

Special Issue

Emerging Trends in Energy Harvesting Materials and Technologies for Sustainable Energy

Message from the Guest Editors

Emerging energy harvesting technologies—such as micro-electromagnetic generators (micro-EMGs), piezoelectric generators (PEGs), thermoelectric generators (TEGs), and triboelectric nanogenerators (TENGs)—offer promising solutions to achieving long-term, stable, and maintenance-free power sources for these distributed sensors. To fully realize the potential of self-powered IoT systems, continued advancements are needed in material innovation, device miniaturization, energy conversion efficiency, and biocompatibility. Research into material modifications, performance optimizations, integration strategies, and reliable fabrication processes will play a pivotal role in pushing these technologies toward practical, scalable deployment. This Special Issue invites cutting-edge contributions from both academia and industry to address these challenges. It seeks original research articles, comprehensive reviews, and case studies that highlight new materials, novel device architectures, enhanced energy conversion mechanisms, and strategies for practical implementation.

Guest Editors

Dr. Jiyu Wang

State Key Laboratory of Advanced Electromagnetic Engineering and Technology, Huazhong University of Science and Technology, Wuhan 430074, China

Dr. Liuxia Li

School of Electrical and Electronic Engineering, Huazhong University of Science and Technology, Wuhan 430074, China

Deadline for manuscript submissions

15 June 2026



Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



mdpi.com/si/229138

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

[mdpi.com/journal/
energies](https://mdpi.com/journal/energies)





Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



[mdpi.com/journal/
energies](https://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)