

Highlights report

2020

A note from Steven Hall, managing director

A strong year in challenging circumstances

At the beginning of 2020, IOP Publishing's directors set an objective for the year of conducting a full-scale test of our business continuity plans: how well would we keep our services running if, say, our UK head office burned to the ground? Little did we know that we would be forced by the pandemic from all our offices, in the UK, USA, China, Japan, and Russia, for most of the year. So how did we do in our real-life test?

We did remarkably well. Thanks to investments in our digital infrastructure over several years, we were able to move to home working almost seamlessly. There was, of course, much paddling below the surface, with our technical and facilities colleagues delivering laptops, monitors, office chairs and the like to the homes of our staff. We met our first priority, of enabling our employees to work safely and effectively from home. Our next priority was the maintenance of our services to authors, reviewers, librarians, conference organisers and publishing partners.

In spite of an increase in published articles in our journals, our peer review team maintained its service levels to researchers, actually reducing the time taken for peer review over the course of the year. Our technology, sales, and customer services staff turned their attention to supporting libraries around the world to provide their users with remote access to IOP Publishing's publications. Conference organisers also adapted quickly to this new world, and while some conferences were cancelled, others sprang up. We moved our own 'Quantum 2020' conference, organised in partnership with the University of Science and Technology of China and the Chinese Physical Society, originally planned to be held in China in October, to a successful virtual event with nearly 4,500 registrants. We further grew open access publishing in our journals, increasing the number of articles in our fully open journals by 148% and open access articles in our hybrid journals by 72.5%, the latter driven by the growth of our 'transformative agreements'. Our physicsworld.com science news website saw record levels of usage around the world as it became an indispensable, trusted source of daily news for the physical-science community.

We also made good progress on some key initiatives which we had initially feared would come to a halt. We converted almost all our journal content – well over one million articles – to the JATS (journal article tag suite) format, which will speed up our production process and help us to make journal articles more discoverable and usable. We also launched our peer review training and certification programme, the only one in the world designed specifically for the physical sciences, and awarded 'IOP trusted reviewer' certificates to the first 7,000 reviewers.

Another important objective for 2020 was to continue to make our publishing more representative of the communities we serve, by increasing the gender, racial and geographical diversity of our editorial boards and reviewers. We moved a number of journals to double-anonymous peer review in 2020 and made a commitment to move all the journals we manage editorially to double-anonymous peer review by the end of 2021. Our broader work in this area will accelerate in 2021 and we will also increase our efforts to make our own workforce more representative of the communities we live in.

We entered 2021 with all but our Chinese colleagues still working from home and, while the rollout of vaccines gives us hope, we are likely to be operating under restrictions for many months to come. It will be a challenging year, not least for our library customers, some of whom are struggling with reduced budgets and many of whom are investing to support online teaching and learning. We look forward to working together with them to address these challenges.

This will be my final contribution to IOP Publishing's annual report, as after almost eleven years as managing director, I shall retire from the company at the beginning of March. It's been a great disappointment to me that I have not had the chance, during this last year, to thank my colleagues and IOP Publishing's customers and partners in person for their support and friendship during my time with the company. I have enormously enjoyed serving the research and library communities and working with my publishing colleagues during my time at IOP Publishing and I leave the company in very good hands.

Steven Hall

A note from Antonia Seymour, managing director-elect

A look at the year ahead

As we look ahead to 2021, which will be my first year as managing director of IOP Publishing, it's clear that there is more uncertainty ahead, but we are very fortunate to have started this year from a position of strength.

We will continue to develop our products and services to meet the evolving needs of our researchers, librarians, and partners worldwide. Open science remains a key focus as we look to increase the range of open access options available, introducing new open access journals as well as expanding our number of transformative agreements and encouraging the sharing of open data.

The need for rigorous peer review is as important as ever, and we are always looking at how we can improve the quality and efficiency of the process and offer more support to reviewers. We have ambitious plans for 2021 to expand our peer review training and certification programme, further diversify our reviewer pool, and trial new and progressive approaches.

