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Nota di contenuto	Introduction -- The basic biogeography-based optimization -- Localized basic biogeography-based optimization: Improved by local topologies -- Ecogeography-based optimization: Improved by new migration mechanisms -- Hybridization with other algorithms -- Applications in transportation -- Applications in image processing -- Applications in neural network learning.
Sommario/riassunto	This book introduces readers to the background, general framework, main operators, and other basic characteristics of biogeography-based optimization (BBO), which is an emerging branch of bio-inspired computation. In particular, the book presents the authors' recent work on improved variants of BBO, hybridization of BBO with other algorithms, and the application of BBO to a variety of domains including transportation, image processing, and neural network learning. The content will help to advance research into and application of not only BBO but also the whole field of bio-inspired computation.

The algorithms and applications are organized in a step-by-step manner and clearly described with the help of pseudo-codes and flowcharts. The readers will learn not only the basic concepts of BBO but also how to apply and adapt the algorithms to the engineering optimization problems they actually encounter.