

Special Issue

Maritime Security and Smart Navigation: Recent Developments and Prospects

Message from the Guest Editors

Maritime transportation serves as the backbone of the global economy, yet it faces unprecedented challenges ranging from increasing traffic density to the urgent need for decarbonization. As the industry accelerates its transition toward Maritime Autonomous Surface Ships (MASS) and smart shipping, the focus of research is shifting from isolated automation systems to holistic, resilient, and human-centric solutions. This Special Issue aims to gather original contributions that address the latest developments in intelligent navigation technologies and safety management. We particularly welcome studies leveraging emerging technologies such as digital twins, deep learning, and big data analytics to solve complex problems in mixed-traffic scenarios (manned and unmanned ships). Topics of interest extend to cybersecurity in smart navigation, energy-efficient route planning to meet green shipping goals, and the evolution of human-machine collaboration. By integrating theoretical breakthroughs with practical applications, this Special Issue seeks to define the next generation of safe, efficient, and intelligent maritime systems.

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About the Journal

Message from the Editor-in-Chief

Journal of Marine Science and Engineering (JMSE, ISSN: 2077-1312) focuses on research in the fields of Ocean Engineering, Coastal Engineering, Physical Oceanography, Geological Oceanography, Marine Biology, and Marine Environmental Science. It publishes reviews, regular research papers, and short communications, as well as Special Issues on particular subjects. Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the maximum length of the papers.

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