

Special Issue

Advances in Materials, Design and Modeling of Additive Manufacturing

Message from the Guest Editor

Additive manufacturing has already become widespread not only in the academic environment but also in various fields of industry. An important advantage of additive manufacturing is the ability to form functionally graded materials. Variations in properties can be achieved through the formation of a gradient structure or the density or chemical composition of the material.

Modeling the additive manufacturing process makes a more complete understanding of the ongoing processes possible. A large number of different processes simultaneously occurring in additive manufacturing require special approaches to their modeling. This Special Issue will publish new reviews and research findings on the topics covered, including, but not limited to, the following:

- Laser additive manufacturing;
- Lightweight structures;
- Biomaterials and new medical materials, and 3D printing of biomaterials;
- Postprocessing of materials and heat treatment;
- Modeling and design of additive manufacturing;
- New materials and materials with special properties;
- Functionally graded materials;
- 4D and smart materials.

Guest Editor

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closed (20 January 2023)



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About the Journal

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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