



an Open Access Journal by MDPI

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

Guest Editor:

Prof. Dr. Marek Procházka

Institute of Physics, Faculty of Mathematics and Physics, Charles University, Prague, Czech Republic

Deadline for manuscript submissions: closed (31 December 2021)

Message from the Guest Editor

Dear Colleagues,

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. bv 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 ii) the determination of the SERS spectroscopy, 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.



mdpi.com/si/49869







an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Shirley Chiang

Department of Physics, University of California Davis, One Shields Avenue, Davis, CA 95616-5270, USA

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 nanometer-scale dimensions, which we call "nanomaterials". These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metalorganic 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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank: JCR - Q2 (*Chemistry, Multidisciplinary*) / CiteScore - Q1 (General Chemical Engineering)

Contact Us

Nanomaterials Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/nanomaterials nanomaterials@mdpi.com X@nano_mdpi