Special Issue

Emerging Materials and Structures Achieving High-Performance, Low-Carbon and Sustainable Development

Message from the Guest Editors

The shortage of raw construction materials, high carbon emissions in the cement industry and the huge maintenance cost of existing structures are critical obstructions hindering the sustainable development of concrete infrastructures. Due to the innovative efforts undertaken by the research community, satisfactory achievements have been reached in terms of advanced materials, featured structures as well as retrofitting materials and technologies. The application of high-performance, low-carbon and recycled construction materials, together with innovative structure systems, is a trend facing the above-stated challenges. This Special Issue plans to provide a platform for the overview of the state-of-the-art in this research field. Topics of interest include (but are not limited to):

- Low-carbon cementitious materials;
- Concrete with recycled solid wastes;
- Recycled fiber-reinforced concrete;
- Innovative FRP strengthening and retrofitting;
- FRP bar concrete structures considering ductility demand;
- High-performance structure system and theory;
- Ultra-high-performance concrete.

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Deadline for manuscript submissions

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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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