Special Issue

Innovative Underwater Robotics for Ocean Observance

Message from the Guest Editors

About 71% of the Earth's surface is water-covered. However, the exploration of the ocean is still inadequate. Unmanned underwater vehicles (UUVs) are automated and operate independently of direct human input. With the development of artificial intelligence technologies, the application of underwater robotics has aroused the interest of researchers. It can assist with ocean observation, deep-sea exploration, offshore inspection, surveillance, and reconnaissance. Different from ground or aerial vehicles, UUVs operate in a marine environment, which is usually unknown, dynamic, hostile, and unconstructed. In such a complex and uncertain environment, it is difficult for UUVs to accomplish one or multiple missions and to realize full autonomy. In particular, the harshness of the underwater environment and the nature of the signal make navigation, guidance, and control challenging. In this Special Issue, innovative and frontier research in navigation and decision making for underwater robotics is addressed, with emphasis on the sensing, data fusion, target detection, motion planning, task management, and cooperative control and application of UUVs.

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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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