Special Issue

Advances in Pedestrian Positioning and Navigation Based on Ultra-Wideband Technology

Message from the Guest Editors

This Special Issue aims to explore the latest advances in the field of accurate positioning technologies, with a focus in particular on the use of ultra-wideband (UWB) technology. This Special Issue is committed to providing a comprehensive overview of innovative technologies, solutions, and applications, with a special focus on UWB positioning in smartphones. For this Special Issue, we invite submissions that focus on several key themes, including, but not limited to, the following:

- The application of UWB technology in smartphones for precise positioning in various environments (indoor, outdoor, mixed) and conditions (static, dynamic).
- Evaluations of system parameters such as accuracy, coverage area, integrity, availability, and robustness in UWB-enabled devices. Analysis of multiuser positioning systems to assess scalability and performance in crowded environments.
- Technical challenges and solutions related to accessing raw data from smartphones, including range, signal strength, and angle of arrival.
- Case studies or experimental research that showcase the application of UWB technology in real-world scenarios.

Guest Editors

Dr. Vincenzo Di Pietra

Department of Environment, Land and Infrastructure Engineering (DIATI), Politecnico di Torino, 10129 Torino, Italy

Prof. Dr. Paolo Dabove

Department of Environment, Land, and Infrastructure Engineering (DIATI), Politecnico di Torino, 10129 Torino, Italy

Deadline for manuscript submissions

closed (15 August 2025)



an Open Access Journal by MDPI

Impact Factor 4.1 CiteScore 8.6



mdpi.com/si/197371

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

mdpi.com/journal/remotesensing





an Open Access Journal by MDPI

Impact Factor 4.1 CiteScore 8.6



About the Journal

Message from the Editorial Board

Remote Sensing is now a prominent international journal of repute in the world of remote sensing and spatial sciences, as a pioneer and pathfinder in open access format. It has highly accomplished global remote sensing scientists on the editorial board and a dedicated team of associate editors. The journal emphasizes quality and novelty and has a rigorous peerreview process. It is now one of the top remote sensing journals with a significant Impact Factor, and a goal to become the best journal in remote sensing in the coming years. I strongly recommend Remote Sensing for your best research publications for a fast dissemination of your research.

Editors-in-Chief

Dr. Prasad S. Thenkabail

Senior Scientist (ST), U. S. Geological Survey (USGS), USGS Western Geographic Science Center (WGSC), 2255, N. Gemini Dr., Flagstaff, AZ 86001. USA

Prof. Dr. Dongdong Wang

Institute of Remote Sensing and Geographic Information Systems, Peking University, Beijing, China

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, PubAg, GeoRef, Astrophysics Data System, Inspec, dblp, and other databases.

Journal Rank:

JCR - Q1 (Geosciences, Multidisciplinary) / CiteScore - Q1 (General Earth and Planetary Sciences)

