Special Issue

Concrete Durability: Deterioration Mechanisms, Prediction and Rehabilitation

Message from the Guest Editor

Concrete is the most widely used man-made material in the modern construction industry. However, the service life of concrete constructions has been seriously shortened due to various durability problems. Therefore, it is extremely significant to better understand the mechanisms during the deterioration processes and then to reliably enhance the long-term performance of concrete in practice.

This Special Issue aims to present new findings on mechanism studies in the subject area and to bring innovative solutions for prediction and protection/rehabilitation of concrete durability.

Potential topics include but are not limited to the following:

Deterioration mechanisms of concrete;
Microstructures of cementitious materials;
Prediction of degradation process;
Prediction of durability properties;
Numerical modelling and investigation;
Long-term performance of concrete structures;
Strengthening, protection and rehabilitation.

Guest Editor

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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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