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	Nota di contenuto	Part I: Theory and Algorithms for Global Optimization -- On the Asymptotic Tractability of Global Optimization -- Combining Interval and Probabilistic Uncertainty: What Is Computable? -- Survey of Piecewise Convex Maximization and PCMP over Spherical Sets -- Assessing Basin Identification Methods for Locating Multiple Optima -- Part II: Applications of Global Optimization -- Cloud Computing Approach for Intelligent Visualization of Multidimensional Data -- Comparative Study of Different Penalty Functions and Algorithms in Survey Calibration -- Multidimensional Scaling for Genomic Data -- Solving Stochastic Ship Fleet Routing Problems with Inventory Management Using Branch and Price -- Investigation of Data Regularization and Optimization of Timetables by Lithuanian High Schools Example -- Dynamic Global Optimisation Methods for

Determining Guaranteed Solutions in Chemical Engineering -- On the Least-Squares Fitting of Data by Sinusoids -- Part III: Multi-objective Global Optimization -- A Multicriteria Generalization of Bayesian Global Optimization -- Understanding the Impact of Constraints: a Rank Based Fitness Function for Evolutionary Methods -- Estimating the Pareto Front of a Hard Bi-criterion Competitive Facility Location Problem -- On Sampling Methods for Costly Multi-objective Black-box Optimization.

| Sommario/riassunto | Current research results in stochastic and deterministic global optimization including single and multiple objectives are explored and presented in this book by leading specialists from various fields. Contributions include applications to multidimensional data visualization, regression, survey calibration, inventory management, timetabling, chemical engineering, energy systems, and competitive facility location. Graduate students, researchers, and scientists in computer science, numerical analysis, optimization, and applied mathematics will be fascinated by the theoretical, computational, and application-oriented aspects of stochastic and deterministic global optimization explored in this book. This volume is dedicated to the 70th birthday of Antanas Žilinskas who is a leading world expert in global optimization. Professor Žilinskas's research has concentrated on studying models for the objective function, the development and implementation of efficient algorithms for global optimization with single and multiple objectives, and application of algorithms for solving real-world practical problems. |