

Special Issue

Structural, Mechanical, and Thermal Properties of Mortars, Cements, and Alternative Composites

Message from the Guest Editor

Various kinds of concretes and mortars are widely applied in the construction industry all over the world due to their availability and beneficial utility properties. However, the growing production of binders, such as Portland cement, lime hydrate, etc., and intensive quarrying of natural aggregates, are tied with environmental impacts in the form of increased emission of greenhouse gases and excessive depletion of natural non-renewable resources. On the other hand, global industrial productions generate a considerable amount of wastes and by-products which either can supplement the input raw materials or can intentionally and suitably modify some material properties of building composites and thus contribute to the higher rate of sustainability in the construction industry. This Special Issue is focused on the research of traditional building composites as well as their alternatives in alkali-activated bases that contribute to the preservation of the environment and dispose with advanced material properties and increased durability. In this sense, original research papers, state-of-the-art reviews, communications, and discussions are welcomed.

Guest Editor

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Message from the Editorial Board

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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