Special Issue

Advanced High-Performance and Ultrahigh Performance Concrete Materials and Structures

Message from the Guest Editor

This Special Issue will highlight recent value-added contributions to the state-of-the-art and state of practice on UHPC. We seek high-quality research manuscripts addressing key UHPC aspects, including the following topics:

- measurement and control of the rheology and earlyage behavior of UHPC;
- specialty materials and novel mixture proportioning;
- nanostructure and advanced characterization of UHPC;
- sustainability and novel binders with low-CO2 footprint;
- mechanical performance under extreme loading, impact, blast, and fire;
- durability in severe exposure environments;
- life cycle assessment:
- design principles and design guidance; applications of UHPC in bridges and buildings, precast concrete, repair and rehabilitation, seismic retrofit, field-cast connections, nuclear fuel and spent fuel storage and containment, etc.;
- new predictive models for the behavior of UHPC, and other novel research that pushes the envelope of innovation and application of UHPC.

Guest Editor

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Deadline for manuscript submissions

closed (31 March 2022)



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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.

Editor-in-Chief

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