Special Issue

New Progress on Remote Sensing Technology and Its Application in Agriculture

Message from the Guest Editors

Global agriculture faces increasing demands for productivity and sustainability, and remote sensing technology offers critical tools for addressing these challenges. The integration of multisource data fusion, radiative transfer models, and artificial intelligence (AI) will advance sustainable agriculture. Multisource data fusion combines satellite, UAV, and ground-based data, allowing for the more accurate monitoring of crop conditions, soil moisture, and environmental variables. Radiative transfer models enhance our understanding of the interaction between electromagnetic radiation and vegetation, enabling the precise retrieval of crop characteristics. AI, including machine learning and deep learning, plays a critical role in analyzing complex datasets, and facilitating crop stress detection, yield prediction, and disease monitoring. Together, these technologies provide actionable insights for precision agriculture, resource optimization, and climate resilience, supporting sustainable farming practices globally. This Special Issue requests research on innovative approaches and applications, fostering collaboration across disciplines to address key agricultural challenges.

Guest Editors

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Deadline for manuscript submissions

closed (20 June 2025)

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/223476

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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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