

CONTENTS

Original Articles

1. **Nguyen Thi Khanh Van, Tran Si Trong Khanh, Vu Thi Thao, Nguyen Duc Cuong, Nguyen Phuong Hoai Nam, Nguyen Nang Dinh**, Electrochromic Properties of PANI/TiO₂ Nanocomposite Films Prepared by Electropolymerization 1
2. **Pham Hung Vuong, Nguyen Duc Trung Kien, Tran Trong An, Ta Quoc Tuan, Pham Van Huan, Nguyen Dac Thong, Vu Thi Phuong Thuy, Le Van Toan**, Synthesis of ZnO Nanoparticles/Nanofibers and Their Luminescence via Electrospinning 8
3. **Nguyen Van Nghia, Nguyen Manh Hung, Luong Duy Thanh**, A Model for Electrical Conductivity of Porous Materials under Saturated Conditions 13
4. **Ho Van Tuyen, Nguyen Ha Vi**, Energy Level Locations of Lanthanide Ions in Strontium-Aluminosilicate Phosphors 22
5. **Nguyen Quang Hoc, Vu Quoc Trung, Nguyen Duc Hien, Nguyen Minh Hoa**, Combining the Mie-Lennard-Jones and the Morse Potentials in Studying the Elastic Deformation of Interstitial Alloy AGC with FCC Structure under Pressure 31
6. **Nguyen Thi Hong, Nguyen Ba Duc, Ho Khac Hieu**, EXAFS Debye-Waller Factors of B2-FeAl Alloys 43
7. **O. N. Nenuwe, O. E Agbalagba**, High-pressure Effect of Elastic and Mechanical Properties of Hexagonal Gallium Nitride 49
8. **Vu Thanh Mai, Tran The Anh, Donny Hartanto, Luu Thi Lan, Pham Nhu Viet Ha, Tran Viet Phu**, Neutron Cross Section Generation for PWR MOX Fuel Assemblies with SCALE and Serpent 59
9. **Quang-Duy Dao**, Fabrication of Highly Efficient Perovskite Solar Cells Using Simple Single-step Solution Method 69
10. **Pham Thi Thu Ha, Vu Xuan Hoa, Trinh Dinh Kha, Nguyen Dac Dien, Luong Duy Thanh, Nguyen Quang Hung, Luong Van Luyen**, Synthesis and Characterization of Silver Nanoparticles for Antibacterial Application against *Bacillus Subtilis* and *Pseudomonas Aeruginosa* 77
11. **Bui Khanh Hang, Tran Manh Cuong, Ta Cong Son**, Weak Laws of Large Numbers for Negatively Superadditive Dependent Random Vectors in Hilbert Spaces 84
12. **Nguyen Van Chuong, Nguyen Ngoc Hieu, Nguyen Van Hieu**, Theoretical Prediction of the Structural and Electronic Properties of a Single Layer Graphene-like Two-dimensional Janus GaInSTe 93
13. **Ho Thi Anh, Nguyen Ngoc Huyen, Nguyen Thi Minh Hong, Pham Duc Thang, Tran Dang Thanh**, Changing the Magnetic Properties of Cobalt Ferrite Nanoparticles with Different Fabrication Conditions 100