Special Issue

Sensor Systems for the Batteryless Internet of Things

Message from the Guest Editor

The predicted, massive proliferation of Internet of things sensors will require many wireless sensor nodes to operate with no, or very small amounts of, harvested power for both sensor data acquisition and the communication of sensor data. While there are many sensor architectures that require relatively small amounts of energy, duty cycling can be used to drive the power consumption lower, particularly for conventional radio communications, which often require significantly more power than sensor operation. However, recently, there has been widespread interest in backscatter communication systems, which reduce the power required for radio communication by several orders of magnitude. Such improvements will result in a paradigm shift in the operation of wireless sensor nodes, with the energy consumption of the sensors and data converters becoming significant and the overhead of communication being vastly reduced so that the approach of bursty, compressed or averaged data will no longer be effective.

Guest Editor

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Deadline for manuscript submissions

closed (31 August 2021)

Journal of Sensor and Actuator Networks

an Open Access Journal by MDPI

Impact Factor 4.2
CiteScore 9.4

mdpi.com/si/46152

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Message from the Editor-in-Chief

I encourage you to contribute research and comprehensive review articles for publication in Journal of Sensors and Actuator Networks (JSAN), an international, open access journal which provides an advanced forum for research findings in areas of sensors and actuators. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full articles) and communications. I am confident you will find the journal contributes to enhancing understanding of sensors and actuators and fostering applications of sensor-based measurements and effective actuator incorporation.

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