Special Issue

Energy Technologies in Microgrids

Message from the Guest Editors

A microgrid is an emerging framework comprising interconnected loads and distributed energy resources that form an autonomous, secure, and sustainable power network. As various local energy resources interact with each other and the main power grid, advanced control and energy management techniques are crucial to maintaining the network's security and reliable operation. In this Special Issue, original research articles and reviews are welcome. Research areas may include (but not limited to) the following:

- Distributed energy management optimization algorithms.
- Data-driven methods for energy management of microgrids.
- Heuristic optimization-based energy management models.
- Peer-to-peer energy trading in stand-alone and clustered microgrids.
- Volt-Var optimization for DER-enriched microgrid frameworks.
- AI and machine learning-based algorithms for optimal control of microgrids.
- Optimal microgrid planning tools and algorithms.
- Reinforcement and federated learning for microgrid systems.
- Multi-energy systems in microgrid.
- Resilience of microgrid under extreme events.
- Cybersecurity of microgrid systems.

We look forward to receiving your contributions.

Guest Editors

Dr. Sheroze Liaquat

Dr. Muhammad Fahad Zia

Prof. Dr. Mohamed Benbouzid

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Electronics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
electronics@mdpi.com

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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.

Editor-in-Chief

Prof. Dr. Flavio Canavero
Department of Electronics and Telecommunications, Politecnico di Torino, 10129 Torino, Italy

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