

## Special Issue

# Advances in High-Performance Cementitious Materials for Structural Strengthening and Seismic Applications

### Message from the Guest Editors

Advanced cementitious materials are essential for strengthening aging infrastructure and improving seismic resilience. Systems such as ultra-high-performance concrete (UHPC), engineered cementitious composites (ECC), fiber-reinforced cementitious composites, textile-reinforced mortars (TRM), strain-hardening cementitious composites (SHCC), and geopolymers provide enhanced strength, ductility, crack control, energy dissipation, and durability. This Special Issue focuses on high-performance cementitious materials for structural strengthening and seismic applications. Topics include:

- Material design and characterization;
- Bond and interface behavior;
- Strengthening of concrete, masonry, steel, timber, and hybrid structures;
- Seismic retrofitting and cyclic performance;
- Durability and life-cycle assessment;
- Numerical modeling and simulation;
- Non-destructive evaluation;
- Smart, sustainable, and low-carbon materials;
- Case studies and field applications. Experimental, analytical, and computational studies on the design, synthesis, modification, characterization, and performance optimization of advanced cementitious materials are particularly welcome.

### Guest Editors

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### Deadline for manuscript submissions

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## Materials

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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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