



## **Novel Applications of Optical Sensors and Machine Learning in Agricultural Monitoring—2nd Edition**

Guest Editors:

**Dr. Haikuan Feng**

**Dr. Yanjun Yang**

**Dr. Ning Zhang**

**Dr. Chengquan Zhou**

**Dr. Jibo Yue**

Deadline for manuscript  
submissions:

**25 June 2024**

### **Message from the Guest Editors**

Optical sensors play an essential role in agriculture production management. In particular, monitoring plant health, growth condition, and insect infestation have traditionally been approached by performing extensive fieldwork. The processing and analysis of huge amounts of data from different sensors still face many challenges. Machine learning can derive and process agricultural information from optical sensors onboard ground, air, and space platforms.

This Topic seeks to compile the latest research on optical sensors and machine learning in agricultural monitoring. The following provides a general (but not exhaustive) overview of subjects that might be relevant to this Topic:

- Machine learning approaches for crop health, growth, and yield monitoring.
- Combined multisource/multi-sensor data to improve crop parameter mapping.
- Crop-related growth models, artificial intelligence models, algorithms, and precision management.
- Farmland environmental monitoring and management.
- Ground, air, and space platform application in precision agriculture.
- Development and application of field robotics.
- High-throughput field information surveys.
- Phenological monitoring.





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## 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

## Message from the Editor-in-Chief

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Agriculture Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

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