Special Issue

Remote Sensing in Smart Irrigation Systems

Message from the Guest Editors

With the development of precision irrigation technology in precision agriculture, the use of remote sensing methods, such as UAVs, satellites, ground vehicles, etc., can successfully obtain crop information and monitor soil moisture in agricultural fields quickly, efficiently, and accurately without touching or destroying the original soil structure.

This Special Issue focuses on the effectiveness of remote sensing technology in monitoring water use in agricultural environments to improve the sustainability of crop production. The scope of this Special Issue includes the application of remote sensing technology in irrigation monitoring, the design and optimization of smart irrigation systems, the impact of climate change on irrigation demand, the integration of remote sensing technology with the Internet of Things (IoT), case studies of remote sensing technology applications in different crops and regions, the combination of precision agriculture with remote sensing technology, and the analysis and processing of remote sensing data. We welcome the submission of various types of articles, such as original research papers and reviews.

Guest Editors

Prof. Dr. Wenting Han

College of Mechanical and Electronic Engineering, Northwest A&F University, Yangling 712100, China

Dr. Guomin Shao

State Key Laboratory of Eco-Hydraulics in Northwest Arid Region of China, Xi'an University of Technology, Xi'an 710048, China

Deadline for manuscript submissions

closed (30 October 2025)



Agriculture

an Open Access Journal by MDPI

Impact Factor 3.6 CiteScore 6.3



mdpi.com/si/224741

Agriculture
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
agriculture@mdpi.com

mdpi.com/journal/agriculture





Agriculture

an Open Access Journal by MDPI

Impact Factor 3.6 CiteScore 6.3



About the Journal

Message from the Editor-in-Chief

Agriculture (ISSN 2077-0472) is an international, scholarly and scientific open access journal publishing peer-reviewed research papers, review articles, communications and short notes that reflect the breadth and interdisciplinarity of agriculture.

Editor-in-Chief

Prof. Dr. Les Copeland

Sydney Institute of Agriculture, School of Life and Environmental Sciences, The University of Sydney, Sydney, NSW 2006, Australia

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), PubAg, AGRIS, RePEc, and other databases.

Journal Rank:

JCR - Q1 (Agronomy) / CiteScore - Q1 (Plant Science)

