Special Issue

Trends in Functionalization of Natural Polymers by Ionizing and Non-ionizing Radiation Processing

Message from the Guest Editors

Materials based on natural polymers are increasingly desired and promoted in both food and non-food applications. In this way, there is a continuous need to functionalize and upgrade the processing of bio-based materials by using emerging and non-polluting techniques. Recent trends of (bio)polymer modification explore various approaches of using radiation-based techniques for both single and dual modification in order to improve the technological and functional properties of natural polymer materials (i.e., starch, cellulose, pectins, alginates, chitosan, gums). The methods based on ionizing radiation or non-ionizing radiation, and even cold plasma for processing bio-based materials, are environmentally friendly and quick, involving no use of pollutants, no production of waste, and no penetration of toxic substances into the treated materials. This Special Issue on **Trends in Functionalization of Natural Polymers by Ionizing and Non-Ionizing Radiation Processing** aims to highlight recent progress in the development of ionizing and non-ionizing radiation uses in modern and non-conventional methods for bio-based material processing.

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Message from the Editorial Board

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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