

## Table of Contents

<b>Structural and Electrical Properties of Pure and Samarium Doped <math>\text{MgFe}_2\text{O}_4</math> Nanoparticles for Resistive RAM Applications</b> H. Mazhar and M. Anis-ur-Rehman	1
<b>GMR Biosensor Based on Spin-Valve Thin Films for Green-Synthesized Magnetite (<math>\text{Fe}_3\text{O}_4</math>) Nanoparticles Label Detection</b> N. Mabarroh, T. Alfansuri, N.I. Istiqomah, R.M. Tumbelaka and E. Suharyadi	9
<b>Preliminary Research on the Analysis of Chromium(III) Based on Digital Image Processing Method Utilizing Gold Nanoparticles as Colorimetric Sensor</b> P.S. Dyaninggar, S.J. Santosa and B. Rusdiarso	15
<b>Synthesis of Sodium Citrate-Capped Gold Nanoparticles and its Application for Creatinine Detection in Urine Sample by Colorimetric Analysis Based on the Red-Green-Blue (RGB) Digital Image</b> H. Findari, Mudasir and S.J. Santosa	23
<b>Study of Structural and Electrical Properties of CuFe-CGN for Renewable Energy Applications</b> A. Siddique and M. Anis-ur-Rehman	33
<b>2D Strain Mapping in Sub-10nm SiGe Layer with High-Resolution Transmission Electron Microscopy and Geometric Phase Analysis</b> V.V. Hoang and V.T. Trinh	41
<b>Direct Transfer Manufacturing of Flexible Silicon Carbide Nanowire-Network Prototype Device</b> M.S. Onder and K. Teker	49
<b>The Effect of Carbon/Oxygen Ratio upon Structure-Property Relationships in Polymer/Graphene Nanocomposites</b> H. Aldosari	59
<b>Synthesis and Effect of Nanocellulose Obtained from East Java Kenaf Fiber on Mechanical Properties of Polyurethane Foam Composites as Strong and Lightweight Materials</b> Y.A. Siagian, A.L. Juwono and S. Roseno	79
<b>Evaluation of Nanolime-Silica Core-Shell for Consolidation of Egyptian Limestone Samples with Application on an Archaeological Object</b> M.K. Khalaf, A. Roshdy Elsakhry, S.H. Ismail, M. Abdel-Hamied and G.G. Mohamed	91