Perpetual Sensor Nodes for Sustainable Wireless Network Applications

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Message from the Guest Editors

Dear Colleagues,

Over the last few years, there has been an increasing interest in the development of wireless sensor networks (WSNs) for a variety of applications, such as structural health monitoring, smart homes and buildings, agriculture and environmental monitoring, among others. However, the widespread adoption of WSN technology has been limited partly due to sustainability and maintenance cost concerns. Therefore, there is a necessity to explore different approaches for the extension of battery life in sensor nodes. This *Technologies* Special Issue is focused on addressing energy harvesting, energy conservation, and wireless power transfer approaches to the development of sustainable and cost-effective wireless sensor nodes. Potential topics include (but are not limited to) ultra-low-power hardware architectures and communication protocols for sensor nodes, wireless-power-transfer-enabled sensor nodes, novel energy harvesting transducers, energy harvesting circuits for sensor nodes, predictive energy harvesting techniques, energy-saving and energy-aware battery management techniques, and low-power machine learning algorithms for wireless networks.

Special Issue

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Message from the Editor-in-Chief

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