



Integrated Sensors Based on Silicon-on-Insulator (SOI)

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Message from the Guest Editors

The need for miniaturized sensors and MEMS becomes ever more pressing considering the emergence of Internet of Things (IoT) applications, autonomous cars, structural health monitoring, smart maintenance and logistics in Industry 4.0, point-of-care medicine, smart cities, etc. Over the years, Silicon-on-Insulator (SOI) has proven to be a very adequate technology for the integration of high-performance sensors and MEMS, as well as of their analog and digital interfaces. The benefits of specific SOI features have been exploited, such as ultra-low-power, high-temperature reliability, radiation hardness, to name but a few. SOI research and industrial platforms have further enabled CMOS compatibility with novel materials and structures for sensing applications beyond traditional MEMS micromachining processes.

Particular areas of interest include, but are not limited to:

- IoT, 5G Platforms
- Health, Medicine
- Automotive, Aeronautics, Space
- Smart Monitoring, Energy Harvesting
- Implantable, On-Body or Flexible Electronics, Wearables





sensors



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Message from the Editor-in-Chief

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