



Optimization and Energy Maximizing Control Systems for Wave Energy Converters II

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Deadline for manuscript submissions:

closed (30 November 2023)

Message from the Guest Editors

Dear Colleagues,

Wave energy is now an established research field, and the scientific community focuses on reducing the capital cost associated with the design and construction of wave energy converters (WECs) while maximizing their performance and durability in real working conditions. Research challenges on WECs contemplate the application of well-known control and optimization techniques to highly nonlinear and multiple degrees of freedom dynamic systems.

We would like to invite papers on the topic of “Optimization and Energy-Maximizing Control Systems for Wave Energy Converters II”. This includes but is not limited to optimal design and control-informed optimization algorithms applied to WEC systems and array, model-based and data-driven novel energy-maximizing control strategies for WECs, numerical results and experimental tests proving the achievements of specific control architectures, specific challenges of the WEC application case, including strong nonlinearities (nonideal and saturated power take-off, hard-stop mechanisms), extreme condition handling (large motions and forces), and accurate estimation and forecasting of WEC input and states.





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Message from the Editor-in-Chief

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