

Special Issue

Coastal Morphodynamics and Dune Ecosystems

Message from the Guest Editor

Coastal dunes are dynamic landforms at the interface between marine and terrestrial environments, where sediment transport, vegetation growth and hydrodynamic forcing continuously interact. They play a crucial role in protecting coastlines from erosion and flooding, supporting biodiversity and providing carbon storage and recreational services. However, they are increasingly threatened by climate change, sea-level rise and human interventions that alter their natural morphodynamic behavior. This Special Issue aims to advance the understanding of the coupled morphodynamic and ecological processes driving coastal-dune formation, evolution and resilience. We welcome contributions that integrate field and laboratory experiments, remote sensing and modeling approaches to explore sediment transport, wind-vegetation feedback, and dune-ecosystem functioning. Studies addressing restoration strategies, nature-based coastal protection and the long-term adaptation of coastal dunes and ecosystems to climate change are particularly encouraged.

Guest Editor

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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

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