

Special Issue

Novel Self-Assembled Organic Nanoarchitectures Stabilized by Selective and Directional Interactions Engineering and Properties

Message from the Guest Editor

Engineering complex and sophisticated organic nanomaterials is the focus of intense research interest for developing new devices in nanotechnology. Self-assembly offers unique possibilities for the bottom-up engineering of organic nanoarchitectures. The internal structure of the resulting organic arrangements can be tailored at the atomic scale by exploiting selective and directional intermolecular interactions. Large self-assembled porous organic nanoarchitectures have thus been successfully generated taking advantage of intermolecular hydrogen bonds, halogen bonds, metal-coordination interactions, surface-triggered covalent bonding, and organic-ionic compound interactions, to cite a few examples. This Special Issue covers the latest advances in self-assembly phenomena in organic nanoarchitectures, not only focusing on synthesizing and engineering novel organic nanostructures but also on the specific electronic/optical/magnetic properties of these systems and their applications in nanotechnology.

Guest Editor

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Deadline for manuscript submissions

closed (30 June 2023)



Nanomaterials

an Open Access Journal
by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed



mdpi.com/si/95513

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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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