

## Special Issue

# Innovations in Precision Smart Environmental Control for Sustainable Facility Agriculture

### Message from the Guest Editors

In recent years, the demand for efficient and sustainable agricultural practices has surged, driven by the need to ensure food security and minimize environmental impact. Precision smart environmental control technologies and algorithms have emerged as essential tools in facility agriculture, encompassing greenhouses, livestock systems, and other controlled environments. These innovations enable growers to optimize environmental conditions, enhance plant and livestock productivity, and reduce resource consumption.

The aim of this Special Issue is to explore the latest developments in precision control systems and relevant advanced algorithms applied to environment control in facility agriculture. The articles in this Special Issue shall cover a broad range of topics, including but not limited to, precision climate control in greenhouses, smart ventilation systems in livestock facilities, environmental impact on animal behavior or plant production, and the application of AI and machine learning algorithms to optimize agricultural environmental operations.

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### Guest Editors

Dr. Hao Li  
Dr. Xiaoshuai Wang  
Dr. Guoxing Chen

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### Deadline for manuscript submissions

closed (20 December 2025)



## Agriculture

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## 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.

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### Editor-in-Chief

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