Special Issue

Modern Materials with Amorphous and Nanocrystalline Structure

Message from the Guest Editor

Materials with an amorphous and nanocrystaline structure are one of the newer groups of modern materials with significantly better properties than the corresponding crystalline materials of the same composition. Particularly interesting, for functional reasons, are amorphous ferromagnetic alloys showing the so-called soft magnetic properties. These materials, compared to the commercially used FeSi transformer sheets, show significantly lower losses during remagnetization, reducing this undesirable effect by as much as 80%. Therefore, in-depth knowledge of the methodology of their production and a detailed analysis of the magnetic properties with the simultaneous study of their structure may contribute to significant technological progress. Another group of modern materials are geopolymers. The term includes modern inorganic, amorphous, synthetic polymers aluminum silicates with a specific composition and unique properties. This Special Issue covers all aspects of the synthesis, characterization, and application of modern amorphous and nanocrystaline materials. I am inviting you to publish the results of your research related to the subject of this Issue.

Guest Editor

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Deadline for manuscript submissions

closed (20 September 2022)



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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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