Special Issue

Advances and Applications of 3D Printing and Additive Manufacturing

Message from the Guest Editors

Additive manufacturing (AM) is rapidly transforming a wide array of industries. Its growing adoption is driven by significant advancements in near-net-shape fabrication, particularly for components with intricate geometries customized for specific applications which are difficult to produce using traditional manufacturing methods. The goal of this Special Issue is to highlight the innovative capabilities of AM and its extensive applicability, providing an overview of current trends and future directions in the field. We encourage submissions in the following areas: Specialized applications in medical devices, aerospace, corrosion protection, and energy utilization; Design and modeling focused on enhancing functionality for specialized applications; Additive manufacturing processes and advancements, including hybrid systems and process optimization for improved performance and efficiency; Development of novel materials with a focus on characterizing their performance in microstructural, mechanical, electrical, chemical, or biological contexts; Surface postprocessing of additive-manufactured components for improved functionality in specialized applications.

Guest Editors

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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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