

# Special Issue

## Emerging Topics in Multi-Objective Optimization and Its Applications

### Message from the Guest Editors

Multi-Objective Optimization Problems (MOPs) are common in many application domains, such as engineering, management, operation research, finance, medical science, computer science, and informatics. Such problems commonly involve conflicting objectives, a huge number of variables, nonlinear relationships, a variety of soft and hard constraints, and a dynamic and uncertain environment, and as such pose great challenges. Solving a MOP without a priori articulation of the objective preferences commonly results in more than one solution. Over more than two decades, Pareto-based optimization, which is based on a vector-based domination relation among the candidate solutions, has become a leading approach to solving MOPs. It aims to find the set of optimal solutions and their associated performance vectors, i.e., the Pareto-optimal set and front. The main advantage of this approach is that it exposes the performance tradeoffs of the optimal solution, which supports decision making on the selected solution.

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### Guest Editors

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### Deadline for manuscript submissions

closed (20 March 2026)



## Mathematics

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### Editor-in-Chief

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