

# Special Issue

## Mathematical Modeling and Algorithmic Techniques for Engineering

### Message from the Guest Editor

Currently, mathematical modeling and algorithmic techniques are widely used in many engineering fields. For example, railway engineering applies AI models to detect machinery failures, and to alert distracted/misconducted train operators. Car engineering applies AI models and algorithms to predict behaviors of surrounding vehicles and pedestrians, and to plan driving routes with traffic flows prediction. Bioengineering applies AI models and algorithms to analyze genomic data to identify genetic variations and understand their associations with diseases for personalized medicine.

This Special Issue “Mathematical Modeling and Algorithmic Techniques for Engineering” aims to further advance the studies on engineering AI and algorithms, and invites manuscripts that explore applications of AI models and algorithms in various engineering and practical fields. The best-fitted manuscripts would include at least one of the following contents: novel AI models or algorithms, innovative applications, and discussions about new engineering problems. Manuscripts about transferring AI models or algorithms from a specific field to a different one are highly recommended.

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### Guest Editor

Dr. Ergude Bao

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### Deadline for manuscript submissions

closed (20 November 2025)



## Mathematics

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## 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.

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### Editor-in-Chief

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

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.3 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).