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Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	A MAX-MIN Ant System for the University Course Timetabling Problem -- A MAX-MIN Ant System for the University Course Timetabling Problem -- ACO Applied to Group Shop Scheduling: A Case Study on Intensification and Diversification -- ACO Applied to Group Shop Scheduling: A Case Study on Intensification and Diversification -- Agent-Based Approach to Dynamic Task Allocation -- Agent-Based Approach to Dynamic Task Allocation -- An Ant Colony Optimization Algorithm for the 2D HP Protein Folding Problem -- An Ant Colony Optimization Algorithm for the 2D HP Protein Folding Problem -- An

Experimental Study of a Simple Ant Colony System for the Vehicle Routing Problem with Time Windows -- An Experimental Study of a Simple Ant Colony System for the Vehicle Routing Problem with Time Windows -- Ant Algorithms for Assembly Line Balancing -- Ant Algorithms for Assembly Line Balancing -- Ant Colonies as Logistic Processes Optimizers -- Ant Colonies as Logistic Processes Optimizers -- Ant Systems for a Dynamic TSP -- Ant Systems for a Dynamic TSP -- Anti-pheromone as a Tool for Better Exploration of Search Space -- Anti-pheromone as a Tool for Better Exploration of Search Space -- Applying Population Based ACO to Dynamic Optimization Problems -- Applying Population Based ACO to Dynamic Optimization Problems -- Cross-Entropy Guided Ant-Like Agents Finding Cyclic Paths in Scarcely Meshed Networks -- Cross-Entropy Guided Ant-Like Agents Finding Cyclic Paths in Scarcely Meshed Networks -- Insertion Based Ants for Vehicle Routing Problems with Backhauls and Time Windows -- Insertion Based Ants for Vehicle Routing Problems with Backhauls and Time Windows -- Modelling ACO: Composed Permutation Problems -- Modelling ACO: Composed Permutation Problems -- Self-Organized Networks of Galleries in the Ant Messor Sancta -- Self-Organized Networks of Galleries in the Ant Messor Sancta -- Solving the Homogeneous Probabilistic Traveling Salesman Problem by the ACO Metaheuristic -- Solving the Homogeneous Probabilistic Traveling Salesman Problem by the ACO Metaheuristic -- Toward the Formal Foundation of Ant Programming -- Toward the Formal Foundation of Ant Programming -- Towards Building Terrain-Covering Ant Robots -- Towards Building Terrain-Covering Ant Robots -- Short Papers -- A New Ant Colony Algorithm Using the Heterarchical Concept Aimed at Optimization of Multimodality Continuous Functions -- An Ant-Based Framework for Very Strongly Constrained Problems -- Analysis of the Best-Worst Ant System and Its Variants on the QAP -- Ants and Loops -- Candidate Set Strategies for Ant Colony Optimisation -- Dynamic Wavelength Routing in WDM Networks via Ant Colony Optimization -- Homogeneous Ants for Web Document Similarity Modeling and Categorization -- Parallel Ant System for the Set Covering Problem -- Real-World Shop Floor Scheduling by Ant Colony Optimization -- Simulation of Nest Assessment Behavior by Ant Scouts -- Using Genetic Algorithms to Optimize ACS-TSP -- Posters -- A Method for Solving Optimization Problems in Continuous Space Using Ant Colony Algorithm -- A Nested Layered Threshold Model for Dynamic Task Allocation -- ACO Algorithm with Additional Reinforcement -- Ant Colony System for Image Segmentation Using Markov Random Field -- Bidimensional Shapes Polygonalization by ACO -- Coevolutionary Ant Algorithms Playing Games -- GAACO: A GA + ACO Hybrid for Faster and Better Search Capability -- GPS Positioning Networks Design: An Application of the Ant Colony System.

Sommario/riassunto

This book constitutes the refereed proceedings of the Third International Workshop on Ant Algorithms, ANTS 2002, held in Brussels, Belgium in September 2002. The 17 revised full papers, 11 short papers, and extended poster abstracts presented were carefully reviewed and selected from 52 submissions. The papers deal with theoretical and foundational aspects and a variety of new variants of ant algorithms as well as with a broad variety of optimization applications in networking and operations research. All in all, this book presents the state of the art in research and development in the emerging field of ant algorithms.
