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Titolo	Evolutionary Computation Techniques: A Comparative Perspective // by Erik Cuevas, Valentín Osuna, Diego Oliva
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Lingua di pubblicazione	Inglese
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Nota di contenuto	Preface -- Introduction -- Multilevel segmentation in digital images -- Multi-Circle detection on images -- Template matching -- Motion estimation -- Photovoltaic cell design -- Parameter identification of induction motors -- White blood cells Detection in images -- Estimation of view transformations in images -- Filter Design.
Sommario/riassunto	This book compares the performance of various evolutionary computation (EC) techniques when they are faced with complex optimization problems extracted from different engineering domains. Particularly focusing on recently developed algorithms, it is designed so that each chapter can be read independently. Several comparisons among EC techniques have been reported in the literature, however, they all suffer from one limitation: their conclusions are based on the performance of popular evolutionary approaches over a set of synthetic functions with exact solutions and well-known behaviors, without considering the application context or including recent developments. In each chapter, a complex engineering optimization problem is posed, and then a particular EC technique is presented as the best choice, according to its search characteristics. Lastly, a set of experiments is conducted in order to compare its performance to other popular EC methods.