Improving diversity, equity, and inclusion remains high on our agenda. We are striving to ensure that our contributors represent the diversity of the physical-science communities and to build an inclusive workplace culture. We know that there is plenty more to do – the steps and initiatives that we have already put in place are just a start. But we are determined to see change.

We're also going to be looking at our response to the climate crisis. Understanding and managing the environmental and social impacts of our activities as a business is a priority, as we work to minimise the impact of our operations on the environment, and manage our resources effectively at the local, national, and global level. In addition, we are curating a collection of research we publish that addresses the UN Sustainable Development Goals, bringing the relevant advancements in science together.

2020 taught us that plans can change without warning but, as you will see from this report, we achieved a significant amount throughout the year whilst ensuring that our employees and customers were always well supported.

I would like to take this opportunity to thank Steve for his commitment to IOP Publishing. He is handing over a strong and healthy business and it will be my great privilege to lead the company through its next phase of development.

I hope you enjoy reading this report,

Antonia Seymour

Strengthening our leadership team – introducing our new directors

The appointments of Julian Wilson as our new sales and library marketing director and Miriam Maus as our publishing director give us a fresh leadership perspective as we look to the opportunities and challenges ahead.

“The scholarly publishing industry is accustomed to change, but I join IOP Publishing at a time when this change is particularly rapid and wide ranging. Connecting with the researcher communities that we serve has never been more important and moving towards more openness and transparency in research publishing will be key to ensuring that we continue to meet their expectations. I’m committed to building on the good work of my colleagues so far.”

Miriam Maus, publishing director

“Understanding how we can really make a difference means listening to our customers, taking stock and developing our products, policies, processes and models in line with what we are hearing. Working collaboratively is essential to ensure we are able to achieve what we set out to as publishers – to ensure that there is trust in scientific research and advance discovery through its widest dissemination. Our focus for the year ahead is to stay in touch and stay flexible, so that we can continue to help institutions address the challenges they are facing during these uncertain times.”

Julian Wilson, sales and marketing director

Making science more open and accessible

Throughout the year our contribution to open physics has developed in collaboration with researchers, librarians, partner societies, and funders. Making science open and accessible is the key to accelerating scientific discovery. Our commitment to open physics is about how we disseminate high-quality research, increase its visibility, and encourage reproducibility and access to data. It is also our promise to ensure inclusivity and improve diversity at every step of the publishing process.

Increasing our open access journal portfolio

2020 saw us increase our open access journal portfolio with the launch of three gold open access journals:

Materials for Quantum technology, Neuromorphic Computing and Engineering, Environmental Research: Infrastructure and Sustainability

Significant growth for the open access journal Environmental Research Letters

Launched in 2006 with the vision of inspiring collaboration between the research and policy communities, Environmental Research Letters (ERL) has grown to become a significant leader in the field, bringing key event-based research to the global stage. In 2020, the number of ERL articles published grew by 52%, with 869 articles published.

Ensuring equitable access to research

We’ve opened up our content to many low-income countries through our participation with Research4Life, a multi-organisation partnership aiming to reduce the knowledge gap between high-income and low- and middle-income countries by making scholarly, professional, and research information more accessible. In 2020, we offered 2,500 discounts and 1,390 waivers to help authors with the costs of open access publishing.

Switching one of our largest journals to open access

Following our announcement in 2019 that we would be flipping Materials Research Express to fully open access, all articles published in the journal throughout 2020 have been immediately free to read under a Creative Commons licence. The move has been well received by the community, with submissions from over 70 countries and we've seen increased average downloads per article, with some being downloaded and read over 2,000 times.

Raising standards in research evaluation

We can play an important role in the way that research quality is understood and how researchers are recognised for their scientific contributions. Signing DORA in October affirmed our commitment to raising standards and creating a more equitable research evaluation system.

