

Information for Contributors

1. Manuscripts must be written in English. All manuscripts will be referred to acknowledged experts in the subject. Only those receiving favourable recommendations from the referees will be accepted for publication. Manuscripts may be sent to any Board member, any Associate Editor or the Editor.
2. The typescript should be double spaced, on one side of good grade paper, allowing a reasonable left-hand margin. An original and two copies should be submitted with the author's full postal address, position and affiliations.
3. The title and section headings should highlight the significant points. A short abstract should precede the main text.
4. One copy of photographs, prints or transparencies of good quality and unmarked should be submitted. Where lines or lettering are to appear on the photograph, an additional print should be supplied appropriately marked. Each should have, lightly written on the back, the author's name, the figure number and an indication of which is the top of the picture.
5. One copy of each line diagram should be submitted at approximately twice final size and unlettered. Diagrams must be drawn in indian ink on plain white or transparent paper. A second copy should be supplied with lettering included. The author's name and the figure number should be written on this copy.
6. Tables should be typewritten on separate sheets. Avoid, where possible, very wide tables.
7. References and footnotes should be cited according to the Harvard (Author/date system), also known as the "British form". In the text, author and year are cited in brackets e.g. "... was found by McCarthy (1980; 1980a) . . ." or "(Emmett *et al.* 1972)". Full references are listed in alphabetic order at the end of the paper. References are not numbered. An example of a reference list is:
DEUTSCH, C. & KLARSFELD, S. 1973 *Phys. Rev.* **A7**, 2081.
NICHOLSON, D. R. 1983 *Plasma Theory*, (John Wiley, New York).
OOMURA, H. *et al.* 1982 *Res. Rep ILE*, ILE-8207p.
OOMURA, H. *et al.* 1982a *Trans. ANS*, **43**, 617.
Note that the year of publication appears after the author's name. If possible, all authors names should be listed in preference to "*et al.*" If one author or team is referred to more than once in any year, the letters a, b, etc should be added after the year to distinguish the individual references.
8. Correction to proofs should be restricted to printers' errors only. Authors are entitled to 25 offprints of their article free of charge. Additional offprints may be purchased if they are ordered on the form sent with the proofs.

LASER AND PARTICLE BEAMS

Volume 5 Part 1 February 1987

CONTENTS

Editorial 1

A. M. Rubenchik and S. K. Turitsyn: On self-focusing of laser beams in plasma 3

P. H. Y. Lee: On relativistic self focusing 15

V. I. Zakharov and V. G. Tyuterev: Dynamics of photon number quantum fluctuations in multiphoton processes 27

D. Deck: Transport phenomena in laser created plasma with non-Maxwellian electronic distribution 49

A. B. Shvartsburg: The surface explosion of electron temperature due to microwave resonant plasma heating 65

Kazuko Inoue and Tomio Ariyasu: Thermodynamic properties and thermal conductivity of high density deuterium 71

Miloš M. Škorić: On a theory of stimulated scattering in laser plasmas 83

Wang Naiyan, Hong Runsheng, Zeng Naigong, Shan Yusheng, Liu Weiren, Du Shigang, Zhou Chuangzhi, Wang Xiaojun and Wan Ganchang: Particle beam fusion research at IAE in Beijing 89

G. Bonnaud: Ion mobility influence on stimulated Raman scattering in homogeneous laser-irradiated plasma 101

S. Jackel, M. Givon, A. Ludmirsky, S. Eliezer, J. L. Borowitz, B. Arad, A. Zigler and Y. Gazit: Multiple-pass amplifiers for high-power laser systems 115

A. K. Chung and M. A. Prelas: Sensitivity analysis of Xe₂⁺ excimer fluorescence generated from charged particle excitation 125

B. P. Goel, G. A. Moses and R. R. Peterson: Proton stopping in thin aluminium slabs 133

B. d'Etat, J. Grumberg, E. Leboucher, H. Nguyen and A. Poquerusse: Theoretical and experimental study of complete spectral series as a diagnostic tool for dense plasmas 155

Book reviews 163

© Cambridge University Press 1987

Cambridge University Press, The Pitt Building, Trumpington Street, Cambridge CB2 1RP
32 East 57th Street, New York, NY 10022, USA
10 Stamford Road, Oakleigh, Melbourne 3166, Australia

Printed in Northern Ireland by The Universities Press (Belfast) Ltd, Belfast BT6 9HF