



Remote Sensing

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Special Issue Reprint

Artificial Intelligence-Driven Methods for Remote Sensing Target and Object Detection II

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The purpose of this reprint is to provide readers with a comprehensive understanding of the latest advancements and technical approaches in the fields of remote sensing target detection and object detection. Remote sensing target detection focuses on identifying and locating specific targets of interest within remote sensing images, serving as a cornerstone for applications such as resource exploration, environmental monitoring, and national security. Recent years have witnessed significant progress in artificial intelligence (AI), which has been widely applied to tasks such as regression, clustering, and classification. While AI-driven methods exhibit remarkable capabilities in processing the vast volumes of data generated by remote sensing, they heavily rely on abundant high-quality labeled samples, posing challenges in the context of remote sensing big data. Consequently, their performance is often constrained by the scarcity of labeled data and the complexity of diverse backgrounds, making robust and practical target detection an ongoing challenge. This reprint gathers insights from leading experts, presenting cutting-edge research findings and offering forward-looking perspectives to address these pressing issues in remote sensing and object detection.

