

## Special Issue

# Recent Advances in Optoelectronic Materials and Device Engineering

### Message from the Guest Editor

This Special Issue showcases advancements in electronic materials transforming neuromorphic computing, next-generation memory, and advanced sensors. It emphasizes emerging materials' growth, characterization, and fabrication, focusing on memristor devices, photodetectors, logic gates, photonics devices, imaging technologies, and gas sensors. Key materials include 2D, van der Waals materials, epitaxial systems, and wide band gap materials with a spotlight on innovative growth techniques. Theoretical studies and computational modeling will delve into material growth and device performance. Sustainability and scalability in fabrication processes are also explored, aiming to bridge the gap between laboratory research and industrial-scale applications. This issue is a platform for material science, physics, nanotechnology, and electrical engineering researchers to share findings and foster collaboration, driving progress in computing, memory, and photonics technologies. Addressing advancements in materials and devices that underpin modern sensors offers valuable insights for academic and industrial audiences, driving innovation in the field.

### Guest Editor

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### Deadline for manuscript submissions

20 December 2025



## Sensors

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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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