

1. Record Nr.	UNISA996465827403316
Autore	Pardalos Panos M
Titolo	Constrained Global Optimization: Algorithms and Applications [[electronic resource] /] / by Panos M. Pardalos, J. Ben Rosen
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 1987
ISBN	3-540-47755-1
Edizione	[1st ed. 1987.]
Descrizione fisica	1 online resource (IX, 143 p.)
Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 268
Disciplina	518
Soggetti	Numerical analysis Numerical Analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Convex sets and functions -- Optimality conditions in nonlinear programming -- Combinatorial optimization problems that can be formulated as nonconvex quadratic problems -- Enumerative methods in nonconvex programming -- Cutting plane methods -- Branch and bound methods -- Bilinear programming methods for nonconvex quadratic problems -- Large scale problems -- Global minimization of indefinite quadratic problems -- Test problems for global nonconvex quadratic programming algorithms.
Sommario/riassunto	Global optimization is concerned with the characterization and computation of global minima or maxima of nonlinear functions. Such problems are widespread in mathematical modeling of real world systems for a very broad range of applications. The applications include economies of scale, fixed charges, allocation and location problems, quadratic assignment and a number of other combinatorial optimization problems. More recently it has been shown that certain aspects of VLSI chip design and database problems can be formulated as constrained global optimization problems with a quadratic objective function. Although standard nonlinear programming algorithms will usually obtain a local minimum to the problem , such a local minimum will only be global when certain conditions are satisfied (such as f and K being convex).

