

Special Issue

Mechanical Research of Reinforced Concrete Materials

Message from the Guest Editor

Reinforced concrete (RC) is a principal construction material used for civilian and military buildings. Although the mechanical behaviors of reinforced concrete have been a research theme tackled by many researchers through experimental and theoretical approaches for 200 years, an accurate and comprehensive description of the actual mechanical behavior exhibited by reinforced concrete at service and ultimate conditions remains a challenge in the field of structural engineering.

This Special Issue focused on characterizing the mechanical performance of reinforced concrete materials. The scope of papers includes theoretical, experimental, and numerical studies that assess the general deformation response, damage evolution, and failure morphology of ordinary and high-performance reinforced concrete materials under various loading conditions (e.g. quasi-static, dynamic, fatigue, and impact). Investigations of reinforced concrete structures' impact/blast resistance and damage mechanism evolution, failure modes transition and energy absorption performance are also welcome. It is my pleasure to invite you to submit a manuscript to this Special Issue.

Guest Editor

Prof. Dr. Wei Wang

Key Laboratory of Impact and Safety Engineering, Ministry of Education, Faculty of Mechanical Engineering and Mechanics, Ningbo University, Ningbo, China

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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

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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.

Editors-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Prof. Dr. Yuguang Ma

State Key Laboratory of Luminescent Materials and Devices, South China University of Technology, Guangzhou 510640, China

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