# Special Issue

# Wave Energy System Hydrodynamics Modeling and Application of High-Performance Computing

## Message from the Guest Editor

We organize a Special Issue "Wave Energy System Hydrodynamics Modeling and Application of High-Performance Computing", and would like to invite papers dealing with the application of high-performance computing for wave energy converter modeling. Specific topics include but are not limited to:

- Development and implementation of numerical wave tanks, including high-fidelity computational fluid dynamics (CFD) simulations and fully nonlinear time-domain potential flow methods;
- Wave resource characterization studies;
- Device array interaction and layout optimization;
- Fluid structure interaction, such as coupling between CFD for the fluid domain and finite element analysis (FEA) for the structure domain, particularly for advanced and flexible material applications;
- System design and innovation, including co-design, system optimization methods, and the application of machine learning;
- Grid integration analysis, including system cost modeling for utility-scale markets, microgrids and coastal resiliency applications.

## Guest Editor

Dr. Yi-Hsiang Yu
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## Deadline for manuscript submissions

closed (30 June 2022)

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# 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
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