

Special Issue

Advanced Grounding Technology for High-Voltage Energy Systems and Critical Energy Infrastructure

Message from the Guest Editors

As fundamental technology ensuring the safe and stable operation of power systems, grounding technology plays an essential role throughout the entire chain of power generation, transmission, distribution, and utilization. This Special Issue aims to focus on core fields including power system grounding, oil and gas pipeline grounding, and rail transit grounding.

Topics include but are not limited to:

- Grounding grid design, fault grounding analysis, and grounding resistance optimization and measurement in power systems;
- Protection technologies, device design, and material innovations for grounding systems in power systems and critical energy infrastructure;
- Traction grounding, rail potential control, stray current monitoring and mitigation, and electromagnetic interference suppression in rail transit;
- On-line monitoring, fault diagnosis, and service life assessment of grounding systems;
- Numerical simulation, advanced modeling, and optimal design methods for grounding systems;
- Applications of grounding technologies in new energy grid integration and electromagnetic compatibility for rail transit;
- Grounding technologies and protection schemes in special environments.

Guest Editors

Dr. Hailiang Lu

School of Electrical Engineering and Automation, Wuhan University, Wuhan 430072, China

Dr. Yuanchao Hu

School of Electrical and Electronic Engineering, Shandong University of Technology, Zibo 255000, China

Deadline for manuscript submissions

10 October 2026



Energies

an Open Access Journal
by MDPI

Impact Factor 3.9
CiteScore 8.3



mdpi.com/si/279715

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 3.9
CiteScore 8.3



[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)