Welcome to the 2013 Journals Catalogue

IOP Publishing is a global scientific publisher, which provides publications through which leading-edge scientific research is distributed worldwide.

IOP Publishing provides a range of journals, magazines, websites, and services which enable researchers and research organizations to reach the widest possible audience for their research. We combine the culture of a learned society with global reach and highly efficient and effective publishing systems and processes.

With offices in the UK, US, Germany, China, and Japan and staff in many other locations including Mexico and Russia, we serve researchers in the physical and related sciences in all parts of the world.

Subjects
- Applied Physics
- Astronomy and Astrophysics
- Atomic, Molecular, and Optical Physics
- Chemistry
- Computational Science
- Condensed Matter
- Engineering
- Environment
- High Energy and Nuclear Physics
- Materials Science
- Mathematics
- Measurement
- Medical and Biological Sciences
- Physics Education
- Plasma Physics

Innovation
We work with authors, societies, libraries, funders, and other partners to offer innovative products and services that put the progress of knowledge and the success of our customers at the heart of everything that we do.

Recognition
We exist to promote the work of the scientific community and provide our authors and partners with the best possible platform, service, and support in order to gain worldwide recognition.

Partnership
We put our customers first, combining integrity, flexibility, and a real human touch with expert advice and guidance. We are passionate about collaboration and working together with our partners to put science and scientists first.
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IOP Publishing locations throughout the world
New titles for 2013

**Laser Physics**

**Editor-in-chief:** P P Pashinin, A M Prokhorov General Physics Institute, Moscow, Russia

*Laser Physics* (LP) is a monthly journal offering a comprehensive view of theoretical and experimental laser research and applications. Articles cover every aspect of modern laser physics and quantum electronics, emphasizing physical effects in various media (solid, gaseous, liquid) leading to the generation of laser radiation; peculiarities of propagation of laser radiation; problems involving impact of laser radiation on various substances and the emerging physical effects, including coherent ones; the applied use of lasers and laser spectroscopy, and the processing and storage of information. LP publishes original articles, review articles, and special issues.

- Website: [iopscience.org/lp](http://iopscience.org/lp) (this URL will become live during 2012)
- Print ISSN 1054-660X
- Online ISSN 1555-6611
- Volume: 23
- Partner: Astro Ltd

**Laser Physics Letters**

**Editor-in-chief:** P P Pashinin, A M Prokhorov General Physics Institute, Moscow, Russia

This monthly journal provides rapid dissemination of the results of novel and noteworthy research in all aspects of laser-physics sciences, including: spectroscopy, quantum electronics, quantum optics, quantum electrodynamics, nonlinear optics, atom optics, quantum computation, quantum information processing and storage, fiber optics and their applications in chemistry, biology, engineering, and medicine.

- Website: [iopscience.org/lpl](http://iopscience.org/lpl) (this URL will become live during 2012)
- Print ISSN 1612-2011
- Online ISSN 1612-202X
- Volume: 10
- Partner: Astro Ltd

**Methods & Applications in Fluorescence**

**Editors-in-chief**
- Y Mely, Université de Strasbourg, France
- D Birch, University of Strathclyde, UK
- O S Wolfbeis, University of Regensburg, Germany

**Scope**

This journal is the forum for original research articles, review articles, and technical notes in the area of fluorescence spectroscopy, imaging, fluorescent probes, labels, and materials. Its focus is on both methods and advanced applications. The following topics are representative:
- Spectroscopy
- Imaging
- Labels, probes and sensors
- Materials

- Website: [iopscience.org/maf](http://iopscience.org/maf) (this URL will become live during 2012)
- Online ISSN 2050-6120
IOP Publishing has invested in semantic technology to develop a deeper understanding of its content, allowing automatic analysis and grouping of articles based on the concepts within them. This will make it easier and faster than ever for readers to find the material most relevant to their interests and research.

Developments to IOPscience™ based on this semantic technology will provide new features and functionality, including enhanced discovery tools.
Publishing partners worldwide

Shared goals, sharing success
IOP Publishing combines the culture and ethos of a learned society with global reach and highly efficient and effective publishing systems and processes.

As a truly collaborative partner, we work strategically with many societies and independent publishers around the world, to support and develop our partners’ publishing programs and help ensure their valuable content is available to research communities worldwide.

ioppublishing.org/partners

IOP’s publishing partners:

- American Astronomical Society
- Astro Ltd
- Bureau International des Poids et Mesures
- Chinese Astronomical Society
- Chinese Institute of Electronics
- Chinese Physical Society
- Chinese Society of Theoretical and Applied Mechanics
- Deutsche Physikalische Gesellschaft (DPG)
- EDP Sciences
- European Optical Society
- European Organization for Nuclear Research (CERN)
- European Physical Society
- European Synchrotron Radiation Facility
- Institute of High Energy Physics of the Chinese Academy of Sciences
- Institute of Modern Physics of the Chinese Academy of Sciences
- Institute of Physics and Engineering in Medicine
- Institute of Plasma Physics of the Chinese Academy of Sciences
- Institute of Semiconductors of the Chinese Academy of Sciences
- Institute of Theoretical Physics of the Chinese Academy of Sciences
- International Atomic Energy Agency
- International School for Advanced Studies (SISSA)
- Japan Society of Fluid Mechanics
- London Mathematical Society
- National Astronomical Observatories of the Chinese Academy of Sciences
- National Institute for Materials Science
- National Natural Science Foundation of China
- Royal Swedish Academy of Sciences
- Russian Academy of Sciences
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- Società Italiana di Fisica
- The Society for Radiological Protection
- Turpion
- Vietnam Academy of Science and Technology
Partnership development

IOP Publishing is a truly collaborative organization. Combining society publisher credentials with commercial efficiencies and industry expertise, we work to help our partners advance their publishing programs and offer expert guidance and advice on critical publishing issues.

We constantly strive to develop new technologies and services to help bring our publishing partners and the research community closer together and improve researchers’ experience when interacting with the content.

Partners on iopscience.org

We are developing our journals platform, IOPscience, to give more emphasis to our partners and enhance the individuality of their journals.

This increased emphasis on the distinct elements of these titles means researchers can contextualize the work they have discovered and can explore a workspace that is meaningful to them and their community.

Comments from our partners

“iopscience.org

Partners on iopscience.org

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Comments from our partners

“IOP provides considerable added value to our operation in terms of strategic consulting and through its wide range of editorial and production services, along with efficient advertising sales. (When re-designing ESRF news) IOP delivered this complex project on schedule and on a tight budget, showing creativity and an open mind on how to turn the needs of a client into a first-class production.”

Claus Habfast
Head of Communication, ESRF

“The Chinese Physical Society has worked successfully with IOP Publishing for the past 11 years. We deeply value the contribution IOP Publishing has made to increase the visibility and impact of our journals worldwide.”

Professor Li Lu
Director of Publishing, the Chinese Physical Society

“Our relationship with IOP Publishing began in the spring of 2007. We were faced with the monumental task of shifting our publishing operation entirely for the first time ever. IOP presented a detailed transition plan for our journals, worked closely with us to make the transition easier than expected, and went beyond contractual obligations to make it a success. This excellent service and partnership has continued with the regular publication process of our journals, with rapid processing and publication, consistent online access support and technological enhancements.

We view our partnership with IOP as a vital component in the fulfillment of the mission of the American Astronomical Society to enhance and share humanity’s understanding of the universe.”

Dr Kevin B Marvel
Deputy Executive Officer, American Astronomical Society

“Since CERN Courier was outsourced to IOP Publishing, the magazine has gone from strength to strength.”

James Gillies
Head of Education and Communication, CERN

“IOP Publishing has published Physics in Medicine & Biology for IPEM since 1972 and in that time it has developed into one of the leading journals in its field in the world.”

Robert W Neilson
General Secretary, Institute of Physics and Engineering in Medicine
Breaking news!

As part of our ongoing commitment to help gain recognition for authors and their work, we regularly highlight published articles to the news media, resulting in a broad range of global print, online, and broadcast coverage. Here are just a few examples of articles that have made the headlines.

**Scientists create first free-standing 3D cloak**

In January, 2012, *New Journal of Physics* published a paper that reported on the first practical cloaking of a three-dimensional object standing in free space, bringing the much-talked-about invisibility cloak one step closer to reality.

**This story was covered by:**
- The Australian
- Daily Mail
- BBC News Online
- The Telegraph
- ABC News
- The Sydney Morning Herald
- The Huffington Post
- Al Jazeera TV
- The Times of India
- CNET News

**‘Mirage effect’ helps researchers hide objects**

In September, 2011, *Nanotechnology* published a paper in which researchers were able to make a thin strip of material disappear using a naturally occurring phenomenon known as the ‘mirage effect.’

**This story was covered by:**
- Le Monde
- The Sydney Morning Herald
- International Business Times
- ABC News
- Fox News
- International Business Times
- Wired News
- Daily Mail

Since February, 2012, the YouTube video associated with this paper has received **1,307,537 views**.

** Terminator-style info-vision takes step towards reality**

In November, 2011, a group of researchers published a paper in the *Journal of Micromechanics and Microengineering* that reported on the creation of an electrically powered contact lens that could potentially stream texts and e-mails in the vision of its user.

**This story was covered by:**
- LA Times
- BBC News Online
- The Guardian
- Daily Mail
- The Telegraph
- The Age
- physicsworld.com
- New Scientist
- Scientific American
- The Times of India
- Discovery News
- Fox News
- CBS News
- Yahoo! News
- The Huffington Post
- Metro
Advances in Natural Sciences: Nanoscience and Nanotechnology

iopscience.org/ansn

Editor-in-chief
- N Van Hieu, Hanoi, Vietnam

Deputy editors-in-chief
- N Bich Ha, Hanoi, Vietnam
- P Ngoc Minh, Hanoi, Vietnam

Advances in Natural Sciences: Nanoscience and Nanotechnology (ANSN) produces quarterly volumes of research covering all aspects of nanoscience and nanotechnology.

Published using the gold open access model, ANSN gives its international readership—including primary researchers, industry professionals, and undergraduate nanotechnology students—unlimited access to its content. A corresponding print version is created for local use in Vietnam.

In 2012, a new article type was added to the journal—researchers can now read book reviews in addition to ANSN’s regular papers, reviews, and editorials.

Other journals of interest
- Journal of Physics: Condensed Matter p36
- Journal of Micromechanics and Microengineering p31
- Nanotechnology p45
- New Journal of Physics p46
- Reports on Progress in Physics p59

Volume 4
Frequency 4
Print ISSN 2043-6254
Online ISSN 2043-6262
CODEN ANSNCK
Online archive 2010–2012 freely available to all at iopscience.org/ansn
The Astronomical Journal
iopscience.org/aj

Editor-in-chief
• J S Gallagher III, University of Wisconsin–Madison, WI, USA

The Astronomical Journal (AJ) is a peer-reviewed, monthly journal published for the American Astronomical Society by IOP Publishing. It is highly respected by an international community of authors, scientists, and students for its high quality, rapid publication, and accessible communication of a broad range of astronomical research, extending from the solar system to observational cosmology.

