

## Special Issue

# Modeling, Control and Optimization of Wind Power Systems

### Message from the Guest Editor

This Special Issue focuses on the latest innovations in the design, analysis, and management of wind power systems, aiming to improve their performance, reliability, and adaptability in diverse operating conditions. Topics of interest include, **but are not limited to, the following:**

- Advanced modeling techniques for wind turbines and entire wind power systems;
- Innovative control strategies for enhancing stability and efficiency;
- Optimization of energy capture and integration into power grids;
- Fault detection, diagnosis, and tolerance methods for wind power systems;
- Hybrid systems combining wind power with other renewable energy sources;
- AI and machine learning applications in wind power system management;
- Novel materials and designs for enhanced turbine performance;
- Grid-friendly technologies for seamless power integration;
- Economic and environmental analyses for wind energy optimization.

We invite you to contribute your groundbreaking research to this Special Issue, helping to shape the future of wind power technology.

---

### Guest Editor

Dr. Ciprian Sorandaru

Department of Electrical Engineering, Polytechnic University of Timisoara, Timisoara, Romania

---

### Deadline for manuscript submissions

20 November 2025



## Energies

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.2  
CiteScore 7.3



[mdpi.com/si/226537](https://mdpi.com/si/226537)

*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)