



Application of Spectroscopy and Sensor Technology in Agricultural Products

Guest Editors:

Dr. Ahmed Mustafa Rady

1. Teagasc, The Agriculture and Food Development Authority, Dublin, D15 KN3K, Ireland
2. Food, Water, Waste Research Group, Faculty of Engineering, University of Nottingham, University Park Campus, Nottingham NG7 2RD, UK

Dr. Ewa Ropelewska

Fruit and Vegetable Storage and Processing Department, The National Institute of Horticultural Research, Konstytucji 3 Maja 1/3, 96-100 Skierniewice, Poland

Deadline for manuscript submissions:

closed (25 January 2023)

Message from the Guest Editors

Among digital technologies, spectroscopic, color, gas, ultrasonic, and other sensors have been showing a significant capability to be utilized as non-invasive and/or rapid sensors for monitoring various quality aspects of agricultural commodities in a robust, reproducible, and accurate manner. The significant advancement of IoT and smart manufacturing facilities provided other phases of applications of non-invasive sensors for online quality evaluation and to be integrated with cloud computing platforms. Over the last decade, there has been intensive research on improving machine learning algorithms which brought tremendous tools for high-dimensional data analysis among which deep learning is an innovative, highly accurate, and deployable model that accelerated the applications of non-invasive sensors for online quality evaluation of agricultural products.

This Special Issue of Agriculture targets a wide spectrum of original research and review studies focusing on the applications of optical, ultrasonic, and other sensors along with machine learning algorithms for the detection of the quality of agricultural products during production, harvesting, handling, and storage stages.





an Open Access Journal by MDPI

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

Message from the Editor-in-Chief

Agriculture (ISSN 2077-0472) is an international, crossdisciplinary and scholarly open access journal on the science and technology of crop and animal production, and management of the natural resource base for agricultural production. *Agriculture* is published in an open access format – research articles, reviews and other contents are released on the internet immediately after acceptance. The scientific community and the public have unlimited and free access to the content as soon as it is published.

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)

Contact Us

Agriculture Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/agriculture
agriculture@mdpi.com
X@AgricultureMdpi