Special Issue

Monitoring and Evaluation Methodologies on Repair, (Self-)Healing, and Restoration of Materials and Structures

Message from the Guest Editor

We live in a new era of smart and sustainable construction materials. There is no more tolerance in our societies for energy-ineffective short-lived infrastructure; therefore, breakthrough designs using revised concrete formulas, innovative cementitious/plastic composites, and recycled metals/polymers emerge. More and more pioneering technologies appear daily, and the research community is called to effectively assess their performance throughout their service life. Sensing tools are required to track the onset and progress of damage (indicatively in the form of flaws, cracking, and detachment). In recent studies, acoustic and optical techniques have been applied to measure the crack formation and sealing and evaluate repair and healing efficiency. This Special Issue seeks the latest studies that provide pioneering methodology on damage and repair assessment of building materials using advanced experimental techniques. In particular, research papers and case studies discussing new, elaborate sensing tools applied on existent or restored structures are welcome.

Guest Editor

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closed (1 December 2020)



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Message from the Editor-in-Chief

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 multidimensional network.

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