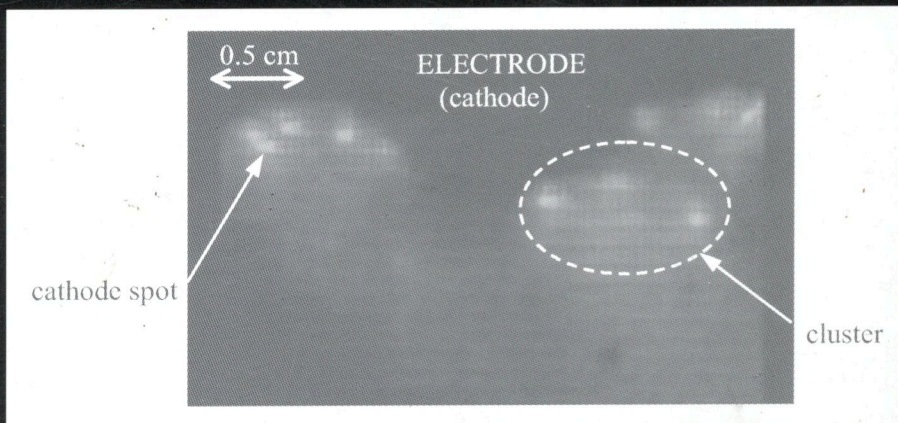


**Applied
Physics**

Volume 35 Number 2 21 January 2002

Online: www.iop.org/journals/jphysd



Ref: BT PF 160102/09 Df: 31146538
JOURNAL OF PHYSICS ("D" : APPLIED PHYSIC
23.01.02 Vol. 35 No. 2
0022-3727 22304673 29.05.02
EDITIONS CHIHAB
ZI. LOT B5
B.P.744 REGHAIA
GG ALGER
ALGERIE

Journal of Physics D: Applied Physics

Volume 35

Number 2

21 January 2002

PAPERS

PHOTONICS AND SEMICONDUCTOR DEVICE PHYSICS

- 95 **A theoretical and experimental thermal study of SiO₂ optical fibres transmitting concentrated radiative energy**
O A Jaramillo, G Huelsz and J A del Río
- 103 **Contact formation of LiF/Al cathodes in Alq-based organic light-emitting diodes**
L S Hung, R Q Zhang, P He and G Mason

EXPERIMENTAL, COMPUTATIONAL AND THEORETICAL PARTICLE BEAM AND PLASMA SCIENCE

- 108 **Radiowave absorption and scattering by quasiatomic complexes (electrons and ions located in the neighbourhood of small particles)**
V V Kveder, I G Naumenko, A I Shalynin and A T Voronchev
- 115 **Numerical and experimental study of a plasma cutting torch**
P Freton, J J Gonzalez, A Gleizes, F Camy Peyret, G Caillibotte and M Delzenne
- 132 **Simulation of stepped propagation of positive streamers in SF₆**
N Yu Babaeva and G V Naidis
- 137 **Modelling of plasma generation and expansion in a vacuum arc: application to the vacuum arc remelting process**
P Chapelle, J P Bellot, H Duval, A Jardy and D Ablitzer

APPLIED SURFACES AND INTERFACES

- 151 **Effects of thermal coefficient and lattice constant mismatches on mosaic dispersion of heteroepitaxial YSZ/Si(001) thin films**
Chun-Hua Chen, N Wakiya, K Shinōzaki and N Mizutani
- 157 **Far-infrared reflection spectra of PbSrSe thin films grown by molecular beam epitaxy**
G Yu, L F Jiang, W Z Shen and H Z Wu

STRUCTURE AND PROPERTIES OF MATTER

- 162 **Acoustic band gaps in 2D liquid phononic crystals of rectangular structure**
Fugen Wu, Zhengyou Liu and Youyan Liu
- 166 **Transient high concentrations of chain anions in hydrating cement—indications from proton spin relaxation measurements**
N Nestle, C Zimmermann, M Dakkouri and J Kärger