Special Issue

Evolutionary Optimization Algorithms for Electromagnetic Devices

Message from the Guest Editors

Evolutionary Optimization Algorithms (EAs) are a family of biologically inspired population-based algorithms for global optimization. They are important tools for providing an effective and efficient solution to many real-word engineering problems due to their flexibility and capability to solve multimodal problems. This Special Issue is focused on the solution of design and operation optimization problems of electromagnetic devices. Potential optimization topics include but are not limited to the following:

- Innovative applications of EAs;
- Tailored EAs;
- A surrogate model for reducing the optimization time;
- New electromagnetic benchmarks;
- A comparison between EAs;
- Real-time optimisation;
- Hardware-in-the-loop or software-in-the-loop optimization;
- Memory-saving and compact optimisation.

Possible applications include but are not limited to the following:

- Active antennas;
- Impulse antennas;
- Reflectarray and transmitarray antennas;
- Linear and tubular motors;
- Electric motors;
- Wireless power transfer.

Guest Editors

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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.

Editor-in-Chief

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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).