

Special Issue

Athermal Field Effects in Spark Plasma Sintering and Flash Sintering

Message from the Guest Editor

Electricity is a noble form of energy, which enables energy saving materials processing (sintering, joining, synthesis and forming). Since the discovery of Joule effect in 1843, researchers working on field-assisted techniques realized that by passing a current across a material it could lead to “something special” not seen otherwise. That “something special” found little use for more than 150 years because of poor controls over the processing parameters. Nowadays, even if these issues have been surpassed, there is still a lot unknown about the interaction between matter and intense electric fields at high temperature ($T > 0.4 T_m$). The special issue invites submissions on aspects of material processing where the use of an electrical field plays a key role in the triangle properties-microstructure-processing. It is my pleasure to invite you to submit a manuscript for this Special Issue. Full papers, communications, and reviews are all welcome.

Guest Editor

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Deadline for manuscript submissions

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About the Journal

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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