Special Issue

Application of Artificial Intelligence in the Processing of Horticultural Crops

Message from the Guest Editor

The application of artificial intelligence (AI) in the processing of horticultural crops integrates advanced multi-sensor technologies and intelligent control systems to enable precise monitoring, optimized handling, and quality enhancement throughout the stages of harvesting, preservation, storage, processing, and quality detection.

Topics of interest for this Special Issue include, but are not limited to, the following:

Intelligent harvesting: The application of Al-driven recognition and localization technologies in the automated harvesting of horticultural crops.

Intelligent preservation: The integration of IoT-based environmental sensing and predictive modeling for the dynamic control of preservation conditions.

Intelligent storage: The development of multi-sensor fusion systems and Al algorithms for the real-time monitoring and modeling of crop status during storage.

Intelligent quality detection: The application of multimodal sensing technologies combined with AI models for the comprehensive, non-destructive quality assessment and grading of horticultural products.

Guest Editor

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About the Journal

Message from the Editor-in-Chief

Horticultural plants and their products provide sustenance, health, and beauty. A confluence of factors is putting increasing pressure on horticultural production to evolve, and innovative research is addressing these challenges. *Horticulturae* provides a venue to communicate research results in a rapid manner with open access, allowing everyone the opportunity to stay abreast of leading research addressing horticulture. I invite you to consider publishing the results of your research in this high quality, peer-reviewed journal.

Editor-in-Chief

Prof. Dr. Luigi De Bellis

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