



an Open Access Journal by MDPI

Power Quality Conditioning and Stability Enhancement of More-Electronics Power Systems, 2nd Edition

Guest Editor:

Prof. Dr. Jingyang Fang

School of Control Science and Engineering, Shandong University, Jinan 250061, China

Deadline for manuscript submissions: closed (15 September 2024)

Message from the Guest Editor

Dear Colleagues,

As the trend of the massive integration of power electronics-coupled renewable energies, electric vehicles, and energy storage continues, modern power grids are experiencing a revolutionized transition to moreelectronics power systems. Along with the large-scale employment of power converters, power quality issues (e.g., harmonics, reactive power, and imbalances) and stability problems (e.g., converter-level instabilities and system-level loss of synchronization) are emerging and evolving. Despite being major trouble sources, grid-tied power converters are promising solutions to such problems mostly due to their flexible and strong control. This Special Issue focuses on the enhancement of power quality and stability of modern power systems through power-electronic-based solutions. It aims to lav a foundation for the further integration of renewable energies in future renewable-dominated power systems.

- Modeling, control, and design of grid-forming power conversion systems;
- Inertia emulation and fast frequency control via power converters and energy storage;
- Synchronization of multiple grid-tied converters;





mdpi.com/si/123006





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 guest-edited 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 χ @electronicsMDPI