AJ articles present significant scientific results derived from observations, including descriptions of data capture, surveys, dynamical processes, analysis techniques, and astrophysical interpretation, including comparisons with theoretical models. This broad coverage, along with discussions of instrumentation and associated software, make this journal an essential resource for anyone interested in astronomy and planetary-sciences research.

AJ actively explores opportunities to enhance electronic presentations of information. Features include the provision of tabular data underlying figures and compilation of related articles into electronic special issues. High citation rates, affordable subscription pricing, and a worldwide circulation base establish AJ as one of the premier journals in the world publishing astronomical and astrophysical research.

Other journals of interest
• The Astrophysical Journal p11
• Classic and Quantum Gravity p18
• Journal of Cosmology and Astroparticle Physics p28
• Reports on Progress in Physics p59

Volume 145–146
Frequency 12
Print ISSN 0004-6256
Online ISSN 1538-3881
CODEN ANJOAA
Online archive Rolling one-year archive available with journal subscription
The Astrophysical Journal

iopscience.org/apj

Editor-in-chief
• E T Vishniac, University of Saskatchewan, Saskatchewan, Canada

Associate editor-in-chief
• W B Burton, National Radio Astronomy Observatory, VA, USA


This prestigious journal has been the first to report many of the classic discoveries of the 20th century and has also presented much of the important recent work on quasars, pulsars, neutron stars, black holes, solar and stellar magnetic fields, X-rays, and interstellar matter.

ApJ has a long history of publishing papers on data and instruments that support astronomical observations and theory. These papers represent essential research for anyone working in the fields of astronomy and astrophysics.

Other journals of interest
• The Astronomical Journal p10
• Classic and Quantum Gravity p18
• Journal of Cosmology and Astroparticle Physics p28
• Reports on Progress in Physics p59


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The Astrophysical Journal Supplement Series

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Biofabrication
iopscience.org/bf

Editor-in-chief
• W Sun, Drexel University, PA, USA

Biofabrication (BF), the official journal of the International Society for Biofabrication, is the first peer-reviewed journal to focus on research and development of biomanufacturing processes, including process science, modeling, and design.

The journal specializes in the application of cells, proteins, and biomaterials as building blocks to fabricate in vitro biological structures and/or cellular systems for applications in tissue engineering, 3D biology, disease pathogeneses, and drug discovery. BF is a highly respected resource for biomedical engineers, biochemists, and medical researchers all over the world.

BF publishes articles covering a range of research topics from this important and rapidly developing field, including:
• integrated bio/micro- and nano-fabrication
• cell, tissue, and organ printing, patterning, and assemblies
• protein/biomolecules printing and patterning
• cell/protein-integrated biological systems
• 3D tissue scaffold fabrication

Other journals of interest
• Biomedical Materials p14
• Nanotechnology p45

Volume 5
Frequency 4
Print ISSN 1758-5082
Online ISSN 1758-5090
CODEN BIOFCK
Online archive 2009–2012 available free with journal subscription

IMPACT FACTOR
3.480
Bioinspiration & Biomimetics

Bioinspiration & Biomimetics™ (BB) has two principal aims: to draw from biology to enrich engineering and to draw from engineering to enrich biology. The journal communicates research focusing on the principles and functions found in biological systems that have been developed through evolution, and application of this knowledge to produce novel and exciting basic technologies as well as new approaches to solving scientific problems.

BB provides a forum for interdisciplinary research from across the biological and physical sciences, including:

- systems, designs, and structure
- communication and navigation
- cooperative behavior
- self-organizing biological systems
- self-healing and self-assembly
- aerial locomotion and aerospace applications of biomimetics
- biomorphic surface and subsurface systems
- marine dynamics: swimming and underwater dynamics
- biomechanics: movement, locomotion, and fluidics
- cellular behavior
- sensors and senses
- biomimetic or bioinformed approaches to geological exploration

Other journals of interest

- Biomedical Materials p14
- Smart Materials and Structures p66

Volume 8
Frequency 4
Print ISSN 1748-3182
Online ISSN 1748-3190
CODEN BBIICI
Online archive 2006–2012 available free with journal subscription
Biomedical Materials

iopscience.org/bmm

Editors-in-chief

• I-S Lee, Yonsei University, Seoul, Korea
• M Spector, Harvard Medical School, VA Boston Healthcare System, MA, USA

Biomedical Materials™ (BMM) publishes papers on advances in biomaterials that contribute to the research community’s knowledge of the composition, properties, and performance of materials for tissue engineering and regenerative medicine.

With a diverse readership drawn from biomedical and tissue engineering, materials and biomaterials, biochemistry, pharmacology, and medicine, this specialized journal delivers a combination of Topical Reviews, special issue articles, Communications, and Editorials covering a diverse range of topics, including:

• synthesis/characterization of biomedical materials
• in vitro/in vivo performance of biomedical materials
• nature-inspired synthesis/biomineralization
• tissue engineering/regenerative medicine applications
• interaction of molecules/cells with materials
• effects of biomaterials on stem cell behavior
• growth factors/genes incorporated into biomaterials

Other journals of interest

• Biofabrication p12
• Nanotechnology p45

Volume 8
Frequency 6
Print ISSN 1748-6041
Online ISSN 1748-605X
CODEN BMBUCS
Online archive 2006–2012 available free with journal subscription
Chinese Physics B
iopscience.org/cpb

Editor-in-chief
Z-C Ouyang, Institute of Theoretical Physics, Chinese Academy of Sciences, Beijing, China

Widely recognized as one of China’s top journals, Chinese Physics B (CPB) continues to publish research papers in all areas of theoretical and applied physics, reflecting the high quality and wide scope of Chinese research.

The journal’s broad focus makes it an important source of current research in physics, materials, acoustics, mechanics, optics, engineering, and biophysics.

CPB’s scope includes many areas of high-interest physics research:

- surface physics: the atomic structures of surfaces, theory of electron states, and photoemission studies of surfaces
- spectroscopic studies: Raman scattering, laser spectroscopy, phonon transitions, and interaction between condensed matter and radiation
- structure and phase transitions: the structure and properties of crystals and nanocrystalline materials
- superconductivity: synthesis, structure, and electronic states of high-Tc oxides
- atomic and molecular physics
- magnetism: colossal magnetoresistance in perovskite manganites and great magnetic entropy in rare-earth compounds
- optical physics and applications: laser molecular beam epitaxy of oxide films
- confinement and heating in fusion plasma
- material processing and film preparation based on plasma physics

The publishing partnership between IOP Publishing and the Chinese Physical Society is now in its 12th year, and we look forward to continuing this successful collaboration.

Other journals of interest

- Chinese Physics Letters p17
- Journal of Physics A: Mathematical and Theoretical p34
- Journal of Physics B: Atomic, Molecular and Optical Physics p35
- Journal of Physics: Condensed Matter p36
- New Journal of Physics p46

Volume 22
Frequency 12
Print ISSN 1674-1056
CODEN CPBHAJ
Online archive 2003–2012 available free with journal subscription
1992–2002 available in the IOP Journal Archive
Chinese Physics C
iopscience.org/cpc

Editor-in-chief
- Z-P Zheng, Institute of High Energy Physics, Chinese Academy of Sciences, Beijing, China

Chinese Physics C (CPC) was founded in 1977 and publishes original research in the fields of high-energy and nuclear physics.

The journal’s broad scope includes the following research areas:
- particle physics
- nuclear physics
- astrophysics and cosmology related to particles and nuclei
- detectors and experimental methods
- accelerators
- synchrotron radiation
- astrophysics

High-quality research papers and Rapid Communications published in CPC make it a key resource for researchers in high-energy and nuclear physics.

CPC benefits from sponsorship by the Chinese Physical Society and is supported by the Institute of High Energy Physics and the Institute of Modern Physics of the Chinese Academy of Sciences. Prior to 2008, the journal was known as High Energy Physics and Nuclear Physics.

Other journals of interest
- The Astrophysical Journal p11
- Classical and Quantum Gravity p18
- Journal of Cosmology and Astroparticle Physics p28
- Journal of Physics G: Nuclear and Particle Physics p38

Volume 37
Frequency 12
Print ISSN 1674-1137
CODEN CPCHCQ
Online archive 2008–2012 available free with journal subscription
Chinese Physics Letters (CPL) attracts a growing, international readership, which strengthens the journal’s coverage of major advances in all aspects of physics.

Letters are an increasingly important aspect of international research. CPL fulfills this requirement for the Chinese Physics series of journals published by the Chinese Physical Society.

Each year, a collection of significant research articles published in CPL is made available to read online. These articles, selected by the journal’s Editorial Board, highlight the high quality of work published in CPL.

**Other journals of interest**

- Chinese Physics B: p15
- EPL: p22
- Journal of Physics A: Mathematical and Theoretical: p34
- Journal of Physics B: Atomic, Molecular and Optical Physics: p35
- Journal of Physics: Condensed Matter: p36

**Volume** 30  
**Frequency** 12  
**Print ISSN** 0256-307X  
**Online ISSN** 1741-3540  
**CODEN** CPLEEU  
**Online archive** 2003–2012 available free with journal subscription  
1984–2002 available in the IOP Journal Archive
Editor-in-chief

C M Will, Washington University in St Louis, MO, USA

Now in its 30th year of publication, Classical and Quantum Gravity™ (CQG) has firmly established itself as a world leader in classical relativity and quantum gravity.

The journal is widely read and well cited thanks to its focus on the highest quality research. CQG is a popular choice among physicists, mathematicians, and cosmologists in the fields of gravitation and the theory of space-time, and is valued by both theorists and experimentalists.

CQG subscribers have access to high-quality papers on many subjects, including:

- classical general relativity
- numerical relativity
- experimental gravitation, including gravitational waves
- cosmology and the early universe
- quantum gravity and supergravity
- superstrings and supersymmetry

In addition to regular papers, CQG also publishes Topical Reviews and Focus Issues on high-interest subjects, resulting in an overview of the most interesting research in this field. The findings are placed in the wider context of gravitational physics, a significant added benefit for any reader.

Other journals of interest

- The Astronomical Journal  p10
- The Astrophysical Journal  p11
- Chinese Physics C  p16
- Journal of Cosmology and Astroparticle Physics  p28
- Journal of Physics A: Mathematical and Theoretical  p34
- Journal of Physics G: Nuclear and Particle Physics  p38

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| Online archive | 2003–2012 available free with journal subscription  
1984–2002 available in the IOP Journal Archive |
Communications in Theoretical Physics

iopscience.org/ctp

Editor-in-chief

- T-H Ho, Institute of Theoretical Physics, Chinese Academy of Sciences, Beijing, China

Published on a monthly basis, Communications in Theoretical Physics (CTP) is available to the international research community on behalf of the Institute of Theoretical Physics of the Chinese Academy of Sciences and the Chinese Physical Society, and has been in publication for 30 years.

