

Journal of
Interdisciplinary
Mathematics

ISSN: 0972-0502 (Print) ISSN: 2169-012X (Online)

Indexed in:

SCOPUS & ESCI-WoS

VOLUME 27 NUMBER 5 AUGUST 2024

## Special Issue on

# Computational Mathematics and Modeling

Guest Editor

M. Syed Ali

18/11/24 SB



### Journal of Interdisciplinary Mathematics

Volume 27, Number 5, August 2024

Special Issue on

#### Computational Mathematics and Modeling

#### **CONTENTS**

V. Senthilkumar and K. Venkatesan Odd vertex even edge root square mean labelling graphs	1001–1008
K. Shakilaja and K. Bhuvaneswari Nano (1, 2, 3) generalized closed sets in nano tritopological space	1009–1015
P. R. Sakthivel and L. Sivakami Analytical solution of unsteady MHD immiscible fluid with thermal radiation and chemical reaction in a porous medium under heat source	1017–1027
R. Sivasamy and M. M. Jabarulla Products on interval valued pythagorean fuzzy soft graphs	1029–1037
P. Sumathi and S. Tamilselvi Modular chromatic number on inflated graphs of some tree graphs	1039–1052
S. Kesavarani and S. L. Priya Soret-driven influence on unsteady magnetohydrodynamic mixed oscillatory flow in a two-phase channel: Exploring the thermal effects	1053–1065
S. Loganathan, M. Thamizhsudar and R. Muthucumaraswamy Detailed approaches to heat and mass transfer by exponentially accelerating a fluid over an inclined plate subjected to temperature variation and uniform mass diffusion	1067–1078
S. Saika, M. J. Borah and D. J. Mahanta Arithmetic mean of interval valued intuitionistic fuzzy soft sets and its application in diagnosing infectious diseases	1079–1090
N. Azhagendran and A. M. Ismayıl Exploring the properties and applications of complex fuzzy cut vertices and bridges	1091–1098

vi CONTENTS

I. Mohan, M. Venkataraman and K. Thilagavathi Investigating utilizations of harmonic univalent functions employing the Prabhakar fractional operator within specific categories	1099–1108
V. Prabavathy and B. Preethika Twin proper neutrosophic fuzzy graphs	1109–1116
S. Shukla On almost η-Ricci soliton of Sasakian manifolds	1117–1121
N. Kalaivani and E. M. Visalakshidevi Characterizations of neutrosophic $(\alpha_{\gamma}, \beta_{ne})$ and neutrosophic $\alpha_{(\gamma,\beta)^-}$ contra continuous functions in feutrosophic topological spaces	1123–1132
V. D. Murugan, R. G. D. Gnanam and R. Seethalakshmi An investigation on a few properties of the subgroup lattice of $2\times 2$ matrices over $z_{\rm 11}$	1133–1139
C. Senthilnathan and S. Karunanithi Enhancing telecare medicine security through non-commutative algebra-based authentication	1141–1149
S. Pavithra and G. Jayalalitha Growth of bacteria is collated with Brownian motion	1151–1161
M. A. Basha and M. M. Jabarulla Pythagorean fuzzy shortest hyper path in a network	1163–1173
S. Shukla and A. Ojha Solitons on Kenmotsu manifolds	1175–1183
S. Pavithra and A. Manimaran Matrix representation of z-fuzzy soft β-covering based multigranulation fuzzy rough sets and its application	1185–1191
M. Shobanapriya and M. Ramachandran An exploration of the nth order fuzzy differential equations through numerical analysis, employing He's variational iteration method	1193–1198
K. L. M. Kumaran and A. Rajalakshmi Anti-neutrosophic fuzzy ideals of near-rings	1199–1211
A. Devi and L. Sivakami Effect of chemical reaction with heat and mass transfer over an inclined plate	1213–1222
M. Shobanapriya and M. Ramachandran Computing the solution of hybrid fuzzy differential equations with the application of He's variational iteration method	1223–1230