Special Issue

Functional Design of Polymeric Materials and Composites under Extreme Conditions

Message from the Guest Editors

Extreme conditions have already provided scientists with new opportunities and frontiers for scientific research. These conditions include but are not limited to extreme temperature, extreme humidity, extreme pressure, acidity, alkalinity, and extremely high electrical and magnetic fields. In this case, the functional design of polymeric materials and composites is predominant for facing the specific extreme conditions and displaying required performances. Polymeric materials are already available for various advanced commercial, military, and aerospace applications, and they face an increasing number of different extreme environments. Their durability issues urgently need to be addressed. Establishment of the direct and indirect relationships between material structures and performances is also highly required. This Special Issue aims to advance the fundamental understandings of polymeric materials under extreme conditions and exhibit progressive technologies. We encourage the submission of papers in which the connections of material structures and functions are investigated and highlighted.

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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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