Special Issue

Innovative Remote-Sensing Technologies for Sea Ice Observing

Message from the Guest Editors

This Special Issue, “Innovative Remote Sensing Technologies for Sea Ice Observing,” aims to:
- Showcase cutting-edge sensor and platform technologies (e.g., SAR, passive microwave, UAV hyperspectral, altimeters, and in situ/autonomous systems).
- Advance analytical methodologies—AI/deep learning, multi-sensor fusion, data assimilation—for retrieving key sea-ice parameters (thickness, concentration, and dynamics).
- Bridge science and practice by promoting applications in navigation support, marginal ice zone monitoring, and operational forecasting.

Suggested Themes:
- Satellite SAR and Passive Microwave Systems: Novel sensors, enhanced sea ice thickness, and concentration retrievals.
- Airborne/UAV and In Situ Platforms: Hyperspectral payloads and buoy-mounted and ship□based sensors.
- Multi-Sensor Fusion and Data Assimilation: Integration of optical, altimetry, SAR, radiometry, and model outputs.
- AI / Deep Learning: Segmentation, classification, and forecasting of sea ice from SAR and optical imagery.
- Operational and Case Studies: Navigation support, remote marginal ice-zone monitoring, and climate impacts.

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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

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