

Special Issue

Vision-Based and LiDAR-Based Navigation Systems for Spacecraft and Autonomous Vehicles

Message from the Guest Editors

Contributions to this Special Issue are welcomed in the field of attitude and position measurement systems, in particular vision-based and LiDAR-based, for two main applications: the proximity navigation of spacecraft and the autonomous navigation of vehicles in unstructured environments. The importance of relative navigation between satellites and spacecraft is continuously growing since the number of possible applications is increasing, for instance, the flight formation of a set of small satellites, rendezvous and docking for satellite maintenance or for end-of-life operations and space debris mitigation. A growing interest for rover navigation in unstructured environments and, in particular, for in situ operations for planetary exploration is being demonstrated by several planned mobile robotic missions in the upcoming years, such as ESA Mars2020, NASA Mars2020, ROSCOSMOS Luna-25 and DLR/JAXA Mars Moons eXploration.

Guest Editors

Dr. Marco Pertile
Dr. Sebastiano Chiodini
Dr. Riccardo Giubilato

Deadline for manuscript submissions

closed (20 July 2023)



Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



mdpi.com/si/147719

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
Department of Electrical and Information Engineering, Politecnico di Bari, Via Orabona 4, 70126 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)