

Special Issue

Microgrid Design and Operation Based on Smart Management Systems and Transactive Energy Concepts

Message from the Guest Editors

This Special Issue aims to gather some of the latest efforts for creating novel management systems, trading mechanisms, and technical ideas, applied, but not limited to, microgrids with distributed generation, taking advantage of the concepts presented above, with regard to energy efficiency and influence on the current state-of-the-art in electricity network operation and control. Submissions to this Special Issue are directed, but not limited to, the following main areas:

- Prosumers and small-scale electricity generation;
- Microgrid community and crowdsourcing concept;
- Smart grid flexibility management;
- Peer-to-peer energy trading in microgrids;
- Blockchain for decentralized management of DR programs;
- Flexibility assessment and forecasting;
- Energy management for electric vehicles integration;
- Virtual power plant;
- Energy assets decentralized coordination;
- Energy markets operation and coordinated clearance mechanisms
- Demand response;
- Microgrid design and operation;
- Smart management systems;
- Transactive energy concepts;
- Information and communication technologies.

Guest Editors

Dr. Bogdan-Constantin Neagu

Power Engineering Department, Gheorghe Asachi Technical University,
70005 Iasi, Romania

Dr. Ovidiu Ivanov

Power Engineering Department, Gheorghe Asachi Technical University,
70005 Iasi, Romania

Deadline for manuscript submissions

closed (31 August 2022)



Electronics

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 6.1



mdpi.com/si/75642

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

[mdpi.com/journal/
electronics](https://mdpi.com/journal/electronics)





Electronics

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 6.1



[mdpi.com/journal/
electronics](https://mdpi.com/journal/electronics)



About the Journal

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.

Editor-in-Chief

Prof. Dr. Flavio Canavero

Department of Electronics and Telecommunications, Politecnico di
Torino, 10129 Torino, Italy

Author Benefits

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)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is
provided to authors approximately 16.8 days after
submission; acceptance to publication is undertaken in 2.4
days (median values for papers published in this journal in
the first half of 2025).