

Special Issue

Research and Development of Modified Building Materials

Message from the Guest Editor

Materials scientists study traditional materials and building technology with the aim to learn, transfer knowledge, and advance it. Additionally, newly developed cement-based materials are evolving in order to fulfil the requirements needed for construction. Composites and modified materials are using nanotechnology and alkali-activated mechanisms as well as reactive additives in order to improve their durability and address their inherent weaknesses. Cheap, easy-to-find, environmentally friendly, and effective additives can improve the insulation and consistency of composite materials, influencing fresh and hardened properties. Modified coatings can improve properties such as hydrophobicity, roughness, self-cleanliness, or even adhesion. Material modification can be achieved by different ways either within the structure or by elaborating their surface. Nevertheless, the aim is to produce durable materials with innovative properties able to solve complex structural problems.

Keywords

- cement
- lime
- bio-fibres
- additives
- coatings
- nano-modified
- alkali-activated

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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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