## References

1. Cherry MI. The *South African Journal of Science* adopts online publishing & Genome data from Africa reveals huge diversity (Leader). *S Afr J Sci.* 2010;106(1/2), Art. #151. <https://doi.org/10.4102/sajs.v106i1/2.151>
2. Creative Commons. Open access [webpage on the Internet]. No date [cited 2024 Jun 15]. Available from: <https://creativecommons.org/about/open-access/>
3. Budapest Open Access Initiative. Read the declaration [webpage on the Internet]. c2002 [cited 2024 Jun 15]. Available from: <https://www.budapestopenaccessinitiative.org/read/>
4. Directory of Open Access Journals (DOAJ). Update on reapplications and new applications. DOAJ Blog. 2016 December 23 [cited 2024 Jun 15]. Available from: <https://blog.doaj.org/2016/12/23/update-on-reapplications-and-new-applications/>
5. Blohowiak BB, Cohoon J, de-Wit L, Eich E, Farach FJ, Hasselman F, et al. Badges to acknowledge open practices [database on the Internet]. c2013 [updated 2023 Sep 28; cited 2024 Jun 15]. Available from: [osf.io/tvyxz](https://osf.io/tvyxz)
6. Academy of Science of South Africa (ASSAf). Code of best practice in scholarly journal publishing, editing and peer review. Pretoria: ASSAf; 2018. Available from: <https://www.assaf.org.za/wp-content/uploads/2015/05/NSEF-Code-of-Best-Practice-March-2018.pdf>
7. Kern-Goldberger AR, James R, Berghella V, Miller ES. The impact of double-blind peer review on gender bias in scientific publishing: A systematic review. *Am J Obstet Gynecol.* 2022;227(1):43–50.e4. <https://doi.org/10.1016/j.ajog.2022.01.030>
8. Fox C. Double-anonymous review is an effective way of combating status bias in scholarly publishing. LSE Impact Blog. 2023 September 28 [cited 2024 Jun 15]. Available from: <https://blogs.lse.ac.uk/impactofsocialsciences/2023/09/28/double-anonymous-review-is-an-effective-way-of-combatin-g-status-bias-in-scholarly-publishing/>
9. Holst F, Eggleton K, Harris S. Transparency versus anonymity: Which is better to eliminate bias in peer review? *Insights: UKSG J.* 2022;35:16. <https://doi.org/10.1629/uksg.584>
10. Finch JM. Academic publishing 101: The SAJS monthly journal writing and peer review forum. *S Afr J Sci.* 2023;119(11/12), Art. #15753. <https://doi.org/10.17159/sajs.2023/15753>
11. African Journals Online. Titles by JPPS rating [webpage on the Internet]. No date [cited 2024 Jun 15]. Available from: <https://www.ajol.info/index.php/ajol/browseBy/jpps>
12. Swartz L, Fick L. Inclusion through writing. *S Afr J Sci.* 2022;118(11/12), Art. #15163. <https://sajs.co.za/article/view/15163>
13. UN Sustainable Development Goals. SDG publishers compact [webpage on the Internet]. c2020 [cited 2024 Jun 15]. Available from: <https://www.un.org/sustainabledevelopment/sdg-publishers-compact/>