

Special Issue on
Smart Buildings and Construction Materials

CALL FOR PAPERS

In retrospect, advances and innovations in material science have always played a substantial role in the development of building design and construction. In recent years, extensive effort has been devoted to the applications of stimuli-responsive smart materials and nanostructures in buildings. These smart materials used in built environment can be defined as those offering specific functional and adaptable properties in response to thermal, optical, structural, and environmental stimuli. These materials not only enhance the overall performances of new building construction, but also promise safer structures, longer durability of building elements, more building energy savings, greater environmental sustainability, and even higher indoor user comfort. Given the increasing imperatives for the above, the journal of Advances in Materials Science and Engineering will publish a themed special issue that focuses on smart building and construction materials. The main aim of this special issue is to encapsulate the current interest and state of research related to the smart materials in building and construction applications, underpinning current and future challenges in building energy, environmental sustainability, and structural safety and durability.

Potential topics include but are not limited to the following:

- ▶ Smart nanostructures and nanomaterials for thermal insulation
- ▶ Chromic materials in smart glazing systems
- ▶ Shape memory materials in building structures
- ▶ Self-healing building structures and materials
- ▶ Smart geosynthetic materials for road pavement
- ▶ Smart materials for shallow geothermal systems

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Papers are published upon acceptance, regardless of the Special Issue publication date.

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