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	Titolo	Nature-Inspired Optimizers : Theories, Literature Reviews and Applications / / edited by Seyedali Mirjalili, Jin Song Dong, Andrew Lewis
	Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
	ISBN	3-030-12127-5
	Edizione	[1st ed. 2020.]
	Descrizione fisica	1 online resource (XVI, 238 p. 108 illus., 101 illus. in color.)
	Collana	Studies in Computational Intelligence, , 1860-949X ; ; 811
	Disciplina	006.3823
	Soggetti	Computational intelligence
		Artificial intelligence
		Mathematical optimization
		Control engineering
		Computational Intelligence
		Artificial Intelligence
		Optimization
		Control and Systems Theory
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di bibliografia	Includes bibliographical references.
	Nota di contenuto	Preface -- Chapter 1. Introduction to Nature-inspired Algorithms -- Chapter 2. Ant Colony Optimizer: Theory, Literature Review, and Application in AUV Path Planning.-Chapter 3. Ant Lion Optimizer: Theory, Literature Review, and Application in Multi-layer Perceptron Neural Network -- Chapter 4. Dragony Algorithm: Theory, Literature Review, and Application in Feature Selection -- Chapter 5. Genetic Algorithm: Theory, Literature Review, and Application in Image Reconstruction etc.
	Sommario/riassunto	This book covers the conventional and most recent theories and applications in the area of evolutionary algorithms, swarm intelligence, and meta-heuristics. Each chapter offers a comprehensive description of a specific algorithm, from the mathematical model to its practical application. Different kind of optimization problems are solved in this book, including those related to path planning, image processing, hand

gesture detection, among others. All in all, the book offers a tutorial on how to design, adapt, and evaluate evolutionary algorithms. Source codes for most of the proposed techniques have been included as supplementary materials on a dedicated webpage.