

## 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.

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### Guest Editors

Dr. Guilherme Ascensão

Prof. Dr. Humberto Varum

Prof. Dr. Victor M. Ferreira

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### Deadline for manuscript submissions

closed (20 December 2024)



## Materials

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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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### Editor-in-Chief

Prof. Dr. Maryam Tabrizian

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