

## Special Issue

# Frequency Control of AC/DC Hybrid Power Grid considering Large-Scale New Energy Integration

### Message from the Guest Editors

New energy, represented by wind power and photovoltaic power, has been integrated into the power grid on a large scale. At the same time, with the approach of carbon balance targets, distributed new energy and offshore wind power are also developing rapidly. The integration of large-scale new energy is changing the traditional transmission mode and power grid structure. This brings many new challenges regarding the frequency control in power systems. This Special Issue sincerely invites scholars to submit manuscripts detailing their latest research and welcomes reviews about local frequency control of new energy units or energy storage, the frequency control of the regional control center, and multi-area frequency coordination control between AC/DC hybrid interconnection areas. Any technologies, methods, or comments on the latest research in this field that can improve the frequency modulation capability or frequency stability of AC/DC hybrid systems with large-scale new energy integration are within the scope of this issue.

### Guest Editors

Prof. Dr. Haibo Zhang  
Prof. Dr. Dawei Zhao  
Prof. Dr. Kaifeng Zhang

### Deadline for manuscript submissions

closed (31 March 2022)



## Energies

an Open Access Journal  
by MDPI

Impact Factor 3.2  
CiteScore 7.3



[mdpi.com/si/92635](https://mdpi.com/si/92635)

*Energies*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[energies@mdpi.com](mailto: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)