1. Record Nr. UNINA9910984589403321

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Titolo	Computational Problems in Science and Engineering II / / edited by Nikos E. Mastorakis, Imre J. Rudas, Yuriy S. Shmaliy
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2025
ISBN	9783031784163 3031784162
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (248 pages)
Altri autori (Persone)	RudasI. J ShmaliyYuriy S
Disciplina	621.3815
Soggetti	Electronic circuits Telecommunication Electric power production Electronic Circuits and Systems Communications Engineering, Networks Electrical Power Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1 Investigation of Low-Frequency Acoustic NDE to Detect Delaminations in Multilayer Polymer-Composite Structures -- Chapter 2 2-Normed Groups: Unraveling Computational Properties of 2-Norms -- Chapter 3 Bile Acid Loss Syndrome Screening: a Protocol using Pooled Samples -- Chapter 4 A Novel Enhancement for the Best Master Clock Algorithm Associated with the Precision Time Protocol for the fractional Gaussian noise case -- Chapter 5 Design a Solar Photovoltaic Tracking System for a Sustainable Approach to Electricity Production -- Chapter 6 Toward Geometric Interpretation of Generalized Frequency -- Chapter 7 Cluster Metric Sensitivity to Irrelevant Features -- Chapter 8 Orthogonal Geometry on Generalized Frequencies -- Chapter 9 A Hybrid Probabilistic-Fuzzy Programming for Integrated Production Planning and Raw Material Procurement in Post-pandemic Time -- Chapter 10 Curve Identification and Digitization for the Reconstruction of Ship Hulls from 2D Drawings -- Chapter 11 Multiple Subset Problem as an encryption scheme for communication -- Chapter 12 State

feedback controller of a self-balancing bicycle.

Sommario/riassunto

This book provides readers with modern computational techniques for solving variety of problems from electrical, mechanical, civil and chemical engineering. Mathematical methods are presented in a unified manner, so they can be applied consistently to problems in applied electromagnetics, strength of materials, fluid mechanics, heat and mass transfer, environmental engineering, biomedical engineering, signal processing, automatic control and more. Features contributions on significant aspects of current numerical methods and computational mathematics; Presents actual results and innovative methods that provide numerical solutions, while minimizing computing times; Includes new methods and modern variations of known techniques that can solve difficult scientific problems efficiently.