Special Issue

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

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.

Guest Editors

Dr. Haikuan Feng

Dr. Yanjun Yang

Dr. Ning Zhang

Dr. Chengquan Zhou

Dr. Jibo Yue

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

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Message from the Editor-in-Chief

Agriculture (ISSN 2077-0472) is an international, crossdisciplinary and scholarly open access journal on the science and technology of crop and animal production, and management of the natural resource base for agricultural production. *Agriculture* is published in an open access format – research articles, reviews and other contents are released on the internet immediately after acceptance. The scientific community and the public have unlimited and free access to the content as soon as it is published.

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

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