

Special Issue

Review of Advanced Power Electronics Solutions II

Message from the Guest Editor

Some of the greatest problems that the world is facing today are environmental pollution and the depletion of natural resources. This leads to the development of different new green technologies. Renewable energy integration in AC residential grids, along with storage systems, is a frequently debated topic in the field of power electronics today. At the same time, this new tendency consists of limiting the injection of power from renewable sources to the AC grid, which leads to new challenges cropping up. The DC grid and wireless power transform are new trends in power electronics that aim to solve the existing problems. This Special Issue is devoted to the state-of-the-art review of novel or recently proposed power electronics solutions devoted to the power electronics trends arising. The main focus will be on the review of emerging solutions, their feasibility study through the acquisition of new knowledge in areas related to power circuit design, the control and implementation of advanced materials and active and passive components, and comparative analysis.

- power electronics
- DC systems
- AC systems
- wireless power transfer

Guest Editor

Dr. Oleksandr Husev

Department of Mechatronics and Electrical Engineering, Tallinn University of Technology, EE-19086 Tallinn, Estonia

Deadline for manuscript submissions

closed (31 January 2025)



Energies

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.2



mdpi.com/si/177093

Energies

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

[mdpi.com/journal/
energies](https://mdpi.com/journal/energies)





Energies

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.2



[mdpi.com/journal/
energies](https://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 Aerospace Engineering, University of Roma Sapienza, Via Eudossiana 18, 00184 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)