

## Special Issue

# Feature Papers in Actuators for Surface Vehicles

### Message from the Guest Editors

Surface vehicles are indispensable in maritime transportation, offshore operations, and marine environmental monitoring. With the increasing demand for greater efficiency and safety in maritime activities, the development of advanced control systems for surface vehicles has become more significant. These control systems are responsible for managing the navigation, maneuvering, and stability of vessels, ensuring that they can operate effectively in diverse and often challenging marine environments. The scope of this Special Issue includes, but is not limited to, the following topics:

The security and fault-tolerant control of surface vehicles;

Robust observer designs for the disturbance/state estimation of surface vehicles;

Artificial intelligence-based techniques for surface vehicles;

The formation and cooperative control of surface vehicles;

Navigation and path planning for surface vehicles;

The obstacle avoidance and optimization of surface vehicles;

Advanced control techniques for surface vehicles;

Real-world applications of surface vehicles.

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### Guest Editors

Dr. Hai Wang

Prof. Dr. Xiaozheng Jin

Dr. Edi Kurniawan

Dr. Jinlin Sun

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### Deadline for manuscript submissions

30 June 2026



## Actuators

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

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## About the Journal

### Message from the Editorial Board

We are just entering the Next Wave of Technology (NWT) where actuators will play the same role as the computer chip did for computers/social media approximately four decades ago. Just in the U.S., production of \$1 trillion year of electromechanical systems (vehicles, orthotics, manufacturing cells, freight trains, aircraft, etc.) will be impacted by the NWT, all driven by actuators. Five key trends can be found for the future perspectives: “Performance to Reliability”, “Hard to Soft”, “Macro to Nano”, “Homo to Hetero” and “Single to Multi functional”. We invite papers that primarily impact these economic sectors; those illustrating basic scientific principles are also welcome.

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### Editors-in-Chief

Prof. Dr. Kenji Uchino

Electrical Engineering, Emeritus Academy Institute, Pennsylvania State University, University Park, PA 16802, USA

Prof. Dr. Norman M. Wereley

Department of Aerospace Engineering, University of Maryland, 3179J Martin Hall, College Park, MD 20742, USA

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