

Table of Contents

Approximate Analytical Solution of a Power-Law Pseudoplastic Fluid in a Boundary Layer over a Porous Plate: A New Application of Multi-Stage Parker-Sochacki Method S.O. Akindeinde, O.A. Adewumi and R.S. Lebelo	1
Heat Transport of Casson Nanofluid Flow over a Melting Riga Plate Embedded in a Porous Medium A.T. Adeosun, J.A. Gbadeyan and R.S. Lebelo	15
Thermodynamic Analysis of Magnetohydrodynamic Third Grade Fluid Flow with Variable Properties K.F. Thosago, L. Rundora and S.O. Adesanya	28
CTCS Schemes for Second Order Wave Equation: Numerical Results and Spectral Analysis A.R. Appadu and G.N. de Waal	47
Malliavin Calculus and the Optimal Weighting Function in a Pure Jump Lévy Setting F.J. Mhlanga	66
Parameter Identification of Lorenz System with Incomplete Information: Case of One Unknown Function M.Y. Shatalov, S.A. Surulere, L.M. Phadime and P. Kama	82
Parameter Identification of Lorenz System with Incomplete Information: Case of One Known and Two Unknown Functions M.Y. Shatalov, S.A. Surulere, L.M. Phadime and T.T. Mthombeni	103
A Conceptual Model for Mitigating Security Vulnerabilities in IoT-Based Smart Grid Electric Energy Distribution Systems H.J. Onawola, O.B. Longe, G. Aliyu and B. Badamasi	122
Nanocrystalline Composite Smart Coating Deposition for Corrosion Self-Healing of Mild Steel O. Fayomi, S.O. Oyedepo, D.E. Ighravwe and D.O. Aikhuele	132
Spark Plasma Synthesis and Tribological Behaviour of Ti-Ni-TiCN Nanocomposite A.L. Rominiyi, M.B. Shongwe, S.O. Jeje and P.A. Olubambi	141
Properties Improvement of Spark Plasma Sintered Ti-7Al-1Mo Ternary Alloy by TiN Nanoparticles Addition S.O. Jeje, M.B. Shongwe, A.L. Rominiyi and P.A. Olubambi	150
Experimental Evaluation of Oil Extraction from South African <i>Melia azedarach</i> Seeds as Feedstock for Biodiesel Synthesis O. Ogunkunle, N.A. Ahmed and T.S. Mputsoe	159
Adsorptive Removal of Ibuprofen from Waste Stream Using Sawdust-Based Adsorbents S.A. Adesokan, A.R.A. Giwa and I.A. Bello	172
An Electrohydraulic Direct Current Discharge for Inactivation of <i>Escherichia coli</i> in High-Bacterial Density Wastewaters E. Gwanzura, O.O. Awolusi, S. Kumari, D. Ramjugernath and S.A. Iwarere	190
Recycled Plastics as an Alternative Carbon Nanotubes Source by Chemical Vapor Deposition S. Dlova, O.O. Ayeleru, F.V. Adams, M.A. Mamo and P.A. Olubambi	207