Special Issue

New Trends in New Material Production and Characterization Using Scanning Techniques

Message from the Guest Editors

The rapid development of human society over the last hundred years has resulted in a sharp increase in the number and amount of pollutants emitted into the environment, leading to severe imbalances. Simultaneously, an important technological advance has been observed which allows us to recover pollutants and remediate the environment. Exploitation and conversion of natural resources in raw materials, used by various industries, leads to the apparition of environmental pollution. Broad diversification of industrial products used for improvement of our living conditions is responsible for most pollutant emissions. In this context, it is important to produce suitable materials (adsorbents, catalysts, and so on) to reduce the pollutant amount discharged into the environment. It is vital to properly characterize the produced materials in order to establish a correlation between material structure (microstructure) and its properties. Such a correlation is being established using different scanning characterization techniques: scanning electron microscopy, scanning probe, optical microscopy, and X-Ray diffraction.

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Deadline for manuscript submissions

closed (31 July 2020)



an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/30920

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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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