

Special Issue on
“Augmented RFID sensing systems for environment, healthcare and safety”

In the era of IoT (Internet of Things) and (IIoT) Industrial Internet of Things, the Radio-Frequency IDentification (RFID) plays a key role for enabling a plethora of pervasive applications that can be useful in numerous fields from industry to healthcare. Environmental sensing is one of the most prioritized scenarios to be investigated in the green-related electronic and electromagnetic systems in view of climate change, to which academic and industrial RFID communities are called upon to take care.

Despite the rise of high-quality technical papers in the last decade demonstrating the feasibility and enormous advantages of unwired sensing, passive, active and chipless RFID sensing still labours to emerge as a commercial standard of sensor applications in numerous scenarios such as precision agriculture, shipping, manufacturing, and healthcare. The purpose of this special issue “Augmented RFID sensing systems for environment, healthcare and safety” is to highlight what are the needs of industries related to these systems and to push research toward the study of appealing solutions for use in the commercial field.

To bring the potential of combining RFID systems, sensors and ICs to a broader audience, research papers, surveys and descriptions of successful industrial case studies are encouraged on, but not limited to, the following relevant topics related to RFID-based system:

- Environmental sensing through RFID link
- Passive RFID tags with microcontrollers and sensors
- BAP RFID tags with microcontrollers and sensors
- Design of chipless tag sensors
- RFID sensing applications
- Workplace safety
- RFID sensing: challenges and trends
- Successful RFID sensing case studies
- Design of RFID sensor tags with
- Augmented RFID Localization
- Circuit Design for RFID sensor tags
- Green technologies for RFID tags
- RFID applications in healthcare, precision agriculture, transportation, safety, security, inventory management, logistics, fashion, retail
- Smart and programmable tags
- RFID in wellness

Important Dates:

New Submission Deadline: April 5, 2023

Review Due: May 26, 2023

Revision Due: June 26, 2023

Second Review Due: July 26, 2023

Final Manuscript Due: September 4, 2023

Publication Date: November 2023

Submission Guidelines: Authors are requested to electronically submit their original manuscripts through the IEEE Manuscript Central at <https://mc.manuscriptcentral.com/jrfid>, according to the format described at <https://journals.ieeeauthorcenter.ieee.org/>. The manuscript type for this special issue is “RFID Sensing”.

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