

Special Issue

Advanced Field-Effect Transistor (FET) Sensors for Chemical and Biological Detection

Message from the Guest Editors

This Special Issue focuses on circuit and device topologies for real-time detection of chemical and biological species using functionalized films. We invite original research on functionalized films as FET gates, FET-based circuits using functionalized 2D materials, and integrated photonic concepts combining waveguides and functionalized films for spectroscopic detection. Other topologies for film interrogation are also welcome. Of particular interest are sensor-circuit topologies designed as stand-alone devices, on-chip elements or arrays, and chip-let formats for advanced system-on-a-chip multi-elemental sensing. Submissions on circuit designs, operating characteristics, and sensor responses based on functionalization for detecting targeted species are encouraged to enhance response time, specificity, and detection limits. We also invite reports on low-cost, wearable, submersible, microfluidic, and disposable sensors and detection architectures employing functionalized films.

Guest Editors

Dr. Walter Buchwald

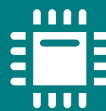
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Deadline for manuscript submissions

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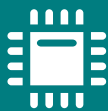


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Message from the Editor-in-Chief

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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