Special Issue

Advances in Thermomechanical Processing and Additive Manufacturing of Engineering Alloys

Message from the Guest Editor

Metal additive manufacturing (AM) has transformed the field of engineering by offering unparalleled flexibilityNevertheless, other enquiries persist, such as how the specific characteristics of metal additive manufacturing (AM) components are attained and, in connection, whether and how they might be intentionally devised. Acquiring this type of expertise is essential for enhancing the performance of AM parts.

The Special Issue, titled "Thermomechanical Processing and Additive Manufacturing of Metal Alloys", is dedicated to publishing studies focused on the in-depth exploration of the additive manufacturing process applied to metallic materials, with a specific focus on investigating the microstructure and mechanical properties of the resulting materials. We extend an invitation to you to participate in this Special Issue by submitting papers that explore the strategic design of microstructures and defects, multi-scale materials characterization, in situ monitoring of AM processes, and a re-evaluation of physical metallurgy to develop the desired mechanical properties in manufactured products for various industrial applications.

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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