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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	A New Local Search Algorithm for the DNA Fragment Assembly Problem -- A Hybrid Immune-Based System for the Protein Folding Problem -- A Genetic Algorithm for the Resource Renting Problem with Minimum and Maximum Time Lags -- A Probabilistic Beam Search Approach to the Shortest Common Supersequence Problem -- Genetic Algorithms for Word Problems in Partially Commutative Groups -- A GRASP and Branch-and-Bound Metaheuristic for the Job-Shop Scheduling -- Reducing the Size of Traveling Salesman Problem Instances by Fixing Edges -- Iterated k-Opt Local Search for the Maximum Clique Problem -- Accelerating Local Search in a Memetic Algorithm for the Capacitated Vehicle Routing Problem -- Evolutionary Algorithms for Real-World Instances of the Automatic Frequency Planning Problem in

GSM Networks -- A New Metaheuristic for the Vehicle Routing Problem with Split Demands -- Generation of Tree Decompositions by Iterated Local Search -- Edge Assembly Crossover for the Capacitated Vehicle Routing Problem -- Tackling the Container Loading Problem: A Hybrid Approach Based on Integer Linear Programming and Genetic Algorithms -- A Population-Based Local Search for Solving a Bi-objective Vehicle Routing Problem -- Combining Lagrangian Decomposition with an Evolutionary Algorithm for the Knapsack Constrained Maximum Spanning Tree Problem -- Exact/Heuristic Hybrids Using rVNS and Hyperheuristics for Workforce Scheduling -- An Analysis of Problem Difficulty for a Class of Optimisation Heuristics -- A New Grouping Genetic Algorithm for the Quadratic Multiple Knapsack Problem -- A Hybrid Method for Solving Large-Scale Supply Chain Problems -- Crossover Operators for the Car Sequencing Problem.

Sommario/riassunto

This book constitutes the refereed proceedings of the 7th European Conference on Evolutionary Computation in Combinatorial Optimization, EvoCOP 2007, held in Valencia, Spain in April 2007. The 21 revised full papers presented were carefully reviewed and selected from 81 submissions. The papers cover evolutionary algorithms as well as various other metaheuristics, like scatter search, tabu search, memetic algorithms, variable neighborhood search, greedy randomized adaptive search procedures, ant colony optimization, and particle swarm optimization algorithms. The papers are specifically dedicated to the application of evolutionary computation and related methods to combinatorial optimization problems and cover any issue of metaheuristic for combinatorial optimization. The papers deal with representations, heuristics, analysis of problem structures, and comparisons of algorithms. The list of studied combinatorial optimization problems includes prominent examples like graph coloring, knapsack problems, the traveling salesperson problem, scheduling, graph matching, as well as specific real-world problems.