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Titolo	Discrete Cuckoo Search for Combinatorial Optimization [[electronic resource] /] / by Aziz Ouaarab
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Nota di contenuto	Combinatorial optimization space -- Solving COPs -- From CS to DCS -- DCS and the studied COPs -- Cuckoo search Random key encoding.
Sommario/riassunto	This book provides a literature review of techniques used to pass from continuous to combinatorial space, before discussing a detailed example with individual steps of how cuckoo search (CS) can be adapted to solve combinatorial optimization problems. It demonstrates the application of CS to three different problems and describes their source code. The content is divided into five chapters, the first of which provides a technical description, together with examples of combinatorial search spaces. The second chapter summarizes a diverse range of methods used to solve combinatorial optimization problems. In turn, the third chapter presents a description of CS, its formulation and characteristics. In the fourth chapter, the application of discrete cuckoo search (DCS) to solve three POCs (the traveling salesman problem, quadratic assignment problem and job shop scheduling problem) is explained, focusing mainly on a reinterpretation of the terminology used in CS and its source of inspiration. In closing, the fifth chapter discusses random-key cuckoo search (RKCS) using

random keys to represent positions found by cuckoo search in the TSP and QAP solution space.