

Special Issue

Intelligent Biophotonic Sensing: AI-Enhanced OTFT-Based Technologies and Applications

Message from the Guest Editors

This Special Issue aims to highlight the latest advancements in biophotonic sensing, particularly those enabled by organic thin-film transistors (OTFTs) and artificial intelligence (AI). By combining the unique properties of OTFTs with the power of AI, we can develop innovative sensing solutions for a wide range of applications, from healthcare to environmental monitoring. We invite high-quality original research papers on the following topics:

- OTFT-Based Biophotonic Sensors:
 - Design and optimization of OTFT materials and device structures;
 - Applications of OTFTs in biomolecular detection;
 - Integration of OTFTs with optical sensors.
- AI in Biophotonic Sensing:
 - Machine learning and deep learning models;
 - Data analysis and pattern recognition;
 - Design and implementation of intelligent sensing systems.
- Applications of Intelligent Biophotonic Sensing:
 - Early disease diagnosis;
 - Biomarker detection;
 - Drug delivery monitoring;
 - Tissue engineering;
 - Environmental monitoring: water quality, food safety, and pollutant detection.

Guest Editors

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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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