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   Titolo Metaheuristics: Outlines, MATLAB Codes and Examples / / by Ali Kaveh, Taha Bakhshpoori

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   Disciplina 006.3

   Soggetti Applied mathematics
   Engineering mathematics
   Mathematical optimization
   Mechanical engineering
   Building construction
   Mathematical and Computational Engineering
   Optimization
   Mechanical Engineering
   Solid Construction

   Lingua di pubblicazione Inglese

   Formato Materiale a stampa

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   Nota di contenuto Introduction -- Preliminaries and frameworks -- Artificial bee colony algorithm -- Big bang big crunch algorithm -- Teaching Learning Based Optimization Algorithm -- Imperialist Competitive Algorithm -- Cuckoo search -- Charged system search Algorithm -- Ray Optimization Algorithm -- Colliding Bodies Optimization Algorithm -- Tug-of-war optimization Algorithm -- Water Evaporation Optimization Algorithm -- Vibrating particles system algorithm -- Cyclical parthenogenesis algorithm -- Thermal exchange optimizaton algorithm.

   Sommario/riassunto The book presents eight well-known and often used algorithms besides nine newly developed algorithms by the first author and his students in a practical implementation framework. Matlab codes and some benchmark structural optimization problems are provided. The aim is to provide an efficient context for experienced researchers or readers

not familiar with theory, applications and computational developments of the considered metaheuristics. The information will also be of interest to readers interested in application of metaheuristics for hard optimization, comparing conceptually different metaheuristics and designing new metaheuristics.