Special Issue

Structure, Function and Mechanics of Low-Dimensional Materials and Their Assemblies

Message from the Guest Editors

In recent years, low-dimensional materials have become a class of emerging materials. Their sample sizes in one or more spatial dimensions are reduced to the nanoscale regime, leading to the unique size effects or confinement effects. Low-dimensional materials include zero-dimensional, one-dimensional and two-dimensional materials. Due to their unique size effects, low-dimensional materials have exhibited excellent mechanical, thermal, electronic, optical, and chemical properties. As a basic building block, low-dimensional materials can be integrated into three-dimensional (3D) macroscopic assemblies. These 3D macroscopic structures or materials have shown enhanced functions in the fields of energy storage, sensing, catalysis, and environmental protection. Aiming at highlighting some important concepts and developments of low-dimensional materials and their assemblies, this Special Issue will focus on the microstructures, functions, and mechanical properties/behaviors of various low-dimensional materials and their assemblies. Because of your expertise in low-dimensional materials and their assemblies, we cordially invite you to contribute a paper to this Special Issue.

Guest Editors

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Dr. Hui Wu

Deadline for manuscript submissions

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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