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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Algorithm Design and Engineering -- Visual Exploration of the Effect of Constraint Handling in Multiobjective Optimization -- A Two-stage Algorithm for Integer Multiobjective Simulation Optimization -- RegEMO: Sacrificing Pareto-Optimality for Regularity in Multi-objective Problem-Solving -- Cooperative coevolutionary NSGA-II with Linkage Measurement Minimization for Large-scale Multi-objective Optimization -- Data-Driven Evolutionary Multi-Objective Optimization

Based on Multiple-Gradient Descent for Disconnected Pareto Fronts -- Eliminating Non-dominated Sorting from NSGA-III -- Scalability of Multi-Objective Evolutionary Algorithms for Solving Real-World Complex Optimization Problems -- Machine Learning and Multi-criterion Optimization -- Multi-Objective Learning using HV Maximization -- Sparse Adversarial Attack via Bi-Objective Optimization -- Investigating Innovized Progress Operators with Different Machine Learning Methods -- End-to-End Pareto Set Prediction with Graph Neural Networks for Multi-objective Facility Location -- Online Learning Hyper-Heuristics in Multi-Objective Evolutionary Algorithms -- Surrogate-assisted Multi-objective Optimization via Genetic Programming based Symbolic Regression -- Learning to Predict Pareto-optimal Solutions From Pseudo-weights -- A Relation Surrogate Model for Expensive Multiobjective Continuous and Combinatorial Optimization -- Pareto Front Upconvert by Iterative Estimation Modeling and Solution Sampling -- Pareto Front Upconvert by Iterative Estimation Modeling and Solution Sampling -- Approximation of a Pareto Set Segment Using a Linear Model with Sharing Variables -- Feature-based Benchmarking of Distance-based Multi/Many-objective Optimisation Problems: A Machine Learning Perspective -- Benchmarking and Performance Assessment -- Partially Degenerate Multi-Objective Test Problems -- Peak-A-Boo! GeneratingMulti-Objective Multiple Peaks Benchmark Problems with Precise Pareto Sets -- MACO: A Real-world inspired Benchmark for Multi-objective Evolutionary Algorithms -- A scalable test suite for bi-objective multidisciplinary optimisation -- Performance Evaluation of Multi-Objective Evolutionary Algorithms using Artificial and Real-World Problems -- A Novel Performance Indicator based on the Linear Assignment Problem -- A Test Suite for Multi-objective Multi-fidelity Optimization -- Indicator Design and Complexity Analysis -- Diversity enhancement via magnitude -- Two-Stage Greedy Approximated Hypervolume Subset Selection for Large-Scale Problems -- Two-Stage Greedy Approximated Hypervolume Subset Selection for Large-Scale Problems -- On the Computational Complexity of Efficient Non-Dominated Sort using Binary Search -- Applications in Real World Domains -- Evolutionary Algorithms with Machine Learning Models for Multiobjective Optimization in Epidemics Control -- Joint Price Optimization across a Portfolio of Fashion E-commerce Products -- Improving MOEA/D with Knowledge Discovery. Application to a Bi-Objective Routing Problem -- The Prism-Net Search Space Representation for Multi-Objective Building Spatial Design -- Selection Strategies for a Balanced Multi- or Many-Objective Molecular Optimization and Genetic Diversity: a Comparative Study -- A Multi-objective Evolutionary Framework for Identifying Dengue Stage-Specific Differentially Co-expressed and Functionally Enriched Gene Modules -- A Multi-objective Evolutionary Framework for Identifying Dengue Stage-Specific Differentially Co-expressed and Functionally Enriched Gene Modules. -Multiobjective Optimization of Evolutionary Neural Networks for Animal Trade Movements Prediction -- Transfer of Multi-Objectively Tuned CMA-ES Parameters to a Vehicle Dynamics Problem -- Multi-Criteria Decision Making and Interactive Algorithms -- Preference-Based Nonlinear Normalization for Multiobjective Optimization -- Incorporating preference information interactively in NSGA-III by the adaptation of reference vectors -- A Systematic Way of Structuring Real-World Multiobjective Optimization Problems -- IK-EMOViz: An Interactive Knowledge-based Evolutionary Multi-objective Optimization Framework -- An Interactive Decision Tree-Based Evolutionary Multi-Objective Algorithm.

Sommario/riassunto

This book constitutes the refereed proceedings of the 12th International Conference on Evolutionary Multi-Criterion Optimization, EMO 2022 held in Leiden, The Netherlands, during March 20-24, 2023. The 44 regular papers presented in this book were carefully reviewed and selected from 65 submissions. The papers are divided into the following topical sections: Algorithm Design and Engineering; Machine Learning and Multi-criterion Optimization; Benchmarking and Performance Assessment; Indicator Design and Complexity Analysis; Applications in Real World Domains; and Multi-Criteria Decision Making and Interactive Algorithms.