

1. Record Nr.	UNISA996518464103316
Titolo	Mathematics and computing : ICMC 2022, Vellore, India, January 6-8 / / edited by B. Rushi Kumar [and five others]
Pubbl/distr/stampa	Gateway East, Singapore : , : Springer, , [2023] ©2023
ISBN	981-19-9307-6
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (701 pages)
Collana	Springer Proceedings in Mathematics & Statistics, , 2194-1017 ; ; 415
Disciplina	515.45
Soggetti	Integral equations Numerical analysis Informàtica Àlgebra lineal Anàlisi matemàtica Models matemàtics Congressos Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	PART 1: APPLIED ALGEBRA AND ANALYSIS: S. Krishnan and K. Shunmugaiah, On the Genus of the Annihilator-Ideal Graph of Commutative Ring -- Niranjan P.K., The Radio $k$ -Chromatic Number for the Corona of Arbitrary Graph and $K_1$ -- Latha Devi Puli and Manjula K., Some Parameters of Restricted Super Line Graphs -- G. Ganesan, Edge Constrained Eulerian Extensions -- C. Phanjoubam and S. Mawiong, Bounds of Some Energy-Like Invariants of Neighbourhood Corona of Graphs -- M. Kumar, Neelesh S. Upadhye, and A.K.B. Chand, Linear Recurrent Fractal Interpolation Function for Data Set with Gaussian Noise -- V. Vijay and A.K.B. Chand, $C^1$ -Rational Quadratic Trigonometric Spline Fractal Interpolation Functions -- P. Rajan, A. K. Bedabrata Chand and María A. Navascués, Cyclic Multivalued Iterated Function Systems -- E. Savas, On Almost Convergence and Statistical Convergence of Weight $g$ -- Tamilarasi W. and Balamurugan B.J., Non-Neighbor Topological Indices on Covid-19 Drugs with Qspr Analysis --

Tejuswini M. and Shilpa N., Some Results on Differential Polynomials of Meromorphic Functions Sharing Certain Values -- G.

Murugusundaramoorthy, Thomas Rosy, and Asha Thomas, A Subclass of Pseudo-Type Meromorphic Bi-Univalent Functions of Complex Order Associated with Linear Operator -- Malathi V. and Vijaya K., Bi-Starlike Function of Complex Order based on Double Zeta Functions Associated with Crescent Shaped Region -- G. Bisht and S. Kumar, Fuzzy Rule based Expert System for Multi Assets Portfolio Optimization -- B.

Ganesan and M. Annamala, Stability Analysis of Additive Time Varying T-S Fuzzy System using Augmented Lyapunov Functional -- PART 2: FRACTIONAL CALCULUS AND INTEGRAL EQUATIONS: R. Teppawar, R. Ingle and R. Muneshwar, Solution of Fractional Differential Equations by using Conformable Fractional Differential Transform Method with Adomain Polynomials -- R. Muneshwar, K. Bondar, Y. Shirole, and V. Mathpati, Generalized results on Existence and Uniqueness with Wronskian and Abel Formula for -Fractional Differential Equations -- D. Karunarathna and M. Dewasurendra, Method of Directly Defining the Inverse Mapping for Nonlinear Ordinary and Partial Fractional Order Differential Equations -- M. Latha Maheswari and R. Nandhini, Existence Results for Nonlocal Impulsive Fractional Neutral Functional Integro-Differential Equations with Bounded Delay -- G Tamil Preethi, N. B. Gatti, and N. Magesh, An Application of Conformable Fractional Differential Transform Method for Smoking Epidemic Model -- K. Sarkar and B. Mondal, Analysis of a Fractional Order Predator-Prey Model with Nonlinear Harvesting -- Rahul and N. K. Mahato, Solvability of Infinite System of Volterra Integral Equations in the Tempered Spaces -- S.V. Babar and S.G. Latpate, On Generalizations of Integral Inequalities and Its Applications -- PART 3: MATHEMATICAL MODELLING AND FLUID DYNAMICS: B. Belay and A. Abebaw, Optimizing Multi-Objective Chance Constraint Quadratic Fractional Programming Problem -- S. Khatri and A. Prasad, Higher-Order Variational Symmetric Duality Over Cone Constraint -- S. Pal and D. Chutia, On Generalized Energy Inequality of the Damped Navier–Stokes Equations with Navier–Slip Boundary Conditions -- S. Sangapatnam, S. Ketineni, B. Anki R. Polu, and R. ul Haq Satti, The Diathermic Oils over a Thin Liquid Film with Mos2 Nano Particles: A Model with Analysis of Shape Factor Effects -- B. Sarkar and Soumen De, Dissipation of Wave Energy by Thin Multiple Partially Immersed Vertical Porous Walls in Water of Uniform Finite Depth -- A. Adhe and A. Kirtiwant Ghadle, Thermal Stress Analysis of Inhomogeneous Infinite Solid to 2D Elasticity of Thermoelastic Problems -- M. Udupa and S. Saha, Study of Non-Newtonian Models for 1D Blood Flow through a Stenosed Carotid Artery -- M. Nagavalli, T. Ling Raju, and P. K. Kameswaran, Two-Layered Fluid Flow of Ionized Gases in a Channel between Two Parallel Porous Plates under Applied Magnetic Field with Hall Effect -- S. Rao Gunakala, V. Job, and J. Veronique, Influence of Heat Transfer, Chemical Reaction and Variable Fluid Properties on Oscillatory MHD Couette Flow through a Partially-Porous Channel -- I. Ramarao, P. N Basavaraju, and Jagadeesha S., Effect of Heat Transfer on Peristaltic Transport of Prandtl Fluid in an Inclined Porous Channel -- A. Kumar Das and S. C. Rana, Comparative Analysis of Flow in S-Diffusers using Standard K-, Realizable K- and Renormalized Group K- Models -- N. Lakhmara and H. S. Mahato, A Multiscale Model of Stokes–Cahn–Hilliard Equations in a Porous Medium: Modeling Analysis and Homogenization -- A. Samanta, Water Wave Scattering by a Wide Rectangular Impediment with a Vent Placed under a Finite Depth Water Body with Ice Covered Surface -- P. Kumar and Dipesh, Sensitivity and Directional Analysis of Two Mutually Competing Plant Population under Allelopathy using DDE

