Special Issue

Research on Thermal Stability and Degradation of Polymers and Their Potential Use in a Circular Economy Development

Message from the Guest Editors

Thermal stability and degradation routes often decide whether new materials exhibit applicative potential and fulfil market demands. Currently, the development of novel materials must meet additional requirements such as enhancing the life cycle of polymers and promoting a circular economy. The investigation of thermal degradation processes, including theoretical modelling prediction and the characterization of degradation products, enables the full life cycle of new materials to be addressed, with a focus on maximizing their use after the end of their performance. The purpose of this Special Issue is to provide a comprehensive understanding of the degradation processes of polymeric materials in order to design and close reuse and sustainability loops. Contributions to this Special Issue may cover all recent advances related to the thermal stability of polymers, the modelling of the degradation process and the characterization of degradation products, emphasizing possible applications in material recycling.
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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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