Special Issue

Modeling of Damage in Composite Materials

Message from the Guest Editor

Fiber-reinforced polymer (FRP) composite materials have many applications in industry and have been extensively investigated thanks to aeronautical developments in the last few decades. Modeling of damage in FRP is still a complex task keeping in view the heterogeneous nature of composite materials in addition to the multiscale nature of damage development and progression. This complexity is further augmented when predicting the damage under the application of multiaxial loading. Classical such examples are damages in the wear and fretting phenomena occurring in the contact zones of composite materials with other materials. In contrast to the experimental works on the wear of FRPs, very few studies have reported on modeling the damage mechanisms encountered in the wear process. This Special Issue will focus on recent progresses on damage modeling concerning:

- New numerical approaches;
- New damage models or criteria;
- Wear of composite materials;
- Damage under multiaxial loading.

Guest Editor

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Deadline for manuscript submissions

closed (20 November 2022)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/49658

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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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