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

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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.









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Message from the Editor-in-Chief

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