





Special Issue Reprint

# Mathematical Optimization and Evolutionary Algorithms with Applications

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Optimization is present almost everywhere in real life, resulting in a wide spectrum of scientific and engineering areas with applications that can be formalized as optimization problems. This feature has fostered the development of research studies aiming to design and implement efficient optimization methods able to address the increasing complexity of applications that are intended to be solved. These studies are typically divided into two areas: one focuses on the theoretical development of advanced solution strategies through the perspective of tackling problems of increasing complexity; another toward developing problem-devoted techniques that aim to efficiently find high-quality solutions to specific applications drawn from a wide spectrum of areas (engineering, social sciences, biotechnologies, finances, etc.). The articles included in this reprint illustrate both types of studies. The reprint is a collection of all the articles accepted and published in the Special Issue titled "Mathematical Optimization and Evolutionary Algorithms with Applications" of the journal Mathematics. We hope that readers will benefit from the insights provided by these papers and contribute to the fast-paced growth of these areas. We also hope that the resulting mixture of methods, algorithms and applications for the treatment of complex optimization problems presented in this Special Issue, either through mathematical tools or metaheuristic algorithms, contributes to the development of research in this area.



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