Special Issue

Advances in 3D Printing Technologies: Design, Manufacturing, and Applications

Message from the Guest Editors

3D printing, also known as additive manufacturing, is a creative and magic manufacturing method to form complex components. 3D printing is a new manufacturing technology developed based on the concept of "discrete-stacking" additive manufacturing. Compared with the subtractive manufacturing, 3D printing has many advantages, including infinite structural design space, infinite material design space, and powerful complex structural manufacturing capabilities. Common materials for 3D printing include metal, resin, ceramic, and composite. Common processes for 3D printing include Powder Bed Fusion (PBF), Direct Energy Deposition (DED), Stereolithography (SLA), Digital Light Processing (DLP), Fused Deposition Modelling (FDM), etc. The Special Issue called “Advances in 3D Printing Technologies: Design, Manufacturing, and Applications” offers a platform for researchers to share the cutting-edge research. The Special Issue covers all aspects of 3D printing technology, especially serving for mechanical engineering and biomedical engineering, including design and simulation for 3D printing, materials and processes for 3D printing, quality and detection for 3D printing, etc.

Guest Editors

Dr. Chenchen Tian

Dr. Yi Lu

Prof. Dr. Quanquan Han

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Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

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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.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian
1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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