

## Special Issue

# Lidar Sensing for 3D Digital Twins

### Message from the Guest Editors

Lidar has now become a common sensor for direct and accurate 3D information acquisition. It has been used for both environment perception in computer vision and robotics communities and 3D mapping in remote sensing and spatial surveying communities, depending on its configurations and mounting platforms. Digital twins is now a well-adopted concept to guide technological development in data acquisition, physical modelling, information management, interactive visualisation, etc. A digital twin generally includes the static environment and the dynamic components that interact with the environment. Thanks to the versatility of lidar systems, they have been used for both static environment mapping and dynamics detection. This Special Issue invites contributions from both remote sensing and related communities to demonstrate the advancements in lidar-based 3D mapping, dynamic object detection and tracking towards digital twins. Potential topics include, but are not limited to:

- Urban-scale mapping and modelling
- Point cloud segmentation
- Object detection and tracking
- Change/dynamic detection
- Multi-spectral lidar data processing
- Lidar-based mapping systems

---

### Guest Editors

Prof. Dr. Wen Xiao

Dr. Yongqiang Li

Dr. Jian Yang

---

### Deadline for manuscript submissions

closed (15 December 2023)



## Remote Sensing

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.1  
CiteScore 8.6



[mdpi.com/si/132983](https://mdpi.com/si/132983)

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

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





# Remote Sensing

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.1  
CiteScore 8.6



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



## About the Journal

### Message from the Editor-in-Chief

*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 peer-review 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.

---

### Editor-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

---

### 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)