Achieving open access growth through transformative agreements

During the year we negotiated seven new transformative agreements and we now have 16 in place in 11 countries. These agreements are essential to ensure that authors in countries where open access is mandated can continue to publish freely in our journals. In addition, we negotiated the inclusion of the partner journals that were previously unable to include into the majority of our existing agreements.

Uniting with major physics societies in support of open access

We joined forces with 17 other major physics societies to show our commitment to open access for physics research. Our common ambition is that all open access models provide financially sustainable support for author choice and the quality of peer review and publication upon which excellent physics research relies. Read our joint statement [here](#).

Setting new standards to achieve greater diversity and inclusion

Double anonymous peer review

Our move to double-anonymous peer review, which we announced in September, saw us become the first physics publisher to commit to adopting the approach portfolio-wide and affirmed our commitment to improving diversity and equity in science.

Expanding transparent peer review

Following a successful trial with three of our journals, transparent peer review – which shows the complete peer review process from initial review to final decision – was rolled out to other titles: Environmental Research Communications, IOP SciNotes, JPComplexity, JPEnergy, and JPPhoton. We believe that double-anonymous review, in combination with transparent review, allows for maximum objectivity during the review process and maximum transparency after publication.

A founding member of the Publishing Equality Working Group

We are a founding member of the 'Publishing Equality Working Group' which sees leading publishers commit to working together to make research publishing more inclusive and diverse. The 11 publishers that make up the group have agreed to pool their resources, data and knowledge to set a new standard for diversity and inclusion in scholarly publishing.

Open Physics in numbers

17

We now publish 17 open access journals

22%

22% of articles across our entire journal portfolio were published open access

121%

The number of open access articles published in our journals has increased by 121%

70,000

Our Conference Series published more than 70,000 open access papers

17

We led on the issuance of a joint statement on open access together with 17 major physics societies

52%

Environmental Research Letters published articles increased by 52%

Meeting the evolving needs of our customers

The way that online content is accessed and discovered has always evolved, but no more so than in 2020 as people quickly moved to remote working. With the needs of our customers shifting dramatically, we helped them navigate through the disruption. We have worked hard to ensure the resilience of our content platform, provided remote access to our content, continued to grow our content programme, and looked for ways to improve our processes and services.

Enabling remote access to content

We moved quickly to support libraries around the world to provide remote access to our content during the pandemic by:

- Implementing 'Google CASA' – an authentication enhancement that delivers off-campus access for users of Google Scholar
- Significantly extending our support of federated access across the globe, in such geographical areas as China, India, and the US, enabling an additional route for users to access their institution's licensed content

Free access to Coronavirus research articles

When the pandemic hit, we quickly worked to make Coronavirus related articles submitted to our journals free to read and will continue to do so throughout the duration of the crisis.

Ensuring the stability and performance of IOPscience

Ensuring the functionality, accessibility, performance, and security of IOPscience, our online content platform, remained a priority. We have significantly improved page download times and improved the available bandwidth, meaning a large increase in the number of simultaneous users that can access the platform.

98.8%

IOPscience uptime 98.8% which is equivalent of just 20 minutes offline per week

Transition to the JATS content model

The introduction of a new content model sees the latest publishing and technology standards improve the way we capture, store, process and distribute content published online. To date, we have migrated over 1 million articles to the Journal Article Tag Suite (JATS) content model. Along with making our journal articles more useable and discoverable, the move will help to make our production processes more efficient.

Helping authors track their articles through WeChat

In November, we released a new feature into our 'Track My Article' tool that allows authors to easily check the status of their articles using WeChat. Through this tool, authors receive information about where their paper is in the peer review process in seconds via the social media platform on their mobile devices.

Publishing numbers

Recognising the importance of combining peer review rigour and excellence with efficiency and speed, 2020 again saw us ensure the rapid dissemination of our authors' work.

