Special Issue

Driving Spectroscopy and Laser Physics toward Biological, Agricultural, and Medical Applications

Message from the Guest Editor

In this Research Topic, we aim to collect studies dealing with optical and laser spectroscopy techniques which forward the knowledge of biology and medicine with fundamental as well as new perspective applications of photonics studies for ecology, agriculture, and the food industry. The Research Topic focuses on but is not limited to:

- Laser spectroscopy sensing (scatterometry, fluorescence spectroscopy, Raman spectroscopy, interferometry, hyper-spectral imaging, etc.) techniques in both laboratory research and field measurements
- Optical and laser interaction with biological and medical targets
- Light and laser synthesis and modification of new materials (nanoparticles, nanotubes, etc.) valuable for biological systems as well as nanomaterials diagnostics inside such bioactive objects
- Laser spectroscopy (fluorescence spectroscopy, Raman spectroscopy, interferometry, scatterometry, pump-probe)
- Production (laser-based) and diagnostics (optics and spectroscopy) of nanomaterial for biological applications
- Application of spectroscopy and laser physics in medical, biological, environmental, food industry, agriculture, and ecology

Guest Editor

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Deadline for manuscript submissions

closed (28 February 2022)



Photonics

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About the Journal

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 peerreviewed 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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