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

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Deadline for manuscript submissions

closed (20 April 2026)

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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.

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