

## Table of Contents

Volume 4 Number 3

July 2014

### **Immersive 3D Visualization of the Collective Behavior of Particles and Crystal Dislocations Using Virtual Reality Technology**

S. R. Panigrahi, S. Jayaram, U. Jayaram, H. M. Zbib, S. Dj. Mesarovic..... 79

### **Numerical Simulation of Decarburization in a Top-Blown Basic Oxygen Furnace**

M. A. Barron, D. Y. Medina, I. Hilerio..... 94

### **Micromechanical Analysis of Thermal Expansion Coefficients**

C. Karch..... 104

### **Modeling and Analysis of Low Frequency Noise in Ion-Field-Effect Transistors Sensors**

J. Chermiti, S. Azzouzi, M. B. Ali, M. Trabelsi, A. Errachid..... 119

### **Simulation of Fatigue Life Behavior of Circular Cross-Section Bar with Straight-Fronted Crack**

H. Alihosseini, K. Dehghani, G. Faraji..... 128

### **Numerical Simulations of Nonlinear Interaction of Space Charge Waves in Microwave and Millimeter Wave Range in n-InN Films Using Negative Differential Conductivity**

A. Garcia-Barrientos, V. Grimalsky..... 136