CTP is devoted to reporting new developments in theoretical physics, and covers topics in interdisciplinary areas such as biophysics and computational physics, as well as:

- atomic and molecular physics
- condensed matter and theory of statistical physics
- nuclear theory
- fluid theory and plasmas
- elementary particle physics and quantum field theory
- quantum mechanics and quantum optics
- theoretical astrophysics
- cosmology
- relativity

In addition to original regular articles, letters, research notes, and Rapid Communications, CTP also publishes review articles and conference proceedings.

All article submissions, peer review, and production—from acceptance to publication—are handled by the journal’s editorial office in China.

Other journals of interest

- Chinese Physics B p15
- Chinese Physics Letters p17
- Journal of Optics p33
- Journal of Physics A: Mathematical and Theoretical p34
- Journal of Statistical Mechanics: Theory and Experiment p41

Volume 59–60
Frequency 12
Print ISSN 0253-6102
CODEN CTPHDI
Online archive 2005–2012 available free with journal subscription
Computational Science & Discovery
iopscience.org/csd

Editor-in-chief
• N A Baker, Pacific Northwest National Laboratory, WA, USA

*Computational Science & Discovery*™ (CSD) is a multidisciplinary journal focused on advances achieved through the application of computational science tools and techniques. Researchers working in all fields of science can benefit from the reported advances in the following areas:

• applications of computational science to problems in physics, chemistry, biology, materials, engineering, and other applied areas
• development and implementation of new computational methods
• knowledge discovery via data analysis, visualization, and other computational techniques

CSD recognizes that discovery via computational science involves the integration of science, applied mathematics, and enabling technologies, and welcomes collaborative papers from authors in a variety of research areas, making the journal a unique resource for the computational research community.

Other journals of interest
• Inverse Problems p25
• Journal of Physics A: Mathematical and Theoretical p34
• Journal of Physics: Conference Series p69
• Modelling and Simulation in Materials Science and Engineering p44

Volume 6
Online ISSN 1749-4699
CODEN CSDOA3
Environmental Research Letters

**erl.iop.org**

**Editor-in-chief**
- D M Kammen, University of California, Berkeley, CA, USA

*Environmental Research Letters*™ (ERL) is published under the gold open access model and offers authors the option to publish raw data alongside their articles as supplementary data, providing free access to this data for all researchers.

ERL is the meeting place for the research and policy communities concerned with environmental change and management. The journal covers all of environmental science; its coherent and integrated approach includes research articles, perspectives, editorials, and letters. ERL is intended to communicate new results or findings that merit rapid publication.

The journal’s coverage reflects the increasingly interdisciplinary nature of environmental science, and recognizes the wide range of contributions to the development of methods, tools, and evaluation strategies relevant to the field.

The core of ERL’s high-impact research content draws from observations, numerical modeling, and theoretical and experimental approaches to environmental science—especially science relevant to policy, impacts, and decision-making in all components of the Earth system.

ERL’s diverse scope ranges from physical and natural sciences to economics, political, sociological, and legal studies, including:
- biodiversity
- biogeochemical cycles
- climate
- energy
- environmental health, risk assessment, policy, and law
- pollution
- natural resources, water, food

Many articles published in ERL are also covered on IOP’s community website, [environmentalresearchweb.org](http://environmentalresearchweb.org). See p74 for more information.

### Other journals of interest

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**EPL**

[www.epljournal.org](http://www.epljournal.org)

**Editor-in-chief**

- M Schreiber, Chemnitz University of Technology, Chemnitz, Germany

**EPL (formerly Europhysics Letters)** has been in publication for 27 years since its creation in 1986 from the merger of Journal de Physique Lettres with Lettere al Nuovo Cimento.

**EPL** publishes original, high-quality letters in all areas of physics, ranging from condensed matter topics and interdisciplinary research to astrophysics, geophysics, and plasma and fusion sciences, including those with application potential. The journal communicates new results and findings that merit rapid publication. **EPL** also publishes comments on letters previously published in the journal.

**EPL** enjoys the benefits of international partnership. It is co-managed by scientists for the international scientific community and published under the scientific policy and control of the European Physical Society by EDP Sciences, IOP Publishing, and Società Italiana di Fisica for a partnership of 17 European physical societies (the EPL Association).

Publishing 24 issues per year, increasing in prestige, and broadening its coverage of a range of physics topics, **EPL** publications are focused on novel, scientifically significant, developing areas of science, including high-profile topics such as quantum simulators, topological insulators, metamaterials, soft matter, high-energy physics, and plasma physics and fusion sciences, as well as interdisciplinary areas such as bio-physics and medical-physics topics.

**EPL** has an agreement for mutual transfer of manuscripts with the Journal of Physics™ series (J. Phys.), the European Physical Journal (EPJ), Classical and Quantum Gravity™ (CQG), Plasma Physics and Controlled Fusion™ (PPCF) and Plasma Sources Science and Technology™ (PSST). This agreement enables an article which would be more suitable to another journal to be transferred with the related material and keep the original submission date. This agreement respects the editorial independence of all the journals involved.

**Other journals of interest**

- Journal of Physics B: Atomic, Molecular and Optical Physics
- Journal of Physics: Condensed Matter
- New Journal of Physics
- Plasma Physics and Controlled Fusion

**Volume** 101–104

**Frequency** 24

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**CODEN** EULEE8

**Online archive** 2003–2012 available free with journal subscription

1986–2002 available in the IOP Journal Archive
European Journal of Physics

iopscience.org/ejp

Editor-in-chief

- J Mostowski, Polish Academy of Sciences, Warsaw, Poland

With a worldwide readership and authors from every continent, European Journal of Physics (EJP) is an international journal dedicated to improving the standard of teaching physics courses in universities and other higher education institutions.

EJP’s wide-ranging scope includes:

- explanations of how contemporary research can inform the understanding of physics at university level
- original insights into the derivation of results
- descriptions of novel laboratory exercises illustrating new techniques of general interest
- articles of a scholarly or reflective nature that are aimed to be of interest to, and at a level appropriate for, physics students or recent graduates
- descriptions of successful and original student projects, whether experimental, theoretical, or computational
- discussions of the history, philosophy, and epistemology of physics at a level accessible to physics students and teachers
- reports of new developments in physics curricula and techniques for teaching physics

EJP is an essential point of reference for anyone involved in physics education at the high school or undergraduate level, such as teachers, lecturers, and teacher trainers in physics, engineering, and education departments, and produces resources for schools, colleges and universities, companies with an education program, government-funded bodies, and government-funding departments.

Other journals of interest

- Physics Education p51
- Reports on Progress in Physics p59

Volume 34
Frequency 6
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CODEN EJPHD4
Online archive 2003–2012 available free with journal subscription
1980–2002 available in the IOP Journal Archive
Fluid Dynamics Research
iopscience.org/fdr

Editor-in-chief
• M Funakoshi, Kyoto University, Japan

Fluid Dynamics Research (FDR) is celebrating its 45th volume in 2013. Published on behalf of the Japan Society of Fluid Mechanics, this international journal caters to researchers in all areas of fluid dynamics, including: aerodynamics, nano-fluids, fluid motion or modeling, turbulence, waves, rogue waves, vortices, bifurcation, bubbles, gas-liquid boundaries, and computational fluid dynamics.

FDR’s scope includes theoretical, numerical, and experimental studies that contribute to the fundamental understanding and/or application of fluid phenomena. The journal’s broad coverage features invited reviews and original papers on topical subjects by leading researchers in this interdisciplinary field.

Each year, FDR’s Editorial Board selects an outstanding article published in the previous year to be awarded the FDR Prize. This article must contain rigorous scientific work, be highly novel, exhibit a significant advancement to the field, and, above all, be an extremely interesting read.

Other journals of interest
• Computational Science & Discovery p20
• EPL p22
• Journal of Physics A: Mathematical and Theoretical p34
• Journal of Physics D: Applied Physics p37
• Measurement Science and Technology p42
• Nanotechnology p45
• Nonlinearity p47

Volume 45
Frequency 6
Print ISSN 0169-5983
Online ISSN 1873-7005
CODEN FDRSEH
Inverse Problems

iopscience.org/ip

Editor-in-chief

• A K Louis, Universität des Saarlandes, Saarbrücken, Germany

Inverse Problems™ (IP) is an interdisciplinary journal that combines mathematical and experimental papers on inverse problems with numerical and practical approaches to their solution. IP is a key resource for mathematicians, physicists, engineers, and scientists working in:

• geophysics
• radar
• optics
• biology
• acoustics
• communication theory
• signal processing
• medical imaging
• inverse-scattering techniques
• object identification

The journal’s scope includes original contributions to methods of solving mathematical, physical, and applied problems. All papers published in IP meet the highest standards of scientific quality, contain significant and original new science, and present substantial advancement in the field.

IP ensures that all authors provide sufficient introductory material to appeal to its broad readership, and that articles which are not explicitly applied include a discussion of possible applications.

For those looking for further exploration of particular topics within IP, special issues are published that present research from specific fields in one collection. Special issues for 2013 include Radar Imaging.

Other journals of interest

• Journal of Physics A: Mathematical and Theoretical p34
• Measurement Science and Technology p42
• Nonlinearity p47
• Physics in Medicine & Biology p52
• Physiological Measurement p54

Volume 29
Frequency 12
Print ISSN 0266-5611
Online ISSN 1361-6420
CODEN INPEEY
Online archive 2003–2012 available free with journal subscription
1985–2002 available in the IOP Journal Archive
Izvestiya: Mathematics

iopscience.org/im

Editor-in-chief
• V V Kozlov, V A Steklov Mathematical Institute, Russian Academy of Sciences, Moscow, Russia

Deputy editor
• A G Sergeev, V A Steklov Mathematical Institute, Russian Academy of Sciences, Moscow, Russia

Izvestiya: Mathematics (IM) is the English edition of the Russian bimonthly journal Izvestiya Rossiiskoi Akademii Nauk, Seriya Matematicheskaya, which was founded in 1937. Since 1995, IM has been published jointly by Turpion, the Russian Academy of Sciences, and the London Mathematical Society.

The journal publishes only original research papers containing full results in the author’s field of study, covering all fields of mathematics but paying special attention to: algebra, algebraic geometry, mathematical logic, number theory, mathematical analysis, geometry, topology, and differential equations. IM is a must-read journal in two key areas: algebraic geometry and number theory. The journal’s historic archive provides access to the golden age of Russian science in mathematics and related fields, including research by many Fields Medal-winning authors and other leading and pivotal characters in the history and development of the Russian math schools.

The original Russian version is reproduced in English in less than three weeks, allowing researchers to access the latest achievements faster than ever.

