

Special Issue

Advances in Optical Sensors for Biomedical Applications

Message from the Guest Editor

As mainstream research has moved from the physical sciences to the biomedical sciences, many optics and spectroscopy techniques have been embraced. Combined with optical fibers and micro-optical elements, microscopy and spectroscopy techniques have been successfully implemented in endoscopes. Frequency domain techniques, widely used in optical communication, have been adapted to optical coherence tomography. Mathematical modeling has helped extracting meaningful information from turbid human tissues. Multimodal approaches have been used to measure both morphological and chemical information from complex biological systems. Currently, the development of optical probes such as quantum dots or plasmonic nanoparticles, to enhance sensitivity, is a hot area. This Special Issue is focused on the advances in optical sensors for biomedical applications. You are kindly invited to submit your original articles or reviews of optical systems and probe development.

Keywords:

- biomedical spectroscopy
- microscopy
- endoscopy
- optical diagnosis and therapeutics monitoring
- molecular probe

Guest Editor

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Message from the Editorial Board

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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