Special Issue

Plasmonic Nanostructures for Reliable and Quantitative Surface-Enhanced Raman Scattering (SERS)

Message from the Guest Editor

The SERS plasmonic nanostructures exhibit significant differences in the homogeneity of their geometrical structure, instrumentation, and know-how required for fabrication/synthesis, and the option to be scaled up. This Special Issue will introduce new advanced plasmonic nanostructures for reliable and quantitative SERS applications, taking into account the recommendations, recently published in *Angew. Chem. Int. Ed.* 2020, 59,

5454, https://doi.org/10.1002/anie.201908154. by an international team of scientists with longstanding expertise in SERS. Their recommendations include i) the characterization of solid and colloidal SERS substrates by correlative electron and optical microscopy and spectroscopy, ii) the determination of the SERS enhancement factor using suitable Raman reporter/probe molecules, and iii) good analytical practice. Therefore, both newcomers and specialists will benefit from these recommendations in order to increase the inter-laboratory comparability of experimental SERS results and further establish SERS as an analytical tool.

Guest Editor

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Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometerscale dimensions, which we call "nanomaterials". These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal-organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, Nanomaterials, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

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