

Special Issue

Carbon-Based Materials: Structures and Electrochemical Applications

Message from the Guest Editor

Carbon materials are rising stars in the 21st century. Carbon materials belong to a big family which includes carbon quantum dots, fullerenes, carbon nano-onions, carbon spheres, carbon nanotubes, carbon nanofibers, graphene, carbon aerogels/monoliths/foams/sponges, etc. Various precursors, especially biomass, have been exploited in preparing functional carbon materials. Versatile nanotechnologies such as chemical vapor deposition, electrospinning, the hydrothermal method, and the template method have been developed to synthesize carbon materials with different structures. Carbon materials are promising materials for electrochemical applications due to their good conductivity, excellent stability, tunable microstructure, etc. Moreover, carbon materials are excellent substrates in loading electroactive materials for energy storage devices, electrocatalysis, electrochemical sensors, etc. The field is blooming into many new areas of discovery. It is my pleasure to invite you to submit a manuscript for this Special Issue. Full papers, communications, and reviews are all welcome.

Guest Editor

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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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