

Special Issue

Electromagnetic Compatibility and Electromagnetic Interference in Power Electronic Converters

Message from the Guest Editors

Power electronic converters are a primary component of modern electrical equipment and applications. They are used to allow an efficient conversion and control of electrical power from source to load. This is particularly important in smart grid implementation and development, and in general in all applications where energy-efficient power electronic converters are required on both consumer and generation sides. Nevertheless, the use of power electronics leads to three major issues, namely, power losses, electromagnetic interference, and harmonic distortion. This Special Issue has the aim of motivating further research on power electronic converters for electromagnetic compatibility and power quality improvement. The topics of interest include, but are not limited to:

- Analysis and modelling of EMI and harmonics issues in power converters;
- Design of novel power converters with reduced EMI and harmonics generation;
- Design of mitigation techniques for EMI and harmonics reduction;
- Design of power electronics systems with low parasitics;
- Supraharmonics in low-voltage installations;
- Measurement and assessment methods for the 2–150 kHz supraharmonic range.

Guest Editors

Dr. Leonardo Sandrolini

Department of Electrical, Electronic, and Information Engineering (DEI), University of Bologna, 40136 Bologna, Italy

Prof. Dr. Andrea Mariscotti

Department of Electrical, Electronics and Telecommunication Engineering and Naval Architecture (DITEN), University of Genova, 16145 Genova, Italy

Deadline for manuscript submissions



Electronics

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 6.1



mdpi.com/si/45733

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 guestedited 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 16.4 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the second half of 2025).