

Special Issue

Semiconductor and Functional Materials Based Sensors for the Infrared and the Terahertz Waves: Recent Developments and Applications

Message from the Guest Editor

This Special Issue is aimed at providing an in-depth review of the latest advances in sensor technology for detecting infrared (IR) or terahertz (THz) radiation. Indeed, recent progress in semiconductor- and functional-material-based sensors show enhanced sensitivity, speed, spectral selectivity or broadband response, reduced dark currents or noise and lowered cooling requirements, in the IR or THz range. For instance, this includes semiconductor-based sensing technology driven by surface plasmons or quantum materials (graphene and other 2D materials, quantum dots, quantum wells, type-II superlattices...), or functional materials such as oxides or organic polymers, eventually combined with specific absorbers (metals, metamaterials...).

Guest Editor

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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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