Special Issue

Integration of Remote Sensing and Artificial Intelligence for Structural Health Monitoring

Message from the Guest Editors

Structural Health Monitoring (SHM) offers a systematic and predictive approach for the early detection of structural issues, supporting informed maintenance decisions and improving safety and durability. This Special Issue aims to bring together cutting-edge research that leverages satellite, UAV, LiDAR, SAR, optical imagery, and other remote sensing data sources in combination with advanced AI techniques—including machine learning, deep learning, and data fusion—to monitor, detect, and predict structural degradation, damage, and failure.

This Special Issue aims to foster collaboration between remote sensing scientists, civil engineers, and AI researchers, and to highlight the transformative potential of this integration for safer, smarter, and more resilient infrastructure systems. We welcome original contributions that explore novel methodologies, real-world applications, and interdisciplinary approaches to SHM using remote sensing and AI.

Guest Editors

Dr. Bao Shu

Dr. Xuanyu Qu

Dr. Lei Xie

Dr. Mehdi Maboudi

Deadline for manuscript submissions

31 January 2026

Remote Sensing

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 8.6

mdpi.com/si/248005

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

mdpi.com/journal/remotesensing

MDPI

Remote Sensing

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 8.6

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)