



High Performance Power Converters: Design, Control, Devices and Applications

Guest Editors:

Prof. Dr. Jae-Jung Yun

School of Electrical Engineering,
Chungbuk National University,
Cheongju, Republic of Korea

Prof. Dr. Jong-Soo Kim

School of Electrical Engineering,
Daejin University, Pocheon,
Korea

Deadline for manuscript
submissions:

closed (31 January 2022)

Message from the Guest Editors

Optimal design, topologies, and control algorithms for improving of the efficiency of power converters have been actively developed and regarded as the core technology in various industry applications, such as home appliances, electric vehicles, renewable energies, energy storage systems, and so on.

With the help of wide bandgap (WBG) power semiconductor devices such as SiC and GaN devices, in recent times, the dramatic improvement of efficiency of power converters has become the main issue.

Therefore, this Special Issue focuses on emerging technologies to meet the recent requirements of power converters for various industry applications.

Topics of primary interest include but are not limited to the following:

- Topologies and control methods for high efficiency;
- Optimal design approaches for high efficiency;
- Power converters based on wide bandgap devices;
- Passive component design for efficiency improvement;
- Soft-switching methods for power converters.





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 (Engineering, Electrical and Electronic) / CiteScore - Q1 (Electrical and Electronic 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
[@electronicsMDPI](https://twitter.com/electronicsMDPI)