Special Issue

Advanced Design and Electronic Design Automation Techniques of Analog and RF Integrated Circuits for Sensor Applications

Message from the Guest Editors

Analog and RF ICs play a crucial role in sensor systems by enabling the conversion, amplification, and processing of signals from various sensors, thereby facilitating accurate and reliable measurement and detection. As sensor technologies continue to evolve, and in turn the demand for high-performance and low-power ICs keeps increasing, it becomes imperative to explore innovative IC design methodologies and EDA techniques that address the unique challenges associated with sensor applications. Topics of interest include, but are not limited to, the following:

- Novel circuit architectures and design methodologies for sensor interface or signal-processing ICs.
- Low-power and low-noise analog as well as RF circuit design techniques.
- Circuit techniques for improved sensor signal conditioning and digitization.
- Frequency synthesizers, phase-locked loops (PLLs), and clock generation circuits for sensor systems.
- Circuit- and system-level optimization techniques for power, area, and performance trade-offs in sensor ICs.
- Design challenges and solutions for emerging sensor technologies (e.g., MEMS, the IoT, and biomedical sensors).

Guest Editors

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Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. *Sensors* organizes Special Issues devoted to specific sensing areas and applications each year.

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