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Fabric Reinforced Cementitious Matrix (FRCM) Systems for Masonry Strengthening

Guest Editor:

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Message from the Guest Editor

Fiber-reinforced composites are presently used in structural strengthening interventions more and more frequently. The mortar matrix makes such a class of materials ideal for masonry structures, as mortar is at the same time a component of masonry, in comparison to polymeric matrices. However, the first attempts to adapt the wide knowledge gained for FRPs have revealed some limits and drawbacks, as the substitution of matrix with mortar material jeopardizes and has a crucial impact on the performance of such materials. This Special Issue aims to explore experimental and theoretical research dealing with the peculiar aspects of the behavior of masonry strengthened with this class of materials. Potential topics include but are not limited to the following:

- Experimental results on full scale and scaled down prototypes and structural elements;
- Testing of materials to derive structural properties (tensile, bond, etc.);
- Capacity models and numerical simulations;
- In-plane and out-of-plane behavior;
- Confinement;
- Seismic strengthening;

Keywords: Capacity modeling; Experimental testing; Numerical simulations; Masonry strengthening design





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Message from the Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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