

ISSN 0022-3727

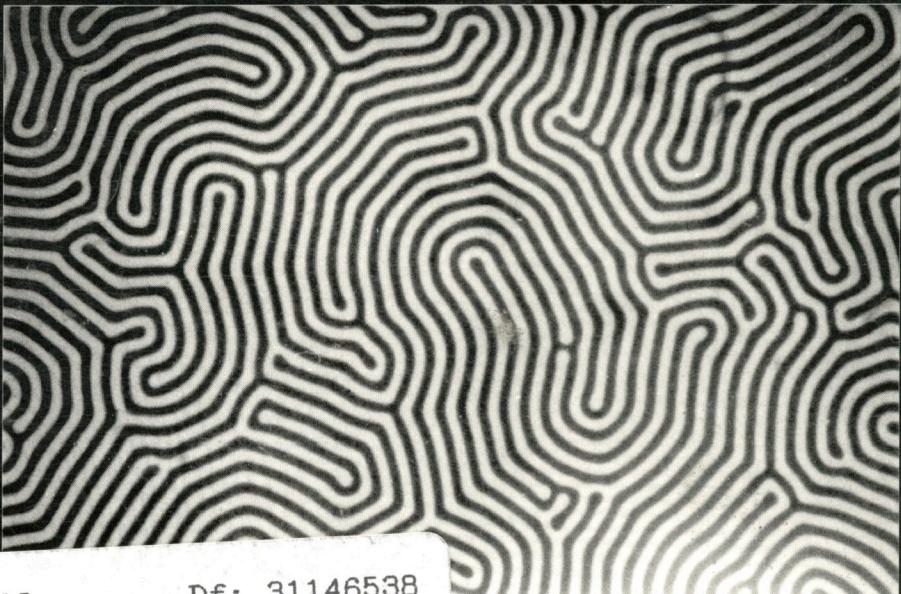
IoP

Journal of Physics D Applied Physics

Volume 35 Number 7 7 April 2002

Special issue on III-Nitride Semiconductors

Online: www.iop.org/journals/jphysd



Ref: BT PF 160102/09 Df: 31146538
JOURNAL OF PHYSICS ("D" : APPLIED PHYSIC
07.04.02 Vol. 35 No. 7 22304673 29.05.02
0022-3727
EDITIONS CHIHAB
ZI. LOT B5
B.P.744 REGHAIA
GG ALGER
ALGERIE

Institute of **Physics** PUBLISHING

Journal of Physics D: Applied Physics

Volume 35 Number 7 7 April 2002

RAPID COMMUNICATIONS

- L15 **Window and mixing effects in the dynamics of an LN₂ Raman laser**
S Marchetti, M Giorgi and R Fantoni
- L18 **Frequency-dependent closed-form expressions for inductance and resistance of a single interconnect on a silicon substrate**
H Ymeri, B Nauwelaers, K Maex, D De Roest and S Vandenberghe
- L21 **Electrostatic discharges on solar arrays: common characteristics with vacuum arcs**
E Amorim, L Levy and S Vacquie

SPECIAL ISSUE ON III-NITRIDE SEMICONDUCTORS

Guest Editor's Introduction

- 577 **Determination of strain state and composition of highly mismatched group-III nitride heterostructures by x-ray diffraction**
O Brandt, P Waltererit and K H Ploog
- 586 **Hydrogen in group III nitrides, studied by muon spin resonance**
S F J Cox, R L Lichten and E A Davis
- 591 **Band offsets in III-nitride heterostructures**
H Ünlü and A Asenov
- 595 **Comparison of different surface passivation dielectrics in AlGaN/GaN heterostructure field-effect transistors**
W S Tan, P A Houston, P J Parbrook, G Hill and R J Airey
- 599 **Influence of GaN barrier growth temperature on the photoluminescence of InGaN/GaN heterostructures**
S M Olaizola, S T Pendlebury, J P O'Neill, D J Mowbray, A G Cullis, M S Skolnick, P J Parbrook and A M Fox
- 604 **Light emission ranging from blue to red from a series of InGaN/GaN single quantum wells**
R W Martin, P R Edwards, R Pecharroman-Gallego, C Liu, C J Deatcher, I M Watson and K P O'Donnell
- 609 **The GaN yellow luminescence centre observed using optoelectronic modulation spectroscopy**
Chi-Hsin Chiu, F Omnes, C Gaquiere, P Gibart and J G Swanson
- 615 **Heteroepitaxial growth of InN islands studied by STM and AFM**
C Nörenberg, M G Martin, R A Oliver, M R Castell and G A D Briggs
- 620 **Chemical beam epitaxy of GaN on Si (111) using AlAs buffer layers**
T S Huang, T B Joyce, R T Murray, A J Papworth and P R Chalker

REGULAR PAPERS

APPLIED MAGNETISM, MAGNETIC MATERIALS AND SUPERCONDUCTIVITY

- 625 **On the temperature dependence of domain wall pinning field in soft, uniaxial magnetic materials**
G Vértesy, I Tomáš and Z Vértesy

PHOTONICS AND SEMICONDUCTOR DEVICE PHYSICS

- 631 **Interface-induced electroluminescence in the type II P-Ga_{0.84}In_{0.16}As_{0.22}Sb_{0.78}/n-In_{0.83}Ga_{0.17}As_{0.82}Sb_{0.18} single heterojunction**
K D Moiseev, A Krier, M P Mikhailova and Yu P Yakovlev
- 637 **The characteristic potential method of noise calculation in multi-terminal homogeneous semiconductor resistors**
C H Park, Y S Kim, M S Chae, J S Kim, H S Min and Y J Park

(Continued on inside back cover)