

Special Issue

High-Current Discharge and Its Applications

Message from the Guest Editors

High-current discharge is a key research area in electrical engineering and energy-related technologies, covering topics from theory to application. With its growing role in industrial and energy systems, optimizing high-current discharge has become a global focus in academia and industry. This Special Issue seeks to present recent advances in high-current discharge, including applications such as electromagnetic pulse welding, forming, acceleration, and electrical wire explosion. We aim to foster interdisciplinary research and industrial implementation. Topics of interest include, but are not limited to:

- Electromagnetic pulse welding
- Electromagnetic forming
- Electromagnetic acceleration
- Electrical wire explosion and its applications
- High-current pulsed power sources
- Energy-related industrial uses of high-current discharge
- Other relevant topics in high-current discharge and energy systems

We invite researchers to submit their original work to advance innovations in electromagnetic energy technologies.

Guest Editors

Prof. Dr. Yan Mi

School of Electrical Engineering, Chongqing University, Chongqing 400044, China

Dr. Yan Zhou

1. State Key Laboratory of Power Transmission Equipment Technology, School of Electrical Engineering, Chongqing University, Chongqing 400044, China
2. School of Electronics and Internet of Things, Chongqing Polytechnic University of Electronic Technology, Chongqing 401331, China

Deadline for manuscript submissions

20 November 2025



Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



mdpi.com/si/242277

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)