



## Underwater Robotics: Theory, Methods and Applications

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### Message from the Guest Editors

With the continuous deepening of ocean exploration, humans will face more and more extreme underwater operations that cannot be completed. Underwater robots have emerged as important tools for understanding and developing the ocean due to their unmanned, intelligent, and clustered capabilities. They have broad application prospects in fields such as oil and mineral exploration, geomorphic surveying, scientific research observation, aquaculture, pier dam inspection, ship cleaning, underground pipeline inspection, military and national defense, etc. This SI aims to better explore the latest breakthrough and innovative research achievements, current challenges, and corresponding solutions of underwater robots. Research areas include (but are not limited to) the following:

1. Design and modeling of a new type of underwater robot
2. Image processing and recognition of the underwater environment
3. Acoustic and optical image fusion in the underwater environment
4. Communication networking technology for surface/underwater environment
5. Navigation positioning and trajectory planning for underwater environments





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## Message from the Editor-in-Chief

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