IoP

Journal of Physics D Applied Physics Physics

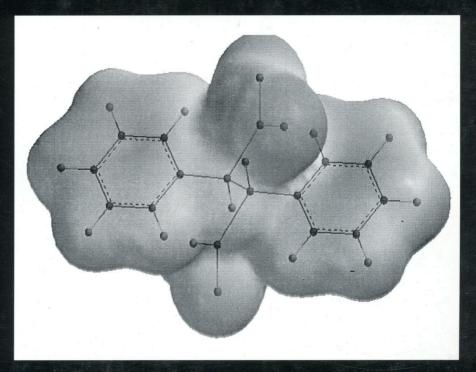
Volume 30 Number 10 21 May 1997

Containing papers presented at The Material Research Society Symposium on the Spectroscopy of Heterojunctions (Boston, USA, Fall 1995)

Online: http://www.iop.org

A Journal Recognized by The European Physical Society





Journal of Physics D: Applied Physics

Volume 30

Number 10

21 May 1997

RAPID COMMUNICATION

L37 The laser-heated-pedestal growth of LiNbO₃:MgO crystal fibres with ferroelectric domain inversion by in situ electric field poling

A Brenier, G Foulon, M Ferriol and G Boulon

PAPERS

APPLIED INTERFACES AND SURFACES

SYMPOSIUM PAPERS

- 1411 Optical NMR from single GaAs/AlGaAs quantum wells S W Brown, T A Kennedy, E R Glaser and D S Katzer
- Reverse surface photovoltaic effects in GaAs surface quantum wells
 C Cameron Miller, S J Diol, C A Schmuttenmaer, J Cao, D A Mantell, R J D Miller and Y Gao
- Molecular quantum chemical calculations of the formation of interfaces between Al, Ca and Mg with poly(phenylene vinylene) oligomers
 V-E Choong, Y Park, B R Hsieh and Y Gao
- Photogenerated hot electron dynamics at GaAs (100) surfaces
 S J Diol, C Cameron Miller, C A Schmuttenmaer, J Cao, Y Gao, D A Mantell and R J D Miller
- 1432 Surface-phonon characterization of InP, GaP and GaAs quantum dots confined in dielectric hosts D O Henderson, A Ueda, Y-S Tung, R Mu, W C White, R A Zuhr and J G Zhu
- 1436 Band offsets at heavily strained III-V interfaces C Ohler, A Förster, J Moers, C Daniels and H Lüth
- 1442 Internal photoemission in heterostructures affected by scattering processes
 M Schmidt, M Brauer and V Hoffmann

REGULAR PAPERS

- The effect of interface resistances on thermal wave propagation in multi-layered samples Bin-cheng Li and Shu-yi Zhang
- 1455 A structural investigation of high-quality epitaxial Pb(Zr,Ti)O₃ thin films
 L X Cao, Y Xu, B R Zhao, L P Guo, L Li, B Xu, Y Z Zhang, H Chen, A J Zhu, Z H Mai, J H Zhao, Y F Fu and X J Li
- Gas-sensitive properties and structure of nanostructured (α-Fe₂O₃)_x-(SnO₂)_{1-x} materials prepared by mechanical alloying
 J Z Jiang, R Lin, W Lin, K Nielsen, S Mørup, K Dam-Johansen and R Clasen

APPLIED MAGNETISM AND MAGNETIC MATERIALS

- 1468 An analysis of the high-temperature magnetic after-effect in single-crystal cobalt H J Blythe, J I Lopez-Cabido and J Castro
- 1477 A comparison of the magnetic properties of commercial HDDR powder with those of other commercial sintered rare-earth magnets

 S J Collocott and J B Dunlop

Continued on inside back cover

Transition shape and nonlinear effects in digital magnetic recording on thin film media 1483 T Fung, B K Middleton, J J Miles and M Aziz FUNDAMENTAL AREAS OF PHENOMENOLOGY (INCLUDING APPLICATIONS) A kinetic model for the formation of Ar₂ excimers 1489 S Neeser, T Kunz and H Langhoff PHYSICS OF GASES, PLASMAS AND ELECTRIC DISCHARGES 1499 Some experimental research on anisotropic effects in the neutron emission of dense plasma-focus devices F Castillo Mejía, M Milanese, R Moroso and J Pouzo 1507 Energy dissipation in the electrodes of CuBr laser-like discharges D N Astadjov and N V Sabotinov The mechanism of positive streamer acceleration and expansion in air in a strong external field 1515 A A Kulikovsky CONDENSED MATTER: ELECTRONIC STRUCTURE, ELECTRICAL AND OPTICAL **PROPERTIES** Thermal conductivity of polydisperse composites with periodic microstructures 1523 G Q Gu and K W Yu 1531 Mechanism of conduction in doped polyaniline M Campos and B Bello Jr 1536 On photoelasticity and the quadratic electrostrictive effect G Kloos