Special Issue

Environmental Adaptability and Ecological Synergy in Offshore Renewable Energy Engineering

Message from the Guest Editors

Marine renewable energy is a vital component of the renewable energy sector and plays a key role in achieving sustainable energy development. However, challenges such as extreme environmental conditions, technical complexity, and potential ecological impacts remain critical concerns. Understanding the dynamic behavior of marine energy systems, their adaptability to diverse ocean environments, and their interactions with marine ecosystems is essential for ensuring their long-term sustainability.

This special issue focuses on three core challenges: hydrodynamics—exploring the influence of complex marine environments (waves, currents, and wind) on the dynamic behavior and structural stability of offshore energy facilities; environmental factors—analyzing the challenges posed by extreme marine conditions (such as typhoons and salt spray corrosion) to the long-term operational reliability and technical adaptability of systems; ecological impacts—assessing the potential effects of marine energy development on marine ecosystems and exploring innovative solutions for sustainable development with ecological conservation.

Guest Editors

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In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. *Water* invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

Editor-in-Chief

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