Special Issue

Smart Sensing Systems for Arable Crop and Grassland Management

Message from the Guest Editors

In recent decades, multiple sensor-based systems for agriculture have appeared. Using these sensors combined with different methodologies based on artificial intelligence, such as machine learning, has provided multiple solutions. Most of these solutions have been designed to be applied in greenhouses and permanent crops, while systems for arable crops and grasslands have been less proposed. In this Special Issue, we aim to collect novel developments of smart sensing systems to support the management of arable crops and grasslands, including urban and periurban grasslands. These systems can be based on multiple types of sensors: optical sensors, acoustic sensors, electromagnetic sensors, or other physical/chemical sensors. The systems can monitor the parameters of soil, water, plants, or climate and combine them. The gathered information should be used as input for algorithms that provide smart, data-based agricultural management recommendations linked to irrigation, fertilization, and pest management.

- smart agriculture
- smart farming
- arable crop management
- meadow management
- urban grassland management
- IoT in agriculture
- WSN in agriculture
- proximal sensing

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Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

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