Researchers and postdoctoral workers specializing in the various branches of mathematics and related sciences, and lecturers, students, and postgraduate students would find this journal of interest.

Other journals of interest
• Journal of Physics A: Mathematical and Theoretical
  p34
• Nonlinearity
  p47
• Russian Mathematical Surveys
  p62
• Sbornik: Mathematics
  p63

Volume  77
Frequency  6
Print ISSN  1064-5632
Online ISSN  1468-4810
Online archive  1967–2012 available free with journal subscription

1967–2002 available in Turpion’s Historic Archive: Turpion offers the option to acquire perpetual rights of Turpion journals content for a one-time purchase. Since 2008, electronic access back to the first English translation volume has been hosted by IOP Publishing at iopscience.org/im.
Journal of Breath Research

iopscience.org/jbr

Editor-in-chief

• A Amann, Innsbruck Medical University and Breath Research Institute of the Austrian Academy of Sciences, Austria

Journal of Breath Research™ (JBR) is the only journal exclusively dedicated to this multidisciplinary field. The journal is an invaluable tool for researchers in many different fields, including chemistry, engineering, biochemistry, dentistry, and sensor production.

JBR covers all aspects of breath science, with the major focus on the analysis of exhaled breath in physiology and medicine, and the diagnosis and treatment of breath odors.

JBR also includes research on sampling procedures for breath and the interpretation of results from the clinical and physiological viewpoints. Additionally, there is a focus on the isotopic labeling of substances that lead to a better understanding of the production and transport of volatile substances in the body, including parallel measurements of the breath/dermal emissions of volatiles.

In addition to high-quality original research and Topical Review articles, JBR also publishes Focus Issues covering topics of high interest.

Other journals of interest

• Measurement Science and Technology  p42
• Physiological Measurement  p54

Volume  7
Frequency  4
Print ISSN  1752-7155
Online ISSN  1752-7163
CODEN  JBROBW
Online archive  2007–2012 available free with journal subscription
Journal of Cosmology and Astroparticle Physics

iopscience.org/jcap

Scientific director
• V Mukhanov, Arnold Sommerfeld Center for Theoretical Physics, Munich, Germany

Journal of Cosmology and Astroparticle Physics (JCAP) is an electronic-only journal jointly owned and published by the International School for Advanced Studies (SISSA) and IOP Publishing. Highly cited, JCAP covers all aspects of cosmology and particle astrophysics, and encompasses theoretical, observational, and experimental areas as well as computation and simulation.

JCAP covers the latest developments in the theory of all fundamental interactions and their cosmological implications (e.g. M-theory and cosmology, brane cosmology). JCAP’s coverage also includes topics such as:

• early universe: inflationary cosmology, the origin of the cosmic asymmetry between matter and anti-matter, big-bang nucleosynthesis, cosmic microwave background
• large-scale structure of the universe
• dark matter and dark energy: the nature of dark matter and its detection, vacuum energy, and quintessence
• neutrino physics and astronomy
• gravitational waves
• particle and nuclear astrophysics
• black holes and their impact on cosmology
• gamma-ray astrophysics
• string theory and cosmology

JCAP has an access-and-usage policy based on affordable and reasonable pricing for both authors and libraries. There are no page charges for authors.

 Scientists working in particle astrophysics and cosmology—as well as astronomers and physicists working in high-energy and particle physics—will find JCAP an invaluable research tool.

Other journals of interest
• Classical and Quantum Gravity p18
• Journal of Physics G: Nuclear and Particle Physics p38
• New Journal of Physics p46

Volume 11
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CODEN JCAPBP
Online archive 2003–2012 available free with journal subscription
Journal of Geophysics and Engineering

*iopscience.org/jge*

**Editors-in-chief**
- Y Wang, Imperial College, London, UK
- S Qu, Sinopec Geophysical Research Institute, Nanjing, China

**Associate editor-in-chief**
- J Guo, Chinese Geophysical Society, Beijing, China

*Journal of Geophysics and Engineering* (JGE) is a valuable resource for researchers interested in developments within Earth-physics disciplines, with a focus on applied sciences and engineering, including: geodynamics; natural and controlled-source seismology; oil, gas, and mineral exploration; petrophysics; and reservoir physics. The journal also includes contributions from all Earth-physics disciplines from global geophysics to applied and engineering geophysics.

JGE was first published in 2004, in partnership with the Sinopec Geophysical Research Institute based in Nanjing, China. The journal increased its frequency in 2012 and now publishes six issues per year, making more research more quickly available to readers and increasing its visibility within the geophysics community. A special issue on the uses of geophysics in either civil engineering or cultural heritage is planned.

JGE is also part of the Article Evolution™ project, which allows readers to enjoy a more interactive and enhanced reading experience.

**Other journals of interest**
- Environmental Research Letters p21
- Inverse Problems p25

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Journal of Instrumentation

iopscience.org/jinst

Scientific director
• A Breskin, Weizmann Institute of Science, Rehovot, Israel

Journal of Instrumentation (JINST) is a multidisciplinary, electronic-only journal, created jointly by the International School of Advanced Studies (SISSA) and IOP Publishing.

JINST specializes in papers related to concepts and instrumentation in:
• radiation-detector physics
• accelerator science
• associated experimental methods and techniques, theory, modeling, and simulations

JINST provides regular Technical Reports on innovative achievements related to topics covered in the journal’s scope. The emphasis is not necessarily on novelty or on scientific value, but rather on relevance to the community.

A recent addition to the journal is the introduction of peer-reviewed conference proceedings.

JINST is of particular interest to scientists focusing on physics instrumentation—especially experimental physics research groups.

The advisory and Editorial Boards, composed of distinguished scientists in the field, jointly establish the journal’s scientific policy and ensure the scientific quality of accepted papers.

Other journals of interest
• Journal of Physics G: Nuclear and Particle Physics p38
• Measurement Science and Technology p42
• Physics in Medicine & Biology p52

Volume 8
Online ISSN 1748-0221
CODEN JIONAS
Online archive 2006–2012 available free with journal subscription
A leading journal in its field, *Journal of Micromechanics and Microengineering* (JMM) covers all aspects of microelectromechanical structures, devices, and systems, as well as micromechanics and micromechatronics.

JMM focuses on original work in fabrication and integration technologies and aims to highlight the link between new fabrication technologies and their capacity to create novel devices.

The journal’s scope includes original work in microengineering and nanoengineering, spanning the physical, chemical, electrical, and biological realms, as well as new fabrication and integration techniques for both silicon and non-silicon materials.

The fastest peer review in its sector combined with its rejection rate of more than 60% makes JMM a key resource for:

- electrical, biological, and mechanical engineering
- physics
- chemistry
- materials
- biochemistry and medicine

### Editor-in-chief

- M G Allen, Georgia Institute of Technology, GA, USA

### Other journals of interest

- Measurement Science and Technology p42
- Nanotechnology p45
- Smart Materials and Structures p66

### Volume and Frequency

- Volume: 23
- Frequency: 12

### ISSN

- Print ISSN: 0960-1317
- Online ISSN: 1361-6439

### CODEN

- JMMIEZ

### Online archive

- 2003–2012 available free with journal subscription
- 1991–2002 available in the IOP Journal Archive
Journal of Neural Engineering

iopscience.org/jne

Editors-in-chief
• D M Durand, Case Western Reserve University, OH, USA
• A B Schwartz, University of Pittsburgh, PA, USA

In 2013, Journal of Neural Engineering™ (JNE) celebrates its 10th year of helping scientists, clinicians, and engineers to understand, replace, repair, and enhance the nervous system. Researchers working in biomedical engineering, neuroscience, neurobiology, and neurology will find this journal an essential point of reference.

JNE’s scope encompasses experimental, computational, theoretical, clinical, and applied aspects of:
• brain–machine (computer) interfaces
• neuromodulation
• neural prostheses
• optical neural engineering
• neural tissue regeneration
• neural signal processing

As part of IOP Publishing’s commitment to ensure that publishing in our journals is as easy as possible, JNE uploads final, accepted manuscripts for NIH-funded papers to PubMed Central automatically, unless an author requests otherwise.

Other journals of interest
• Bioinspiration & Biomimetics p13
• Biomedical Materials p14
• Physiological Measurement p54

Volume 10
Frequency 6
Print ISSN 1741-2560
Online ISSN 1741-2552
CODEN JNEIEZ
Online archive 2004–2012 available free with journal subscription
**Journal of Optics**

iopscience.org/jopt

**Editor-in-chief**

• N Zheludev, University of Southampton, UK

*Journal of Optics (JOPT)* publishes work of relevance to the optics community, including applied and theoretical researchers working on all aspects of modern and classical optics.

JOPT publishes research in eight key sections—each section is managed by editors who are experts in that particular field:

• nanophotonics and plasmonics
• metamaterials and structured photonic materials
• nonlinear and ultrafast optics
• photonics at the life–science interface
• information and communication optics
• integrated photonics
• material processing with light
• propagation, diffraction, and scattering

In addition to regular papers and Topical Reviews, JOPT publishes a select number of special issues each year on topics of particular interest from across the journal’s entire scope.

JOPT offers additional article types to meet the needs of its diverse audience: Rapid Communications give the research community prompt access to work that stands out due to novelty, significance, topicality, and timeliness, and PhD Tutorials present sufficient information to allow an active researcher to access another subfield quickly.

As part of the journal’s ongoing efforts to improve reader experience, all JOPT articles can now be read as Enhanced Article HTML—perfect for researchers using tablets or smartphones.

**Other journals of interest**

• Journal of Physics B: Atomic, Molecular and Optical Physics p35
• Journal of Physics D: Applied Physics p37
• New Journal of Physics p46

**Volume** 15  
**Frequency** 12  
**Print ISSN** 2040-8978  
**Online ISSN** 2040-8986  
**CODEN** JOAOF8  
**Online archive** 2003–2012 available free with journal subscription  
(2003–2009 under the previous name of *Journal of Optics A: Pure and Applied Optics*)  
1970–2002 available in the IOP Journal Archive (under previous journal names)

* Impact Factor calculated by combining both JOPT and JOPA 2011 Impact Factor results. The split has occurred due to the journal’s name change.
Journal of Physics A: Mathematical and Theoretical

iopscience.org/jphysa

Editor-in-chief
M T Batchelor, Australian National University, Canberra, Australia

Publishing 50 issues a year, Journal of Physics A: Mathematical and Theoretical™ (JPhysA) is a key resource for those who are interested in the mathematical structures that describe fundamental processes of the physical world, and the analytical, computational, and numerical methods for exploring these structures. Researchers can access a mix of regular papers, reviews, comments, and special issues across six key research areas:

- statistical physics
- chaotic and complex systems
- mathematical physics
- quantum mechanics and quantum information theory
- field theory and string theory
- fluid and plasma theory

JPhysA rapidly delivers high-quality, significant, and original contributions in the arenas of mathematical and theoretical physics to a diverse readership. Outstanding short papers are made quickly available to the research community via the journal’s Fast Track Communications™ program, while the newer Insights series supplements regular research with additional summary articles written by the authors, making their work more widely accessible to researchers working in other fields.

