IoP

0022-3727

ZI. LOT B5

GG ALGER ALGERIE

EDITIONS CHIHAB

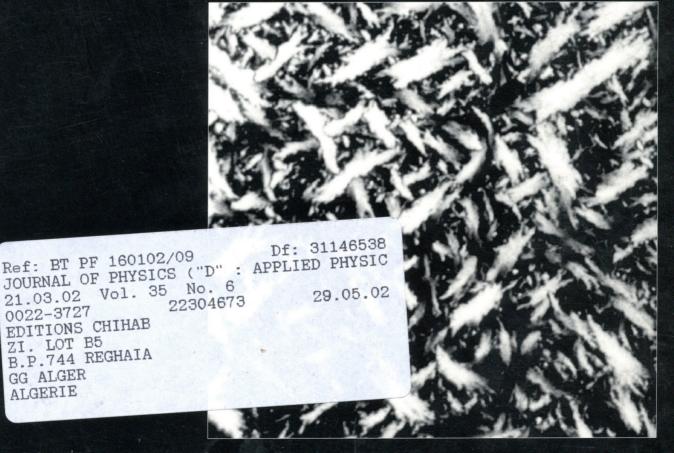
B.P.744 REGHAIA

## **Journal of Physics D**

Volume 35 Number 6 21 March 2002

Review article: Finite-size effects in fine particles: magnetic and transport properties X Batlle and A Labarta

Online: www.iop.org/journals/jphysd



Institute of Physics Publishing

## **Journal of Physics D: Applied Physics**

|     | Volume 35 Number 6 21 March 2002                                                                                                                                                                                             |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     | TOPICAL REVIEW                                                                                                                                                                                                               |
| R15 | Finite-size effects in fine particles: magnetic and transport properties X Batlle and A Labarta                                                                                                                              |
|     | PAPERS                                                                                                                                                                                                                       |
|     | APPLIED MAGNETISM, MAGNETIC MATERIALS AND SUPERCONDUCTIVITY                                                                                                                                                                  |
| 497 | Investigation of possible electric potential arising from a constant current through a superconductor coil G G Shishkin, A G Smirnov, A V Dudarev, A V Barkov, P P Zagnetov and Yu M Rybin                                   |
| 503 | Crystallization behaviour of amorphous (Fe <sub>0.99</sub> Mo <sub>0.01</sub> ) <sub>78</sub> Si <sub>9</sub> B <sub>13</sub> alloy<br>J I Akhter, M A Shaikh, M Siddique, M Ahmad, M Iqbal and Z Q Hu                       |
| 508 | Effects of magnetostatic interaction on the magnetization processes in Fe <sub>73.5</sub> Cu <sub>1</sub> Nb <sub>3</sub> Si <sub>13.5</sub> B <sub>9</sub> nanocrystalline wires Y F Li, D X Chen, M Vazquez and A Hernando |
| 512 | Crystallographic defects in CoCrPt thin film media: effect on interactions and magnetic viscosity H Laidler, L Holloway and K O'Grady                                                                                        |
|     | PHOTONICS AND SEMICONDUCTOR DEVICE PHYSICS                                                                                                                                                                                   |
| 520 | Improvement of luminescence efficiency by electrical annealing in single-layer organic light-emitting diodes based on a conjugated dendrimer  Dongge Ma, J M Lupton, R Beavington, P L Burn and I D W Samuel                 |
|     | EXPERIMENTAL, COMPUTATIONAL AND THEORETICAL PARTICLE BEAM AND PLASMA SCIENCE                                                                                                                                                 |
| 524 | Spectroscopic investigation of two equal colliding plasma plumes of boron nitride T Atwee and H-J Kunze                                                                                                                      |
| 529 | Particle concentrations and transport properties of a partially ionized Ar plasma in a two-temperature reaction kinetic approach M M Hossain, Y Tanaka and T Sakuta                                                          |
| 536 | Basic relationships in electronegative plasmas with more than one species of negative ion R N Franklin                                                                                                                       |
| 543 | NO formation in a pulsed spark discharge in $N_2/O_2/Ar$ mixture at atmospheric pressure R Ono and T Oda                                                                                                                     |
| 549 | Pinch effect in vacuum arc plasma sources under moderate discharge currents I A Krinberg and V L Paperny                                                                                                                     |
|     | APPLIED SURFACES AND INTERFACES                                                                                                                                                                                              |
| 563 | Fundamental transport properties in N-phenyl thin films S W Tkaczyk, I V Kityk and R Schiffer                                                                                                                                |

INTERDISCIPLINARY PHYSICS AND RELATED AREAS OF SCIENCE AND TECHNOLOGY

Analytical expression to impedance for solenoid coil with a coaxial cylindrical ferrite core of finite length

570

Jing Wu and Yinzhao Lei