



## Recent Development of Resonance-Based Optical Sensors and Biosensors

Guest Editor:

**Dr. Francesco Chiavaioli**

Institute of Applied Physics “Nello Carrara”, CNR-IFAC, Via Madonna del Piano 10, 50019 Sesto Fiorentino, Italy

Deadline for manuscript  
submissions:

**closed (31 December 2021)**

### Message from the Guest Editor

Dear Colleagues,

**This Special Issue “Recent Development of Resonance-Based Optical Sensors and Biosensors” will focus on the unique and novel implementations of optical sensors and biosensors that allow them to perform measurements in challenging physical, chemical, and biomedical applications.** We encourage authors to submit original, high quality, relevant research articles and reviews for this Special Issue.

Potential topics include, but are not limited to, recent developments in the following areas:

- The design/development/optimization of optical sensors;
- The design/development/optimization of optical biosensors;
- The design/development/optimization of optical detection platforms;
- The application of an optical system to measure physical parameters, chemical compounds, or biomolecules
- The application of an optical system to measure multiple parameters with a single device;
- Real-time, resonance-based sensing/biosensing;
- Fiber-optics devices and optical micro-/nano-resonators;
- Novel photonic devices or methodologies in optical sensing/biosensing.





an Open Access Journal by MDPI

## Editors-in-Chief

### **Prof. Dr. Costantino De Angelis**

Department of Information  
Engineering, University of  
Brescia, 25123 Brescia, Italy

### **Prof. Dr. Thomas Seeger**

Institut Fluid- und  
Thermodynamik, Lehrstuhl für  
Technische Thermodynamik,  
Universität Siegen, Paul-Bonatz-  
Straße 9-11, 57076 Siegen,  
Germany

## Message from the Editorial Board

*Optics* (ISSN 2673-3269) aims at establishing *Optics* as a leading journal for publishing high impact fundamental research and applications in optics field with a fast processing time and high quality service. The journal particularly welcomes both theoretical (simulation) and experimental research within our journal's scope. We encourage scientists to publish their experimental and theoretical results in as much detail as possible. So, there is no restriction on the length or pages of the papers. The full experimental details must be provided so that the results can be reproduced. Electronic files and software regarding the full details of the calculation or experimental procedure, if unable to be published in a normal way, can be deposited as supplementary electronic material.

## Author Benefits

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

**High Visibility:** indexed within **ESCI (Web of Science)**, **Scopus**, **EBSCO**, and **other databases**.

**Rapid Publication:** manuscripts are peer-reviewed and a first decision is provided to authors approximately 23 days after submission; acceptance to publication is undertaken in 4.8 days (median values for papers published in this journal in the first half of 2025).

## Contact Us

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

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

[mdpi.com/journal/optics](http://mdpi.com/journal/optics)  
[optics@mdpi.com](mailto:optics@mdpi.com)