Special Issue

Current and Future Trends in Carbon-Based Materials

Message from the Guest Editor

Currently, carbon-based materials represent one of the most interesting classes of structures due to their unique properties and wide potential for application in electronic devices, superstrength coatings, as well as for hydrogen energetics. There is a great variety of such structures of different morphology, for example, composites, carbon structures doped with other atoms, and new carbon phases with complex architecture, to name a few. All of these carbon-based materials have their special features and benefits, which can be based on structural peculiarities or on modification by other atoms or by external treatment. One of the important issues is the search for new structures and the development of new synthesis methods to obtain carbon-based materials with improved properties. This Special Issue focuses on the recent development of new advanced carbon materials and their design, preparation, applications, and future trends in carbon-based materials. Both experimental works and numerical simulations on these new and unique structures are very welcome. Full papers, short communications, and reviews are all welcome.

Guest Editor

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Deadline for manuscript submissions

closed (20 November 2023)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/101773

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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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