



an Open Access Journal by MDPI

# Nanotechnologies for the Development of Rapid Analytical Platforms

Guest Editors:

#### Dr. Salvatore Petralia

Department of Drug Science, University of Catania, via S. Sofia 64, 95123 Catania, Italy

#### Prof. Dr. Sabrina Conoci

Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, 98166 Messina, Italy

#### Dr. Giovanni Valenti

Department of Chemistry "G. Ciamician", University of Bologna, via Selmi 2, 40126 Bologna, Italy

Deadline for manuscript submissions: closed (21 December 2021)

### **Message from the Guest Editors**

Nanotechnologies play a crucial role in the development of analytics platforms for the rapid diagnosis of pandemic disease, in the monitoring of emerging pollutants, as well as in the fight against the food fraud.

User-friendly and cost-effective miniaturization is a crucial issue in improving the efficiency and robustness of analytics assay for in-field use. In this context, nanomaterials, microfluidics, MEMS silicon technology, nanomedicine, surface chemistry, as well as Lab-on-Chip are some examples of nanotechnologies implemented for the fabrication of rapid analytics platforms.

This Special Issue aims to cover current experimental and computational advances in the field of analytic and diagnostics by innovative nanotechnologies. Topics can include but are not limited to advanced nanostructured materials synthesis routes, innovative sensing and transduction approaches, effective integration strategies, biosensors, analytics performance evaluation, and computational simulation.



**Special**sue





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 - 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