VOLUME 28 NUMBER 4 2010

ASER AND PARTICLE BEAMS

Pulse Power, High Energy Densities, Hot Dense Matter, and Warm Dense Matter



https://doi.org/10.1017/S0263034610000704 Published online by Cambridge University Press

Laser and Particle Beams

Pulse Power, High Energy Densities, Hot Dense Matter, and Warm Dense Matter

Editor in Chief: Editorial Board DIETER H.H. HOFFMANN M.M. Basko (Institute for Theoretical and Technical University Darmstadt **Experimental Physics**) Nuclear Physics Institute D. Batani (University of Milano Bicocca) Radiation and Nuclear Physics Department A. Caruso (ENEA Frascati) Schlossgartenstrasse 9 M. Decroisette (Centre d'Etudes de Limeil-Valenton) 64289 Darmstadt, Germany T. Desai (University of Milano, Bicocca) S. Eliezer (SOREQ) **Emeritus Editor in Chiefs:** J. Honrubia (Universidad Politecnica) HEINRICH HORA K. Horioka (Tokyo Institute of Technology) University of New South Wales M. Kalal (Czech Technical University) Kensington 2033 NSW, Australia M.H. Key (Lawrence Livermore National Laboratory) G.H. MILEY Hong Jin Kong (KAIST) University of Illinois M. Kristiansen (Texas Technological University) Urbana, IL 61801, USA Y. Maron (Weizmann Institute of Science) R.L. McCrory (University of Rochester) **Associate Editors:** G.A. Mesyats (Institute for Electrophysics) CLAUDE DEUTSCH S. Nakai (Osaka University) Laboratoire de Physique de Gaz et Plasmas A. Ng (Teikyo University of Technology) Universite de Paris XI A.A. Offenberger (University of Alberta) Orsay 91405, Cedex France A.R. Piriz (Universidad de Ćastilla-La Mancha) B.G. LOGAN M. Roth (Technical University) Virtual National Laboratory for Heavy Ion Fusion D.D. Ryutov (Lawrence Livermore National Laboratory) Lawrence Berkeley National Laboratory A.S. Shikanov (P.N. Lebedev Physical Institute) Berkeley, CA 94720 N.A. Tahir (GSI) BORIS YU. SHARKOV V.F. Tarasenko (High Current Electronics Institute) Institute for Theoretical and Experimental Physics A.V. Zrodnikov (Institute of Physics and 117259 Moscow, Russia Power Engineering)

Laser and Particle Beams is an international journal that covers the generation, and the interaction with matter, of high intensity laser and particle beams. It also covers the physics of systems with high energy densities. Specific fields of interest include nuclear fusion, especially inertial confinement, magnetic confinement, diagnostics, material treatment, laboratory astrophysics, plasmas and spectroscopy at extreme conditions, physical properties of hot dense matter, warm dense matter, and intense particle beams and optical (laser) beams from the microwave to the X-ray region. The exploration of these fields and their new physics, including nonlinear and nonclassical phenomena, should find a forum in this journal.

As well as publishing original articles, the journal also publishes occasional review articles, surveys of research at particular laboratories, and reviews of recent books.

Laser and Particle Beams is indexed in Chemical Abstracts, Computerized Engineering Index, Current Contents, Engineering Index Monthly, Inspec, Mechanical Engineering Abstracts, Referativnyi Zhurnal, Science Citation Index, SCOPUS, Index of Scientific Reviews.

© Cambridge University Press, 2010. All rights reserved. No part of this publication may be reproduced, in any form or by any means, electronic, photocopy, or otherwise, without permission in writing from Cambridge University Press. For further information see http://us.cambridge.org/information/rights/ or http://www.cambridge.org/uk/information/rights/

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 US \$20.00. This consent does not extend to multiple copying for promotional or commercial purposes. Code 5/0263-0346/10 \$20.00.

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

Subscriptions: *Laser and Particle Beams* (ISSN 0263-0346) is published in March, June, September, and December by Cambridge University Press, 32 Avenue of the Americas, New York, NY 10013-2473/Cambridge University Press, The Edinburgh Building, Shaftesbury Road, Cambridge CB2 8RU, UK. 2011 Annual rates for institutions print and electronic: US \$1386.00 in the USA, Canada, and Mexico; UK £729.00 + VAT elsewhere. Institutions electronic only: US \$1130.00 in the USA, Canada, and Mexico; UK £595.00 + VAT elsewhere. Institutions print only: US \$1252.00 in the USA, Canada, and Mexico; UK £651.00 + VAT elsewhere. Individuals print plus electronic: US \$233.00 in the USA, Canada, and Mexico; UK £129.00 + VAT elsewhere. Individuals print only: US \$217.00 in the USA, Canada, and Mexico; UK £123.00 + VAT elsewhere. Individuals print only: US \$217.00 in the USA, Canada, and Mexico; UK £123.00 + VAT elsewhere.

Orders, which must be accompanied by payment, may be sent to a bookseller, subscription agent, or direct to the publishers: Cambridge University Press, Journals Department, 32 Avenue of the Americas, New York, NY 10013-2473, USA; orders outside the US, Canada, or Mexico may be sent to Cambridge University Press, The Edinburgh Building, Shaftesbury Road, Cambridge CB2 8RU, England. Claims for missing issues should be made immediately after receipt of the next issue.

POSTMASTER: Send address changes in the US, Canada, and Mexico to *Laser and Particle Beams*, Cambridge University Press, 100 Brook Hill Drive, West Nyack, NY 10994-2133.

Periodicals Postage paid at New York, NY, and at additional mailing offices.