

Special Issue

Land Cover and Vegetation Mapping Based on Spectral Unmixing and Multi-Source Remote Sensing Data Fusion

Message from the Guest Editors

Accurate, spatially explicit characterization of land cover and vegetation is fundamental to biodiversity assessment, ecosystem monitoring, agricultural management, carbon accounting, natural-resource planning, and climate adaptation. This Special Issue welcomes original research, methodological studies, technical advances, and reviews that develop or apply spectral unmixing, remote-sensing data fusion, or integrated approaches for land-cover and vegetation mapping. Studies demonstrating robust applications across forests, croplands, rangelands, wetlands, drylands, coastal zones, and urban environments are also encouraged.

Topics of interest include, but are not limited to:

- Linear, nonlinear, sparse, Bayesian, and physics-based spectral unmixing;

- Hyperspectral and multispectral unmixing for sub-pixel land-cover and vegetation-fraction estimation;

- Fusion of complementary optical, radar, structural, thermal, and multi-platform observations;

- Time-series analysis of phenology, biomass, stress, disturbance, degradation, and recovery;

- Benchmark datasets, spectral libraries, open-source tools, and reproducible workflows.

Guest Editors

Dr. Hamdi A. Zurqani

Arkansas Agricultural Experiment Station, Arkansas Forest Resources Center, University of Arkansas, Monticello, AR 71655, USA

Dr. Abdulsalam Al-Bukhari

Department of Forestry and Rangeland, Faculty of Natural Resources and Environmental Sciences, Omar Al-Mukhtar University, Al Bayada, Libya

Deadline for manuscript submissions

28 February 2027



Remote Sensing

an Open Access Journal
by MDPI

Impact Factor 4.3
CiteScore 9.4



mdpi.com/si/285931

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

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





Remote Sensing

an Open Access Journal
by MDPI

Impact Factor 4.3
CiteScore 9.4



[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.

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)