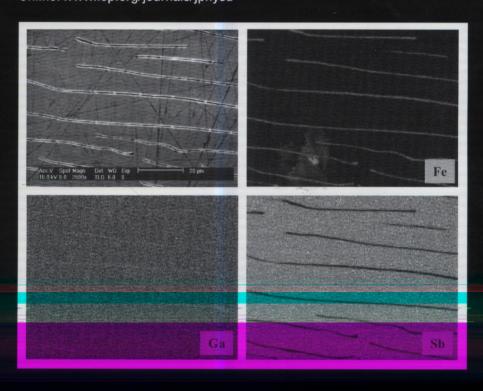
IoP

Journal of Physics D Applied Physics Physics

Volume 36 Number 21 7 November 2003 Online: www.iop.org/journals/jphysd



2692	Inception behaviour of pulsed positive corona in several gases E M van Veldhuizen and W R Rutgers
	APPLIED SURFACES AND INTERFACES
2697	Surface roughness effects on the transmission of Gaussian beams by anisotropic parallel plates F Zomer
2705	The optical properties of ZnO films grown on porous Si templates Y L Liu, Y C Liu, H Yang, W B Wang, J G Ma, J Y Zhang, Y M Lu, D Z Shen and X W Fan
2709	Deposition and structure of W-Cu multilayer coatings by magnetron sputtering C Wang, P Brault, C Zaepffel, J Thiault, A Pineau and T Sauvage
	STRUCTURE AND PROPERTIES OF MATTER
2714	Investigations on the variable large bandgap semiconductor compound HgBrI G A Stanciu, S G Stanciu, M Daviti, K M Paraskevopoulos and E K Polychroniadis
2719	Method of computerized glow curve deconvolution for analysing thermoluminescence T Sakurai and R K Gartia
2725	Alloying effects on elastic properties of TiN-based nitrides K Chen, L R Zhao, J Rodgers and J S Tse
	INTERDISCIPLINARY PHYSICS AND RELATED AREAS OF SCIENCE AND TECHNOLOGY
2730	Stresses in a thin, circular aeolotropic plate subjected to uniform lateral load J A Salem and J M Manderscheid
2738	Acoustic profilometry within polymers as performed by Brillouin microscopy R Sanctuary, Ravi Bactavatchalou, Ulrich Müller, W Possart, P Alnot and J K Krüger
2743	Ion transport across the gas-liquid interface in xenon A J Walters
2750	Peltier heat measurements at a junction between materials exhibiting Fermi gas and Fermi liquid behaviour V L Kuznetsov, L A Kuznetsova and D M Rowe

Journal of Physics D: Applied Physics

Number 21

Volume 36

7 November 2003

RAPID COMMUNICATIONS Fabrication of a carbon nanotube-based gas sensor using dielectrophoresis and its application for ammonia L109 detection by impedance spectroscopy J Suehiro, G Zhou and M Hara Stress-induced optical anisotropy in polycrystalline copper studied by reflection anisotropy spectroscopy L115 R J Cole, S Kheradmand, D D Higgins, F Madani, B F Macdonald, V Koutsos and J R Blackford **PAPERS** APPLIED MAGNETISM, MAGNETIC MATERIALS AND SUPERCONDUCTIVITY Localized magnetic modification of permalloy using Cr+ ion implantation 2601 L Folks, R E Fontana, B A Gurney, J R Childress, S Maat, J A Katine, J E E Baglin and A J Kellock PHOTONICS AND SEMICONDUCTOR DEVICE PHYSICS Electron paramagnetic resonance study of Ag⁰ atoms and Ag²⁺ ions in β-BaB₂O₄ nonlinear optical crystals 2605 W Hong, D Perlov and L E Halliburton Analysis of strain-modified confinement potentials in vertically stacked InAs/GaAs quantum dot 2612 nanostructures with varying stacking period H Shin, Y-H Yoo and W Lee Modelling the energy dependence of helium ion TL fluence response using the extended track interaction 2619 D Satinger, O Avila and Y S Horowitz Features of electron and phonon processes in GaSb-FeGa_{1.3} eutectics 2627 M I Aliyev, A A Khalilova, D H Arasly, R N Rahimov, M Tanoglu and L Ozyuzer Highly periodic, three-dimensionally arranged InGaAsN: Sb quantum dot arrays fabricated 2634 nonlithographically for optical devices N Kouklin, H Chik, J Liang, M Tzolov, J M Xu, J B Heroux and W I Wang EXPERIMENTAL, COMPUTATIONAL AND THEORETICAL PARTICLE BEAM AND PLASMA SCIENCE Measurements and modelling of axial emission profiles in abnormal glow discharges in argon: 2639 heavy-particle processes D Marić, P Hartmann, G Malović, Z Donkó and Z Lj Petrović Effect of the microstructure of electrode materials on arc cathode spot dynamics 2649 Y Wang, C Zhang, H Zhang, B Ding and K Lu Electronegative plasmas diluted by rare gases 2655 2660 The dual frequency radio-frequency sheath revisited Optical and electrical diagnostics of a non-equilibrium air plasma 2662 X P Lu, F Leipold and M Laroussi Low current mode of negative coronas: mechanism of electron emission 2667 Onset corona fields and electrical breakdown criteria

(Continued on inside back cover