Special Issue

Machine Learning and Optimization for Energy Management Systems in Smart Grid

Message from the Guest Editors

The penetration of distributed renewable energy has recently increased rapidly, and energy management in smart grids is becoming more and more difficult because of the stochastic energy source and flexible resources. Managing these kinds of energy resources efficiently is a significant scientific problem. Consequently, this Special Issue aims to present the most recent advances related to the current research and future development in machine learning and optimization methods for energy management systems in smart grids.

- Machine learning methods for energy management system scheduling;
- Power electronics application in a smart grid;
- Machine learning and optimization techniques for sharing energy and energy trading;
- Machine learning and optimization techniques for energy storage systems;
- Machine learning and optimization techniques for integrated energy systems;
- Future and review of machine learning techniques used in smart grid.

Guest Editors

Prof. Dr. Hong Liu

Dr. Shenxi Zhang

Dr. Chenghong Gu

Prof. Dr. Wei Pei

Deadline for manuscript submissions

closed (15 May 2025)

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

mdpi.com/journal/electronics

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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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