Special Issue

Novel Nanoparticle Composites: Functionalization and Application

Message from the Guest Editors

The correct functionalization of NPs provides an opportunity to adjust and enhance their properties as desired, broadening their application in diverse fields such as photo-induced catalytic reactions (solar cells, water-splitting reaction, oxidation of organic molecules), sensing, antimicrobial effects and medicine. An additional significant aspect of functionalization is the potential to manipulate the interface and reducie the toxicity of NPs, thus leading, when possible, to the formation of biocompatible nanocomposites (NCs).

The scope of this Special Issue includes, but is not limited to, the following topics:

The synthesis and functionalization of various types of materials

The green synthesis of nanoparticles;

The characterization and properties of functionalized nanoparticles;

Theoretical modeling and computer simulations;

Photo-induced catalytic reactions over functionalized nanoparticles;

The antimicrobial ability of functionalized nanoparticles;

Application in nanomedicine;

Sensing.

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Deadline for manuscript submissions

20 March 2026



International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed



mdpi.com/si/217400

International Journal of Molecular Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 ijms@mdpi.com

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Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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