

Special Issue

Transforming Agriculture Through Industrial Informatics and Emerging Technologies

Message from the Guest Editors

The global agricultural landscape is rapidly evolving to meet the challenges of feeding a growing population, ensuring environmental sustainability, and addressing climate variability. Traditional methods of farming and food production are becoming insufficient to meet these demands, prompting a digital transformation in agriculture. This Special Issue focuses on leveraging industrial informatics and emerging technologies to address pressing challenges in agriculture and food systems. It invites contributions on advanced research and innovative applications that integrate smart sensing, the Internet of Things (IoT), artificial intelligence (AI), robotics, and big data analytics to enable precision agriculture, optimize resource use, and enhance sustainability. Topics include, but are not limited to, the following: Precision Agriculture; Automation and Robotics; Digital Twins and Predictive Analytics; Smart Monitoring Systems; Energy-Efficient Farming.

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Deadline for manuscript submissions

31 December 2025



Agronomy

an Open Access Journal
by MDPI

Impact Factor 3.4
CiteScore 6.7



mdpi.com/si/236183

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Agronomy draws together researchers from diverse areas of agricultural research with a common aim of enhancing agricultural productivity globally. The journal provides unlimited free access to all those interested in advancing agricultural science from both the research and general community. Papers are released immediately after acceptance through the internet.

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