-- N. Ghosh and H. S. Mahato, Pore Scale Analysis and Homogenization of a Diffusion–Reaction–Dissolution–Precipitation Model -- R. Saha, C. Benitez, K. Cimbalista, J. Pek, and Padmanabhan Seshaiye, Mathematical Modeling and Computing to Study the Influence of Quarantine Levels and Common Mitigation Strategies on the Spread of Covid-19 on a Higher Education Campus -- PART 4: NUMERICAL ANALYSIS: S. Patel, L. Panigrahi, and G. Nelakanti, Numerical Solution of the Fredholm Integral Equations of the First Kind by using Multi-Projection Methods -- A. Kumar and S. Kumari, Local Convergence of a Family of Kurchatov Like Methods for Nonlinear Equations -- S. Tomar and K. Vajravelu, An Effective Scheme for Solving Second-Order Two-Point Boundary Value Problems -- M. M. Ayub Hossain and B. M. Ikramul Haque, An Analytic Solution for the Helmholtz–Duffing Oscillator by Modified Mickens’ Extended Iteration Procedure -- K. Takale and V. Sangvikar, C. Nicolson, Finite Difference Scheme for Time–Space Fractional Diffusion Equation -- N. C. Bhagat and P. K. Parida, Gauss-Newton–Kurchatov Method for the Solution of Nonlinear Least Square Problem using Omega Condition -- P.K. Parida and S. Nisha, An Exponential Bisection Newton-Like Method of Third-Order for Enclosing Simple Roots of Nonlinear Equations -- PART 5: COMPUTER SCIENCE AND APPLICATION: S. Karanwal, Color Multiscale Block-ZigZag LBP: An Efficient and Discriminant Face Descriptor -- A. Dhiman, Effect of Noise in the Quantum Network Implementation of Cop and Robber Game -- P. Singh, N. Bhandari, N. Bisht, and S. Bisht, Design of Energy Efficient IoMT Electrocardiogram Machine on 28 nm FPGA -- Study of Decoherence in Quantum Cournot Duopoly Game using Modified EWL Scheme.

---

#### Sommario/riassunto

This book comprises select peer-reviewed articles submitted for the proceedings of the International Conference on Mathematics and Computing (ICMC 2022), held by the School of Advanced Sciences, Vellore Institute of Technology, Vellore, India, in association with Ramanujan Mathematical Society, India, Cryptology Research Society of India and Society for Electronic Transactions and Security, India, from 6–8 January 2022. With an aim to identify the existing challenges in the areas of mathematics and computing, the book emphasizes the importance of establishing new methods and algorithms to address these challenges. The book includes topics on diverse applications of cryptology, network security, cyber security, block chain, IoT, mobile network, data analytics, applied algebra, mathematical analysis, mathematical modelling, fluid dynamics, fractional calculus, multi-optimization, integral equations, dynamical systems, numerical analysis and scientific computing. Divided into five major parts—applied algebra and analysis, fractional calculus and integral equations, mathematical modelling and fluid dynamics, numerical analysis, and computer science and applications—the book is a useful resource for students, researchers and faculty as well as practitioners.

---