Special Issue

Surfaced Enhanced Raman Scattering (SERS) in Disease Diagnosis

Message from the Guest Editor

Surface enhanced Raman spectroscopy (SERS), combining molecular specificity with a high sensitivity, became a powerful tool in sensing molecules in trace amounts within the field of chemical and biochemical analytics. The application of SERS in biology and medicine is further supported by the capability of SERS to be performed in complex biological compositions. Within this Special Issue, the focus will be on SERSbased detection schemes in disease diagnosis. This includes the detection of pathogenic bacteria and viruses in complex matrices such as body fluids as well as the analysis of metobolites of pathogens or drug molecules in biological fluids. Moreover, the disease detection is achieved by monitoring cellular changes in cells and tissues pointing toward in-vivo application of SERS including the usage of SERS tags. Finally, intracellular detection schemes using SERS-active particles is an emerging research topic. All researchers are welcome to submit a manuscript within the scope of SERS in disease diagnosis.

Guest Editor

Dr. Dana Cialla-May

Leibniz Institute of Photonic Technology (IPHT), Albert-Einstein-Str. 9, 07745 Jena, Germany

Deadline for manuscript submissions

closed (7 June 2019)



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/13147

Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applisci@mdpi.com

mdpi.com/journal/applsci





Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



About the Journal

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 multidimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

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), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

