Special Issue

Recent Advances in UAVs' GN&C (Guidance, Navigation, and Control) Technologies

Message from the Guest Editors

Emerging applications in various types of UAVs, such as rotor aircrafts, tilt-rotor aircrafts, blended-wing-body planes, and hypersonic vehicles, require innovative advanced GN&C technologies with great robustness and good performance under uncertainty and disturbances. We are pleased to announce this Special Issue on UAVs' GN&C (guidance, navigation, and control) and invite manuscripts that highlight recent advances in this field. The scope of this Special Issue will include:

- Innovative designs for UAVs' GN&C;
- Novel navigation and detection concepts and architectures;
- Improvements in data processing and sensor fusion techniques that enhance GN&C performance;
- Research illustrating advances in integrated guidance and control for UAVs;
- Methods and techniques of Artificial Intelligence for UAVs' GN&C;
- New methods of navigation, estimation, and tracking;
- GN&C of multiple UAVs or UAV swarms.

For more information, please visit: mdpi.com/si/125003

Guest Editors

Dr. Xueyun Wang

School of Instrument Science and Optoelectronics Engineering, Beihang University, XueYuan Road No. 37, HaiDian District, Beijing 100191, China

Dr. Stefano Caizzone

Institute of Communications and Navigation, German Aerospace Center (DLR), 82234 Wessling, Germany

Deadline for manuscript submissions

10 January 2026



Sensors

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 8.2 Indexed in PubMed



mdpi.com/si/125003

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

mdpi.com/journal/

sensors





Sensors

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 8.2 Indexed in PubMed



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)