Readers of JPhysA also enjoy an enhanced reading experience through Article Evolution™, which enables interaction with the latest research in new ways.

Other journals of interest

- Classical and Quantum Gravity p18
- Computational Science & Discovery p20
- Journal of Statistical Mechanics: Theory and Experiment p41
- Nonlinearity p47

Volume 46
Frequency 50
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Online ISSN 1751-8121
CODEN JPHAC5
Online archive 2003–2012 available free with journal subscription
1968–2002 available in the IOP Journal Archive
Journal of Physics B: Atomic, Molecular and Optical Physics

iopscience.org/jphysb

Editor-in-chief
• P Corkum, NRC Steacie Institute for Molecular Science and University of Ottawa, Canada

One of the longest-running titles in the field, Journal of Physics B: Atomic, Molecular and Optical Physics™ (JPhysB) has a reputation for publishing quality work for researchers at all stages of their careers in atomic, molecular, and optical physics, including:
• atomic physics
• molecular and cluster structure, properties, and dynamics
• atomic and molecular collision
• cold matter
• optical and laser physics
• quantum optics, information, and control
• ultrafast, high-field, and X-ray physics
• astrophysics and plasma physics

In addition to original research papers, Topical Reviews, and special issues, JPhysB offers readers a variety of article types to meet the needs of the journal’s varied audience:
• Fast Track Communications™ papers report new and timely developments that merit accelerated publication.
• Tutorials are based on PhD theses or lecture series; they introduce newcomers to rapidly developing fields where textbooks are still unavailable, and allow researchers from related fields to gain insight into developing areas of interest.
• Invited Papers are commissioned by the Editorial Board. These articles mix review material with unpublished research and deal with the latest emerging topics, to give readers contextualization for these rapidly developing subjects.

Other journals of interest
• Journal of Optics p33
• New Journal of Physics p46
• Physica Scripta p49
• Reports on Progress in Physics p59

Volume 46
Frequency 24
Print ISSN 0953-4075
Online ISSN 1361-6455
CODEN JPAPEH

Online archive 2003–2012 available free with journal subscription
1968–2002 available in the IOP Journal Archive
Journal of Physics: Condensed Matter

iopscience.org/jpcm

Editor-in-chief
• J S Gardner, NIST, Gaithersburg, MD, and Indiana University, USA

Deputy editors
• J E Inglesfield, Cardiff University, UK
• H Kasai, Osaka University, Japan

Celebrating its 25th volume as Journal of Physics: Condensed Matter™ (JPCM), this journal offers readers the very latest research across all of condensed matter physics, including soft matter, nanoscience, and biophysics.

Reporting experimental, theoretical, and simulation studies, readers can also access JPCM’s authoritative Topical Review program, Fast Track Communications™, and special issues in the areas of:

• surface, interface, and atomic-scale science
• liquids, soft matter, and biological physics
• nanostructures and nanoelectronics
• solid structure and lattice dynamics
• electronic structure
• correlated electrons
• superconductors and metals
• semiconductors
• dielectrics and ferroelectrics
• magnetism and magnetic materials

JPCM is embracing new technologies to further enhance reader experience. Video abstracts represent an exciting new content stream that allows authors to go beyond the constraints of the written article to convey their research more widely than ever before. Other developments, designed to enhance the user experience, include improved figure views, new exporting options, mobile versions, and MathJax.

Other journals of interest
• Journal of Physics D: Applied Physics p37
• Nanotechnology p45
• New Journal of Physics p46
• Semiconductor Science and Technology p65
• Superconductor Science and Technology p67

Volume 25
Frequency 50
Print ISSN 0953-8984
Online ISSN 1361-648X
CODEN JCOMEL
Online archive 2003–2012 available free with journal subscription
1968–2002 available in the IOP Journal Archive (under previous journal names)
Receiving more than 1 million downloads every year, *Journal of Physics D: Applied Physics*™ (JPhysD) continues to offer cutting-edge research and reviews on all aspects of applied physics.

Reflecting advances made by researchers in the field, the Editorial Board has expanded the journal’s already broad scope to encompass even more topics in applied physics:

- applied magnetism and applied magnetic materials
- photonics and semiconductor materials and device physics
- low-temperature plasmas and plasma–surface interactions
- condensed matter, interfaces, and related nanostructures
- NEW – microfluidics
- NEW – adhesion and fracture
- NEW – magnetophotonics and magnetoplasmonics
- NEW – spintronic devices

This increased scope will make JPhysD a key resource for researchers working in physics, chemistry, materials, engineering, and biophysics.

Researchers can keep up-to-date with the latest developments by reading the journal’s Fast Track Communications™, and the popular special issue program will continue in 2013 with issues planned on terahertz science and technology, non-volatile memory, and phase contrast in radiology and electron microscopy.
Journal of Physics G: Nuclear and Particle Physics

iopscience.org/jphysg

Editor-in-chief
• A Schwenk, EMMI/TU Darmstadt, Germany

Journal of Physics G: Nuclear and Particle Physics™ (JPhysG) covers nuclear physics, particle physics, and nuclear/particle astrophysics, as well as the many areas where these subjects overlap. The journal publishes original, high-quality research articles on:

• theoretical and experimental topics in the physics of elementary particles and fields
• intermediate-energy physics and nuclear physics
• experimental and theoretical research in particle, neutrino, and nuclear astrophysics
• research arising from all interface areas among these fields

In order to react to new developments and to highlight key accomplishments, new results, and directions, JPhysG also presents research in a variety of flexible formats:

• The well-established Topical Review program presents specially commissioned review articles on areas of current interest.
• The new LabTalk™ feature presents accessible article summaries written by the researchers themselves. These short articles introduce the findings, techniques, and possible applications of their research.

Other journals of interest
• Classical and Quantum Gravity p18
• Journal of Cosmology and Astroparticle Physics p28
• Journal of Physics A: Mathematical and Theoretical p34
• New Journal of Physics p46

Volume 40
Frequency 12
Print ISSN 0954-3899
Online ISSN 1361-6471
CODEN JGPED
Online archive 2003–2012 available free with journal subscription
1975–2002 available in the IOP Journal Archive
As the official journal of the Society for Radiological Protection, *Journal of Radiological Protection* (JRP) is an essential and comprehensive title for all those involved with radiological protection in the medical, nuclear power, and environmental industries.

The journal publishes primary research articles—as well as Topical Reviews, Practical Matter articles, Opinions, Memoranda, and Letters to the Editor—across a wide range of topics, including:

- dosimetry
- instrument development
- specialized measuring techniques
- epidemiology
- biological effects (*in vivo* and *in vitro*)
- risk and environmental-impact assessments

In 2013, JRP will publish key papers concerning the 2011 Fukushima accident in Japan.

JRP is recommended reading for anyone involved with radiological protection, whether researching in academia, working in hospitals or in nuclear power, or monitoring environmental levels of radioactive materials.
Editor-in-chief
• S Wang, Institute of Semiconductors, Chinese Academy of Sciences, Beijing, China

*Journal of Semiconductors* (JoS), published jointly by the Chinese Institute of Electronics and the Institute of Semiconductors (a branch of the Chinese Academy of Sciences), covers the latest achievements and developments in semiconductor physics, materials, devices, circuits, and related technology.

Managed by an advisory committee and an Editorial Board, the journal’s broad scope includes the following areas at the forefront of semiconductor physics research:

- semiconductor superlattice and microstructure physics
- semiconductor material physics
- growth and characterization of novel semiconductor materials, including quantum dots and quantum wires
- semiconductor device physics
- novel semiconductor devices
- CAD design and fabrication of integrated circuits
- novel technology for semiconductor devices
- semiconductor optoelectronic devices and integration
- semiconductor film growth, characterization, and application

As an interdisciplinary title based in both physics and information, JoS is a key resource for anyone with an interest in physics, chemistry, materials, electronics, engineering, or biochemistry.
Journal of Statistical Mechanics: Theory and Experiment

iopscience.org/jstat

Chief scientific director
• M Mézard, LPTMS, CNRS et Université Paris Sud, France

Scientific directorate
• E Fradkin, University of Illinois at Urbana-Champaign, IL, USA
• M Marsili, ICTP, Trieste, Italy
• D Mukamel, Weizmann Institute of Science, Rehovot, Israel
• G Mussardo, SISSA, Trieste, Italy
• B Shraiman, KITP, University of California, Davis, USA
• R Zecchina, Politecnico, Turin, Italy

Journal of Statistical Mechanics: Theory and Experiment (JSTAT) is published in partnership with the International School for Advanced Studies (SISSA) and offers fast publication and comprehensive coverage of theoretical and experimental research in the field of statistical physics.

JSTAT’s online-only nature allows for all articles to include large data sets, tables, and figures, as well as videos and other supplementary data.

JSTAT is an essential source of information for those working in mathematics or physics departments, or for any group working on applications of statistical physics.

Its scope includes:
• exact results
• quantum mechanics and quantum field theory
• phase transitions and critical phenomena
• non-equilibrium processes
• fluids, instabilities, turbulence, reaction dynamics, soft and granular matter
• surfaces, interfaces, growth processes
• disordered systems and glassy matter
• statistical mechanics of complex materials
• interface between biology and physics
• information theory, combinatorial optimization, graphs and networks
• collective phenomena in economic and social systems

Other journals of interest
• Computational Science & Discovery p20
• Fluid Dynamics Research p24
• Journal of Physics A: Mathematical and Theoretical p34
• Journal of Physics: Condensed Matter p36

Online ISSN 1742-5468
CODEN JSMTCS
Online archive 2004–2012 available free with journal subscription
Celebrating its 90th anniversary in 2013, *Measurement Science and Technology*™ (MST) maintains its popularity among researchers by publishing the latest interdisciplinary papers showcasing new and improved measurement techniques. The journal is of interest to experimental researchers in all science and engineering disciplines as well as those specializing in measurement science.

MST covers all aspects of the theory, practice, and application of measurement and sensor technology across the sciences:

- measurement theory and practical developments
- sensors and sensor systems
- optical and laser-based techniques
- measurement methods for fluids
- imaging techniques
- spectroscopy
- techniques for materials and materials processing evaluation
- measurement techniques for biological, medical, and life-science applications
- instrumentation for environmental and atmospheric measurements
- novel instrumentation

MST’s strong publishing program includes Topical Reviews and special issues.

