

Table of Contents

Computational Fluid Dynamics (CFD) Based Simulated Study of Multi-Phase Fluid Flow M.R. Malik, T.L. Shi, Z.R. Tang and S.Y. Liu	1
Role of Silicon in PM Processed Soft Magnetic Alloy D. Sharma, K. Chandra and P.S. Misra	13
Voltage Switch of Nano-Size Zinc Oxide Ceramic Defected Barium M. El-Hofy and A.H. Salama	21
Self-Diffusion in Nano-ZnO S.S. Kanmani and K. Ramachandran	27
Localised Vibrational Mode in CuO:Sn (5 at%) Nanoparticles R.N. Mariammal and K. Ramachandran	37
A Brief Survey of the Literature on Silica Refractory Research and Development: The Case for Nanostructured Silica Obtained from Rice Husk Ash (RHA) B.I. Ugheoke, O. Mamat and B. Ariwahjoedi	53
Local Density Diffusivity (LDD-) Model for Boron Out-Diffusion of <i>In Situ</i> Boron-Doped Si_{0.75}Ge_{0.25} Epitaxial Films Post Advanced Rapid Thermal Anneals with Carbon Co-Implant F. Wirbeleit	63
GaAs Surface Composition Investigation during Al Thin Film Growth Using the CBE Method D.V. Lioubtchenko, T.A. Briantseva, Z.M. Lebedeva and T.J. Bullough	75
Slow Positron Studies in Polymers S.B. Shrivastava, A.D. Acharya and R. Sharma	85
A Model and Simulated Analysis for Reliability and Failure in MEMS Fabrication M.R. Malik, T.L. Shi, Z.R. Tang, S.Y. Liu and M. Haseeb	93
Abstracts	103