

## Special Issue

# Intelligent Sensing and Edge AI-Driven Systems for Precision Agriculture

### Message from the Guest Editors

With innovations in artificial intelligence (AI), big data analytics, the Internet of Things (IoT), edge computing, and automation/robotics, agriculture has advanced to smart agriculture. The growing demand for smart solutions has propelled edge computing due to the need to move computation closer to data sources. The rise of connected devices generates significant raw data at the edge, where AI enables real-time data transformation. Powerful computational infrastructure and data analytics have enhanced the robustness and reliability of sensing, edge AI, and control technologies in production agriculture. This Special Issue aims to deepen understanding of major conceptual and technical challenges while facilitating breakthroughs in sensing, computer vision, edge AI, and control systems for smart farming. The scope includes but is not limited to: 1. Computer vision for agricultural automation and control 2. Edge AI-enabled monitoring and decision support systems 3. Computer vision systems for plant phenotyping 4. IoT-based sensing for intelligent automation 5. Edge-centric collaborative learning for smart farming 6. Optimization of real-time AI-based edge solutions

### Guest Editors

Dr. Azlan Zahid

Dr. Mazhar Sher

Dr. Chetan Badgujar

### Deadline for manuscript submissions

closed (31 August 2025)



## Agriculture

an Open Access Journal  
by MDPI

Impact Factor 3.6  
CiteScore 6.3



[mdpi.com/si/232257](https://mdpi.com/si/232257)

*Agriculture*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[agriculture@mdpi.com](mailto:agriculture@mdpi.com)

[mdpi.com/journal/  
agriculture](https://mdpi.com/journal/agriculture)





# Agriculture

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.6  
CiteScore 6.3



[mdpi.com/journal/  
agriculture](https://mdpi.com/journal/agriculture)



## About the Journal

### Message from the Editor-in-Chief

*Agriculture* (ISSN 2077-0472) is an international, scholarly and scientific open access journal publishing peer-reviewed research papers, review articles, communications and short notes that reflect the breadth and interdisciplinarity of agriculture.

---

### Editor-in-Chief

Prof. Dr. Les Copeland  
Sydney Institute of Agriculture, School of Life and Environmental  
Sciences, The University of Sydney, Sydney, NSW 2006, Australia

---

### Author Benefits

#### Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), PubAg, AGRIS, RePEc, and other databases.

#### Journal Rank:

JCR - Q1 (Agronomy) / CiteScore - Q1 (Plant Science)