Special Issue

Advanced Cement-Based Composite Materials and Composite Intelligent Design

Message from the Guest Editors

Cement-based composite is the most popular artificial material in the world and is ubiquitous in most infrastructures. In the past two decades, rapid progress has been made in terms of scientific research on and the technological development of advanced cement-based composite, which can be endowed with many functionalities (e.g., self-sensing, self-monitoring, thermal energy storage, ultrahigh-strength, self-healing, etc.) by intelligent design, rendering it smarter for service in various applications. Though diverse advanced cement-based composite materials are expected to benefit construction materials and engineering, there are still many challenges in their development and application. The aim of this Special Issue is to promote excellent research concerning all aspects of advanced cement-based composite materials and artificial intelligence in the concrete construction process, focusing on recent advances, basic properties, research gaps, and new trends in the construction of buildings, roads, tunnels, etc.

Guest Editors

Prof. Dr. Wei Wang

Dr. Weichen Tian

Dr. Mingzhi Wang

Dr. Kunyang Yu

Dr. Yanqin Zeng

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Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

mdpi.com/journal/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.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian
1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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