

## TABLE OF CONTENTS

**Volume 1 Number 2**

**July 2011**

### **Structural Inversion and Behavioural Changes as a Function of Composition in Sr-La-Al-B-Si Based Glasses**

P. K. Ojha, S. K. Rath, T. K. Chongdar, N. M. Gokhale, A. R. Kulkarni.....21

### **Evaluation of Non Crystalline Phase in AZS Refractories by XRD Methods**

M. S. Conconi, N. M. Rendtorff, E. F. Aglietti.....28

### **Upconversion Luminescence of Er<sup>3+</sup>/Yb<sup>3+</sup> Co-doped Sb<sub>2</sub>O<sub>3</sub>-WO<sub>3</sub>-Li<sub>2</sub>O Antimonate Glasses**

D. Q. Wang, J. J. Lu, Z. Zhang, Y. F. Hu, Z. L. Shen.....34

### **The Effect of Glass Plate Thickness and Type and Thickness of the Bonding Interlayer on the Mechanical Behavior of Laminated Glass**

I. S. Jalham, O. Alsaed.....40

### **Mechanochemical Synthesis of Nano Calcium Silicate Particles at Room Temperature**

S. P. Singh, B. Karmakar.....49

### **Research on the High Strength Glass Ceramics/Mullite Ceramics Composites**

Y. J. Liu, J. F. Huang, X. F. Wang, Q. Yang, Y. Q. Wang, P. W. Rao, Q. G. Wang.....53

### **Synthesis and Characterization of La<sub>0.75</sub>Sr<sub>0.25</sub>Cr<sub>0.5</sub>Mn<sub>0.5</sub>O<sub>3-δ</sub> Nanoparticles**

### **Using a combustion Method for Solid Oxide Fuel Cells**

V. S. R. Channu, R. Holze, E. H. Walker Jr., R. R. Kalluru.....58

### **Photoacoustic Studies of Colloidal Silica Particles after MeV Ion-Induced Shape Deformation**

U. Morales, R. Castañeda-Guzmán, S. J. Pérez-Ruiz, J.-C. Cheang-Wong.....63

### **Physical Study of Thin Film and Monolithic Nano-Composites [SiO<sub>2</sub>:11P<sub>2</sub>O<sub>5</sub>:3Al<sub>2</sub>O<sub>3</sub>:(1.2)Er(1.2, 1.8 and 3)Yb] Prepared by Sol Gel Technique, Planar Waveguide and Co-operative Up-Conversion**

Y. Badr, I. K. Battisha, A. M. S. El Nahrawy, B. Elouadi, M. Kamal.....69