Special Issue

Internet of Things for Energy-Efficient Smart Cities: Technologies, Big Data and Security

Message from the Guest Editors

The rapid urbanization of our world presents challenges and opportunities, with smart cities emerging as a strategy to enhance citizens' guality of life and ensure sustainable development. Central to this is the Internet of Things (IoT), which connects devices and systems for intelligent data collection and control. As urban areas grow, energy consumption increases, making energy efficiency critical. IoT technologies optimize energy usage across sectors like smart grids and transportation. This Special Issue seeks original research on IoT systems for energy-efficient smart cities, focusing on innovative technologies, Big Data management, and security frameworks. Topics include novel IoT architectures, low-power devices, Big Data analytics, cybersecurity mechanisms, smart grids, and sustainable resource management.

Guest Editors

Dr. Lorenzo Gigli Department of Computer Science and Engineering, University of Bologna, 40126 Bologna, Italy

Dr. Federica Zonzini

Department of Electrical, Electronic and Information Engineering "Guglielmo Marconi", University of Bologna, 40136 Bologna, Italy

Deadline for manuscript submissions

20 November 2025



Energies

an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 7.3



mdpi.com/si/241770

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



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)