Special Issue

Advanced Fiber-Reinforced Concrete Composites

Message from the Guest Editor

Fiber-reinforced concrete is recognized as a high-performance construction material because of its high toughness levels under compressive and tensile loads. Therefore, it is widely used in high-rise buildings, tunnels, bridges, and pre-cast structures. Societal demands have increased the need for advanced fiber-reinforced concrete composites with ultra-high performance or multifunctionality, such as self-healing, self-sensing, self-cleaning, and self-regulating. This Special Issue focuses on the emerging concepts that allow the design of new or improved fiber-reinforced concrete composites, as well as on the characterization of the properties of advanced fiber-reinforced concrete composites. Potential topics include, but are not limited to:

- Advanced and multifunctional fiber-reinforced concrete composites
- Ultra-high-performance fiber-reinforced concretes
- Advanced fiber-reinforced cement-free composites
- Nano-fiber-reinforced concrete composites
- Characterization of properties
- Strain-hardening behavior
- Multiple microcracks
- Fiber-bridging behavior
- Structural application of advanced fiber-reinfoced concrete composites

Guest Editor

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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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