Special Issue

Spark Plasma Sintering

Message from the Guest Editors

Over the course of the last three decades, a novel sintering technique known as spark plasma sintering (SPS), plasma activated sintering (PAS) or field-assisted sintering technique (FAST), has emerged. This technique has shown great versatility in the development, synthesis, and consolidation of both novel materials and improvements on traditional materials. The technique enables rapid densification of various materials, including metals, ceramics, polymers, and composites, to high or even full density within a period of minutes. Moreover, SPS allows the fabrication of refractory materials, composites or functionally graded materials (FGMs) for a wide range of applications. Even though SPS shows promising ways to obtain materials with properties that cannot be achieved by other conventional methods, the fundamental mechanisms of this fast sintering process are still under debate. One of the latest, fascinating developments in this field is a high-pressure SPS (HPSPS), which has been demonstrated as a suitable route for the development of nano- and ultrafine grained materials with enhanced properties. For further information, please visit mdpi.com/si/43913.

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Journal of Manufacturing and Materials Processing (*JMMP*)(ISSN 2504-4494) is a new MDPI peer-reviewed, open access venue with a focus on the scientific fundamentals and engineering methodologies of manufacturing and materials processing. We offer an online platform facilitating effective exchange of innovative scientific and engineering ideas and the dissemination of recent, original, and significant research and developmental findings. On behalf of the Editorial Board, I extend an invitation to our scientific and engineering colleagues to contribute high-quality, innovative, and ground-breaking research articles to *JMMP.*

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