

1. Record Nr.	UNINA9910733714203321
Titolo	Numerical Methods and Applications : 10th International Conference, NMA 2022, Borovets, Bulgaria, August 22–26, 2022, Proceedings // edited by Ivan Georgiev, Maria Datcheva, Krassimir Georgiev, Geno Nikolov
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2023
ISBN	9783031324123 9783031324116
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (363 pages)
Collana	Lecture Notes in Computer Science, , 1611-3349 ; ; 13858
Disciplina	519.4
Soggetti	Numerical analysis Numerical Analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	SUSHI for a Bingham Flow -- Two-Phase Algorithm For Solving Vehicle Routing Problem with Time Windows -- Topological dynamic consistency of numerical methods for dynamical models in biosciences? -- Parameter Estimation Inspired by Temperature Measurements for a Chemotactic Model of Honeybee Thermoregulation -- On the Consistency and Convergence of Repeated Richardson Extrapolation -- Convergence Analysis of a Finite Volume Scheme for a Distributed Order Diffusion Equation -- SUSHI for a Non-Linear Time Fractional Diffusion Equation with a Time Independent Delay -- On the Numerical Simulation of Exponential Decay and Outbreak Data Sets Involving Uncertainties -- Rational approximation preconditioners for multiphysics problems -- Rational approximation preconditioners for multiphysics problems -- Analysis of Effective Properties of Poroelastic Composites with Surface Effects Depending on Boundary Conditions in Homogenization Problems -- Ant Algorithm for GPS Surveying Problem with Fuzzy Pheromone Updating -- Covering a set of points with a minimum number of equal disks via simulated annealing -- Mathematical modelling of nonlinear heat conduction with relaxing boundary conditions -- Random Sequences in Vehicle Routing Problem -- A database of high precision trivial choreographies for the planar

three-body problem -- Evaluation of the Effective Material Properties of Media with Voids Based on Numerical Homogenization and Microstructure Data -- Variable Neighborhood Search Approach to Community Detection Problem -- Simulation Investigations of Pyramidal Cells Layer Effect on Conscious Visual Perception -- On Decision Making Under Uncertainty -- An Inequality for Polynomials on the Standard Simplex -- A Theoretical Analysis on the Bound Violation Probability in Differential Evolution Algorithm -- On the Extreme Zeros of Jacobi Polynomials -- Sensitivity Analysis of an Air Pollution Model Using Innovative Monte Carlo Methods in Calculating Multidimensional Integrals -- Demanded scale for modern numerical optimisation -- RMSD Calculations For Comparing Protein Three-Dimensional Structures -- On the Application of a Hierarchically Semi-Separable Compression for Space-Fractional Parabolic Problems with Varying Time Steps -- Optimized Stochastic Approaches Based on Sobol Quasirandom Sequences for Fredholm Integral Equations of the Second Kind -- Intuitionistic Fuzzy Knapsack Problem through the Index Matrices Prism -- Simulation of the Mechanical Wave Propagation in a Viscoelastic Media with and without Stiff Inclusions. .

Sommario/riassunto

This book constitutes the thoroughly refereed post-conference proceedings of the 10th International Conference on Numerical Methods and Applications, NMA 2022, held in Borovets, Bulgaria, in August 2022. The 30 revised regular papers presented were carefully reviewed and selected from 38 submissions for inclusion in this book. The papers are organized in the following topical sections: numerical search and optimization; problem-driven numerical method: motivation and application, numerical methods for fractional diffusion problems; orthogonal polynomials and numerical quadratures; and Monte Carlo and Quasi-Monte Carlo methods.
