Special Issue

Spark Plasma Sintering of Materials: Processing and Applications

Message from the Guest Editor

Spark plasma sintering (SPS) technology has attracted much attention not only for the enhancement of consolidation process and capable of producing highly dense materials with smaller grain size and cleaner grain boundaries, but also in exploring the mechanisms underlying fast sintering. Different from the conventional sintering, SPS involves a pulsed electric current passing directly through the graphite die, by which results in much faster heating rate as well as the controversial contributions from electric field or/and plasma. Like that in hot pressing, SPS also involves the application of a uniaxial pressure for densification promotion. Thus, this Special Issue, with the title of “Spark Plasma Sintering of Materials: Processing and Applications”, will focus on the frontier researches associated with SPS technology for the materials of ceramics, metals, alloys, amorphous materials, and so on. It is my pleasure to invite you to submit a manuscript for this Special Issue.

Guest Editor

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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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