

1. Record Nr.	UNINA9910299880403321
Titolo	Advanced Computing in Industrial Mathematics : 11th Annual Meeting of the Bulgarian Section of SIAM December 20-22, 2016, Sofia, Bulgaria. Revised Selected Papers // edited by Krassimir Georgiev, Michail Todorov, Ivan Georgiev
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	3-319-65530-2
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (VIII, 227 p. 61 illus., 42 illus. in color.)
Collana	Studies in Computational Intelligence, , 1860-949X ; ; 728
Disciplina	510
Soggetti	Computational intelligence Artificial intelligence Mathematical models Chemistry, Physical and theoretical Computational Intelligence Artificial Intelligence Mathematical Modeling and Industrial Mathematics Theoretical and Computational Chemistry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Local Perturbation Analysis Of The Stochastic Matrix Riccati Equation With Applications In Finance -- An Embedded Compact Scheme For Biharmonic Problems In Irregular Domains -- Ant Colony Optimization Algorithm For 1D Cutting Stock Problem -- 2D Optimal Cutting Problem -- Error Estimate In The Iterative Numerical Method For Two-Dimensional Nonlinear Hammerstein-Fredholm Fuzzy Functional Integral Equations -- Noise Removal And Feature Extraction Of 2D CT Radiographic Images -- Representation Of Civilians And Police Officers By Generalized Nets For Describing Software Agents In The Case Of Protest -- Comparison Of NDT Techniques For Elastic Modulus Determination Of Laminated Composites -- Integer Codes For Flash Memories -- On The Strong Asymptotics Of Rows Of The Pade Table -- Total Phosphorus Removal In Horizontal Subsurface Flow Constructed

Wetlands: A Computational Investigation For The Optimal Adsorption Model -- Some Results Involving Euler-Type Integrals And Dilogarithm Values -- Nonlinear Evolution Equation For Propagation Of Waves In An Artery With An Aneurysm: An Exact Solution Obtained By The Modified Method Of Simplest Equation -- Modelling Of Light Mg And Al Based Alloys As "In Situ" Composites -- Asymptotic Study Of The Nonlinear Velocity Problem For The Oscillatory Non-Newtonian Flow In A Straight Channel -- Competition For Resources And Space Contributes To The Emergence Of Drug Resistance In Cancer -- Efficient Error Based Metrics For Fuzzy-Neural Network Performance Evaluation -- Box Model Of Migration In Channels Of Migration Networks -- Modified Coordinates In Dynamics Simulation Of Multibody Systems With Elastic Bodies.

Sommario/riassunto

This book presents recent research on Advanced Computing in Industrial Mathematics, which is one of the most prominent interdisciplinary areas, bringing together mathematics, computer science, scientific computations, engineering, physics, chemistry, medicine, etc. Further, the book presents the major tools used in Industrial Mathematics, which are based on mathematical models, and the corresponding computer codes, which are used to perform virtual experiments to obtain new data or to better understand previous experimental findings. The book gathers the peer-reviewed papers presented at the 11th Annual Meeting of the Bulgarian Section of SIAM (BGSIAM), from December 20 to 22, 2016 in Sofia, Bulgaria.
