1. Record Nr. UNINA9910637726803321

Titolo	Design and Applications of Nature Inspired Optimization : Contribution of Women Leaders in the Field / / edited by Dipti Singh, Vanita Garg, Kusum Deep
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2022
ISBN	3-031-17929-3
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (x, 204 pages) : illustrations
Collana	Women in Engineering and Science, , 2509-6435
Disciplina	006.3 006.38
Soggetti	Computational intelligence Mathematical optimization Algorithms Computational Intelligence Optimization
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical reference and index.
Nota di contenuto	AN OVERVIEW OF SWARM INTELLIGENCE BASED ALGORITHMS -- Particle Swarm Optimization and its Applications in the Manufacturing Industry -- Role of Machine Learning in Bioprocess Engineering: Current Perspectives and Future Directions -- Advanced Selection Operation for Differential Evolution Algorithm -- Profit Optimization of Two-Unit Briquetting System using grey wolf Optimization algorithm -- Solving Portfolio optimization using Sine-cosine Algorithm embedded mutation operations -- Detecting Group Shilling Profiles in Recommender Systems: A Hybrid Clustering and Grey Wolf Optimizer Technique -- SINGLE IMAGE REFLECTION REMOVAL USING DEEP LEARNING -- Social media analysis: A tool for popularity prediction using machine learning classifiers.
Sommario/riassunto	This book gives a detailed information of various real-life applications from various fields using nature inspired optimization techniques. These techniques are proven to be efficient and robust in many difficult problems in literature. The authors provide detailed information about

real-life problems and how various nature inspired optimizations are applied to solve these problems. The authors discuss techniques such as Biogeography Based Optimization, Glow Swarm Optimization, Elephant herd Optimization Algorithm, Cuckoo Search Algorithm, Ant Colony Optimization, and Grey Wolf Optimization etc. These algorithms are applied to a wide range of problems from the field of engineering, finance, medicinal etc. As an important part of the Women in Science and Engineering book series, the work highlights the contribution of women leaders in nature inspired optimization, inspiring women and men, girls and boys to enter and apply themselves to the field. Provides a detailed overviewof nature inspired optimization techniques from prominent women in the field; Presents well-defined variables and objective functions and their constraints of various real-life problems in nature inspired optimization; Includes methodology and criteria for presentation of the solutions obtained.