



Distributed Generation, Microgrids and Smart Grids

Guest Editors:

Prof. Dr. Luiz Carlos Gomes De Freitas

Faculty of Electrical Engineering,
Federal University of Uberlandia,
Uberlandia 38400-902, Brazil

Prof. Dr. Gustavo Brito de Lima

Faculty of Electrical Engineering,
Federal University of Uberlandia,
Uberlandia, Brazil

Prof. Dr. Luciano Coutinho Gomes

Faculty of Electrical Engineering,
Federal University of Uberlandia,
Uberlandia, Brazil

Message from the Guest Editors

For microgrids, power electronics is essential for them to work, providing different control functions and hierarchical control levels that work parallel to the grid and islanding operation modes, beyond power flow control with the grid. The many distinct and adaptive architectures of microgrids can only be implemented because they use power converters extensively. For smart grids, power electronics is key at several points, from consumption to production, passing through transmission. Among them, one can outline an intelligent insertion in an embracing way to the power system, DG operation improvement, bidirectional power flow and agent-based controls, the integrated formation of smart microgrids, the transformation of the distribution system from passive to active, and new devices and techniques for a more advanced and flexible transmission system.

Deadline for manuscript submissions:

closed (31 December 2022)



mdpi.com/si/122151

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Steve W. Lyon

School of Environment and Natural Resources, Ohio State University, Columbus, OH 43210, USA

Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in Sustainability, an international open access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full articles) and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, RePEc, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (Environmental Studies) / CiteScore - Q1 (Geography, Planning and Development)

Contact Us

Sustainability Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/sustainability
sustainability@mdpi.com
X@Sus_MDPi