

Special Issue

Advancements in Autonomous Navigation Systems for UAVs

Message from the Guest Editors

With the advancements in satellite technology and AI, the integration of GPS, inertial measurement units (IMUs), and computer vision has opened up new possibilities in the development of UAV navigation systems. This progress in navigation systems is changing our understanding of drone operations. Autonomous drone navigation systems use increasingly sophisticated algorithms and sensors to navigate complex environments. These systems not only improve flight safety and efficiency but also lead to new and exciting applications in a variety of fields. This Special Issue will be dedicated to the latest advances and findings in hardware and software solutions, including algorithms, for autonomous navigation systems in UAVs. In particular, attention is given to various UAV sensors, onboard computers, path planning, AI, ML, and SLAM. We welcome papers presenting multidisciplinary and state-of-the-art research on navigation systems in various types of applications across diverse fields, including precision agriculture, surveillance, infrastructure inspection, search and rescue, and environmental monitoring.

Guest Editors

Prof. Dr. Vlado Papic

Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, University of Split, 21000 Split, Croatia

Prof. Dr. Josip Music

Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, University of Split, 21000 Split, Croatia

Deadline for manuscript submissions

20 March 2026



Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



mdpi.com/si/245668

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

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





Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



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



About the Journal

Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro

Dipartimento di Ingegneria Elettrica e dell'Informazione (Department of Electrical and Information Engineering), Politecnico di Bari, Via Edoardo Orabona n. 4, 70125 Bari, 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), PubMed, MEDLINE, PMC, Ei Compendex, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Instruments and Instrumentation) / CiteScore - Q1 (Instrumentation)