IOP Publishing Highlights report 2022

29,574

+15%

growth of total journal usage

10,000 reviewers achieved IOP Trusted Reviewer status 41% of all journal articles were published OA on our platform vs 26% in 2021

695,000 Average PhysicsWorld page views per month

Note from Antonia Seymour, Chief Executive, IOP Publishing

It has been an intense and eventful year. It felt as if a shadow had fallen over the world in February with the outbreak of the war in Ukraine. As the conflict continues to ravage the country, with months of escalating devastation and displacement for the people of Ukraine, we have focussed on what we can do to help. We continue to provide Ukrainian institutions with free access to all the research we publish, free open access publishing for corresponding authors based in Ukraine and submission extensions for any researcher whose ability to work has been affected by the war. We considered carefully how to treat research submissions from Russian researchers in our publications. Physics is a global endeavour and we're committed to the ideals of science and scholarship as a global community. We therefore adopted the approach signed up to by many academic publishers and continue to publish research where the corresponding author is from Russia as long as they and their affiliated institution is not subject to sanctions.

The sector-wide shift towards open access publishing has truly begun. We've seen the number of open access mandates from funding organisations and policy makers grow, most notably the updated guidance from the Office of Science and Technology Policy (OSTP) to make the results of federally-funded research immediately available. We share the ambitions of policy makers and funders, and we know that researchers recognise the importance of widening access to their work around the world. We've made great strides this year. Open access content made up 41% of our total journal output in 2022 compared to 26% last year. We also expanded our transformative agreements on a global scale, with our first secured in North and South America and more will be agreed in 2023.

The climate emergency threads through all of the decisions we make. As a publisher of leading environmental research, we listen to the science and take our responsibility to do what we can to change the earth's trajectory seriously. Having calculated the sources of our carbon emissions with the help of ClimatePartner, we've taken steps to cut our emissions down and carried out a comprehensive assessment of the sustainability of our supply chain. Internally, to raise awareness amongst colleagues we've launched our 'IOP for environmental change' campaign with leading climate activists and influencers joining us to talk about the reality of the threats and what each of us can do for our planet.

Following two -very long pandemic years, things began to stabilise in most parts of the world. That said, it has led to significant change for people, businesses and society. The world of working has been transformed and IOP Publishing has fully embraced that change. In September we opened our new and re-imagined offices in the UK, China and the US. Designed with flexibility and connection in mind, our ambition was to create an office that colleagues want to use, rather than one they feel they have to. We've brought some of the comforts associated with working from home back into the office environment; good coffee in our cafe, comfy lounge areas and space for quiet work. Colleagues now work from where they feel they can be most productive. The feedback has been overwhelmingly positive, and it's been a highlight for me to see so many colleagues enjoying the offices and knowing that we have the smart technology in place to seamlessly connect everyone around the world.

As I reflect on the year, I'm reminded that behind all of our achievements are our people. They have shown incredible resilience and drive as they have navigated the many changes that come with a sector in transition. Their competence, depth of expertise and dedication never fails to impress me.

I hope you enjoy reading this report which looks in more detail at those achievements. As you do, it's worth remembering that as a society owned publisher 100% of our profits go back into physics. We, along with all the authors, librarians, reviewers, members of our editorial boards and partners that we work with, can be proud of that.

Publishing in numbers

Building on our vision for open access (OA) to scholarly communications, we launched new OA journals publishing cutting-edge research in vital areas of environmental science. We also saw a dramatic increase in the percentage of research published OA and

1,063,912

citations to content published on IOPscience in 2022

41%

of all journal articles were published OA on our platform vs 26% in 2021

26.4 million

72.7 million

total number of article downloaded from IOPscience in 2022, up by 15%

29,574

total number of articles published

the usage of our journal content has continued to grow, showing that our publications reflect relevant and timely research.

Impact of our journals

More than 2700 of the articles we published in 2022 featured in the top 10% of cited research for the physical sciences, and 18 of our journals featured in the top quartile of their relevant subject category.

Publication highlight

Two especially noteworthy discoveries we published last year was the definitive focus issue of the MICROSCOPE space mission, which showed the most precise test to date of the Weak Equivalence Principle and the first images of the black hole at the centre of the Milky Way. These discoveries were announced through a co-ordinated publication and joint publicity with the American Physical Society, and in our partner journal *The Astrophysical Journal Letters* respectively.

