

ISSN 0022-3727

IOP

Journal of Physics D

Applied Physics

Volume 33 Number 5 7 March 2000

Online: www.iop.org/Journals/jd

A Journal Recognized by
The European Physical Society



Ref: C 2 PF 251199/03
JOURNAL OF PHYSICS ("D" : APPLIED PHYSIC
07.03.00 Vol. 33 No. 5
0022-3727 22101144
LIBRIS 15.06.00
144 BOULEVARD KRIM BELKACEM
ALGER
ALGERIE

Institute of **Physics** PUBLISHING

Journal of Physics D: Applied Physics

Volume 33

Number 5

7 March 2000

RAPID COMMUNICATIONS

- L45 Giant magnetoimpedance and permeability in CoFeNiSiB amorphous ribbon**
Jifan Hu, Liansheng Zhang, Hongwei Qin, Yizhong Wang, Zhenxi Wang and S X Zhou
- L49 Formation of n-type CrSi₂ semiconductor layers on Si by high-current Cr ion implantation**
H N Zhu, K Y Gao and B X Liu

PAPERS

APPLIED INTERFACES AND SURFACES

- 473 White-emitting organic diode with a doped blocking layer between hole- and electron-transporting layers**
Xueyin Jiang, Zhilin Zhang, Weiming Zhao, Wenqing Zhu, Buxin Zhang and Shaohong Xu
- 477 Luminescence spectra of CaSO₄ with Ce, Dy, Mn and Ag codopants**
M Maghrabi, T Karali, P D Townsend and A R Lakshmanan

APPLIED MAGNETISM AND MAGNETIC MATERIALS

- 485 Structure and magnetic properties of Sm₂Fe_{17-*x*}Mn_{*x*} compounds**
Zhi-gang Sun, Hong-wei Zhang, Shao-ying Zhang, Jing-yun Wang and Bao-gen Shen

ELECTROMAGNETISM, OPTICS, ACOUSTICS, HEAT TRANSFER, CLASSICAL MECHANICS AND FLUID DYNAMICS

- 492 Direct observation of keyhole behaviour during pulse modulated high-power Nd:YAG laser irradiation**
S Fujinaga, H Takenaka, T Narikiyo, S Katayama and A Matsunawa
- 498 Experimental determination by PVDF and EMV techniques of shock amplitudes induced by 0.6–3 ns laser pulses in a confined regime with water**
P Peyre, L Berthe, R Fabbro and A Sollier

PHYSICS OF GASES, PLASMAS AND ELECTRIC DISCHARGES

- 504 Implementation of a discharge propagation model using an electric field map: an attempt toward a design tool for high-voltage overhead insulation**
M Giralt and F Buret
- 517 A self-consistent one-dimensional model of the anode region of inert gas discharges at low pressures and currents**
Yu B Golubovskii, I A Porokhova, A Dinklage and C Wilke
- 524 Model of the cathode region and gas temperature of a dc glow discharge at high current density**
R R Arslanbekov

CONDENSED MATTER: STRUCTURE, MECHANICAL AND THERMAL PROPERTIES

- 545 High-temperature viscous carbon flow for the growth of single-wall carbon nanotubes**
F Kokai, K Takahashi, M Yudasaka and S Iijima
- 551 Calculation of inelastic cross-sections for the interaction of electrons with amorphous selenium**
M Lachaine and B G Fallone
- 556 Time evolution of pulsed supersonic jets of argon clusters**
A V Malakhovskii

CONDENSED MATTER: ELECTRONIC STRUCTURE, ELECTRICAL AND OPTICAL PROPERTIES

- 564 Shallow electron traps induced by [Ru(CN)₆]⁴⁻ in AgCl microcrystals: a computer simulation study of transient microwave photoconductivity**
J P Hua, F Callens, F Cardon, H De Meyer and D Vandenbroucke

(Continued on inside back cover)