

Table of Contents

Study of Conduction Mechanism in Amorphous $\text{Se}_{85-x}\text{Te}_{15}\text{Bi}_x$ Thin Films A. Sharma and P.B. Barman	1
Structure and Optical Properties of Magnetron-Sputtered SiO_x Layers with Silicon Nanoparticles L. Khomenkova, N. Korsunska, T. Stara, Y. Goldstein, J. Jedrzejewski, E. Savir, C. Sada and Y. Emirov	7
Non-Gaussian Diffusion of Phosphorus and Arsenic in Silicon with Local Density Diffusivity Model F. Wirbeleit	21
Artificial Aging Behavior of 6063 Alloy Studied Using Vickers Hardness and Positron Annihilation Lifetime Techniques M.A. Abdel-Rahman, A. El-Deen, A.E.A. El-Nahas, Y.A. Lotfy and E.A. Badawi	31
Analysis of the Solid Solution Microstructure of (HF) Al-Zn Alloys H. Bedboudi, A. Bourbia, M. Draissia, S. Boulkhessaim and M.Y. Debili	39
Liquid-Phase Sintering of Tungsten Heavy Alloys S.F. Moustafa, S.H. Kaitbay and G.M. Abdo	55
Analysis of Stress Intensity Factor and Crack Propagation for Alloy X-750 Pressure Vessel with a Blunting Crack E. Mahdavi, M.M. Mashhadi and M. Amidpour	63
Effect of Microstructure upon the Wear Properties of 2.25Cr-1Mo Steel B.B. Jha, B.K. Mishra, T.K. Sahoo, P.S. Mukherjee and S.N. Ojha	85
Phase and Structure Formation of Metallic Materials Electrodeposited via a Liquid State Stage: New Experimental Proof O. Girin	99
Testing Natural Aging Effect on Properties of 6066 & 6063 Alloys Using Vickers Hardness and Positron Annihilation Lifetime Techniques M.A. Abdel-Rahman, A. Aldeen Ahmed and E.A. Badawi	107
Investigations of the Gyromagnetic Factors for the Ni^{3+} Center in MgO X.M. Li	113
Variable Range Hopping (VRH) Model in Manganese Oxides A. Huda	117
Theoretical Studies of the EPR Parameters for Rh^+ in NaCl Z.H. Zhang, S.Y. Wu, P. Xu and L.L. Li	125
The Effect of Droplet Diameter on the Separation of Heavy-Oil from Water Using a Hydrocyclone F.P.M. Farias, C.J.O. Buriti, W.C.P. Barbosa de Lima, S.R.F. Neto and A.G.B. de Lima	131
Spreading Exponents: Dynamics of Trisiloxane Wetting of Hydrophobic Surfaces J. Radulovic, K. Sefiane and M.E.R. Shanahan	139
Abstracts	147