Special Issue

Studies of Symmetry/Asymmetry in Biosensors and Their Application

Message from the Guest Editors

Nanotechnology has become a pillar of contemporary research, marked by the emergence of advanced technologies focused on material engineering with a variety of human health and environmental applications. In addition, the synthesis and characterization of new nanosensors based on metal nanoparticles (MNPs) are of high interest in the analytical chemistry field, mainly due to the detection of emerging contaminants (ECs) in diverse environmental and biological matrices. The study of the symmetry/asymmetry of the aforementioned materials allows us to understand their properties and subsequent applications. The remarkable sample complexity and high analytical sensitivity achieved by these materials make them a suitable option for monitoring and detecting different types of ECs. This comprehensive review will explore the latest scientific advances in MNPs as nanosensors in analytical chemistry, focusing on their biomedical applications in human health, shedding light on promising avenues for minimizing exposure to various unregulated toxic agents.

Guest Editors

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About the Journal

Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

Editor-in-Chief

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