Supporting our partners to thrive

We published more than 15,000 high-quality articles with our partners, up by 2% compared to the previous year. We continue to work with our partners around the world and across several subject areas and are privileged to publish their impactful journals.

The increase in our OA output was driven by our partner the American Astronomical Society, which transitioned its entire journal portfolio to gold OA in September.

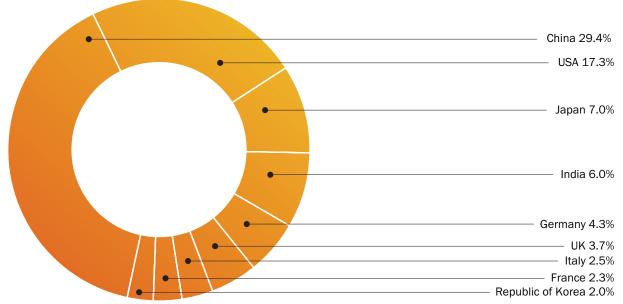
Switching Nuclear Fusion to fully OA

We supported our partner the International Atomic Energy Agency (IAEA) as it transitioned *Nuclear Fusion* to a fully gold OA journal. The transition of the journal has been well received by the community and has maintained a similar number of submissions and will continue to evolve with the needs of its authors.

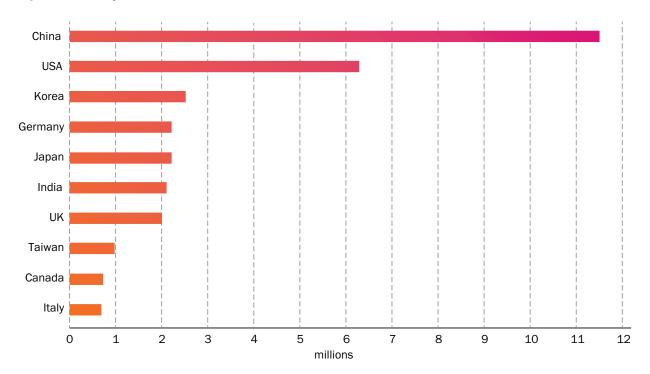
World-leading science news

Our leading physics magazine *Physics World* has moved to an entirely online-first content model, which makes content timelier for readers, authors and advertisers. An overhaul of the images online has led to a better user experience and a reduction in CO2 of about 34% per page visited. *Physics World* grew its registered users by 15% compared to 2021 and the *Physics World* weekly podcast saw an 18% increase in listens in 2022. Physics World podcasts are now in the top 10 physics podcasts on i Tunes in the USA.

Top countries publishing in our journals



Top 10 countries by article downloads from IOPscience



Our global reach

Making universal access to research a reality

Making science open and accessible to as many people as possible is a priority for us. In 2022, we continued to build on our 'open physics' programme to make science more accessible, transparent and inclusive.

Progress on OA

OA content made up 41% of IOP Publishing's total journal output in 2022 compared to 26% last year.



total journal output OA

Transformative agreements

In 2022 we continued to expand our portfolio of transformative agreements (TAs) to make it easier for authors to publish their research OA. These agreements allow corresponding authors at subscribing institutions to publish their work open access (OA) at no cost to them. The fees for publishing their work openly are covered by institutional subscription fees paid by participating academic and research institutions. Eight percent of our total journal output was published under TAs. From 2023 we will have TAs with more than 700 institutions covering 28 countries.

Researcher OA perspectives

In the summer we presented the findings from a global study OA in physics: researcher perspectives, which was commissioned with other leading learned society physics publishers. The study was designed to get a better understanding of the barriers researchers face when publishing OA. A prominent finding of the survey revealed that over half (53%) of physical science researchers want to publish OA but 62% say a lack of monies from funding agencies prevents them from doing so.

Data sharing

In 2022 we announced the introduction of a new policy to require information about any barriers to sharing research data publicly. As per 2022 we are the first physics publisher requiring all authors to include a data availability statement with each article.

66%

of articles contained a data availability statement

Providing publishing opportunities to the community

To meet the evolving needs of the scientific community, we launched new journals, expanded our ebook offering and continued to publish conference contributions through our proceedings journals.

