Special Issue

Optical Approaches in Raman Spectroscopy: Techniques and Applications

Message from the Guest Editor

This Special Issue, titled 'Optical Approaches in Raman Spectroscopy: Techniques and Applications', aims to capture state-of-the-art developments in this active field. We are interested in how innovative technologies advance research frontiers.We invite researchers to contribute original research papers, short communications, and review articles, covering a range of topics, including the following: 1, New approaches in spontaneous and coherent Raman scattering: time-domain spectroscopy, miniaturized spectrometer, hyperspectral Raman imaging, and high-speed Raman imaging. 2, Raman probes and sensors: molecules and nanostructures with unique Raman signatures and surface-enhanced Raman scattering biosensors. 3, Data analysis: new approaches utilizing machine learning, specifically deep learning, to optimize hyperspectral image data decoding. 4, Multi-discipline applications of Raman spectroscopy and microscopy: chemical quantification and mapping in biological and biomedical research, material science, and forensic research and the synergy of Raman scattering spectroscopy and microscopy with other optical and non-optical imaging modalities.
I look forward to receiving your contributions.

Guest Editor

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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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