Special Issue

Development and Validation of Methodologies for Structural Monitoring of Floating Wind Turbines

Message from the Guest Editors

With the advent of floating platform solutions, the exploration of wind energy in offshore scenarios has been successfully extended to deeper waters. Although placing a wind turbine on top of a floating platform entails additional challenges for the design and operation teams, the particular dynamic nature of these complex structures also allows for the definition of new monitoring strategies that are still mostly unexplored, but which may play a very important role for the better, more efficient management and exploration of floating offshore wind farms. This Special Issue aims not only to explore the extension and validation of conventional structural monitoring techniques to the offshore field, but also to develop new methodologies which are specially designed for these structures, with a particular focus on approaches for enhanced structural health monitoring, operational modal analysis and fatigue damage evaluation.

Guest Editors

Dr. Francisco Pimenta

Dr. Eleonora Tronci

Dr. Sérgio Pereira

Deadline for manuscript submissions

10 October 2025



Energies

an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 7.3



mdpi.com/si/188702

Energies Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 energies@mdpi.com

mdpi.com/journal/ energies





Energies

an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 7.3



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)

