

1.	Record Nr.	UNICAMPANIASUN0007376
	Autore	Aldridge, Susan
	Titolo	Il filo della vita : storia dei geni e dell'ingegneria genetica / Susan Aldridge
	Pubbl/distr/stampa	296 p. ; 21 cm
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	Edizione	[Bari : Dedalo]
	Descrizione fisica	Trad. di Giovanni Sabato.
	Disciplina	576.5
	Soggetti	Genetica
	Lingua di pubblicazione	Italiano
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
2.	Record Nr.	UNINA9910254274403321
	Autore	Lobato Fran Sérgio
	Titolo	Multi-objective optimization problems : concepts and self-adaptive parameters with mathematical and engineering applications / / by Fran Sérgio Lobato, Valder Steffen Jr
	Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
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	Descrizione fisica	1 online resource (210 pages) : illustrations, tables
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	Soggetti	Mathematical optimization Engineering design Calculus of variations Discrete Optimization Continuous Optimization Engineering Design Calculus of Variations and Optimal Control; Optimization
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Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Chapter 1 Introduction -- Part 1 Basic Concepts -- Chapter 2 Multi-objective Optimization Problem -- Chapter 3 Treatment of multi-objective Optimization Problem -- Part 2 Methodology -- Chapter 4 Self-Adaptive Multi-objective Optimization Differential Evolution -- Part 3 Applications -- Chapter 5 Mathematical -- Chapter 6 Engineering -- Part 4 Final Considerations -- Chapter 7 Conclusions.
Sommario/riassunto	This book is aimed at undergraduate and graduate students in applied mathematics or computer science, as a tool for solving real-world design problems. The present work covers fundamentals in multi-objective optimization and applications in mathematical and engineering system design using a new optimization strategy, namely the Self-Adaptive Multi-objective Optimization Differential Evolution (SA-MODE) algorithm. This strategy is proposed in order to reduce the number of evaluations of the objective function through dynamic update of canonical Differential Evolution parameters (population size, crossover probability and perturbation rate). The methodology is applied to solve mathematical functions considering test cases from the literature and various engineering systems design, such as cantilevered beam design, biochemical reactor, crystallization process, machine tool spindle design, rotary dryer design, among others.