



Journal of Biophysics

Special Issue on  
**Biological and Chemical Sensing Based on Optical Technologies**

# CALL FOR PAPERS

As a sensitive and powerful detection technology, optical sensors have many applications in biological and chemical assays. In the past decades, the optical sensor has been developed to be a state-of-the-art technology by continually optimizing experimental configurations and signal processing approaches. Moreover, in recent years, due to the advancements of nanofabrication technology and emergence of novel materials, the optical sensing has been further improved with a variety of novel applications in single molecule detection, lab-on-a-chip sensors, DNA/protein interactions measurement, and so on.

This special issue is dedicated to modeling, fabrication, and characterization of optical sensing with potential applications in healthcare diagnosis, environment monitoring, process and safety control, and so on.

We invite investigators to contribute original research papers as well as review articles on biological and chemical sensing based on optical technology.

Potential topics include, but are not limited to:

- ▶ Sensors based on absorbance, fluorescence, refractive index with interferometers, and surface-enhanced Raman spectroscopy
- ▶ Nanophotonic and plasmonic sensors
- ▶ Planar waveguide sensors
- ▶ Optical fiber sensors and nanofiber sensors
- ▶ Optofluidic and microfluidic sensing platform
- ▶ THz, mid-, and long-wavelength IR sensors
- ▶ Sensors based on metal oxide
- ▶ Sensors based on graphene and carbon nanotube
- ▶ Proof-of-concept of sensing applications with novel materials
- ▶ Sensing applications for safety control, gas monitoring, or health diagnosis
- ▶ Commercialization, from research to products

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