**Other journals of interest**

- Fluid Dynamics Research  p24
- Journal of Micromechanics and Microengineering  p31
- Journal of Optics  p33
- Metrologia  p43
- Physiological Measurement  p54
- Smart Materials and Structures  p66

**Volume**  24
**Frequency**  12
**Print ISSN**  0957-0233
**Online ISSN**  1361-6501
**CODEN**  MSTCEP
**Online archive**  2003–2012 available free with journal subscription
**Online archive**  1923–2002 available in the IOP Journal Archive
Metrologia

iopscience.org/met

Editor-in-chief

• J Miles, Bureau International des Poids et Mesures, Sèvres, France

Metrologia (MET) is the leading journal in pure and applied metrology, and is essential reading for all researchers to whom measurement standards and calibrations are important.

MET publishes original research on the fundamentals of measurement, including improvements to the seven base units of the International System of Units (SI) (meter, kilogram, second, ampere, kelvin, candela, mole) or proposals to replace them.

MET readers can also find articles that contribute to the accuracy of derived units, or of constants that have a fundamental importance in physics—such as Planck’s constant or the gyromagnetic ratio of the proton—or that contribute to the solution of particularly difficult measurement problems.

In addition to original papers, MET publishes review articles, issues devoted to single topics of timely interest, and occasional conference proceedings, as well as features that draw attention to the development of new trends of thought and experiment in this area of physical research, such as Letters to the Editor and Short Communications.

MET subscribers also have access to the journal’s Technical Supplement, an electronic-only publication. An abstract for each article is provided, which contains a link to the full report in PDF format. The full report of the text forms part of the Key Comparison Database (KCDB) held on the BIPM website: kcdb.bipm.org.

Other journals of interest

• Measurement Science and Technology p42
• Physiological Measurement p54

Volume 50
Frequency 6
Print ISSN 0026-1394
Online ISSN 1681-7575
CODEN MTRGAU
Online archive 2003–2012 available free with journal subscription
1965–2002 available in the IOP Journal Archive
Modelling and Simulation in Materials Science and Engineering

iopscience.org/msmse

Editor-in-chief

- W A Curtin, Ecole Polytechnique Fédérale de Lausanne, Switzerland

Serving the multidisciplinary materials community, *Modelling and Simulation in Materials Science and Engineering* (MSMSE) publishes new research that advances the understanding and prediction of material behavior—at scales from atomistic to macroscopic—through modeling and simulation.

The journal is led by editor-in-chief Professor Curtin, with support from an Editorial Board of well-respected field professionals who were appointed for their expert guidance and knowledge across the journal’s scope, which covers:

- modeling and/or simulation across materials science that emphasizes fundamental materials issues
- interdisciplinary research that tackles challenging and complex materials problems where the governing phenomena may span different scales of materials behavior, with an emphasis on the development of quantitative approaches to explain and predict experimental observations
- material processing that advances the fundamental materials science and engineering underpinning the connection between processing and properties
- all classes of materials and mechanical, microstructural, electronic, chemical, biological, and optical properties

Since the first volume was published in 1993, MSMSE has seen a continual increase in readership. This is reflected by the increase in downloads, which were as high as 12,700 per month in 2011, and a 74% increase in Impact Factor over the past 10 years.

In 2013, MSMSE will continue to provide special issues and Topical Reviews relevant to the modeling and simulation communities as well as the broader materials science community.

Other journals of interest

- Computational Science & Discovery p20
- IOP Conference Series: Materials Science and Engineering p69
- Journal of Physics: Condensed Matter p36
- Smart Materials and Structures p66

| Volume | 21 |
| Frequency | 8 |
| Print ISSN | 0965-0393 |
| Online ISSN | 1361-651X |
| CODEN | MSMSEEU |
Nanotechnology

iopscience.org/nano

Editor-in-chief
• M Reed, Yale University, CT, USA

Nanotechnology™ was launched in 1990 as the first journal dedicated to providing comprehensive coverage across nanoscale research and technology. Since then, the journal has grown in both quality and quantity to establish itself as one of the leading titles in the field. It continues to offer cutting-edge research articles at the forefront of developments in all fields of nanotechnology research.

In addition to original research articles and Topical Reviews, Nanotechnology publishes special issues on a regular basis, which feature Invited Articles from highly active subject areas. In 2012, special issues were published covering the areas of flexible electronics, plasmonics in optoelectronics, and nanowires for energy applications. Special issues focusing on other topics of interest are planned for 2013.

In 2013, the ‘Energy at the nanoscale’ section will be expanded; this section was launched in 2011 in response to increasing interest in the field. In addition, the journal will continue to provide commentary on advances in nanoscale research in:
• biology and medicine
• electronics and photonics
• patterning and nanofabrication
• sensing and actuating
• materials synthesis
• materials properties

Nanotechnology is recommended to all researchers working in applied physics, chemical physics, condensed matter and materials science, and measurement science and sensors. The journal boasts high quality content that continues to improve, as reflected in the journal’s rising Impact Factor.

Other journals of interest
• Journal of Micromechanics and Microengineering p31
• Journal of Physics: Condensed Matter p36
• Journal of Physics D: Applied Physics p37
• Measurement Science and Technology p42

Volume 24
Frequency 50
Print ISSN 0957-4484
Online ISSN 1361-6528
CODEN NNOTER
Online archive 2003–2012 available free with journal subscription
1990–2002 available in the IOP Journal Archive
New Journal of Physics

www.njp.org

Editor-in-chief
- E Bodenschatz, Max Planck Institute for Dynamics and Self-Organisation, Gottingen, Germany and Cornell University, NY, USA

Co-owned by the Institute of Physics and Deutsche Physikalische Gesellschaft, New Journal of Physics (NJP) was the first open access journal to publish original research across all areas of physics, and continues to be a leader in publishing articles of outstanding scientific quality that merit the attention and interest of the global physics community.

NJP’s broad coverage of physics encompasses pure, applied, theoretical, and experimental research, as well as interdisciplinary topics, including:

- quantum physics (including quantum information)
- atomic and molecular physics
- optics
- condensed matter
- surface science
- nanoscale science
- photonics and device physics
- soft matter and polymers
- chemical physics
- statistical mechanics, thermodynamics, and nonlinear systems
- fluid dynamics
- plasmas
- nuclear and particle physics
- cosmology and astrophysics
- biological and medical physics
- Earth science and geophysics

NJP is committed to serving the entire physics community. The journal’s policy ensures that articles are written to be accessible to the non-specialist, and the recently introduced video-abstract content stream adds to this user-friendliness, making it easy to truly engage with the content.

Other journals of interest

- Environmental Research Letters p21
- EPL p22
- Journal of Physics: Conference Series p69
- Physica Scripta p49
- Reports on Progress in Physics p59

Volume 15
Online ISSN 1367-2630
CODEN NJOPFM
Online archive 1998–2012 freely available to all at www.njp.org
Entering its 26th year of publication, Nonlinearity (NON) presents original work that spans the interdisciplinary nature of nonlinear science. The broad scope of the journal ranges from physics, mathematics, and engineering to biological science.

NON’s Editorial Board is comprised of members with expertise in extremely diverse subject areas, reflecting the varied interests of the title’s wide readership and ensuring that NON continues to be an essential resource for researchers in any field where nonlinearity is of fundamental importance. Subjects covered in the journal include:

- nonlinear, chaotic, and dynamical systems and their applications
- mathematical biology
- nonlinear partial differential equations
- fluid dynamics, including fluid boundaries, vortex dynamics, turbulence, and rogue waves
- network dynamics and swarming
- quantum dynamics and quantum chaos

All authors are strongly encouraged to provide sufficient introductory material to make their work accessible to NON’s wide readership.
Nuclear Fusion
iopscience.org/nf

Editor-in-chief
• R D Stambaugh, USA

Associate editor for Inertial Confinement
• M Tabak, Lawrence Livermore National Laboratory, CA, USA

Chairman of the Board of Editors
• M Kikuchi, Japan Atomic Energy Agency, Japan

Founded by the International Atomic Energy Agency (IAEA) in 1960, Nuclear Fusion (NF) is the acknowledged world-leading journal specializing in fusion physics. The award-winning journal covers all aspects of theoretical and practical research that are relevant to controlled thermonuclear fusion.

Since 2002, a co-publishing arrangement has been in place that combines the IAEA’s peer-review and author services with the publishing expertise of IOP Publishing. Today, the journal continues its tradition as a leading voice of the worldwide fusion community while offering the most up-to-date electronic services (including key papers from the history of fusion research) covering subjects in:

• the production, heating, and confinement of high-temperature plasmas
• the physical properties of such plasmas
• the experimental or theoretical methods of exploring or explaining them
• fusion-reactor physics
• reactor concepts
• fusion technologies

Other journals of interest
• Plasma Physics and Controlled Fusion p55
• Plasma Science and Technology p56
• Plasma Sources Science and Technology p57

Volume 53
Frequency 12
Print ISSN 0029-5515
Online ISSN 1741-4326
CODEN NUFUAU
Online archive 2003–2012 available free with journal subscription
1960–2002 available in the IOP Journal Archive
Physica Scripta

www.physica.org

Editor-in-chief
S Lidström, Royal Swedish Academy of Science, Stockholm, Sweden

Physica Scripta (PhysScr), published by IOP Publishing on behalf of the Royal Swedish Academy of Sciences, is an international journal that provides original research across a broad range of physics and related areas, with a focus on interdisciplinary and cross-disciplinary topics.

PhysScr publishes 12 issues annually, and also produces special sections containing invited contributions in six major areas in physics:

- atomic, molecular, and optical physics
- condensed matter physics
- nuclear and particle physics
- plasma physics and controlled fusion
- astrophysics and cosmology
- facilities and research projects

These invited articles describe the current thinking of leading researchers on outstanding problems, and may include discussion of open questions, important new applications, new theoretical and experimental approaches, and/or predictions of future developments. They are intended to bridge gaps in readers’ knowledge, be readily understood by experts and students alike, and provide insight into problems, methods, and results in different areas of physics.

PhysScr also separately publishes a program of Topical Issues that contain invited presentations and poster contributions from international conferences highlighting cutting-edge research across key areas of physics. The annual Nobel Physics Symposium is frequently published as a Topical Issue.

Other journals of interest

- EPL p22
- Journal of Physics A: Mathematical and Theoretical p34
- Journal of Physics B: Atomic, Molecular and Optical Physics p35
- Journal of Physics: Condensed Matter p36

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Physical Biology

iopscience.org/pb

**Editor-in-chief**

- T Newman, University of Dundee, UK

*Physical Biology*™ (PB) bridges research in the biological and physical sciences, and showcases a range of interdisciplinary papers, reviews, and perspectives with an innovative edge.

In 2013, PB will feature focus issues on the physics of stem cells and the physics of cancer, continuing its emphasis on research in which physics-based approaches generate new insights into biological systems at all levels of complexity.

