Special Issue

Modeling and Control in Power Electronics and Electric Drives

Message from the Guest Editors

This Special Issue aims to address all subjects of scientific interest in the field of power electronics and electric drives that look both to specific applications on individual components and systems in their completeness and complexity.

Potential topics include, but are not limited to, the following:

- Numerical methods for circuit and electromagnetic field simulation;
- Loss characterization and prediction of passive components;
- Modeling, simulation for EMI analysis and reduction methods in power electronics
- Multi-physics system modeling of power converters
- Electrical and thermal modeling of power switches
- Simulation for design and optimization
- Methodologies, and instruments for model verification
- Multi-modal and Multiphysics simulation
- Real-time and HIL simulation
- Digital twining

Guest Editors

Dr. Vincenzo Cirimele

Department of Electrical, Electronic, and Information Engineering "Guglielmo Marconi", University of Bologna, 40126 Bologna, Italy

Dr. Riccardo Ruffo

Texas Instruments, SEM Grid Infrastructure, 85354 Freising, Germany

Deadline for manuscript submissions

closed (15 June 2023)



Electronics

an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 6.1



mdpi.com/si/124874

Electronics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
electronics@mdpi.com

mdpi.com/journal/electronics





Electronics

an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 6.1



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), CAPlus / 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).

