Application of Raman Spectroscopy as Sensors for Direct in Vivo/in Situ Investigation

Guest Editor:

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Deadline for manuscript submissions: 31 October 2019

Message from the Guest Editor

Dear Colleagues,

For this Special Issue, we invite both reviews and original research articles discussing novel Raman-based (bio)chemical time-resolved sensing techniques that can be applied to in situ/in vivo applications for analyte detection, quantification, surveillance, or mapping. Research articles may focus on the use of Raman-based sensors in biological analysis, medical diagnostics, illicit drug detection, combustion science, public safety, or food and water quality inspection. Raman spectroscopic applications involving biofilms, lab-on-chip and organ-on-chip, or Raman combined with other techniques are of high interest for this Special Issue. Reviews must offer a critical and up-to-date overview of the state of the art in a particular application, or discuss present and future challenges of Raman-based sensors (limit of detection, multiplexing, detection in complex matrices, time, etc.).

- Time-resolved Raman spectroscopy
- Stimulated Raman scattering
- Hyper Raman spectroscopy
- Coherent anti-Stokes Raman spectroscopy
- Terahertz Raman spectroscopy
- Surface-enhanced Raman spectroscopy
- Tip-enhanced Raman spectroscopy

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Message from the Editorial Board

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