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Application of Supramolecular Chemistry and Self-Assembly in Nanotechnology and Nanomaterials

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Message from the Guest Editors

Supramolecular chemistry has played a key role in the development of nanotechnology as self-assembly offers a bottom-up way to fabricate nanomaterials. The aim of this Special Issue is to outline and summarize the most innovative research regarding the synthesis, characterization, and new applications of self-assembled nanomaterials. Novel nanotechnologies based on supramolecular chemistry are also encouraged. The synthesized nanostructures may have (or have potential) applications in a wide variety of diverse areas as mentioned above. The scope includes the following areas:

- Nanotechnologies developed by supramolecular chemistry;
- Nanocarriers for drug delivery system and nanotheranostics;
- Nano-hydrogel mediated by supramolecular self-assembly;
- Highly emissive nanomaterials through self-assembly;
- Nanocomposites constructed by noncovalent bond;
- Supramolecular transmembrane channels;
- Functional supramolecular cages/capsules;
- Self-assembly in surfaces/interfaces;
- Molecular machines and nano-devices.



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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.

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