New journals

In 2022 we introduced three further additions to our expanding open access *Environwmental Research* journals series. A paper to highlight as part of this series showed that there are still large gaps in the research that conceals the link between the impacts of extreme weather and human-induced climate change. The study was picked up by more than 265 news outlets in 138 countries supporting people to adapt to the changing climate.

We published the first papers in The Electrochemical Society's new gold OA titles, ECS Advances and ECS Sensors Plus.

Ebooks programme

We expanded our ebook programme by adding 111 new titles in 2022. The ebook content was downloaded 461,000 times in 2022. In total we have published 791 ebooks from authors across the globe since the inception of the programme 10 years ago.

791

Ebooks published since start of programme

Conference Series

The publication of early-stage research through our proceedings journals remains critical to our mission. In 2022 we published 28,000 open access proceedings papers, representing conferences from 47 countries. Proceedings were downloaded 26.4 million times.

The integrity of the content we publish is of utmost importance to us, and we have improved and refined editorial processes across our three conference proceedings journals to support our commitment to safeguarding the scientific record. In addition, further enhancements in publishing technologies have allowed us to improve the publishing experience for conference organisers and authors.

Peer review and production times

Strengthening robust peer review and investing in excellence with efficiency. Average of 95 days from article submission to acceptance after peer review across our portfolio, with some journals faster than 60 days. Average 18 days acceptance to

Ensuring service excellence and creating efficiencies for the scientific community

Supporting our ambition to make universal access to research a reality whilst delivering an exceptional service to our authors, we introduced a number of tools and services and expanded our webinar offering.

Introducing a Journal Finder service

Our free-to-use IOP Publishing Journal Finder is delivered by ChronosHub and enables authors to easily check whether the IOP Publishing journal they have chosen to publish their work in complies with their funder or institutional requirements.

Better access to content

We partnered with Get Full Text Research (GetFTR), which enables faster access for researchers to high quality published research. The partnership streamlines access to published journal articles via a free-to-use solution that signals content available to researchers based on their affiliation, whether they work on or off campus.

Enhancing research dissemination

We have started a pilot collaboration with ResearchGate to explore how this platform can help us disseminate our author's work even further. Over 36,000 IOP Publishing peer reviewed articles have been uploaded onto this scholarly social networking site, which is used by over 20 million scientists and researchers to share papers, ask and answer questions, and find collaborators.

Continuous availability of service

Authors have been able to access our IOPscience platform with hardly any disruptions giving access to published content for 99.99% of the time. This achievement is a great result, considering the increase in cyber security attacks across the sector.

99.99%

IOPscience up time

Tracking article progress

Our Track my article tool has been used over 1.5 million times in 2022.

1.5 million

uses in 2022

Embedded in the scientific community

Over the course of the year we organized over 105 webinars for more than 8634 authors, reviewers, editorial boards, librarians and partner organizations.



Informed by the scientific community

To help us develop products and services that are tailored to the needs of the scientific research community, we have organized a virtual library advisory board (LAB) meeting representing Europe, the Middle East and Africa, and an in-person LAB meeting in the United States.

Quantum 2022 - an international online workshop

In collaboration with the World Young Scientist Summit and in partnership with the Chinese Physical Society and the University of Science of Technology of China, our international Quantum 2022 conference brought together more than 445 quantum research and technology specialists to explore the latest discoveries in the field. The recorded talks of 28 invited speakers were viewed over 60,000 times during and after the event.

Recognizing researchers for their important work

Taking leadership in quality peer review

In 2022 we certified our 10,000th IOP Trusted Reviewer as part of our Peer Review Excellence: IOP training and certification programme. This formal certification for reviewers was introduced in 2020 to create a future generation of outstanding peer reviewers. More than 4,000 people have now signed up for our peer review elearning hub, which gives researchers around the world the option to build their peer review competency online, for free.

Outstanding reviewer awards

Celebrating excellence in peer review, we awarded 1093 exceptional reviewers across 56 journals with our Outstanding Reviewer of the Year Award. These outstanding reviewers were selected from the more than 30,000 reviewers who submitted reports to IOPP journals in 2021.

Outstanding Early Career Investigator in Nanoscience Award

To celebrate the exceptional achievements of early career researchers in nanoscience, we have awarded the IOP Publishing Outstanding Early Career Investigator in Nanoscience Award, in collaboration with ChinaNano 2021.

Focusing on diversity, equity and inclusion in publishing

IOP Publishing is strongly committed to diversity and inclusion in academic publishing, and to ensuring our approach to peer review meets the highest ethical standards.

