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Titolo	Frontier Applications of Nature Inspired Computation // edited by Mahdi Khosravy, Neeraj Gupta, Nilesh Patel, Tomonobu Senjyu
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Collana	Springer Tracts in Nature-Inspired Computing, , 2524-552X
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Soggetti	Computational intelligence Algorithms Engineering—Data processing Mathematical optimization Computational Intelligence Algorithm Analysis and Problem Complexity Data Engineering Discrete Optimization Continuous Optimization
Lingua di pubblicazione	Inglese
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Nota di contenuto	Nature-inspired Metaheuristic Optimization: Recent Advances and Applications -- Prediction in Nature Inspired Dynamic Optimization -- Plants Genetics Inspired Evolutionary Optimization: A Descriptive Tutorial -- Trends on fitness landscape analysis in evolutionary computation and meta-heuristics -- Lion Algorithm and its Applications -- A self-adaptive nature-inspired procedure for solving the quadratic assignment problem.
Sommario/riassunto	This book addresses the frontier advances in the theory and application of nature-inspired optimization techniques, including solving the quadratic assignment problem, prediction in nature-inspired dynamic optimization, the lion algorithm and its applications, optimizing the operation scheduling of microgrids, PID controllers for two-legged robots, optimizing crane operating times, planning electrical energy distribution systems, automatic design and evaluation of classification

pipelines, and optimizing wind-energy power generation plants. The book also presents a variety of nature-inspired methods and illustrates methods of adapting these to said applications. Nature-inspired computation, developed by mimicking natural phenomena, makes a significant contribution toward the solution of non-convex optimization problems that normal mathematical optimizers fail to solve. As such, a wide range of nature-inspired computing approaches has been used in multidisciplinary engineering applications. Written by researchers and developers from a variety of fields, this book presents the latest findings, novel techniques and pioneering applications.
