

Special Issue

Trends and Prospects in DC–DC/DC–AC Converters and Their Control Techniques for Renewable Energy Applications: 2nd Edition

Message from the Guest Editor

Following the success of its first edition, this Special Issue continues to present the latest research on DC–DC and DC–AC converters and their control techniques for renewable energy applications. Topics include innovative converter topologies, soft switching, resonant and multilevel converters, and power electronic interfaces that enhance efficiency and reduce costs. We welcome original research on advanced control strategies such as voltage/current mode control, predictive control, sliding mode control, PID, and model predictive control. These methods aim to improve converter dynamics and reliability. This Special Issue serves as a valuable resource for researchers, engineers, and practitioners in power electronics and renewable energy systems, providing insights into emerging trends and technologies in energy conversion.

Guest Editor

Dr. Ramy Georgious

LEMUR Group, Department of Electrical Engineering, University of Oviedo, 33204 Gijón, Spain

Deadline for manuscript submissions

15 May 2026



Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



mdpi.com/si/241342

Energies
Editorial Office
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 3.2
CiteScore 7.3



[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 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)