

Special Issue

Regulation and Control of Flexible Resources in Resilient and Sustainable Power Systems

Message from the Guest Editors

Large-scale renewable energy has emerged in both centralized and distributed infrastructure to augment conventional generation and limit the impact of fossil fuels on climate change while preserving natural fuel resources. Renewable energy investment and integration, including energy storage and intelligent loading, is one critical facet of progressive power system evolution, which is defining transitional paths to sustainability. Topics for this Special Issue include, but are not limited to, the following innovations and findings:

- Flexible regulation and control of steam and hydro turbines;
- Regulation and control of renewable energy in challenging scenarios, including desert, offshore, and island at transmission and distribution levels;
- Regulation and control of virtual power plant of typical regions;
- Regulation and control of demand response, including residential, commercial and industrial loading and system interconnection;
- ICT and IoT, energy policies and grid codes, and electricity market pricing and trading mechanisms;
- Impacts of renewable generation on dispatch and unit commitment;
- The role of energy storage in control and regulation.

Guest Editors

Dr. Bowen Zhou

Prof. Dr. Matilde Santos

Dr. Timothy Littler

Dr. Jun Cao

Deadline for manuscript submissions

closed (15 October 2024)



Energies

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.2



mdpi.com/si/176577

Energies

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 3.0
CiteScore 6.2



[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)