Special Issue

Additive Manufacturing: Materials and Technologies for Digital Construction

Message from the Guest Editors

With this Special Issue entitled “Additive Manufacturing: Materials and Technologies for Digital Construction”, we invite the scientific community to report advances and novel insights on topics that may include, but are not limited to:
Advanced technologies for 3D digitalization; Development, optimization, and characterization of eco-efficient printable materials; Novel processing, reinforcement, and post-production methods; Durability, deterioration mechanisms, and end-of-life valorization routes for 3D printed building materials; Printable multifunctional materials and compatibility with traditional building materials; AI/ML-based methods applied to development of printable materials and additive manufacturing processes; Structural analysis, modeling, and topological optimization of additively manufactured materials and construction elements; Using sensors for structural health monitoring of 3D-printed structures; Life cycle analysis and life cycle cost of additively manufactured building materials and construction elements; Integration of additive manufacturing into project management and building information modeling tool; Novel business models and case studies.

Guest Editors

Dr. Guilherme Ascensão

Prof. Dr. Humberto Varum

Prof. Dr. Victor M. Ferreira

Deadline for manuscript submissions

closed (20 December 2024)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/160196

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

mdpi.com/journal/materials

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/journal/materials

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.

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

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)