Special Issue

Advanced Concrete Technology – Smart and Multifunctional Cementitious Composites

Message from the Guest Editors

Many in-service civil infrastructure assets are reaching their service lives, requiring extensive condition assessment, repair, and rehabilitation to keep them safe and functional. Accordingly, recent technology advances in the field of smart cementitious composites are attracting significant attention as they offer various innovative functionalities in concrete infrastructure, such as self-healing, self-adjusting, self-heating, and energy-storing capabilities. This Special Issue welcomes contributions from researchers interested in advanced concrete technology, encompassing diverse topics ranging from their fundamental definition to practical applications. Research areas may include (but are not limited to): smart concrete, piezoresistive cementitious composites, self-healing cementitious composites, electrically conductive cementitious composites, energy-storing cementitious composites, 3D printable concrete technology, smart actuators, numerical simulation, and resilient infrastructure. Contributions on the design of sustainable and resilient infrastructure are also welcome.

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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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