Special Issue

Innovative Construction Materials for Advanced Engineering Applications

Message from the Guest Editors

Zero carbon emission policies call for greener solutions in cementitious composites, concrete mixes, fibrereinforced polymers, nanomaterials, and adhesives, as well as revolutionary design, processing and production methods to reduce the usage of raw materials and energy costs. There is also a focus on prolonging the service life of structures and the cyclic economy. Recycling of used materials is at the forefront and new composites are being invented and tested. As a result, new adaptations to already existing testing methods are being devised and new production methods are being presented. Furthermore, 3D printing is revolutionizing the way the infrastructure is perceived, and engineering is entering all sectors of life. This issue celebrates all advancements and particularly welcomes new studies on combinations of construction materials, be they biobased, nanosized, recycled, energy-harvesting, selfsensing, fatigue-resisting, compatible with materials of historical structures, 3D-printed, smart or others. Particular emphasis is placed on green technology and materials, new characterization methods and novel structural tests that can be performed on the materials.

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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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