Special Issue

Application of Spectral Sensors in Agricultural Product Quality Detection

Message from the Guest Editor

The utilization of spectral sensors in agriculture has revolutionized the way producers, scientists, and engineers approach crop management and food safety. This Special Issue aims to highlight innovative research and developments in the application of spectral sensors for detecting and predicting the quality of agricultural products. It seeks to cover a broad spectrum of topics, including advances in sensor technology, data analysis techniques, and their integration into existing agricultural practices. Papers in this issue will showcase the latest breakthroughs in spectral sensor technology and its applications in agriculture. This includes novel sensor designs, improvements in data processing algorithms, and the use of artificial intelligence to interpret complex datasets. Suitable topics include, but are not limited to, the following:

- Development and validation of new spectral sensors for quality detection in various crops;
- Case studies on the implementation of spectral sensors in field conditions;
- Methods for interpreting complex data collected by spectral sensors, including the use of machine learning and artificial intelligence to predict crop quality.

Guest Editor

Dr. Tong Lei

Plant Simulation Lab, Department of Plant Sciences, University of California, Davis, One Shields Ave, Davis, CA 95616, USA

Deadline for manuscript submissions

closed (5 June 2025)



Agriculture

an Open Access Journal by MDPI

Impact Factor 3.6 CiteScore 6.3



mdpi.com/si/208049

Agriculture
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +4161 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)

