

Special Issue

Graphene and Carbon Nanotube Ceramic Matrix Composites

Message from the Guest Editors

Ceramics are known materials with a high hardness, strength and toughness, with possible applications in a wide range of temperatures and the addition of second-phase fillers or nanoparticles to ceramic matrices possibly resulting in novel properties of the final composites, which can be considered as improvements or added functionalities in comparison to the intrinsic properties of the starting matrix. Nowadays, in the case of nitride, carbide or oxide ceramics, one of the most used additional phases is carbon in various forms, e.g., carbon nanotubes, carbon black or graphene. In this Special Issue, papers dealing with preparation routes, colloidal mixing, milling and dispersing, followed by sintering, e.g., hot pressing, hot isostatic pressing, spark plasma sintering and flash sintering, as well as destructive or non-destructive characterization techniques related to the mechanical, electrical, thermal and tribological properties, together with ab initio or molecular dynamics modeling focusing on different defense, automotive, medical or space application areas of CMCs will be considered.

Guest Editors

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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.

Editor-in-Chief

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