

## Special Issue

# Modeling and Optimal Operation of Hydraulic, Wind and Photovoltaic Power Generation Systems

### Message from the Guest Editors

The modeling and optimal control of renewable energy sources such as hydraulic, wind and photovoltaic, which play an increasing role in modern power systems, are of great importance for safe and stable system operation. This Special Issue aims to present and disseminate the most recent advances related to the theory and/or application research on the modeling and optimal operation of hydraulic, wind and photovoltaic power generation systems. The topics of interest for publication include, but are not limited to, the keywords below.

hydraulic/solar/photovoltaic power generation system  
system integration; refined modeling; optimal  
operation  
advanced/intelligent control; cooperative control  
performance evaluation; scheduling and planning  
fault forecasting/diagnosis  
CFD simulation; stability analysis  
multi-energy complementary  
100% renewable power system  
smart microgrid

### Guest Editors

Prof. Dr. Chaoshun Li

Prof. Dr. Yun Zeng

Dr. Beibei Xu

Dr. Dong Liu

### Deadline for manuscript submissions

closed (31 July 2022)



## Energies

an Open Access Journal  
by MDPI

Impact Factor 3.2  
CiteScore 7.3



[mdpi.com/si/97854](https://mdpi.com/si/97854)

*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)