Special Issue

Unmanned Systems: Intelligent Perception, Autonomous Navigation, and Positioning

Message from the Guest Editors

Autonomous vehicles (AUV) have difficulty in exploring the unknown environment, such as underwater, air and other areas. To fuse various sensors carried and obtain high-precision information independently is an important issue of environment perception. For example, the underwater environment has the characteristics of poor light conditions, image tone shift, and sensor interference, which is not conducive to the work of autonomous underwater vehicles. Focusing on the positioning and mapping of autonomous underwater vehicles in unknown environment detection, this Special Issue mainly shows intelligent perception, automous navigation and positioning for unmanned systems, which enable them tomore accurately and carefully locate and reconstruct underwater environments.

Guest Editors

Dr. Haogian Huang

College of Artificial Intelligence and Automation, Hohai University, Changzhou 213200, China

Dr. Di Wang

College of Artificial Intelligence and Automation, Hohai University, Changzhou 213200, China

Deadline for manuscript submissions

31 May 2026



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/250672

Applied Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 applsci@mdpi.com

mdpi.com/journal/applsci





Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

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

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