Accepting contributions from a wide range of biological subfields, and strongly encouraging articles concerning the generation or explanation of experimental data, PB covers an extensive range of subjects, including:

- intracellular processes, cell division, and cytoskeleton dynamics
- signaling, gene regulation, and metabolic networks
- developmental processes
- physical aspects of disease, such as viruses and cancer progression
- neuronal dynamics
- population dynamics, ecology, and evolution
- biomolecular structure and interactions
- cells and their microenvironments
- novel physical techniques to probe biological systems
- systems and synthetic biology

With a focus on novel research and an international board of experts, PB is recommended for individuals and departments based in physics, biology and biomedical sciences, biomedical engineering and bioengineering, and mathematics or biomathematics.

**Other journals of interest**

- Journal of Physics: Condensed Matter p36
- Nanotechnology p45
- New Journal of Physics p46
- Physics in Medicine & Biology p52

**Volume** 10

**Frequency** 6

**Print ISSN** 1478-3967

**Online ISSN** 1478-3975

**CODEN** PBHIAT

**Online archive** 2004–2012 available free with journal subscription
Physics Education
iopscience.org/physed

Editor-in-chief
• G Williams, Christ College Brecon, UK

Physics Education™ (PE) provides an indispensable resource for the physics-teaching community. PE supports the teaching of physics to students up to the introductory undergraduate level, and offers professional development and support to physics teachers around the world by providing:

• a forum for practicing teachers to make an active contribution to the physics-teaching community
• knowledge updates in physics, educational research, and relevant curriculum developments
• strategies for teaching and classroom management that will engage and motivate students

In addition to feature papers, PE publishes shorter frontline papers, news, resource reviews, letters, and multimedia supplementary material. It also features a video-abstract channel, where authors go beyond the constraints of the written article to convey their research.

PE readers benefit from the perspective and expertise of the journal’s international advisory panel. PE is a valuable resource for anyone involved in physics education at the high-school or undergraduate level—teachers, lecturers, and teacher trainers in university physics, engineering, and education departments—as well as for those producing resources for schools, colleges, and universities, companies with an education program, government-funded bodies, and government-funding departments.

Other journals of interest
• European Journal of Physics p23
• Physics—Uspekhi p53
• Reports on Progress in Physics p59

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| Online archive | 2003–2012 available free with journal subscription
1966–2002 available in the IOP Journal Archive |
Physics in Medicine & Biology

iopscience.org/pmb

Editor-in-chief
• S R Cherry, University of California, Davis, USA

Physics in Medicine and Biology (PMB) is published in partnership with the Institute of Physics and Engineering in Medicine (IPEM), and covers:

• all areas of radiotherapy physics
• radiation dosimetry (ionizing and non-ionizing radiation)
• biomedical imaging (e.g. X-ray, MRI, ultrasound, optical, nuclear medicine)
• image reconstruction and kinetic modeling
• image analysis and computer-aided detection
• other radiation medicine applications
• therapies (including non-ionizing radiation)
• biomedical optics
• radiation protection
• radiobiology

The journal has experienced outstanding growth in recent years and continues to build on its excellent reputation.

This journal is essential reading for medical physicists, clinicians, and industry specialists involved in the manufacturing and testing of radiotherapy equipment, with the purpose of improving the understanding, detection, and treatment of disease and the management of patients.

Many of the best papers published are promoted to a wider audience via coverage on IOP’s community website, medicalphysicsweb.org.

Other journals of interest
• Inverse Problems p25
• Journal of Neural Engineering p32
• Journal of Radiological Protection p39
• Physiological Measurement p54

Volume 58
Frequency 24
Print ISSN 0031-9155
Online ISSN 1361-6560
CODEN PHMBA7
Online archive 2003–2012 available free with journal subscription
1956–2002 available in the IOP Journal Archive
Physics—Uspekhi
(Advances in Physical Sciences)

iopscience.org/phu

Editor-in-chief
• L V Keldysh, P N Lebedev Physical Institute, Russian Academy of Sciences, Moscow, Russia

First deputy editor
• V A Rubakov, Institute for Nuclear Research, Russian Academy of Sciences, Moscow, Russia

Associate editors
• L P Pitaevskii, P L Kapitza Institute for Physical Problems, Russian Academy of Sciences, Moscow, Russia
• O V Rudenko, M V Lomonosov Moscow State University, Russia

The flagship journal of the Russian Academy of Sciences, Physics—Uspekhi (Advances in Physical Sciences) (PU) is the English translation of the authoritative Russian-language review journal, Uspekhi Fizicheskikh Nauk, first published in 1918, which describes and discusses the latest achievements in physics and associated fields.

Papers in PU cover a wide spectrum of the world’s scientific research, with particular attention given to astrophysics, solid-state physics, nonlinear phenomena, and modern interdisciplinary areas. Principal headings include: reviews of topical problems, physics of our day, instruments and methods of investigation, methodological notes, from the history of physics, conferences and symposia, and book reviews.

The journal’s historic archive provides access to the golden age of Russian science in physics, including research by Nobel Laureates and other leading and pivotal characters in the history and development of Russian science.

Articles published in PU are accessible to established physicists and senior researchers as well as individuals beginning their career in science, and the journal continues to have the highest Impact Factor among all Russian translation journals.

Other journals of interest
• EPL p22
• New Journal of Physics p46
• Reports on Progress in Physics p59

Volume 56
Frequency 12
Print ISSN 1063-7869
Online archive 1958–2012 available free with journal subscription
1958–2002 available in Turpion’s Historic Archive: Turpion offers the option to acquire perpetual rights of Turpion journals content for a one-time purchase. Since 2008, electronic access to the content back to the first English translation volume has been hosted by IOP Publishing at iopscience.org/phu.
Physiological Measurement
iopscience.org/pmea

Editor-in-chief
• R H Bayford, Middlesex University, London, UK

Physiological Measurement (PMEA) bridges the gap between the laboratory and the clinic. It facilitates the flow of ideas and understanding between organizations with different objectives, and highlights the area where scientific research, innovation engineering, and medical progress meet. For 25 years, PMEA has supported research in electrical impedance tomography (EIT) with an annual Focus Issue featuring cutting-edge advances in topics such as hardware, algorithms, new technologies, and clinical applications.

Produced in partnership with the Institute of Physics and Engineering in Medicine (IPEM), PMEA covers quantitative assessment and visualization of physiological function, both in research and practice.

Areas covered include:
• measurement in applied physiology
• biomedical sensors
• human biology and clinical medicine
• instrumentation and methods of data analysis
• clinical engineering
• patient monitoring
• life-support systems and prosthetic devices
• modeling and simulation as they apply to measurements
• measurement of flow and pressure
• bioMEMs and applications of microfabrication technology to biomedical measurements

PMEA is a valuable title for universities with biomedical engineering departments, clinical departments in hospitals, and any group performing physiological measurements or monitoring of patients.

Other journals of interest
• Journal of Breath Research p27
• Journal of Neural Engineering p32
• Measurement Science and Technology p42
• Physics in Medicine & Biology p52

Volume 34
Frequency 12
Print ISSN 0967-3334
Online ISSN 1361-6579
CODEN PMEAE3
Online archive 2003–2012 available free with journal subscription
1980–2002 available in the IOP Journal Archive
Plasma Physics and Controlled Fusion

iopscience.org/ppcf

Editor-in-chief
• R O Dendy, United Kingdom Atomic Energy Authority, Culham Science Centre, Abingdon, UK, and Centre for Fusion, Space and Astrophysics, University of Warwick, Coventry, UK

Deputy editors
• M Koepke, West Virginia University, WV, USA
• S Sudo, National Institute for Fusion Science, Nagoya, Japan

A leading voice in plasma physics, Plasma Physics and Controlled Fusion™ (PPCF) covers the latest experimental and theoretical research into the physics of hot, highly ionized plasmas and controlled nuclear fusion.

The scope of PPCF includes:
• experimental and theoretical research into all aspects of hot, highly ionized plasmas
• nuclear fusion (both magnetic confinement fusion and inertial confinement fusion)
• basic phenomena in highly ionized gases in the laboratory, in the ionosphere, and in space
• diagnostic methods relevant to fusion and high-temperature plasmas

PPCF’s direction is overseen by an Editorial Board comprised of leading researchers from major international laboratories. These experts ensure that the latest and most relevant work is published, making PPCF the destination journal for researchers in the fields of nuclear fusion and high-temperature plasma physics.

Other journals of interest
• Nuclear Fusion p48
• Plasma Science and Technology p56
• Plasma Sources Science and Technology p57

Volume 55
Frequency 12
Print ISSN 0741-3335
Online ISSN 1361-6587
CODEN PLPHBZ
Online archive 2003–2012 available free with journal subscription
1960–2002 available in the IOP Journal Archive
ENTERING ITS 15TH YEAR OF PUBLICATION, Plasma Science and Technology (PST) OFFERS NOVEL EXPERIMENTAL AND THEORETICAL RESULTS IN PLASMA PHYSICS TO THE INTERNATIONAL RESEARCH COMMUNITY, HIGHLIGHTING THE PROGRESS OF INTERDISCIPLINARY AND APPLIED ASPECTS OF THE FIELD.

PST IS THE JOURNAL OF CHOICE FOR PLASMA RESEARCH FROM CHINA, AND PUBLISHES ACROSS A WIDE RANGE OF PLASMA-RELATED TOPICS, INCLUDING:

- basic plasma phenomena
- plasma theory and modeling
- magnetically confined plasma
- inertially confined plasma
- low-temperature plasma
- astronomy and space plasma
- plasma technology
- fusion engineering
- ion beam bioengineering

In 2012, PST increased its frequency from six to 12 issues per year.

**Other journals of interest**

- Nuclear Fusion
- Plasma Physics and Controlled Fusion
- Plasma Sources Science and Technology

**Volume** 15  
**Frequency** 12  
**Print ISSN** 1009-0630  
**CODEN** PSTHC3

**Online archive** 2003–2012 available free with journal subscription  
1999–2002 available in the IOP Journal Archive
Plasma Sources Science and Technology

iopscience.org/psst

Editor-in-chief
• M J Kushner, University of Michigan, Ann Arbor, MI, USA

Associate editors
• W G Graham, Queen’s University, Belfast, UK
• N Hershkowitz, University of Wisconsin–Madison, WI, USA
• N St J Braithwaite, The Open University, Milton Keynes, UK
• M C M Van de Sanden, Eindhoven University of Technology, the Netherlands

A multidisciplinary journal containing theoretical, computational, and experimental techniques for the study of low-temperature plasmas, Plasma Sources Science and Technology™ (PSST) reflects the relevance of low-temperature plasmas for researchers in fields as varied as medical physics, engineering, and materials science.

PSST produces a strong program of special issues and Topical Reviews, focusing on the latest developments in the field, with a scope that is relevant for both theory and applications in materials processing and environmental treatment:

• fundamental studies of low-temperature plasmas and ionized gases operating over all ranges of gas pressure and plasma density
• plasma sources and the processes initiated or sustained by them
• theoretical, computational, and experimental techniques for the study of low-temperature plasmas

PSST offers Fast Track Communications™ to its readership—a service that enables prompt publication of high-profile research—so readers can be confident they have the most up-to-date papers available in the field.

