

Special Issue

Design and Dynamic Control of Wind Turbines

Message from the Guest Editors

Wind energy plays a critical role in meeting the global energy demand while maintaining an eco-friendly and clean approach. Improving the cost-effectiveness of such large turbines (e.g., capacity factor and reliability) and reducing their environmental impact (e.g., noise) are the key goals of the ongoing research. This Special Issue will consider any papers on research topics relating to the "design and dynamic control of wind turbines". Topics of interest for publication include, but are not limited to:

- Wind energy prediction for wind farms;
- Wind turbine aerodynamics and aeroelasticity;
- Aerodynamic efficiency and the upscaling of wind turbines;
- Design of low-noise-emission airfoils;
- Noise control and environmental impact;
- Control and modeling of fixed and floating wind turbines;
- Wind farm control;
- Anomaly detection and compensation;
- Design and analysis of foundations and support structures;
- Loadings on fixed and floating wind turbine structures;
- Wave-structure interaction/soil-structure interaction;
- Innovative tower design concepts.

Guest Editors

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Deadline for manuscript submissions

closed (31 August 2024)



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About the Journal

Message from the Editor-in-Chief

Machines is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications. Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided. There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

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