Special Issue

Applications of Amphibious Robots and Intelligent Systems

Message from the Guest Editors

When robots operate in complex and dynamic environments, their systems require multi-modal switching mechanisms, intelligent control algorithms, and motion planning techniques, all of which are crucial for system performance. Through this Special Issue, we aim to advance the development of amphibious robot technology, providing opportunities for collaboration between academia and industry and supporting the widespread application of intelligent robotic systems in complex terrestrial and aquatic environments.

In this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

Design of multi-mode mechanisms for robotics. Bionic amphibious robot technology.

Amphibious alternating motion and dynamic modeling for robotics.

Advanced control designs for robotic systems. Multi-habitat motion planning and trajectory optimization.

Multi-robot coordination and swarm robotics. Learning-based control strategies and adaptive algorithms.

Applications of artificial intelligence (AI) in amphibious robotics.

Innovative robotic systems in the industrial automation, aerospace, medical, and service fields.

Guest Editors

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Deadline for manuscript submissions

15 February 2026



Electronics

an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 6.1



mdpi.com/si/246124

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About the Journal

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guestedited by leading experts in selected topics of interest.

Editor-in-Chief

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).