Additionally, PSST gives readers access to collections of papers based on content that was previously presented as invited talks at international meetings. These articles are subject to the same high standards of peer review as regular journal articles.

Other journals of interest
• Journal of Physics D: Applied Physics p37
• Plasma Physics and Controlled Fusion p55
• Plasma Science and Technology p56

Volume 22
Frequency 6
Print ISSN 0963-0252
Online ISSN 1361-6595
CODEN PSTEEU
Online archive 2003–2012 available free with journal subscription
1992–2002 available in the IOP Journal Archive
Established alongside the first publication of the Russian journal *Kvantovaya Elektronika* in 1971, the English translation *Quantum Electronics* (QE) is produced just a few weeks after each original edition, providing efficient access to unique research from more than 300 world-class Russian institutions and specialists from 25 countries.

QE is the only journal that provides comprehensive results in topics such as quantum electronic devices, laser physics and optics, interaction of laser radiation with matter, and the transmission and processing of information at basic and applied research levels. It is a valuable resource for those working with all aspects of laser research or with the practical application of laser technologies in the metrological, biological, and medical fields, or in the electronics, engineering, defense, and materials industries. The journal’s historic archive provides access to pioneering research in these areas, including research by Nobel Laureates and other leading and pivotal characters in the history and development of Russian science.

With an Editorial Board and council consisting of more than 40 world-class experts, the journal also covers laser plasmas, nonlinear optical phenomena, nanotechnologies, fiber and integrated optics, and active media, and continues to build on the strong foundation established by Nobel Prize Laureate Nikolay G Basov.

**Other journals of interest**

- Journal of Optics p33
- Journal of Physics B: Atomic, Molecular and Optical Physics p35
- Nanotechnology p45
- Physics—Uspekhi p53
- Plasma Physics and Controlled Fusion p55
- Semiconductor Science and Technology p65
Reports on Progress in Physics
iopscience.org/ropp

Editor-in-chief
• L H Greene, University of Illinois at Urbana-Champaign, IL, USA

Deputy editor
• G T Gillies, University of Virginia, Charlottesville, VA, USA

Reports on Progress in Physics™ (ROPP) has a long-established reputation as an essential resource for authoritative review articles covering all branches of physics. Its appeal lies in both the scope of its subject coverage as well as the high quality of the reviews. Guided entirely by its distinguished Editorial Board, ROPP includes content written exclusively by worldwide experts in fields across the entire spectrum of physics.

ROPP’s impressive Impact Factor and enduring, prestigious reputation stem not only from its authoritative and highly cited commissioned articles, but also from the emphasis placed on adapting to meet the needs of graduate students, researchers entering new fields, and established experts alike.

As part of this evolution, and in addition to the review articles for which the journal is known, ROPP has introduced two other article types in recent years to deal with subjects of current or critical interest to researchers:

• Reports on Progress articles recount the current status of a rapidly advancing field that holds significant interest but has not yet fully developed, with an emphasis on identifying disagreements whose resolution would lead to progress in the field.

• Key Issues Reviews focus on the current compelling questions in physics, and identify the critical aspects of growing fields whose significance and goals are undeveloped or disputed. More than one Key Issue on the same topic with differing or explicitly disagreeing perspectives may be published, generating crucial and exciting debate.

Other journals of interest
• Journal of Physics A: Mathematical and Theoretical p34
• Journal of Physics B: Atomic, Molecular and Optical Physics p35
• Journal of Physics: Condensed Matter p36
• Journal of Physics D: Applied Physics p37
• Journal of Physics G: Nuclear and Particle Physics p38
• New Journal of Physics p46

Volume 76
Frequency 12
Print ISSN 0034-4885
Online archive 2003–2012 available free with journal subscription
1934–2002 available in the IOP Journal Archive

IMPACT FACTOR
14.720
Research in Astronomy and Astrophysics

iopscience.org/raa

Editors-in-chief
- J Wang, National Astronomical Observatories, Chinese Academy of Sciences, Beijing, China
- Y-P Jing, Shanghai Observatory, Chinese Academy of Sciences, Beijing, China

Research in Astronomy and Astrophysics (RAA) is a rapidly developing international journal that publishes top-quality research from astronomers and astrophysicists worldwide.

The journal is published in partnership with the Chinese Astronomical Society and National Astronomical Observatories of the Chinese Academy of Sciences.

RAA publishes research papers and review articles on all branches of astronomy and astrophysics, especially:
- large-scale structure of universe formation and evolution of galaxies
- high-energy and cataclysmic processes in astrophysics
- formation and evolution of stars
- astrogeodynamics
- solar magnetic activity and heliogeospace environments
- dynamics of celestial bodies in the solar system and artificial bodies
- space observation and exploration
- new astronomical techniques and methods

Researchers can keep up to date with recent articles published in RAA by registering for table of contents alerts on the journal’s homepage.

Other journals of interest
- The Astronomical Journal p10
- The Astrophysical Journal p11
- Journal of Cosmology and Astroparticle Physics p28

Volume 13
Frequency 12
Print ISSN 1674-4527
CODEN RAAEBW
Online archive 2003–2012 available free with journal subscription
2001–2002 available in the IOP Journal Archive
Russian Chemical Reviews

iopscience.org/rcr

**Editor-in-chief**
- O M Nefedov, Russian Academy of Sciences, Moscow, Russia

*Russian Chemical Reviews* (RCR) is the English translation of the monthly review journal *Uspekhi Khimii*, one of the leading Russian journals in chemistry, founded in 1932. The journal achieved the highest Impact Factor among all Russian translation journals in all subject areas.

With work written by authorities in their individual fields, the journal gives researchers around the world access to the advances and achievements of chemists from Russia and other countries of the former Soviet Union in most aspects of modern chemistry:

- chemical physics
- physical chemistry, including catalysis
- the structure of molecules and quantum chemistry
- coordination chemistry
- analytical chemistry
- organic and organometallic chemistry
- chemistry of macromolecules
- biochemistry and bioorganic chemistry
- materials chemistry

The journal’s historic archive provides access to the golden age of Russian science in chemistry and associated fields, including research by Nobel Laureates and other leading and pivotal characters in the history and development of Russian science.

Its combination of expertise and interdisciplinary approach means that articles published in RCR appeal to scientists at all levels, including postgraduate students, teachers, and researchers, in chemistry and related scientific disciplines such as physical chemistry, chemical physics, materials science, nanotechnology, nanomaterials, and nanotechnologies.

**Other journals of interest**
- Journal of Physics B: Atomic, Molecular and Optical Physics p35
- Journal of Physics: Condensed Matter p36
- Nanotechnology p45

**Volume** 82  **Online ISSN** 1468-4837
**Frequency** 12  **CODEN** RCRVAB
**Print ISSN** 0036-021X

**Online archive** 1960–2012 available free with journal subscription
1960–2002 available in Turpion’s Historic Archive: Turpion offers the option to acquire perpetual rights of Turpion journals content for a one-time purchase. Since 2008, electronic access to the content back to the first English translation volume has been hosted by IOP Publishing at [iopscience.org/rcr](http://iopscience.org/rcr).
Covering a wide spectrum of mathematics, mechanics, and mathematical physics, Russian Mathematical Surveys (RMS) is the English translation of the prestigious Russian journal Uspekhi Matematicheskikh Nauk, founded in 1936. Since 1998, RMS has been published jointly by Turpion, the London Mathematical Society, and the Russian Academy of Sciences.

RMS consists of survey articles on current trends in mathematics, written by leading experts at the request of the Editorial Board, and Short Communications showcasing the results of new research from the Moscow Mathematical Society, as well as being the only journal that provides a record of mathematical life in Russia and biographical material. Translated into English since 1960, the journal’s historic archive provides access to the golden age of Russian science in mathematics, including research by many Fields Medal-winning authors and other leading and pivotal characters in the history and development of the Russian math schools.

With a high reputation in the mathematics community, RMS has the highest circulation and usage among Russian mathematical journals. It provides respected and eminent articles for researchers, lecturers, students, and postdoctoral workers across various branches of pure mathematics and related sciences.

Other journals of interest
- Izvestiya: Mathematics p26
- Journal of Physics A: Mathematical and Theoretical p34
- Nonlinearity p47
- Sbornik: Mathematics p63

Volume 68
Frequency 6
Print ISSN 0036-0279
Online ISSN 1468-4829
Online archive 1960–2012 available free with journal subscription
1960–2002 available in Turpion’s Historic Archive: Turpion offers the option to acquire perpetual rights of Turpion journals content for a one-time purchase. Since 2008, electronic access to the content back to the first English translation volume has been hosted by IOP Publishing at iopscience.org/rms.
Sbornik: Mathematics

iopscience.org/msb

Editor-in-chief

• A A Gonchar, V A Steklov Mathematical Institute, Russian Academy of Sciences, Moscow, Russia

Sbornik: Mathematics (SM) is the English translation of the Russian monthly journal Matematicheskii Sbornik, founded in 1866. The oldest Russian mathematical journal, translated into English since 1967, SM covers a wide spectrum of areas in pure mathematics, focusing on key developments in mathematical analysis, ordinary differential equations, partial differential equations, mathematical physics, geometry, algebra, and functional analysis. Since 1995, SM has been published jointly by Turpion, the London Mathematical Society, and the Russian Academy of Sciences. The electronic version of SM is now published monthly, and the print issue of SM, which is made up of two issues of Matematicheskii Sbornik translated into English, continues to be published bimonthly.

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Publishing only original research papers containing full results in the author’s particular field of study, SM maintains a high reputation in the mathematical community, and has seen both its Impact Factor and its submission rate rise steadily in recent years. The journal consistently offers eminent, relevant research for students, lecturers, postdoctoral workers, and researchers across departments such as mechanics, mathematics, theoretical, and mathematical physics.

Other journals of interest

• Izvestiya: Mathematics p26
• Journal of Physics A: Mathematical and Theoretical p34
• Nonlinearity p47
• Russian Mathematical Surveys p62

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Other journals of interest

• Journal of Micromechanics and Microengineering p31
• Modelling and Simulation in Materials Science and Engineering p44
• Nanotechnology p45
• Smart Materials and Structures p66

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- Journal of Physics: Condensed Matter p36
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- smart biomimetics and bioinspiration

**Other journals of interest**
- Bioinspiration & Biomimetics p13
- Journal of Micromechanics and Microengineering p31
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**Volume** 22
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Other journals of interest

• Journal of Physics: Condensed Matter p36
• Journal of Physics D: Applied Physics p37
• New Journal of Physics p46
• Reports on Progress in Physics p59

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1953
Biological physics

1960
The invention of laser

1995
The creation of a Bose-Einstein condensate

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