Special Issue

Remote Sensing of Urban Built Environment for Sustainable Development

Message from the Guest Editors

Remote sensing (RS) technologies, ranging from hyperspectral imaging to LiDAR and SAR, together with multisource big geospatial observations and artificial intelligence provide powerful tools for monitoring urban built environment dynamics, and assist in creating roadmaps towards the development of a sustainable, inclusive, and livable society. This Special Issue seeks to compile cutting-edge research on the following topics:

- Urban land use/cover change (LUCC).
- The high-resolution mapping of urban expansion, slums, and green spaces.
- Al-driven classification (e.g., deep learning for impervious surface detection).
- Climate resilience and environmental monitoring
- Urban heat island (UHI) modeling using thermal RS.
- Air/water quality assessment via multispectral and hyperspectral data.
- Disaster risk reduction
- Flood/flood susceptibility mapping (e.g., Sentinel-1 SAR for inundation monitoring).
- Post-disaster damage assessment (e.g., UAVs for earthquake resilience).
- Social and infrastructure applications
- Three-dimensional city modeling with LiDAR and photogrammetry.
- The use of crowdsourced RS data (e.g., street-view imagery) for urban livability studies.

Guest Editors

Dr. Shengbiao Wu

Dr. Siqi Jia

Prof. Dr. Raffaele Lafortezza

Deadline for manuscript submissions

30 November 2025



an Open Access Journal by MDPI

Impact Factor 4.1 CiteScore 8.6



mdpi.com/si/238893

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 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 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.

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)

