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Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 12692
Disciplina	005.432
Soggetti	Computer science - Mathematics Computer systems Computer science Artificial intelligence Computer programming Software engineering Mathematics of Computing Computer System Implementation Theory of Computation Artificial Intelligence Programming Techniques Software Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	A Novel Ant Colony Optimization Strategy for the Quantum Circuit Compilation Problem -- Hybridization of Racing Methods with Evolutionary Operators for Simulation Optimization of Traffic Lights Programs -- Decomposition-based Multi-objective Landscape Features and Automated Algorithm Selection -- MATE: A Model-Based Algorithm Tuning Engine -- An Improvement Heuristic Based on Variable Neighborhood Search for a Dynamic Orienteering Problem -- Runtime Analysis of the ( $\mu+1$ )-EA on the Dynamic BinVal Function -- Tabu-

Driven Quantum Neighborhood Samplers -- On Hybrid Heuristics for Steiner Trees on the Plane with Obstacles -- Flowshop NEH-Based Heuristic Recommendation -- Stagnation Detection with Randomized Local Search -- An Artificial Immune System for Black Box Test Case Selection -- Symmetry Breaking for Voting Mechanisms -- A Heuristic Algorithm for School Bus Routing with Bus Stop Selection -- Hybrid Heuristic and Metaheuristic for Solving Electric Vehicle Charging Scheduling Problem.

#### Sommario/riassunto

This book constitutes the refereed proceedings of the 21st European Conference on Evolutionary Computation in Combinatorial Optimization, *EvoCOP 2021*, held as part of *Evo\*2021*, as Virtual Event, in April 2021, co-located with the *Evo\*2021* events: *EvoMUSART*, *EvoApplications*, and *EuroGP*. The 14 revised full papers presented in this book were carefully reviewed and selected from 42 submissions. They cover a wide spectrum of topics, ranging from the foundations of evolutionary algorithms and other search heuristics to their accurate design and application to combinatorial optimization problems. Fundamental and methodological aspects deal with runtime analysis, the structural properties of fitness landscapes, the study of core components of metaheuristics, the clever design of their search principles, and their careful selection and configuration. Applications cover problem domains such as scheduling, routing, search-based software engineering and general graph problems. The range of topics covered in this volume reflects the current state of research in the fields of evolutionary computation and combinatorial optimization.