Special Issue

Micro Sensors and Devices for Ocean Engineering

Message from the Guest Editor

This Special Issue focuses on cutting-edge sensor technologies for ocean observation and detection, showcasing integrated innovations spanning from microscale devices to macroscale system-level integration. Emphasis is placed on novel sensors for key ocean parameters, supported by manufacturing advances in micro/nanofabrication, biomimetic structuring, multifunctional integration, and corrosion- and high-pressure-resistant encapsulation. We welcome contributions on manufacturing methods, innovative materials, process optimization, and in situ performance validation of marine sensors. Relevant application domains include, but are not limited to, sensing of temperature, salinity, pressure, acoustic signals, flow velocity, electric and magnetic fields, pH, dissolved oxygen, and hydrogen. This Special Issue aims to drive technological breakthroughs in marine sensor manufacturing and help build the device-level foundation for next-generation intelligent, long-endurance, and high-resolution ocean observation networks.

Guest Editor

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Deadline for manuscript submissions

31 July 2026

Micromachines

an Open Access Journal by MDPI

Impact Factor 3.0
CiteScore 6.0
Indexed in PubMed

mdpi.com/si/261938

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Editor-in-Chief

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