Special Issue

Novel Biodegradable and Renewable Polymer-Based Nanohybrids and Applications

Message from the Guest Editor

Biodegradable and renewable polymer-based nanohybrids emerge as a viable alternative to high "carbon footprint" petroleum-derived plastics. With a plethora of opportunities arising from the combination of biodegradable/renewable polymers and nanoparticles, these systems offer exciting opportunities to design and synthesize novel multifunctional materials and devices. These are aimed to be applied in the fields of medicine, packaging, energy storage, catalysis, water purification, sensors, and actuators. Thanks to such propitious characteristics, it is expected that polymeric nanohybrids may take the lead in the transition to a sustainable society. This Special Issue seeks to address recent developments in novel nanohybrids based on biodegradable and renewable polymers in a comprehensive way. Manuscripts dealing with the synthesis of novel biodegradable/renewable polymers, nanoparticles/nanohybrids/nanocomposites, functionalization, processing, multifunctional properties, novel applications, life cycle assessment (LCA), and recycling will be considered. Full papers, communications, and reviews covering these subjects are welcome.

Guest Editor

Dr. Erlantz Lizundia

1. Department of Graphic Design and Engineering Projects, Bilbao Faculty of Engineering, University of the Basque Country (UPV/EHU), 48013 Bilbao, Spain
2. BCMaterials, Basque Center Centre for Materials, Applications and Nanostructures, UPV/EHU Science Park, 48940 Leioa, Spain

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Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

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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.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian
1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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