



## Fluorescence-Based Sensors

Guest Editor:

### Prof. Dr. Hisashi Satoh

Aquatic Environmental  
Protection Engineering, Division  
of Environmental Engineering,  
Graduate school of Engineering,  
Hokkaido University, North-13,  
West-8, Kita-ku, Sapporo 060-  
8628, Japan

Deadline for manuscript  
submissions:

**closed (30 April 2020)**

### Message from the Guest Editor

Dear Colleagues,

The aim of this Special Issue is to collect recent research and developments in the fluorescence-based chemical and biological sensors. Fluorescence-based detection of organic and inorganic matter and microorganisms is an important task for environmental monitoring, medical diagnostics, food safety, industrial quality control, agriculture, and security.

At present, we are using traditional analytical techniques such as gas or liquid chromatography, atomic absorption or emission spectroscopy (AAS/AES), inductively coupled plasma (ICP), mass spectroscopy, and polymerase chain reaction (PCR) for their detection. These techniques are highly accurate and sensitive to a specific analyte of interest, but they are costly, available only in large centralized laboratories, and require extensive sample pretreatment, making on-site, real-time, or in situ detection difficult. However, fluorescence detection is simplicity, low cost, high sensitivity, and fast response.

Topics to be covered include, but are not limited to:

- Fluorescent Sensor
- On-Site Analysis
- Simple Detection
- Sensitivity, Selectivity, Response Time, and Cost For Bioimaging
- Recognition Element





*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](#)