electronics

an Open Access Journal by MDPI

IMPACT FACTOR 2.6

CITESCORE 6.1

Power Electronics in Smart Grids

Guest Editors:

Dr. Lotfi Baghli
Faculté des Sciences, Université de Lorraine – GREEN – ENSEM, Nancy, France

Dr. Ehsan Jamshidpour
GREEN Laboratory, University of Lorraine, F-54505 Vandœuvre-lès-Nancy, France

Prof. Dr. Shamsodin Taheri
Department of Computer Science and Engineering, Université du Québec en Outaouais, Gatineau, QC, Canada

Deadline for manuscript submissions:
closed (31 October 2024)

Message from the Guest Editors

Dear Colleagues,

Recent events such as the war in Ukraine and natural disasters demonstrate the importance of two aspects in determining energy security: the independence of the energy source and its resilience. This means that we must ensure that local energy sources are available, preferably of renewable energy. Another requirement is the reliability and continuation of service at country level, even if when consumers are cut from the main grid. This implies the use of microgrid with local micro power plants and the use of plug and play connection systems between microgrids and with the main grid. Operation must be independent from the TSO, even if this means switching to a degraded mode in the case of demand/generation power mismatch.

Power electronics are the keystone of these smart grids. They allow interconnection and power transfer between smart grids. This includes grid forming/forwarding, voltage stepping (LV/MV), AC/DC conversions, optimal power point tracking, and power factor control.

This Special Issue address these topics, and authors are encouraged to submit their recent work on the described subjects.

electronics

IMPACT FACTOR 2.6

CITESCORE 6.1

an Open Access Journal by MDPI

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 guestedited 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
𝕏@electronicsMDPI