

1. Record Nr.	UNINA9910735777103321
Titolo	Applied Nonlinear Analysis and Soft Computing : Proceedings of ANASC 2020 // edited by Hemen Dutta, Nazibuddin Ahmed, Ravi P. Agarwal
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2023
ISBN	981-19-8054-3
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (433 pages)
Collana	Advances in Intelligent Systems and Computing, , 2194-5365 ; ; 1437
Disciplina	515.7248
Soggetti	Computational intelligence Artificial intelligence Evolution (Biology) Mathematical optimization Computational Intelligence Artificial Intelligence Evolutionary Theory Optimization
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Effect of light intensity on resonance patterns in CDIMA reaction -- Operations on uncertain numbers and its application in multi-criteria group decision making problems -- An improved picture fuzzy similarity measure with its application in pattern recognition and COVID-19 -- A fuzzy inventory model for deteriorating items with time dependent demand under permissible delay in payment -- A delayed predator-prey fishery model with reserve area in presence of toxicity -- Location number of edges and vertices of two-fold hepta-pentagonal circular ladder -- A full probabilistic solution for a hybrid randomized linear-quadratic logistic-type model -- Modelling spotify users by a hybrid generalized logistic model with uncertainty: A random computational approach -- Vacuum solutions in Bianchi Type I universe in $f(R)$ theory of gravity -- Shock, solitary and periodic wave solutions of the ion acoustic waves for nonextensive dusty plasma in the framework of Korteweg-de Vries-Burgers equation with forcing and damping terms -- A probabilistic fitting technique to calibrate a

logistic model to study the growth of breast tumours -- Solving random differential equations by R.V.T. technique and Lagrange-Bürmann theorem via densities: Implementation and simulation -- Soret and dufour effects on MHD flow past a uniformly moving plate with uniform heat flux -- Bianchi type III cosmological model with quadratic equation of state in  $f(R, T)$  theory of gravity -- Thermal diffusion effect in MHD natural convective dissipative flow past a porous plate embedded in a porous medium -- Bounds for VL status index and coindex of graphs and validate to few specific graphs -- A note on degree based energies of m-splitting and m-shadow graphs -- Free group presentation of triangular planar shapes and their Betti numbers: computer engineering perspective.

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#### Sommario/riassunto

The volume contains original research papers as the Proceedings of the International Conference on Applied Nonlinear Analysis and Soft Computing (ANASC 2020), held at Gauhati University, Guwahati, India, on 22-23 December, 2020. It focuses on current research topics in applied analysis including nonlinearity, soft computing and related areas. It primarily includes topics related to pattern recognition, reaction-diffusion problem, decision making problems, inventory model, predator-prey model, logistic models, wave problems, problems in Magnetohydrodynamics, cosmological model, harmonic functions, graphs, shapes, etc. Researchers, educators, scientist and professionals interested in recent developments in applied analysis including nonlinearity aspects and soft computing should be benefited from this volume.

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