



Silicon-Based Optical Sensors

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Deadline for manuscript
submissions:
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Message from the Guest Editor

Dear Colleagues,

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





sensors



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Message from the Editor-in-Chief

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