Speed of publication

21 days

Time to first decision

84 days

Time to acceptance

31 days

Time from acceptance to publication

840,000

Our 'Track My Article' tool was used more than 840,000 times in 2020, which is over 2,000 uses per day

Citations

Citations to our journal content increased significantly in 2020 reflecting the continued value and relevance of the research we publish in driving new advancements across the physical sciences.

1.3 million

IOP Publishing content received over 1.3 million citations in 2020

Impact Factor Citations

7.7%

Overall Impact Factor citations have grown by 7.7%

Evolving our content programme

Ebooks

Our established ebook programme now features over 570 books in 15 subject areas and our titles are available in over 1,000 libraries globally. In July, we extended access to the programme with the launch of our online bookstore making all the titles in the collection available for authors and other individual to purchase. There was a high demand for our ebook content with more than 1.6 million downloads, an increase of 41% on 2019.

Conference Series

Our Conference Series titles are three of the largest journals in science and published more than 70,000 open access proceedings articles in 2020.

Towards the end of 2020, we finalised an agreement with Morressier to provide us with workflow tools that will enable us to more effectively manage the Conference Series publishing process and to enhance the range of services we offer to conference organisers.

Ensuring an indispensable source for science news

Across IOP Publishing's three magazines, *Physics World*, *CERN Courier* and *ESRF News*, over 417,000 magazines were delivered during 2020, to over 44,000 readers in 141 countries. The *Physics World* website received over 10 million pageviews throughout 2020 with an average of more than 445,000 users per month.

Ensuring high-quality, timely, rigorous and ethical peer review

High-quality peer review has never been more important to validate the science we publish. We have more than 60 staff worldwide managing the peer review process and we are constantly looking at how we can improve the process and offer more support to reviewers.

Understanding the reviewer experience

In July, we released the findings of our peer review motivations report. The information we gathered from the survey, with responses from 1,200 reviewers globally, helps us to understand the reviewer experience, what motivates them, and their recognition needs. One finding of the report was the ongoing concern about mis-matched reviewer invites and reviewer fatigue which is one of the key drivers for the launch of our peer review training and certification programme.

59%

of respondents say that in-kind or cash benefits provide very little motivation

55%

of reviewers receive the right level of reviewer requests

25%

of early career researchers have more time available for peer review

Creating a future generation of outstanding peer reviewers

Our Peer Review Excellence: IOP training and certification is a first-of-its-kind programme tailored specifically for the physical sciences which helps early career researchers develop their confidence and their ability to give constructive feedback. Co-delivered by top-level physicists, the programme offers a blend of online learning and hands-on peer review experience. Achieving ‘IOP trusted reviewer’ status demonstrates an exceptionally high level of peer review competency.

7,000

reviewers received ‘IOP trusted reviewer’ status in 2020

“I found the workshop really helpful and the presentation and the practical exercise really engaging. I think anyone pursuing an academic career should be aware of these guidelines and ethical issues. This way the reviewing process can be transparent, fast and most importantly unbiased.”

Peer review excellence workshop participant

Pre-print peer review trial

We are strong proponents of the early sharing of research results as preprints and in 2020 we began trialling an option for authors to list and link to their preprints while under peer review at the journal. This enables earlier and wider visibility of research for authors without compromising on peer review standards.

Acknowledging the vital contributions of scientists

Our annual reviewer and top cited paper awards acknowledge and show our appreciation for the vital contributions that scientists make to the publishing process. We also work with Publons to ensure that researchers can claim credit for their work.

Reviewer awards

Each year, our journal editorial teams select the best reviewers of the year based on the quality, quantity, and timeliness of their reviews. From more than 100,000 reviews for IOP Publishing in 2019, we recognised 1,600 reviewers from more than 60 countries, across 53 journals.

Top cited paper awards

Recognising the significance of the work published in IOP Publishing and partner journals between 2017 and 2019, the top one per cent of the most-cited papers in China and India received our top cited paper award.

