Special Issue

INS/GNSS Integrated Navigation Systems

Message from the Guest Editor

The advent of Integrated Navigation Systems, combining Inertial Navigation Systems (INS) with Global Navigation Satellite Systems (GNSS), marks a significant milestone in the evolution of navigation technology. This Special Issue of our journal delves into the synergistic integration of INS/GNSS and other sensors, aiming to highlight the latest advancements, methodologies, and applications in this domain. As these systems complement each other's strengths and mitigate their respective weaknesses, their integration paves the way for superior accuracy and robustness in navigation solutions. In this Special Issue, we invite researchers to present their innovative work on system design, sensor fusion techniques, and performance analysis of INS/GNSS integrated systems. We are particularly interested in articles that explore the challenges of environmental factors on system performance, and the deployment of these systems in autonomous vehicles, aerospace, and mobile mapping. Through comprehensive research articles, reviews, and case studies, this Special Issue aims to provide a platform for disseminating cutting-edge research that pushes the boundaries of navigation technology.

Guest Editor

Prof. Dr. Xiyuan Chen

Key Laboratory of Micro-Inertial Instrument and Advanced Navigation Technology, Ministry of Education, School of Instrument Science and Engineering, Southeast University, Nanjing 210096, China

Deadline for manuscript submissions

31 December 2025



Sensors

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 8.2 Indexed in PubMed



mdpi.com/si/195625

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



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)

