

Special Issue

Optimization and Energy Maximizing Control Systems for Wave Energy Converters

Message from the Guest Editors

We would like to invite papers on the topic of “Optimization and Energy Maximizing Control Systems for Wave Energy Converters”. This includes, but is not limited to, holistic optimization algorithm, specific challenges of the WEC application case (large motions, estimation, forecasting, power take-off), theoretical and numerical development and implementation of novel control strategies for WECs, evaluation of their performance through high-fidelity numerical models or experiment, importance and representation of nonlinearities in the controlled device.

- Wave energy
- Optimization
- Energy maximizing control
- Nonlinear hydrodynamics
- Power take-off
- Estimation
- Forecasting

Keywords

- Wave energy
- Optimization
- Energy maximizing control
- Nonlinear hydrodynamics
- Power take-off
- Estimation
- Forecasting

Guest Editors

Dr. Giuseppe Giorgi

Marine Offshore Renewable Energy Laboratory (MOREnergy Laboratory), Department of Mechanical and Aerospace Engineering, Politecnico di Torino, 10129 Turin, Italy

Dr. Sergej Antonello Sirigu

Department of Mechanical and Aerospace Engineering, Politecnico di Torino, Turin, Italy

Deadline for manuscript submissions

closed (14 November 2021)



Journal of Marine Science and Engineering

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.0



mdpi.com/si/44866

*Journal of Marine Science and
Engineering*

Editorial Office

MDPI, Grosspeteranlage 5

4052 Basel, Switzerland

Tel: +41 61 683 77 34

jmse@mdpi.com

mdpi.com/journal/

jmse





Journal of Marine Science and Engineering

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.0



[mdpi.com/journal/
jmse](https://mdpi.com/journal/jmse)



About the Journal

Message from the Editor-in-Chief

The *Journal of Marine Science and Engineering* (JMSE, ISSN 2077-1312) is an international peer-reviewed open access journal which provides an advanced forum for studies related to marine science and engineering. The journal aims to provide scholarly research on a range of topics, including ocean engineering, chemical oceanography, physical oceanography, marine biology and marine geosciences. We invite you to publish in our journal sharing your important research findings with the global ocean community.

Editor-in-Chief

Prof. Dr. Charitha Pattiaratchi

Oceans Graduate School and The UWA Oceans Institute, The University of Western Australia, Perth, WA 6009, Australia

Author Benefits

High Visibility:

indexed with Scopus, SCIE (Web of Science), Ei Compendex, GeoRef, Inspec, AGRIS, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Marine) / CiteScore - Q2 (Ocean Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.6 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the first half of 2025).