# **Special Issue**

# Advanced Studies in Nano-BioAnalytical Physico-Chemistry

## Message from the Guest Editors

Nanoscience has seen major improvements in recent years, this special issue aims to highlight advanced studies in the field of nanobioanalytics in medicine and biotechnology. A key positioning is what occurs at the interface between engineered and biological systems. The bio-interface manage the interactions. Understanding the involved mechanisms is a way to enhance the selectivity and the sensitivity of analytical devices. This governed also, with the morphology, the composition and the structuration, the biofunctionality or the biodistribution of the nanomaterials immersed in biologic environments. Smart embedded approaches between the transducing elements and the bio-interface is required while keeping in mind that nanocharacterization of such systems is inseparable from their design and realization. Precise characterizations of the surface chemistry and biointerface is also important to improve the biodistribution, in particular the control of the so-called protein corona. This Special Issue aims to address new inputs in the field of biosensing, diagnosis but also theranostics by using engineered nanomaterials and bulk substrates in complex biological samples.

#### **Guest Editors**

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## Deadline for manuscript submissions

closed (9 June 2022)



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# **About the Journal**

## 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.

### **Editor-in-Chief**

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