Special Issue

Porous Nanomaterials: Preparation, Performance, and Practical Application

Message from the Guest Editors

Due to their unique porous structure, porous materials have compelling potential for multiple fields, such as acoustics, optics, electricity, and energy. The abundance of nano/microporous structures endow these materials with a large surface area and active sites, enabling them to possess diverse functionalities. In addition, the porous structure enhances heat and mass transfer properties, which is of great scientific importance. The synthesis, modification, properties, and practical application of porous materials are currently receiving a great deal of attention from researchers; this Special Issue will focus on, but is not limited to, the following topics: -Synthesis and Processing -Characterization Techniques - Material Properties -Applications -Numerical modeling -Sustainability and Green Chemistry

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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 nanometerscale 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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