

Special Issue

Building a Sustainable Future: Latest Research on the Recovery of Solid Waste for Construction and Building Materials

Message from the Guest Editors

This Special Issue explores the innovative repurposing of waste materials and their integration into construction processes, exploring the opportunities and challenges associated with leveraging waste for sustainable practices. The scope of this Special Issue includes, but is not limited to, the following topics:

- **Material Characterization and Performance:** Exploring the performance and properties of waste materials in construction, and comparing their mechanical, thermal, and durability properties to traditional materials.
- **Material Composition Optimization:** Using AI algorithms to enhance the composition of construction materials by incorporating waste components.
- **Environmental Impact Assessment:** Conducting life cycle assessments (LCAs) to evaluate the environmental impact of using waste materials in construction.
- **Durability and Long-Term Performance:** Assessing the long-term durability and performance of construction materials containing waste components.
- **Structural Integrity and Load-Bearing Capacity:** Evaluating the structural integrity and load-bearing capacity of elements incorporating waste materials.

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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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