

## Special Issue

# Underwater Robotics: Theory, Methods and Applications

### 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

---

### Guest Editors

Dr. Xiang Cao  
Dr. Yunhu Zhou  
Dr. Juqi Hu

---

### Deadline for manuscript submissions

closed (15 March 2025)



## Electronics

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.6  
CiteScore 6.1



[mdpi.com/si/172472](https://mdpi.com/si/172472)

*Electronics*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[electronics@mdpi.com](mailto:electronics@mdpi.com)

[mdpi.com/journal/  
electronics](https://mdpi.com/journal/electronics)





# Electronics

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.6  
CiteScore 6.1



[mdpi.com/journal/  
electronics](https://mdpi.com/journal/electronics)



## 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

Prof. Dr. Flavio Canavero

Department of Electronics and Telecommunications, Politecnico di Torino, 10129 Torino, Italy

---

### Author Benefits

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), CAPlus / SciFinder, Inspec, Ei Compendex and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Electrical and Electronic) /  
CiteScore - Q1 (Electrical and Electronic Engineering)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.4 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the second half of 2025).