

## 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.

[https://www.mdpi.com/journal/electronics/special\\_issues/SA\\_BBO\\_EE](https://www.mdpi.com/journal/electronics/special_issues/SA_BBO_EE)

---

### Guest Editors

Dr. Luciano De Tommasi

Dr. Ivo Couckuyt

Dr. Domenico Spina

---

### Deadline for manuscript submissions

closed (31 March 2022)



## Electronics

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.6  
CiteScore 6.1



[mdpi.com/si/72703](https://mdpi.com/si/72703)

*Electronics*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[electronics@mdpi.com](mailto:electronics@mdpi.com)

[mdpi.com/journal/  
electronics](https://mdpi.com/journal/electronics)





# Electronics

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.6  
CiteScore 6.1



[mdpi.com/journal/  
electronics](https://mdpi.com/journal/electronics)



## 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 guest-edited by leading experts in selected topics of interest.

---

### Editor-in-Chief

Prof. Dr. Flavio Canavero

Department of Electronics and Telecommunications, Politecnico di  
Torino, 10129 Torino, Italy

---

### Author Benefits

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), CAPus /  
SciFinder, Inspec, Ei Compendex and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Electrical and Electronic) /  
CiteScore - Q1 (Electrical and Electronic Engineering)

#### Rapid Publication:

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).