

Topical Collection

Agriculture 4.0: From Precision Agriculture to Smart Agriculture

Message from the Collection Editors

Agriculture 4.0, the natural evolution of precision agriculture, makes it possible to face these challenges by allowing an intelligent and controlled application of inputs, optimized management of production from field to table, integration of different technologies in agriculture, etc. The use of software, applications, networks of sensors, all supported by Internet of Things (IoT) technologies, make data easily manageable and accessible. The agriculture in the future will increasingly use sophisticated technologies such as robots, field sensors, aerial imagery, GPS technology, software completely interconnected by IoT networks allowing farms to be more profitable, efficient, safer and more environmentally friendly. Among the topics we highlight:

History of Precision Agriculture, Sensing Technology for Precision Farming (satellite, aerial, UAV, proximal sensing platforms, etc.), Data Processing and Utilization in Precision Agriculture, Image Processing, Control of Precision Agriculture Production, Big data analysis applied to precision agriculture, Intelligent Agricultural Machinery and Field Robots, Traceability Smart Agriculture, Precision Farming Economics.

Collection Editors

Prof. Dr. Pasquale Catalano

Department of Agricultural, Environmental and Food Sciences,
University of Molise, 86100 Campobasso CB, Italy

Prof. Dr. Antonia Tamborrino

Department of Soil, Plant and Food Science (DISSPA), University of Bari
Aldo Moro, Via Amendola 165/a, 70126 Bari, Italy



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



mdpi.com/si/91747

Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applsci@mdpi.com

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





Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



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



About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,
20133 Milano, Italy

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), Ei Compendex, Inspec, Embase, CAPIus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)