Special Issue

Biophotonics in Diagnostic Applications

Message from the Guest Editors

Diagnostic biophotonics is used to detect diseases in their initial stages before actual medical symptoms occur in patients. By using optics, diagnostic biophotonics provides several advantages of sensing and imaging at the molecular level and also collects multidimensional data for evaluation.

Optical tagging: Proteins, cells, nucleic acids, and tissues are tagged with optical tags and their incandescence or fluorescence is measured;

Visualization of complex structures: Advanced optical technologies have enhanced imaging of vasculature, retinal structures, optic nerve, and other ocular structures to provide precise diagnosis of ocular diseases;

Functional diagnosis: Sophisticated optical technologies involving lasers and photonic and biophotonic applications in medicine provide assistance in observing and identifying cellular biochemistry and their functions;

Optical endoscopes: In medical applications, the combination of optical fibers and endoscopes is used for less invasive imaging and surgery of internal organs.

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Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Photonics* (ISSN 2304-6732). *Photonics* is an online open access journal covering both the fundamental and applications of optics and photonics. *Photonics* strives to provide an avenue to allow authors to disseminate their scientific findings—both theoretical/ simulations and experimental works—in highly accessible peer-reviewed journal publications. The manuscript in *Photonics* will be handled with quick turnaround production processing time. We welcome authors to submit their manuscripts for publications in *Photonics*. Our goal in *Photonics* is to enable fast dissemination of high impact works to the scientific community.

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