Special Issue

Multi-Criteria Decision Making Methods and Their Applications

Message from the Guest Editors

The purpose of this Special Issue is to gather a collection of articles reflecting the latest developments in the mathematical programming methods of operations research for multi-criteria decision making processes for different fields of multi-criteria optimization approaches, models, applications and techniques. Submissions could cover not only multi-criteria theoretical algorithms, but also practical applications in logistics, supply chains, cybersecurity, healthcare and other area. Keywords

- multi-criteria decision making
- mathematical programming
- mixed integer programming
- linear programming
- quadratic programming
- exact approach
- approximation approaches
- portfolio optimization
- fair decision making
- pareto frontier
- goal programming
- conditional value-at-risk
- value-at-risk
- weighting approach
- lexicographic approach
- reference point method
- reference sets
- fuzzy sets
- heuristics

Guest Editors

Prof. Dr. Bartosz Sawik

1. Space Technology Department, AGH University of Krakow, Mickiewicza 30, 30059 Kraków, Poland
2. GILT-OR Group, Department of Statistics, Computer Science and Mathematics, Institute of Smart Cities, Public University of Navarre, Campus Arrosadia, 31006 Pamplona, Spain
3. Department of Industrial Engineering and Operations Research, Haas School of Business, University of California at Berkeley, Berkeley, CA 94720, USA

Dr. Elena Pérez-Bernabeu

Department of Applied Statistics, Operations Research and Quality, Universitat Politècnica de València, 03801 Alcoy, Spain

Σ

Mathematics

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 4.6

mdpi.com/si/106327

Mathematics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
mathematics@mdpi.com

mdpi.com/journal/mathematics

MDPI

Mathematics

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 4.6

mdpi.com/journal/mathematics

MDPI

About the Journal

Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

Editor-in-Chief

Prof. Dr. Francisco Chiclana
School of Computer Science and Informatics, De Montfort University, The Gateway, Leicester LE1 9BH, UK

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), RePEc, and other databases.

Journal Rank:

JCR - Q1 (Mathematics) / CiteScore - Q1 (General Mathematics)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.4 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).