Special Issue

Advances in Bioprinting Techniques and Materials

Message from the Guest Editor

Bioprinting is an additive manufacturing process for the biofabrication of tissue-like, biological structures. Hydrogels loaded with living cells are printed using different dispensing mechanisms to reproduce the geometry and morphology of a 3D-dimensional virtual model.

In this special edition we encourage publication of original work related to recent progress in standardization, digitalization or automation of bioprinting hard- and software, the applied materials (bioinks).

We specifically welcome original research on:
Fluid- and thermodynamic modelling of bioprinting processes, Gelation kinetics of bioinks...

Furthermore, we encourage research on the development and process integration of:
New sensor and actuator systems, such as pressure, vibration, temperature or optical sensors, in 3D-bioprinting systems...

Finally, biomedical applications that proof the automation, digitization or upscaling potential of bioprinting technology are highly appreciated.

Guest Editor

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Deadline for manuscript submissions

closed (30 April 2021)

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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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