



Efficient and Reliable DC–DC Converters and Related Industrial Electronics

Guest Editors:

Dr. Fernando Bento

CISE-Electromechatronic
Systems Research Centre,
University of Beira Interior,
Calçada Fonte do Lameiro, 6201-
001 Covilhã, Portugal

Dr. Khaled Laadjal

CISE - Electromechatronic
Systems Research Centre,
University of Beira Interior,
Calçada Fonte do Lameiro, P-
6201-001 Covilhã, Portugal

**Prof. Dr. Antonio J. Marques
Cardoso**

CISE—Electromechatronic
Systems Research Centre,
University of Beira Interior,
Calçada Fonte do Lameiro, P -
6201-001 Covilhã, Portugal

Message from the Guest Editors

This Special Issue focuses on the discussion of emerging solutions suitable for accomplishing efficient and reliable DC–DC industrial power electronics technologies. Potential topics of interest include, but are not limited to, the following:

- Fault diagnostics and prognostics in DC–DC converters;
- Fault analysis in DC–DC converters;
- Fault-tolerant DC–DC converter topologies;
- Control and operation of DC–DC converters;
- DC–DC components reliability;
- Efficiency analysis and optimisation of DC–DC converters;
- Integration of wide-bandgap devices in DC–DC converters;
- DC–DC converter topologies for emerging applications (renewables integration, LED lighting, EV charging, DC microgrids, etc.).

Deadline for manuscript
submissions:

10 September 2024





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 \(Web of Science\)](#), [CAPus / SciFinder](#), [Inspec](#), and [other databases](#).

Journal Rank: JCR - Q2 (*Electrical and Electronic Engineering*) CiteScore - Q2 (*Electrical and Electronic Engineering*)

Contact Us

Electronics Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

mdpi.com/journal/electronics
electronics@mdpi.com
[X@electronicsMDPI](https://twitter.com/electronicsMDPI)