

CONTENTS

Original Articles

1. **Vu Tuan Anh, Le Thi Thuy Giang, Do Thi Loan, Pham Van Khanh**, Using Deep Learning Neural Networks to Solve Optimization Problems in Economy 1
2. **Nguyen Van Phu, Bui Van Anh, Pham Van Thanh**, Design and Characteristics of a Wireless Non-enzyme Glucose Sensor Based on Resonant LC Passive Circuit 18
3. **Ha Chi Cong**, The Rank of Matrices Over Positive Cones of Commutative Semirings 29
4. **Hoang Van Quyet**, Location of Interface Bose-Einstein Condensate Mixtures in Finite Space Under Neumann Boundary Condition 41
5. **Ha Thanh Bac, Vo Thi Thanh Thu, Vo Doan Xuan Tien, Ho Ngoc Thien, Le Thanh Binh**, Application of Markov Chains in Stock Price Trend Forecasting 47
6. **Nguyen Tu Niem**, Theoretical Study of the Bilayer Honeycomb Spin Lattice in Transverse Field with Competing Ferromagnetic and Antiferromagnetic Interactions 64
7. **Tran Thi Viet Nga, Nguyen Van Quang, To Thanh Loan**, Preparation and Characterization of SrFe₁₂O₁₉/rGO and SrFe₁₂O₁₉/SiO₂-based Composite Materials for Enhancement of Microwave Absorption Properties 72
8. **To Thanh Loan, Tran Thi Viet Nga, Nguyen Kim Thanh**, Structural Properties of CuFe₂O₄/ZnO Nanocomposite: Insights from X-ray Diffraction and Extended X-ray Absorption Fine Structure 82
9. **Nguyen Van Hoang**, On the Cofiniteness of Certain Local Cohomology Modules for a Pair of Ideals 91
10. **Bui Thi Ha Giang**, The Influence of the Anomalous Coupling on the $\mu^- \mu^+ \rightarrow Z\phi \rightarrow l^+ l^- \gamma\gamma$ in the Randall - Sundrum Model 99
11. **Dang Thi Minh Hue**, Quantum Phase Transition in Binary Ultra-cold Bose Gases 107