# **Special Issue**

# Intelligent Energy Management in Smart Grids and Microgrids

## Message from the Guest Editors

The progress in advanced metering, communication equipment, renewables, storage, and electric vehicles have paved the way for more intelligent power networks that are more efficient, reliable and clean. Smart grids operate in a two-way flow of electricity and data, enabling the monitoring, analysis and control of almost all components of the network (loads, generation, storage) in order to improve the efficiency, reduce the cost, maximize the reliability and minimize the carbon dioxide emissions. The goal of this Special Issue is to publish original and unpublished research works related (but not limited) to the following topics:

- Distributed generation and storage;
- Electric vehicle (EV) integration;
- Intelligent forecasting methods of renewables and loads:
- Monitoring of loads using smart meter data;
- Control and optimization of AC and hybrid AC/DC microgrids;
- Intelligent coupling of several energy networks (e.g., electricity networks/natural gas or hydrogen networks/district heat networks);
- Stability and security assessment of smart grids and microgrids;
- Demand-side management (DSM) and demand response;
- Hydrogen integration for the long-term storage of renewable

#### **Guest Editors**

Prof. Dr. Emmanuel Karapidakis

School of Engineering, Hellenic Mediterranean University, GR-71410 Heraklion, Greece

Dr. Pompodakis Evangelos

Department of Electrical and Computer Engineering, Hellenic Mediterranean University, GR-71004 Heraklion, Greece

## Deadline for manuscript submissions

closed (31 May 2023)



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

mdpi.com/journal/ sensors





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## Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

#### Editor-in-Chief

#### Prof. Dr. Vittorio M. N. Passaro

Dipartimento di Ingegneria Elettrica e dell'Informazione (Department of Electrical and Information Engineering), Politecnico di Bari, Via Edoardo Orabona n. 4, 70125 Bari, Italy

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