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Design and Performance Optimization of Tidal Turbines

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Message from the Guest Editors

This Special Issue of our journal is dedicated to exploring the cutting-edge advancements in the “Design and Performance Optimization of Tidal Turbines”. This Special Issue seeks to delve into the complexities of designing turbines that are not only efficient but also resilient to the harsh marine environment. Significant advancements in materials science, hydrodynamics, and engineering design have paved the way for more effective and durable turbines. Moreover, this Special Issue explores the optimization of turbine performance, encompassing aspects like energy capture efficiency, the minimization of environmental impact, and the integration of tidal turbines into the existing energy grid.

Relevant topics for this Special Issue include, but are not limited to:

1. Advanced design techniques for tidal turbines.
2. Performance optimization methods.
3. Environmental impact assessments.
4. Durability, maintenance, and monitoring of tidal turbines.
5. Integration with the energy grid, energy storage, and alternative energy vectors.
6. Economic analysis and market potential.
7. Policy and regulatory frameworks.
8. Case studies and real-world implementations.



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Special Issue



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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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