China

213 research papers received the award, along with the top nine most-cited review papers. In total, the top cited papers received 4,708 citations and the nine most highly-cited review papers received 376 citations.

India

40 research papers received the award, along with the top most-cited review paper. In total, the top cited papers received 661 citations and the most highly-cited review paper received 45 citations.

Publons

We work with Publons to ensure researchers can claim credit for their work.

50,551

reviews added into Publons by 18,129 reviewers

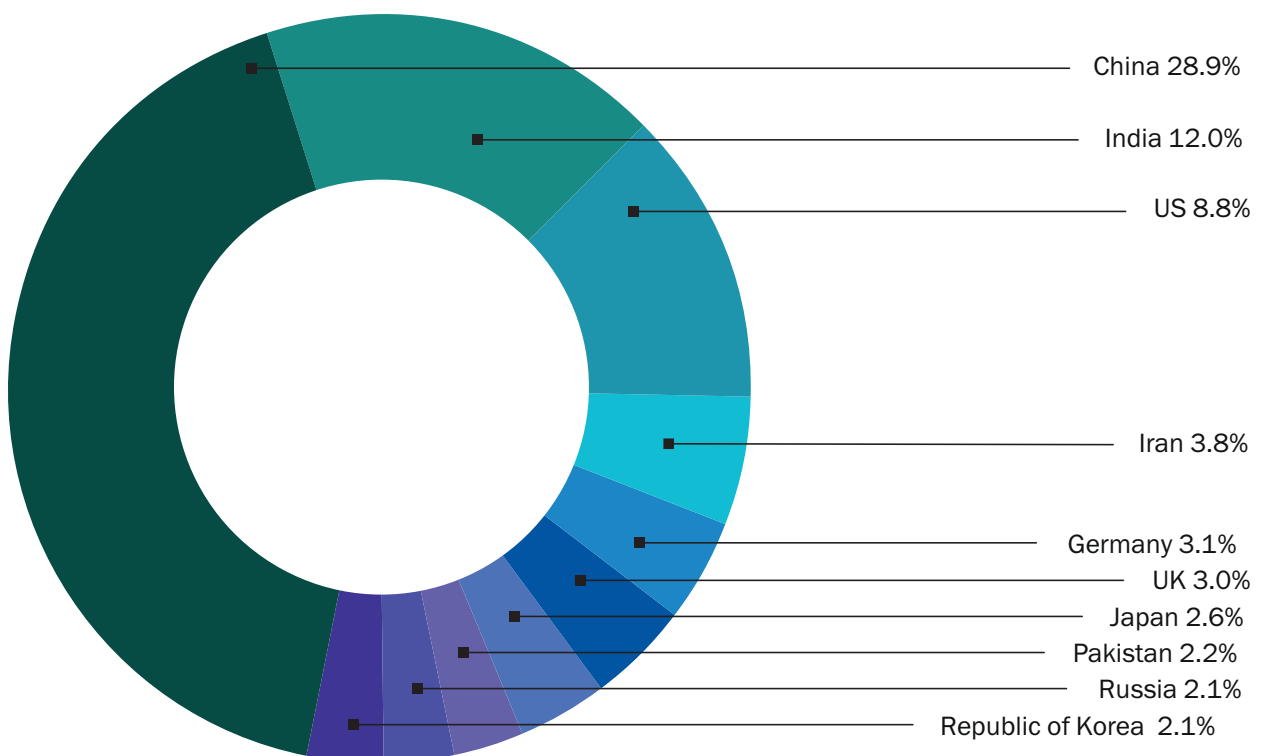
8.5/10

satisfaction rating for using the service

Globally connected

We operate on a global scale, with extensive experience, deep industry knowledge, and a local cultural understanding that enables us to work closely with researchers worldwide to publish their ground-breaking work.

Number of articles published by country in IOP Publishing journals



Top 10 countries – article downloads on IOPscience

