Special Issue

Advanced Wireless Sensor Networks in Power Systems

Message from the Guest Editor

We have been witnessing a swift evolution of Internet-of-Things (IoT) in the 5G era, spanning diverse sectors including smart cities, smart grids, smart agriculture, and so forth. As the proliferation of smart, machine-type devices—including robots and drones—continues, advances in IoT with sensing, communication, and computation capabilities are expected to significantly enhance research and practical applications in intelligent surveillance, operation, and maintenance across a myriad of power system scenarios. This Special Issue is dedicated to showcasing and propagating the latest breakthroughs in the design and deployment of advanced IoT and wireless sensor networks tailored for power systems, as well as the emerging applications in power systems enabled by IoT and wireless sensor networks.

- Intelligent operation and maintenance systems utilizing wireless sensor networks;
- Integrated sensing and communication (ISAC) in power systems;
- Robotics for power systems;
- Digital twins for power systems;
- Noise monitoring for power systems via wireless sensor networks;
- 3D acoustic environment prediction for power systems via wireless sensor networks.

Guest Editor

Dr. Yayu Gao

School of Electronic Information and Communications, Huazhong University of Science and Technology, Wuhan 430074, China

Deadline for manuscript submissions

5 August 2025

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/si/217159

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

mdpi.com/journal/energies

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/journal/energies

About the Journal

Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

Editor-in-Chief

Prof. Dr. Enrico Sciubba
Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 Roma, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

CiteScore - Q1 (Control and Optimization)

MDPI