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Nota di contenuto	1. Definitions and Examples -- 2. Scalarization -- 3. Approximation and Complexity -- 4. A Brief Review of Non-Convex Single-Objective Optimization -- 5. Multi-Objective Branch and Bound -- 6. Worst-Case Optimal Algorithms -- 7. Statistical Models Based Algorithms -- 8. Probabilistic Bounds in Multi-Objective Optimization -- 9. Visualization of a Set of Pareto Optimal Decisions -- 10. Multi-Objective Optimization Aided Visualization of Business Process Diagrams. – References -- Index.
Sommario/riassunto	Recent results on non-convex multi-objective optimization problems and methods are presented in this book, with particular attention to expensive black-box objective functions. Multi-objective optimization methods facilitate designers, engineers, and researchers to make decisions on appropriate trade-offs between various conflicting goals. A variety of deterministic and stochastic multi-objective optimization methods are developed in this book. Beginning with basic concepts and a review of non-convex single-objective optimization problems; this book moves on to cover multi-objective branch and bound algorithms,

worst-case optimal algorithms (for Lipschitz functions and bi-objective problems), statistical models based algorithms, and probabilistic branch and bound approach. Detailed descriptions of new algorithms for non-convex multi-objective optimization, their theoretical substantiation, and examples for practical applications to the cell formation problem in manufacturing engineering, the process design in chemical engineering, and business process management are included to aide researchers and graduate students in mathematics, computer science, engineering, economics, and business management. .