Special Issue

Functional Nanocomposites: From Strategic Design to Applications: 2nd Edition

Message from the Guest Editors

Nanocomposites are advanced composites that use nanomaterials to improve properties for various applications. They are low-dimensional materials with one-, two-, or three-dimensional confinements, and they possess superior optical, electronic, magnetic, thermal, and mechanical properties compared to their bulk material counterparts. In this Special Issue, original research and review articles on developing functional nanocomposites for novel applications are welcome. Research areas may include (but are not limited to) the following:

- Development of nanocomposites with 0D nanomaterials (such as nanoparticles) and applications;
- Development of nanocomposites with 1D nanomaterials (such as nanowires, nanotubes, nanorods, etc.) and applications;
- Development of nanocomposites with 2D nanomaterials (such as nanosheets) and applications;
- Theoretical simulations and modeling of design, fabrication, properties, and mechanisms, as well as applications for advanced functional nanocomposites;
- Review articles involving functional nanocomposites and their applications.

Guest Editors

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Deadline for manuscript submissions

closed (25 August 2025)

Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed

mdpi.com/si/226507

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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, 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. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

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