Special Issue

Durability and Mechanical Properties of Sustainable, High-Performance and Multi-Functional Concrete Materials

Message from the Guest Editors

Since its invention, concrete has become one of the most commonly used construction materials in the world. In recent decades, as awareness of environmental protection has grown and construction demands have increased, a number of new highly sustainable, high-performance and multifunctional concrete technologies and materials have emerged. As a result of these new concrete technologies, UHPC, ECC, geopolymer concrete, recycled waste concrete, self-healing concrete and other newly developed concrete materials have been developed with improved mechanical and green properties, resulting in a variety of new features and functions that have contributed to the development of new concrete structures. This Special Issue focuses on new concrete materials' durability and mechanical properties, which are key factors in their application in engineering with regard to sustainability, high performance and multifunctionality. We intend to highlight new developments in concrete materials, including but not limited to the design and preparation, durability, mechanical properties, microstructure characterization and structural applications of new concrete materials.

Guest Editors

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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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