Special Issue

Silicon-Based Optical Sensors

Message from the Guest Editor

Silicon photonics has unrivalled potential to enable low-cost, mass manufacturing of photonic components by leveraging the already huge investments made in computer chip foundries over the last half-century. Silicon-based optical sensors can provide truly disruptive technologies by enabling system-on-a-chip, lab-on-a-chip, and sensor-fusion-on-a-chip solutions for the automotive, security, pharmaceutical, medical, agriculture, and environmental monitoring industries, etc. Contributions are not limited purely to silicon, but also silicon-compatible materials such as germanium, silicon nitride, and silicon oxide, or which are derived by modifications of silicon, such as porous silicon and amorphous silicon. The topics are not limited to:

- Imaging sensors
- Micro-optical–electrical–mechanical system sensors
- Optical pressure sensors and biosensors
- Integrated waveguide sensors
- Microcavity and Interferometer sensors
- Raman sensors
- Atomic/molecular absorption sensors
- Porous silicon and silicon germanium sensors
- Silica on silicon sensors
- Silicon oxynitride sensors
- Silicon nitride sensors

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Deadline for manuscript submissions

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Message from the Editor-in-Chief

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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