Special Issue

Damage and Failure of Polymers, Polymer-Like Materials, Adhesives and Polymer Nanocomposites

Message from the Guest Editor

The aim of this Special Issue is to gather the latest researches in the field, especially those dealing with the theoretical, numerical and experimental study of damage and failure in polymers and polymer-like materials (biomaterials), adhesives and polymers nanocomposites, all of them being characterized by a complex, entangled, amorphous network-like microstructure. In particular, the Special Issue is devoted, but not limited, to the following aspects: Damage and failure due to static or repeated mechanical actions, delamination, void growth, thermal or chemical actions, environmental degradation, strain rate effects, etc. Of particular interest to the Special Issue will be the microscale and multiscale approaches to the above mentioned aspects; the goal is to provide an up-to-date and comprehensive overview on the problem of assessment and prediction of damage and failure and on the mitigation (repair and healing) of their effects in polymers, polymer-like materials, adhesives and polymers nanocomposites.

Guest Editor

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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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