

Special Issue

Smart Sensors in Precision Agriculture

Message from the Guest Editor

Smart sensors play a crucial role in Precision Agriculture by providing real-time, accurate data that enable farmers to make informed decisions. These sensors, integrated with IoT, AI, and data analytics, optimize resource usage, enhance crop yields, and ensure sustainable farming practices. By enabling the real-time monitoring of soil, crops, and environmental conditions, these sensors empower farmers to make smarter decisions, optimize resources, and improve the overall productivity of farms while reducing their environmental impact. These technologies also facilitate the management and interpretation of this information, with Artificial Intelligence transforming smart agriculture by enabling data-driven decision-making, predictive analytics, and automation. Via the integration of real-time data from IoT sensors, drones, satellite imagery, weather stations, and other sources, digital twins provide a dynamic and data-driven model of farms in a sensor network, allowing the generation of automated integrated decision-making systems that consider the spatial variability of farms when making decisions related to each part of the farm and evaluating their effect.

Guest Editor

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Message from the Editor-in-Chief

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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