

Special Issue

Advances in Construction and Building Materials

Message from the Guest Editor

Recent incidents of catastrophic failures of aging infrastructure in the United States, Italy, and other parts of the world are unfortunate examples of what is to come at an increasing rate in the next decade(s). At the same time, our society is being challenged by global warming combined with extreme events, including flooding, wildfires, earthquakes and hurricanes.

Therefore, the two main challenges for civil engineers and material scientists are to understand the deterioration of existing infrastructure and develop new and high-performance materials that have multifunctionality, self-sensing capabilities and that are not only more durable but also strong, lightweight and eco-friendlier.

Therefore, this Special Issue calls for papers in (but not limited to) the following areas:

- Aging-induced deterioration;
- Green concretes and alternative cement binders;
- Shape memory and superelastic alloys;
- Fiber-reinforced polymers and concrete;
- High strength and ultra-high strength concretes;
- Phase change materials;
- Energy storage through construction materials;
- Environmental impact studies of new construction materials.

Guest Editor

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Deadline for manuscript submissions

closed (1 April 2021)



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About the Journal

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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