#### JOURNALS

# Go Mobile

CJO Mobile (CJOm) is a streamlined Cambridge Journals Online (CJO) for smartphones and other small mobile devices



- Use CJOm to access all journal content including *FirstView* articles which are published online ahead of print
- Access quickly and easily thanks to simplified design and low resolution images
- Register for content alerts or save searches and articles – they will be available on both CJO and CJOm
- Your device will be detected and automatically directed to CJOm via: journals.cambridge.org



#### JOURNALS

## International Journal of Astrobiology

Managing Editor Simon Mitton, University of Cambridge, UK

International Journal of Astrobiology is the peer-reviewed forum for practitioners in this exciting interdisciplinary field. Coverage includes cosmic prebiotic chemistry, planetary evolution, the search for planetary systems and habitable zones, extremophile biology and experimental simulation of extraterrestrial environments, Mars as an abode of life, life detection in our solar system and beyond, the search for extraterrestrial intelligence, the history of the science of astrobiology, as well as societal and educational aspects of astrobiology. Occasionally an issue of the journal is devoted to the keynote plenary research papers from an international meeting. A notable feature of the journal is the global distribution of its authors.

#### Price information is available at: http://journals.cambridge.org/ija

#### **Free email alerts**

Keep up-to-date with new material – sign up at http://journals.cambridge.org/ija-alerts

For free online content visit: http://journals.cambridge.org/ija



International Journal of Astrobiology is available online at: http://journals.cambridge.org/ija

#### To subscribe contact Customer Services

in Cambridge: Phone +44 (0)1223 326070 Fax +44 (0)1223 325150 Email journals@cambridge.org

in New York: Phone +1 (845) 353 7500 Fax +1 (845) 353 4141 Email subscriptions\_newyork@cambridge.org



#### **Instructions for Authors**

**Editorial policy** The journal welcomes submissions in any of the areas of plasma physics. Its scope includes experimental and theoretical work on basic plasma physics, the plasma physics of magnetic and inertial fusion, laser–plasma interactions, industrial plasmas, plasma devices and plasmas in space and astrophysics. This list is, of course, merely illustrative of the wide range of topics on which papers are invited, and is not intended to exclude any aspect of plasma physics that is not explicitly mentioned.

Authors are urged to ensure that their papers are written clearly and attractively, in order that their work will be readily accessible to readers. Manuscripts must be written in English. *Journal of Plasma Physics* employs a rigorous peer-review process whereby all submitted manuscripts are sent to recognized experts in their subjects for evaluation. The Editors' decision on the suitability of a manuscript for publication is final.

**Submission of manuscripts** Papers may be submitted to the Editor or any of the Associate Editors, preferably by email in pdf format. When a paper is accepted, the authors will be asked to supply source files in LaTeX or Word. Instructions for the preparation of these files and LaTeX style files are given in the Instructions for Contributors link at journals.cambridge.org/pla.

**Incremental publishing and DOIs** In order to make articles which have been accepted for publication in *Journal of Plasma Physics* available as quickly as possible, they are now published incrementally online (at Cambridge Journals Online; journals.cambridge.org) The online version is available as soon as author corrections have been completed and before the article appears in a printed issue. A reference is added to the first page of the article in the journal catchline. This is the DOI – Digital Object Identifier. This is a global publishers' standard. A unique DOI number is created for each published item. It can be used for citation purposes instead of volume, issue and page numbers. It therefore suits the early citation of articles which are published on the web before they have appeared in a printed issue. See journals.cambridge.org/pla.

**Proof reading** Only typographical or factual errors may be changed at proof stage. The publisher reserves the right to charge authors for correction of non-typographical errors.

**Offprints** Corresponding authors will receive a PDF of their article upon publication. Print offprints may be purchased from the publisher if ordered at first proof stage.

**Copying** This journal is registered with the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923. Organizations in the USA who are also registered with C.C.C. may therefore copy material (beyond the limits permitted by sections 107 and 108 of US copyright law) subject to payment to C.C.C. of the per copy fee of \$16.00. This consent does not extend to multiple copying for promotional or commercial purposes. Code 0022–3778/2010 \$16.00.

*ISI Tear Sheet Service*, 3501 Market Street, Philadelphia, Pennsylvania 19104, USA, is authorized to supply single copies of separate articles for private use only.

Organizations authorized by the Copyright Licensing Agency may also copy material subject to the usual conditions.

*For all other use*, permission should be sought from Cambridge or the American Branch of Cambridge University Press.

### JOURNAL OF **PLASMA PHYSICS**

VOLUME 77 • PART 6 • DECEMBER 2011

#### **Main Articles**

Numerical simulations to study whistler turbulence by kinetic Alfvén wave <i>R. P. Sharma, K. Batra and N. K. Dwivedi</i>	715
Filamentation instability associated with dispersive Alfvén wave and solar coronal heating <i>B. K. Das, S. Kumar and R. P. Sharma</i>	725
Low-frequency fluctuations in scrape-off layer of tokamak plasma with limiter biasing <i>N. Bisai, Rameswar Singh and R. Singh</i>	733
Axially and spherically symmetric solitons in warm plasma Maxim Dvornikov	749
Comparison of self-fields effects in two-stream electromagnetically pumped FEL with ion-channel guiding and axial magnetic field <i>S. Saviz, H. Mehdian, Farzin M. Aghamir, M. Ghorannevis and A. A. Ashkarran</i>	765
Effect of relativistic self-focusing on plasma wave excitation by a hollow Gaussian beam Ruchika Gupta, M. Rafat and R. P. Sharma	777
Symplectic calculation of the outboard magnetic footprint from noise and error fields in the DIII-D Halima Ali, Alkesh Punjabi and Ernest Nyaku	785
Numerical solution of nonlinear electron kinetic equation in self-similar variables I. F. Potapenko and S. I. Krasheninnikov	803
Rossby–Khantadze electromagnetic planetary vortical motions in the ionospheric E-layer T. D. Kaladze, L. V. Tsamalashvili and L. Z. Kahlon	813
Reevaluation of the Braginskii viscous force for toroidal plasma Robert W. Johnson	829
Torsional magnetic reconnection: The effects of localizing the non-ideal (nJ) term Peter F. Wyper and Rekha Jain	843

**Cambridge Journals Online** journals.cambridge.org/pla //doi.org/10.1017/S0022377811000377 Published online by Cambridge University Press



MIX Paper from responsible sources FSC<sup>®</sup> C018127

