

Special Issue

Power Converter Design, Control and Applications

Message from the Guest Editors

This Special Issue will focus on the design and control of power converters and their applications. The topics of interest include but are not limited to:

- Emerging trends in digital control for power electronics;
- Adaptive and predictive controllers;
- Preventing aging and failure controllers;
- Neural-network-based and artificial intelligence controllers;
- The Internet of Things applied to power management;
- New emerging and innovative power-converter topologies;
- The control of modular, composite and multilevel power converters;
- Partial power-processing converters;
- Multiple input-multiple output (MIMO) power converters;
- The modelling and control of resonant-based power converters and PWM-resonant converters;
- High-switching-frequency applications of GaN and SiC;
- High-power-density switching converters using GaN or SiC.

Guest Editors

Dr. Juan Rodríguez Méndez

Department Electrical Engineering, Universidad de Oviedo, 33204 Gijón, Spain

Dr. Aitor Vázquez Ardura

Power Supply Group, Electrical Engineering Department, University of Oviedo, 33204 Gijón, Spain

Deadline for manuscript submissions

closed (30 June 2022)



Electronics

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 6.1



mdpi.com/si/98318

Electronics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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).