Special Issue

Sensors and Actuators for Crops and Livestock Farming

Message from the Guest Editors

Sensors and actuators have played an important role in the agricultural revolution of monitoring crops and livestock in an automated and high throughput manner. Novel sensors are being developed for irrigation management, nutrient and pesticide application, early disease detection, and environmental monitoring. Novel actuators are being developed for the agricultural automation of fruit picking, fertilizer ejectors, ventilation systems, and climate control. The challenge lies in combining a multitude of sensors and actuators into integrated systems to gather real-time farm data and extract critical parameters related to the growth and health of crops and livestock. These data collection tools and techniques are critical for the subsequent construction of reliable expert systems and decision support with the aim of assisting farmers. This Special Issue invites submissions cantered around novel sensors and actuators for agriculture and exploring data collection and data management pipelines to effectively capture the intra- and intervariability in farm data with acceptable quality and resolution. For further reading, please visit the Special Issue website.

Guest Editors

Dr. Santosh Pandey

Electrical and Computer Engineering, Iowa State University, Ames, IA 50011-1046, USA

Dr. Tiago Paim

Federal Institute of Education, Science and Technology Goiano, Campus Rio Verde, Rio Verde 75900-000, GO, Brazil

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

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Dr. Mathew G. Pelletier
Retired Scientist from Agricultural Research Service, United States Department of Agriculture, Lubbock, TX, USA

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