

TABLE OF CONTENTS

Volume 2 Number 5

May 2011

Thermal Properties of $\text{Se}_{100-x}\text{Zn}_x$ Glassy System

M. Nasir, M. A. M. Khan, M. Husain, M. Zulfequar.....289

Ultrafast Nonlinear Optical and Optical Limiting Properties of Phthalocyanine Thin Films Studied Using Z-Scan

S. V. Rao, P. T. Anusha, T. S. Prashant, D. Swain, S. P. Tewari.....299

Electromechanical Properties of Ethylene Propylene Diene Elastomers: Effect of Ethylene Norbornene Content

P. Intanoo, A. Sirivat, R. Kunanuruksapong, W. Lerdwijitjarud.....307

Vibrations of a One-Dimensional Host-Guest System

A. C. Sparavigna.....314

Design with Ultra Strong Polyethylene Fibers

R. Marissen.....319

Novel Activated Carbon Monoliths for Methane Adsorption Obtained from Coffee Husks

L. Giraldo, J. C. Moreno-Piraján.....331

Optical and Structural Properties of ZnO Thin Films Fabricated by Sol-Gel Method

Z. R. Khan, M. S. Khan, M. Zulfequar, M. S. Khan.....340

Crosslinking as an Efficient Tool for Decreasing Moisture Sensitivity of Biobased Nanocomposite Films

J. Vartiainen, A. Harlin.....346

A TEM Study of Cobalt-Base Alloy Prototypes Fabricated by EBM

S. M. Gaytan, L. E. Murr, D. A. Ramirez, B. I. Machado, E. Martinez, D. H. Hernandez, J. L. Martinez, F. Medina, R. B. Wicker.....355

Electronic Transport Study of ZnTe and ZnSe

S. Khedim, N.-E. C. Sari, B. Benyoucef, B. Bouazza.....364

Application of Intra-Particle Combustion Model for Iron Ore Sintering Bed

P. Hou, S. Choi, W. Yang, E. Choi, H. Kang.....370

Electro-Optical Properties of Carbon Nanotubes Obtained by High Density Plasma Chemical Vapor Deposition

R. D. Mansano, A. P. Mousinho.....381

Elevated Temperatures Tensile Characteristics of Cast $\text{A356}/\text{Al}_2\text{O}_3$ Nanocomposites Fabricated Using a Combination of Rheocasting and Squeeze Casting Techniques

E.-S. Y. El-Kady, T. S. Mahmoud, M. A.-A. Sayed.....390

Thermomechanical Stress in the Evolution of Shear of Fiber-Matrix Interface Composite Material

D. R. Bourega, A. Boutaous.....399

Some Mechanical and Thermal Properties of PC/ABS Blends

R. Krache, I. Debah.....404

Structural Properties of Synthetic Na-Hectorite Exchanged with Heavy Metals

K. M. Salah.....411

Combustion and Ball Milled Synthesis of Rare Earth Nano-Sized Ceria Powder

R. Sen, S. Das, K. Das.....416

Investigation by AES, EELS and TRIM Simulation Method of InP(100) Subjected to He⁺ and H⁺ Ions Bombardment

M. Ghaffour, A. Abdellaoui, A. Ouerdane, M. Bouslama, C. Jardin.....421

Fine Scale Precipitates in Al-Mg-Zn Alloys after Various Aging Temperatures

N. Afify, A.-F. Gaber, G. Abbady.....427

Electrochemical Behavior of Nanocrystalline Fe₈₈Si₁₂ Alloy in 3.5 wt% NaCl Solution

L. C. Fu, J. Yang, Q. L. Bi, W. M. Liu.....435

The Effect of Annealing Treatments on Spherulitic Morphology and Physical Ageing on Glass Transition of Poly Lactic Acid (PLLA)

E.-H. A. Mohamed.....439

Surfactant-Free Production of Ni-Based Nanostructures

Y. B. Mollamahaleh, D. Hosseini, M. Mazaheri, S. K. Sadrnezhad.....444

The Evaluation of Polyethylene/Clay Composite from Solid State NMR

R. F. Nogueira, M. I. B. Tavares, R. A. S. San Gil, A. G. Ferreira.....453

Optimization in Autoclave Process to Produce Durable Aluminium Composite

H. Subawi.....458

Effects of Solution Atoms and Precipitates on Isochronal Annealing Behavior of Cold-Rolled Squeeze-Cast SiCw/Al Composites

W. L. Zhang, M. Y. Gu.....465

Melting and Corrosion Behavior of Al-9Zn Based Alloys with Cu and Mg Additions

El S. Gouda, E. Ahmed, N. Tawfik.....469

Sol-Gel Preparation of Nanoscale TiO₂/SiO₂ Composite for Eliminating of Con Red Azo Dye

A. Nilchi, S. Janitabar-Darzi, S. Rasouli-Garmarod.....476

The Potential of Silane Coated Calcium Carbonate on Mechanical Properties of Rigid PVC Composites for Pipe Manufacturing

A. Al Robaidi, A. Mousa, S. Massadeh, I. Al Rawabdeh, N. Anagreh.....481

Processing and Material Characteristics of a Reclaimed Ground Rubber Tire Reinforced Styrene Butadiene Rubber

Debapriya De, Debasish De.....486

Experimental and Numerical Analysis of Forming Limit Diagram (FLD) and Forming Limit Stress Diagram (FLSD)

M. Safari, S. J. Hosseinipour, H. D. Azodi.....497