

Special Issue

AI Applications for Smart Grid

Message from the Guest Editors

Artificial intelligence (AI) technologies are revolutionizing smart grids. They are being extensively explored for their potential to transform the way that we generate, distribute, and consume electricity. This Special Issue will bring together cutting-edge research and innovative applications of AI for the smart grid. It is expected to highlight the significant potential of data analysis, pattern recognition, predictive modelling, etc.

Meanwhile, various powerful AI applications in smart grids raise concerns and challenges, such as interpretability, collapse, data dependency, etc. This Special Issue will explore the latest advancements in AI applications for smart grids. We are particularly interested in submissions that focus on the following areas:

- AI applications in smart sensing;
- AI applications in fault location and protection;
- AI applications in power markets and trading;
- AI applications in demand-side management;
- AI applications in integrated energy systems;
- AI applications in transportation electrification;
- AI applications in secure energy storage systems.

We also encourage submissions in other, related areas.

Guest Editors

Dr. Bochao Zhao

Dr. Bo Liu

Dr. Ying Han

Deadline for manuscript submissions

20 November 2025



Electronics

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 6.1



mdpi.com/si/219777

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 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

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).