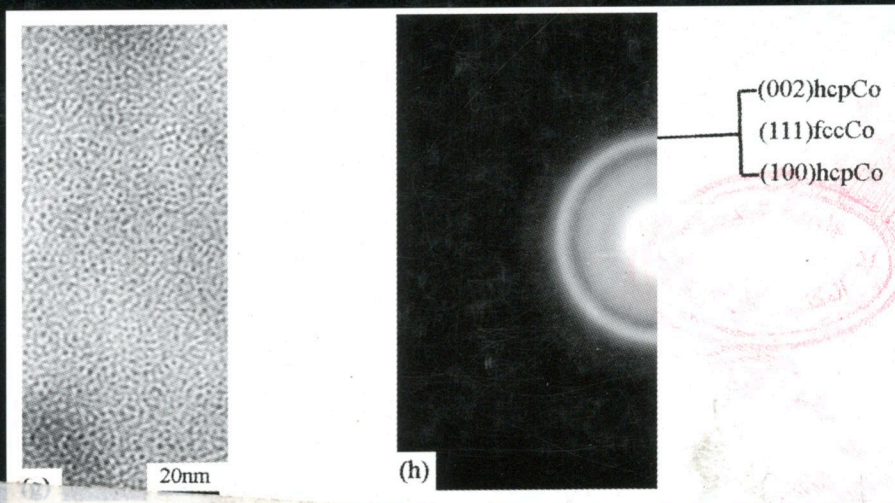


Applied Physics

Volume 34 Number 2 21 January 2001

Online: www.iop.org/Journals/jd

A Journal Recognized by The European Physical Society



Ref: PF 120201/05 Df: 29982251
JOURNAL OF PHYSICS (D : APPLIED PHYSICS)
21.01.01 Vol: 34 No. 2
0022-3727 22101144 02.07.01
LIBRIS - C2
144 BOULEVARD KRIM BELKACEM
ALGER
ALGERIE

Journal of Physics D: Applied Physics

Volume 34

Number 2

21 January 2001

PAPERS

APPLIED INTERFACES AND SURFACES

- 151 **Exciton spectroscopy and assessment of crystallization of amorphous $(\text{PbBr}_2)_{0.9}(\text{CuBr})_{0.1}$ films**
S Kondo, N Tanaka, T Saito, H Asada and M Ishikane
- 155 **The influence of Ar addition on the structure of an a-SiOCF film prepared by plasma-enhanced chemical vapour deposition**
Shi-Jin Ding, Peng-Fei Wang, D Wei Zhang, Ji-Tao Wang and Wei W Lee

APPLIED MAGNETISM AND MAGNETIC MATERIALS

- 160 **Role of vortices in magnetization reversal of rectangular NiFe elements**
K J Kirk, M R Scheinfein, J N Chapman, S McVitie, M F Gillies, B R Ward and J G Tennant
- 167 **The influence of oxygen flux on the tunnelling magnetoresistance effect of Co-Al-O granular thin films**
Shihui Ge, Junhong Chi and Zhengang Zhang

EXPERIMENTAL, COMPUTATIONAL AND THEORETICAL PARTICLE BEAM AND PLASMA SCIENCE

- 174 **Monitoring the velocity of the insulator-metallic phase transition in aluminium powder under shock loading**
B M Novac, I R Smith and S E Goh
- 177 **Uniform nanosecond gas breakdown of negative polarity: initiation from electrode and propagation in molecular gases**
N B Anikin, S M Starikovskaia and A Yu Starikovskii
- 189 **Plasma plume oscillations during welding of thin metal sheets with a CW CO₂ laser**
Z Szymański, J Hoffman and J Kurzyna
- 200 **The effect of photoemission on the streamer development and propagation in short uniform gaps**
G E Georghiou, R Morrow and A C Metaxas
- 209 **Extraction of the fine structure from x-ray absorption spectra**
K V Klementev
- 218 **Surface chemistry induced by air corona discharges in a negative glow regime**
G Jouve, A Goldman, M Goldman and C Haut

OPTICAL, ELECTRONIC, ELECTRICAL AND SUPERCONDUCTING PROPERTIES AND APPLICATIONS

- 222 **Repetitive laser pulse heating with a convective boundary condition at the surface**
B S Yilbas and M Kalyon

INTERDISCIPLINARY PHYSICS AND RELATED AREAS OF SCIENCE AND TECHNOLOGY

- 232 **The equation of motion and the fundamental mode of flexural vibration for a rod with different tensile and compressive properties**
M Kupka and M Kupková
- 238 **Simulation of the magnetic filtration process of technological liquids and gases by a nonlinear electrical circuit**
S Herdem, M Köksal and T Abbasov
- 243 **A novel route of synthesis of aluminium nano-aggregates: an ion beam modification in metal-organic complex**
S Dhara, B K Panigrahi, K G M Nair, P Magudapathy, S Saibaba and G L N Reddy

(Continued on inside back cover)