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Disciplina	620.00151
Soggetti	Engineering mathematics Mathematical optimization Computational intelligence
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Metaheuristics and Evolutionary Algorithms (including Evolutionary Programming, Evolution Strategies, Genetic Algorithms, Memetic Algorithms and Artificial Immune Systems, etc.) -- Multi-objective Evolutionary Algorithms and Constraint Handling Techniques -- Adjoint based and One-shot Methods -- Hybrid Optimisation methods (Gradient Based Methods, Combinatorial Optimization Methods, etc.) -- High Performance Computing and GPUs based Optimisation Algorithms -- Goal oriented optimization for mesh and meshless methods -- Game Strategies -- Surrogate Models for Optimisation -- Parallel and distributed Evolutionary Algorithms (from LANs to GRID) -- Multi-disciplinary Optimization Methods -- Design Optimisation under Uncertainties -- Multi-criteria Decision Making -- Topology Optimization -- Aeronautics, Aerospace, and Space -- Agriculture and Food Production -- Automotive -- Bio Engineering and Medicine -- CAD and Manufacturing -- Civil and Structural Engineering -- Economics and Finance -- Electromagnetics -- Electronics -- Energy, including Renewable Energy -- Environment -- Genetics -- Material Science and Technology -- Offshores, Coastal and Marine Engineering and Operations -- RAMS Analysis -- Risk Analysis -- Smart Materials and Structures -- Social Sciences and Politics -- Telecommunications. .

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Sommario/riassunto

This book presents improved and extended versions of selected papers from EUROGEN 2019, a conference with interest on developing or applying evolutionary and deterministic methods in optimization of design and emphasizing on industrial and societal applications.

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