Special Issue

Advanced Additive Manufacturing Processing of Ceramic Materials

Message from the Guest Editors

Traditional ceramic processing technology is very dependent on the mold, and cannot meet the requirements of rapidly manufactured integrated, complicated and precise ceramic products. Compared to traditional ceramic processing technology, ceramic additive manufacturing technology prevents the key limitation within traditional ceramic processing of its over-reliance on molds, and can quickly produce fully personalized ceramic products without molds, with a high freedom of structural design, and is considered to be one of the many disruptive technologies that constitute Industry 4.0. This Special Issue aims to collect the most recent research on innovative and pioneering works in additive manufacturing, welding and casting, covering several aspects such as the additive manufacturing process, the numerical simulation of the manufacturing process, process quality monitoring and control, solidification and crystallization, composition distribution and defects.

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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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