Special Issue

Advanced Macromodeling and Optimization Techniques in Electrical Engineering

Message from the Guest Editors

This Special Issue deals with scalable optimization methodologies for electronic system design and control, including applications to integrated circuit design, signal integrity simulations, power electronic systems' design and control, and communication networks' design and automation. This issue welcomes novel contributions with respect to the metrics approximated by surrogates to improve multi-objective optimization algorithms' effectiveness, balance between wide design space exploration and local search, use of surrogates for preselection of solution and interplay between surrogate-based evaluation and original expensive objective evaluation. Topics of interest for this Special Issue include, but are not limited to:

- Surrogate-assisted optimization;
- Black-box optimization;
- Surrogate modelling;
- Metamodeling;
- Electronic circuits design;
- Control algorithm design;
- Sensitivity analysis;
- Ensemble surrogate models;
- Multiobjective optimization;
- Evolutionary optimization algorithms.

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Deadline for manuscript submissions

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About the Journal

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guestedited by leading experts in selected topics of interest.

Editor-in-Chief

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 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).

