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Soggetti	Nonconvex programming Optimització matemàtica Estadística bayesiana Llibres electrònics
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Nota di contenuto	1 Space-lling in high-dimensional sets -- 2 Bi-objective decisions and partition based methods in Bayesian global optimization -- 3 Global random search in high dimensions.
Sommario/riassunto	Accessible to a variety of readers, this book is of interest to specialists, graduate students and researchers in mathematics, optimization, computer science, operations research, management science, engineering and other applied areas interested in solving optimization problems. Basic principles, potential and boundaries of applicability of stochastic global optimization techniques are examined in this book. A variety of issues that face specialists in global optimization are explored, such as multidimensional spaces which are frequently ignored by researchers. The importance of precise interpretation of the mathematical results in assessments of optimization methods is demonstrated through examples of convergence in probability of random search. Methodological issues concerning construction and applicability of stochastic global optimization methods are discussed, including the one-step optimal average improvement method based on a statistical model of the objective function. A significant portion of this book is devoted to an analysis of high-dimensional global optimization

problems and the so-called 'curse of dimensionality'. An examination of the three different classes of high-dimensional optimization problems, the geometry of high-dimensional balls and cubes, very slow convergence of global random search algorithms in large-dimensional problems , and poor uniformity of the uniformly distributed sequences of points are included in this book. .
