electronics

an Open Access Journal by MDPI

IMPACT FACTOR 2.6

CITESCORE 5.3

Digital Twins and Robust Design Optimization for Greener Manufacturing of Electrical Machines and Devices

Guest Editors:

Dr. Tamás Orosz

Dr. David Pánek

Prof. Dr. Miklos Kuczmann

Prof. Dr. Anton Rassõlkin

Deadline for manuscript submissions:
15 March 2025

Message from the Guest Editors

The implementation and application of green manufacturing processes are essential to the manufacturing of electrical machines and devices. The Special Issue is open for contributions that show how modern numerical technologies are integrated and deployed as Digital Twins and how robust design optimization techniques can support the greener manufacturing of electric machines and electrical devices.

Topics of interest for this Special Issue include, but are not limited to:

- Digital Twins, predictive maintenance, Industry 4.0;
- System-level modelling, multi-domain automatic analysis tools, co-simulations, etc.;
- Advanced modelling (electromagnetic, thermal, NVH, mechanical, EMC, insulation, etc.);
- Advanced models for diagnosis;
- Electromagnetic materials, iron losses, and additional losses;
- Optimization techniques, Advanced testing; Optimization and learning under uncertainty;
- Model-based software development and validation of optimization of electrical machines or electric devices;
- Surrogate and reduced-order modelling of electric machines and electric devices.

electronics

IMPACT FACTOR 2.6

CITESCORE 5.3

an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Flavio Canavero
Department of Electronics and Telecommunications, Politecnico di Torino, 10129 Torino, Italy

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), CAPlus / SciFinder, Inspec, Ei Compendex and other databases.
Journal Rank: JCR - Q2 (*Physics, Applied*) / CiteScore - Q2 (*Control and Systems Engineering*)

Contact Us

Electronics Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/electronics
electronics@mdpi.com
𝕏@electronicsMDPI