Special Issue

Advanced Materials/Devices for Power Electronics

Message from the Guest Editor

The integration of renewable energies and the need for better energy efficiency have led to the increased electrification. This requires more and more power converters with high performance (efficiency, compactness, reliability and ability to withstand harsh environments). The performance requires high-performance materials (electrical and thermal conductors, insulators, magnetic dielectrics) for the realization of passive components (capacitors and inductors, etc.) or the integration of chips into power integrated circuits or hybrid module performance and reliable power. Prospective authors are invited to submit original contributions, survey papers or tutorials for review and potential publication in this Special Issue. Topics of interest include, but are not limited to:

- New power devices (Si, SiC, GaN, Diamond, etc.) for advanced operation.
- Characterization and modeling of new power devices.
- Power devices in their environment (gate drive, packaging, thermal management, etc.).
- New materials (conductor, thermal management, insulator, dielectric, magnetic, etc.) for advanced power electronics.
- Material modeling and characterization for advanced power electronics.

Guest Editor

Dr. Hervé Morel

Laboratoire Ampère, Univ Lyon, CNRS, INSA Lyon, France

Deadline for manuscript submissions

closed (31 October 2019)

Energies

an Open Access Journal by MDPI

Impact Factor 3.0
CiteScore 6.2

mdpi.com/si/21444

Energies
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 3.0
CiteScore 6.2

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)