Special Issue

Practical Applications of Surface Enhanced Raman Spectroscopy (SERS)

Message from the Guest Editors

Surface-enhanced Raman scattering (SERS) spectroscopy has been proven to be a powerful sensing technique for probing molecules in contact or proximity to a plasmonic substrate, usually a metal surface, but, more recently, also to semiconductors or hybrid materials. Since its discovery over 40 years ago, it has enjoyed a steady growth of interest in general as well as in target-oriented applications, such as biosensing, the monitoring of bacterial contamination, environmental analysis, liquid biopsy, therapeutic drug monitoring, renewable energy and catalysis. SERS applications are now also benefitting from the use of advanced analytical methods provided by chemometrics and machine learning. In this Special Issue, we invite researchers from interdisciplinary fields to submit original articles and reviews exploring practical applications of SERS spectroscopy to resolve technological and analytical needs in several fields:

- Novel SERS substrates for practical applications;
- SERS applications in energy devices;
- SERS applications in biological and biomedical sensors;
- Microfluidic SERS;
- Chemometrics and machine learning in SERS analysis.

Guest Editors

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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