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Digital Technology for Smart Agriculture: Applications, Challenges, and Outlooks

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Message from the Guest Editors

Dear Colleagues,

Extreme weather poses a significant challenge to traditional agriculture, affecting the quality and quantity of planted crops. To ensure a stable crop yield and reduce planting costs, creating a suitable planting environment and optimizing the invested resources, such as water, fertilizer, and the cultivated area, are crucial. Digital technology can be implemented in traditional agriculture to achieve smart agriculture practices. Smart agriculture uses the IoT and wireless communication to monitor and collect information on cultivated land, applies big data analysis to predict or forecast future outcomes, and employs robots to save on labor. The final goal of this process is to achieve sustainable agriculture, precision agriculture, and unmanned agriculture.

This Special Issue, "Digital Technology for Smart Agriculture: Applications, Challenges, and Outlooks", welcomes high-quality studies focused on pioneering technologies involving the Internet of Things (IoT), wireless communication, cloud computing, big data, machine learning, artificial intelligence, etc., and their applications in smart agriculture.









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