Special Issue

Multi-Source Data Fusion and Feature Extraction for Underwater Target Detection

Message from the Guest Editors

Underwater target detection faces unique challenges due to turbidity, variable acoustics, and limited visibility. Traditional single-modality approaches often falter in these complex environments. Recent advances in sensing technologies and artificial intelligence have enabled multi-extraction approaches—extracting diverse features from heterogeneous data sources—and sophisticated fusion algorithms that combine information across sensors, domains, and scales. This research area is crucial for maritime security, underwater archeology, marine conservation, and autonomous underwater vehicle navigation.

This Special Issue showcases cutting-edge research in multi-extraction and fusion techniques for underwater target detection. We seek interdisciplinary contributions bridging theoretical innovations with practical implementations. Our focus aligns with the journal's commitment to advancing technological solutions for complex environmental challenges, particularly in domains characterized by unique physical constraints.

Guest Editors

Dr. Min Fu College of Information Science and Engineering, Ocean University of China, Qingdao 266100 China

Prof. Dr. Salah Bourennane Fresnel Institute, Multidimensional Signal Group, Marseille, France

Deadline for manuscript submissions

15 January 2026



an Open Access Journal by MDPI

Impact Factor 4.1 CiteScore 8.6



mdpi.com/si/242629

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



MDPI

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)