



## Advanced Optical Technologies for Communications, Perception, and Chips

Guest Editors:

**Dr. Tianxu Xu**

**Dr. Kaiheng Zou**

**Dr. Cong Liu**

**Prof. Dr. Yang Yue**

Deadline for manuscript  
submissions:  
**closed (30 September 2024)**

### Message from the Guest Editors

This Special Issue focuses on the state-of-the-art advancements in optical technologies for communication, perception, and chips. Digital, electrical, and optical signal processing theories, artificial intelligence, integrated chips, devices, subsystems/systems, as well as future perspectives are all within the scope. Topics of interest include, but are not limited to, the following areas:

- Active and passive optical devices;
- Digital signal processing for sensing and communication;
- Fiber optics;
- Integrated optics;
- Nonlinear photonics;
- Optical AI: optical neural networking, neuromorphic;
- Optical communications and networking;
- Optical for 5G/6G;
- Optical imaging and display;
- Optical sensing and perception;
- Optical signal processing;
- Optoelectronic signal processing devices;
- Semiconductor optical chips;
- Signal processing for 3D/AR/VR.





*sensors*



an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Vittorio M. N. Passaro**

Dipartimento di Ingegneria  
Elettrica e dell'Informazione  
(Department of Electrical and  
Information Engineering),  
Politecnico di Bari, Via Edoardo  
Orabona n. 4, 70125 Bari, Italy

## 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.

## Author Benefits

**Open Access** : free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

**High Visibility**: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [PubMed](#), [MEDLINE](#), [PMC](#), [Ei Compendex](#), [Inspec](#), [Astrophysics Data System](#), and [other databases](#).

**Journal Rank**: JCR - Q2 (*Chemistry, Analytical*) / CiteScore - Q1 (Instrumentation)

## Contact Us

---

*Sensors* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/sensors](http://mdpi.com/journal/sensors)  
[sensors@mdpi.com](mailto:sensors@mdpi.com)  
[X@Sensors\\_MDPI](#)