Special Issue

Sensor-Based Precision Agriculture

Message from the Guest Editors

The integration of intelligent technologies is one of the solutions to the sustainability and efficiency of agricultural practices, including next-generation sensors, communications, autonomous flight systems, artificial intelligence, robotics, and analytics. This Special Issue is dedicated to investigating the research and development of solid-state sensors to collect varied agricultural data. The aim is to monitor biochemical parameters, such as nutrition, humidity, temperature, light, and pH in real time, and biochemical interactions, such as predation, parasitism, and competition. Sensors are used at different spatial and time scales to provide farmers with data-driven insights into crop and livestock growth and health, pests, pesticides, soil health, water, fruit quality, greenhouse gases, and volatile compounds. This Special Issue will also cover the utilization of low-power sensors, energy harvesting technologies, and high-throughput phenotyping using sensors. We welcome original research, opinions, and reviews covering various specialized crops, including vegetable, ornamental, and field crops and seeds from other managed ecosystems.

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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

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