

## Special Issue

# Remote Sensing Techniques and Applications in Planetary Rover Exploration

### Message from the Guest Editors

Remote sensing techniques play a crucial and indispensable role in the exploration of planetary rovers, enabling scientists to gather invaluable information about distant celestial bodies such as Lunar, Mars and asteroids. These rovers serve as essential tools for conducting scientific investigations and collecting data in challenging and unfamiliar extraterrestrial environments. By employing remote sensing techniques, which involve the acquisition and analysis of remote images and data, researchers gain vital guidance and insights for successful rover missions. The objective of the present Special Issue is to cover the relevant topics, trends and best practices regarding algorithms, models, analyses and applications in the field. We welcome topics that include, but are not limited to the following:

- Planetary geomorphologic mapping;
- Planetary photogrammetric remote sensing;
- Planetary spectroscopic remote sensing;
- Remote sensing methods, data calibration and validation;
- Recent and future planetary exploration missions;
- Landing sites studies;
- Rover localization and navigation;
- 3D terrain reconstruction;
- Deep learning techniques in deep space explorations.

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### Guest Editors

Dr. Xiong Xu

Dr. Xun Geng

Dr. Youqing Ma

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### Deadline for manuscript submissions

closed (31 October 2024)



## Remote Sensing

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Impact Factor 4.2  
CiteScore 8.3



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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.

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### 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

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