Special Issue

Sintering and Processing of Metallic Materials: Experiments and Simulation

Message from the Guest Editors

The market share of sintered metallic materials is constantly increasing and is a permanent stimulus for the development of new materials and new technologies. The forming and sintering process, carried out in several stages or all at once, normally requires the concurrence of pressure and temperature, but more recently it can also include other factors such as electric and magnetic fields, microwave, or laser light. The ultimate goal is usually to obtain fully dense materials with a net shape or near-net shape. Naturally, these manufacturing and processing routes are becoming increasingly complex. The modeling and simulation of these processes offer virtual tools to assist in the development and optimization of the process, and reduce the cost of experimental testing and material waste. In this Special Issue, we welcome papers that focus on the forming and sintering methods of metallic powders, with an emphasis on the simulation of such processes. Traditional routes are included, but also the most recent techniques, aimed at producing high-performance products.

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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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