

CALL FOR PAPERS IEEE Sensors Journal Special issue on Smart Sensing for Agriculture

Seamless integration of sensor technologies with the traditional agriculture has led to a revolutionary transformation in agriculture. This has motivated researchers to use sensor technology, GPS guidance, control systems, drones, and software services for ensuring optimal conditions for the crops and soil. For instance, unmanned surveillance on the agricultural field, automated soil and crop assessment, etc., assist the farmers by monitoring the soil conditions, environmental factors, and crop features. Smart sensing enables the objects to be sensed and controlled remotely using network model. Sensors help in collecting real-time data about the crops, soil, and surrounding conditions. The collected data can be used in managing the agricultural activities by performing predictive analysis using various machine learning and deep learning techniques. These advanced learning techniques mitigate the human errors by analyzing the large amount of sensory data and facilitate smart sensing in agriculture.

The Guest Editors encourage submissions of papers addressing design, fabrication, manufacturing, and application of devices for smart sensing in agriculture. Original research contributions, tutorials, case studies, and review papers are also encouraged. Manuscripts should provide content to be accessible to general audiences working in the field of sensing systems.

Topics of interest for this special issue include (but are not limited to):

- Design and implementation of novel sensing technologies.
- Self-calibration of agricultural sensors.
- Circuits or techniques for irrigation monitoring.
- Multi-modal sensing techniques with data synchronization.
- Smart sensing for agricultural equipment monitoring.
- Smart sensing for soil and water supply monitoring.
- Smart sensing for storage and greenhouse automation system.
- Smart sensing for crop monitoring.
- Smart sensing for waste products and pest management in agriculture.
- Smart sensing for minimizing food deficit and optimizing farming productivity.
- Smart sensing for agriculture supply chain.
- Smart sensing for livestock monitoring.
- Creating agricultural datasets and benchmarks.
- Novel applications of smart sensing for agriculture.

Solicited and invited papers shall undergo the standard IEEE Sensors Journal peer review process. All manuscripts must be submitted on-line, via the IEEE Manuscript Central, see <http://mc.manuscriptcentral.com/sensors>. When submitting, please indicate in the "Manuscript Type" roll down menu, and also select the "Smart Sensing for Agriculture" Special Issue. Authors are particularly encouraged to suggest names of potential reviewers for their manuscripts in the space provided for these recommendations in Manuscript Central. For manuscript preparation and submission, please follow the guidelines in the Information for Authors at the IEEE Sensors Journal web page, <http://www.ieee-sensors.org/journals>.

Deadlines:

Manuscript Submission deadline: September 30, 2020
Notification of Acceptance: November 30, 2020
Final Manuscript published in IEEE Xplore: April 2021

Guest Editors:

Dr. Hari Prabhat Gupta Assistant Professor, Indian Institute of Tech. (BHU) Varanasi, India	Dr. Houbing Song Assistant Professor, Embry-Riddle Aeronautical University, DB, Florida	Dr. Biplab Sikdar Associate Professor, National University of Singapore, Singapore	Dr. Tanima Dutta Assistant Professor, Indian Institute of Tech. (BHU) Varanasi, India	Dr. Jan Faigl Associate Professor, Czech Technical University, Prague
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