Special Issue

Recent Applications of Remote Sensing and Machine Learning in Smart Agriculture

Message from the Guest Editors

Smart Agriculture upgrades conventional farming methods and world agriculture strategies to an optimized value chain by integrating innovative information and communication technologies, such as remote sensing, machine learning, big data analysis, and the Internet of Things. Recent advances in remote sensing technology enable the low-cost, highresolution, and flexible observation of crops and soils, and the obtainment of diagnostic information on crop growth, water stress, soil fertility, weed, disease, lodging, and 3D topography. Machine learning technologies exhibit a considerable potential to handle numerous challenges in the establishment of knowledge-based farming systems. In this context, the aim of this Special Issue is to seek high-quality papers related to recent progress in remote sensing (ground-based, dronebased, and satellite-based), artificial intelligence (deep learning and machine learning), and big data analysis for the application of smart agriculture, especially UAVbased high-throughput phenotyping, crop growth status and nutrition diagnosis, and yield estimation based on multisource remote sensing data and machine learning.

Guest Editors

Dr. Zhenwang Li

Dr. Liujun Xiao

Dr. Yahui Guo

Deadline for manuscript submissions

closed (20 November 2024)



Agriculture

an Open Access Journal by MDPI

Impact Factor 3.6 CiteScore 6.3



mdpi.com/si/192480

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, cross-disciplinary and scholarly journal on the science and technology of crop and animal production, and management of the natural resource base for agricultural production. We invite submissions from authors according to the aims and scope of the journal described in more detail on this page. Agriculture is published in an open access format – articles are published on the journal's website immediately after acceptance, giving the scientific community and the public unlimited and free access to the content.

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)

