



an Open Access Journal by MDPI

# Intelligent Sensor Systems Applied in Smart Agriculture

Guest Editors:

# Prof. Dr. Heinz Bernhardt

Agricultural System Engineering, Technical University of Munich, 85354 Freising, Germany

#### Prof. Dr. Patrick Noack

Information Technology and IoT in Agriculture and Environment, University of Applied Sciences Weihenstephan Triesdorf, 91746 Weidenbach, Germany

Deadline for manuscript submissions: **15 November 2024** 

#### **Message from the Guest Editors**

Dear Colleagues,

Smart farming sensor technology harnesses a diverse array of sensors, including soil, weather, GPS, and livestock monitoring devices, to systematically amass real-time, high-resolution data crucial for precision agriculture. These sensors are attuned to variables such as soil moisture, temperature, humidity, and meteorological conditions, enabling farmers to make empirically grounded decisions.

Advanced data analytics and machine learning algorithms underpin the processing and interpretation of sensorgenerated data. This engenders predictive modeling, earlystage disease detection, and crop yield prediction, thus substantially augmenting the efficacy of farm management.

Furthermore, smart farming fosters energy efficiency via technologies like solar-powered sensors and precise irrigation systems, thereby mitigating the ecological footprint of agricultural practices. Livestock sensors serve as vanguards for animal welfare and productivity enhancement.

**Special**sue



mdpi.com/si/187515





an Open Access Journal by MDPI

## **Editor-in-Chief**

#### Prof. Dr. Flavio Canavero

Department of Electronics and Telecommunications, Politecnico di Torino, 10129 Torino, Italy

#### Message from the Editor-in-Chief

*Electronics* is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

### **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), CAPlus / SciFinder, Inspec, and other databases. **Journal Rank:** JCR - Q2(*Electrical and Electronic Engineering*) CiteScore - Q2 (*Electrical and Electronic Engineering*)

### **Contact Us**

*Electronics* Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/electronics electronics@mdpi.com  $\chi$ @electronicsMDPI