



Nanomaterials in Surface-Enhanced Raman Spectroscopy

Guest Editor:

Dr. Maurizio Becucci

1. Department of Chemistry 'Ugo Schiff', University of Florence, Florence, Italy
2. European Laboratory for Non-Linear Spectroscopy–LENS, Florence, Italy

Deadline for manuscript submissions:

closed (28 February 2021)

Message from the Guest Editor

Dear Colleagues,

Surface-enhanced Raman spectroscopy (SERS) is a highly sensitive and selective technique that allows for a good molecular specificity for analytical purposes, thanks to the spectral details typical of vibrational spectroscopy. In SERS, the large enhancement of the Raman signals is obtained via the specific interaction of molecules with nanoparticles or nanostructured surfaces.

Thanks to the developments of new active nanostructured substrates, SERS has dramatically increased the number of applications from sensing to imaging, including single molecule detection. The fields of application cover studies on the molecular systems relevant in art conservation, forensic, environmental, pharmacology, biomedical sciences, polymer, and material sciences.

This Special Issue dedicated to surface-enhanced Raman spectroscopy aims to present its current state of knowledge, including theoretical, fundamental, and applied research. Therefore, I invite active research scholars and long-time researchers in the field to share and widely diffuse their experience, contributing to this Special Issue with original research papers as well as review articles.





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, 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.

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](#), [Inspecc](#), and [other databases](#).

Journal Rank: JCR - Q1 (*Physics, Applied*) / CiteScore - Q1 (*General Chemical Engineering*)

Contact Us

Nanomaterials Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/nanomaterials
nanomaterials@mdpi.com
[X@nano_mdpi](#)