20.1%

of editorial board members are female

24.5%

of submissions are from authors from low-income economies

Enhancing inclusion of researchers from lower income economies

We introduced a new policy to automatically waive all fees for authors from the lowest income economies, without any need for

them to ask. We also put in place a significantly reduced, flat-rate article publication charge for OA publishing to authors from lowermiddle income economies. We are one of the only publishers to apply our waiver and discount policy to all of our journals, including hybrid journals.

- Researchers from 83 countries received article publication charge discounts or waivers
- Waivers and discounts were applied to more than 2200 articles, totaling more than £1.5 million

Supporting name changes

Since the introduction of our new name change policy in 2021, we changed 51 names on previously published research. Our name change policy ensures a more open and supportive research environment, especially for women and members of the transgender community who are more likely to change their name.

Double anonymous peer review

We are dedicated to tackling the significant gender, racial and geographical underrepresentation in the scholarly publishing process, which is why we offer double anonymous peer review on all our proprietary journals, and some partner titles too. In 2022 18% of authors chose to anonymize their work. Our data shows that especially authors from Africa, Asia and the Middle East benefit from anonymizing their submitted papers as their work is more likely to be accepted.

Transparent peer review

To increase accountability and allow reviewers to be recognized more for their hard work, we introduced transparent peer review (TPR) in 2021 and extended it to all our fully OA journals in 2022. We plan to offer this on all our proprietary journals by the end of 2024. Last year 50% of authors opted-in for TPR and 40% of reviewers opted-in.

50%

of authors opted-in for transparent peer review

Diversity, Equity and Inclusion steering group

During 2022 our Diversity, Equity and Inclusion (DE&I) steering group put in place a vision, strategy and roadmap to keep the company accountable and on track. The role of this group is to discuss and advise on the company's DE&I agenda, identify challenges, develop suggested solutions, and feedback perspectives and recommendations.

Committed to environmental change

We are passionate about a greener economy and are committed to the UN's Sustainable Development Goals (SDGs) and reporting on our progress.

Supply chain assessment and engagement

Throughout the year we looked at which of our products and business activities are responsible for emitting the most greenhouse gases (GHG). Supported by ClimatePartner, a leading solution provider for corporate climate action, we have been able to map our carbon emissions and set targets to reduce them.

20%

In 2022 our carbon footprint was 20% lower

Industry-wide carbon mapping

We have also been working with DIMPACT, an industry-wide initiative that helps to bring into view emissions from the point of content production right through to the end user. The outcome of this work will help us to evolve our sustainability strategy.

Sustainability taskforce

Our sustainability taskforce drives our sustainability activities. Made up of colleagues from all levels across the organization, the taskforce advocates for sustainable practices and raising awareness among staff, suppliers and other stakeholders.

Change makers

The 'IOP for Environmental Change' campaign has seen talks from leading climate activists and built a partnership with award winning Giki Zero, a personal carbon impact calculator. The campaign promotes our sustainability initiatives internally and encourages greener thinking among colleagues.

Latest environmental research

In support of the United Nation's Sustainable Development Goals (SDGs) we have brought together more than 850 SDG-related articles in a Sustainability Collection.

Employer of choice

New office, flexible hybrid working

In September we moved our headquarters to a brand-new purpose-built office. The Distillery in Bristol, UK, provides fully supported digital working combined with a space that fits our hybrid and flexible way of working. The new office offers a collaborative and social hub with space for quiet work.

Pubcon: leading publishing voices share insights with colleagues

Our annual colleague conference held in Bristol focused on trends in publishing and how publishers can support scientists to deliver high quality research. Inspiring speakers such as Caroline Sutton, CEO of The International Association for Scientific, Technical and Medical Publishers (STM) and Astronomer Royal, Lord Martin Rees shared their visions and insights. A panel of early career researchers looked at the challenges they face in the physical sciences with a view to inform what publishers can do differently.

Employee voice

Our annual employee engagement survey gives IOP Publishing colleagues a voice and enables us to drive meaningful change in the organisation by understanding what's working well and where there's room for improvement. We were pleased to see continuing good scores overall.

95%

say we offer a safe and inclusive environment to work

94%

say they have flexibility over their working hours

84%

would recommend IOP Publishing as a great place to work