



*sensors*



an Open Access Journal by MDPI

## Optical Humidity Measurement: Sensors and Applications

Guest Editors:

**Prof. Dr. George Y. Chen**

College of Physics and  
Optoelectronic Engineering,  
Shenzhen University, Shenzhen  
518060, China

**Prof. Dr. Changrui Liao**

College of Physics and  
Optoelectronic Engineering,  
Shenzhen University, Shenzhen  
518060, China

**Prof. Dr. Gilberto Brambilla**

Optoelectronics Research Centre,  
University of Southampton,  
Southampton SO17 1BJ, UK

Deadline for manuscript  
submissions:

**closed (20 November 2022)**

### Message from the Guest Editors

Dear Colleagues,

There is a growing demand for both (a) simple and low-cost humidity sensors and (b) large-area monitoring, high-end humidity sensors. The development of optical humidity sensors will help fuel the growth of industries and elevate healthcare, leading to improvements in the quality of services and yield of production.

This Special Issue attempts to highlight some of the recent progress in optical humidity sensors and relevant methods, including but not limited to:

### Sensors and Sensing Systems:

- Point optical humidity sensors
- Distributed fiber-optic humidity sensors
- Sensor signal processing
- Machine learning of measurement data
- Internet of things (IoT) platforms

### Application:

- Environmental monitoring
- Smart agriculture
- Smart building/smart civil infrastructure
- Smart health monitoring
- Smart manufacturing and industries



[mdpi.com/si/100812](https://mdpi.com/si/100812)

**Special** Issue



# 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 (*Instruments & Instrumentation*) / CiteScore - Q1 (*Instrumentation*)

## Contact Us

*Sensors* Editorial Office  
MDPI, St. Alban-Anlage 66  
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](#)