

# Table of Contents

<b>Magnetic and Structural Properties of Fe-Ni and Fe-Ni-Gr Based Nanostructured Alloys Synthesized by Mechanical Alloying</b>	
A. Younes, A. Bouamer, R. Amraoui, N. Metidji, M. Guessoum and A. Abada	1
<b>Preparation and Fracture Analysis of Advanced Layered Composite with Graphene-Coated Alumina Nanofibers</b>	
E. Mudra, I. Koribanich, M. Hrubovčáková, I. Shepa, A. Kovalcikova and J. Dusza	17
<b>Synthesis of Graphene Oxide/ Poly(Vinyl Alcohol) Composite and Investigation of Graphene Oxide Effect on Diameter and Pore Size of Poly(Vinyl Alcohol) Nanofibers</b>	
Z. Abdullah, A.W. Anwar, I.U. Haq, Z. Arslan, A. Mubashar, S. Ahmad, A. Waheed, M. Ajmal and I.I.A. Baig	23
<b>Synthesis and Characterization of Ag/SiO<sub>2</sub> Nanocomposite Based on Rice Husk Silica Using Sol-Gel Method</b>	
Junaidi, W. Sulistiani, Y. Efridahniar, I. Pratiwi, I. Firdaus, P. Manurung and P. Karo Karo	31
<b>Tailoring Zeolite-Composite (ZC) Impregnated Thermally Endured Nonporous Cellulose Acetate Membranes for Potential Gas Separation and Antibacterial Performances</b>	
Z. Fatima, A. Afzal and S. Arshad	43
<b>Enhanced Thermal Diffusivity and Photocatalytic Dye Degradation Capability of Zinc Ferrite/Silver/Silver Chloride Nanocomposites</b>	
M. Pius, F. Francis and S. Joseph	59
<b>Effect of Nickel Ions Substitution on the Magnetic and Optical Properties of a Nanosized Lithium-Iron Ferrite</b>	
J. Mazurenko, L. Kaykan, A. Žywczak, V. Kotsyubynsky, V. Boychuk, L. Turovska and I. Vakaliuk	73
<b>Influence of Ligands on Physicochemical Characteristics of Magnetic Nanoparticles</b>	
J. Szucsova, A. Želenakova, L. Nagy, M. Barutiak, E. Benova, V. Želenak and V. Zavisova	91
<b>Carbon Fibers Doped by Binary Phosphides as an Electrocatalytic Layer for PEM Electrolyzers</b>	
C. Bera and M. Streckova	97
<b>Heat Transfer Investigation of Laminar Flow Mixed Convection of Nanofluids in a Uniformly Heated Horizontal Annulus: A Combination of Theoretical-Based and Experimental-Based Models of Thermal Conductivity and Viscosity</b>	
M. Benkhedda, T. Tayebi and A.J. Chamkha	103