Special Issue

Advances in Mechanical Alloying and Milling

Message from the Guest Editors

Mechanical alloying is a solid-state powder processing technique involving repeated welding, fracturing, and rewelding of powder particles in a high-energy ball mill. It has been confirmed to be a successful method for the fabrication of a variety of materials, including amorphous alloy powders, nanocrystalline powders, intermetallic powders, composite and nanocomposite powders, and nanopowders. In addition to nanoscale processing, the brute-force employment of mechanical milling has been proven to be one of the most promising and rapidly developing methods to synthesize extended solid solubility even in immiscible systems. In this Special Issue, recent advanced ball milling methods and nanocrystalline preparation processes in these areas, as well as mechanochemical materials synthesis, will be highlighted and discussed. It is my pleasure to invite you to submit a manuscript for this Special Issue. Full papers, communications, and reviews are welcome.

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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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