Special Issue

High-Efficiency Power Converters: Design and Optimization

Message from the Guest Editor

This Special Issue focuses on exploring innovations and challenges in power conversion systems, with a particular emphasis on improving efficiency under various operating conditions. Key topics include the impact of efficient control modulations for dead time, conduction, and core losses on power conversion performance. Contributions are encouraged that cover strategies to optimize performance under light load and varying input voltage conditions, and those to increase overall power output. Our aim is to drive innovation in tackling key challenges such as phase shift modulation, load adaptability, and maximizing conversion efficiency in state-of-the-art power electronics systems.

Guest Editor

Dr. Hyunjun Choi
Korea Electronics Technology Institute, Saenari-ro, Yatap-dong, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea

Deadline for manuscript submissions

closed (30 June 2025)

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/si/226626

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

mdpi.com/journal/energies

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/journal/energies

About the Journal

Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

Editor-in-Chief

Prof. Dr. Enrico Sciubba
Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 Roma, Italy

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), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

CiteScore - Q1 (Control and Optimization)

MDPI