Special Issue

Research and Modeling of Materials Fatigue and Fracture

Message from the Guest Editor

The cracking and destruction of composite materials with a brittle or quasi-brittle matrix, both man-made (such as concrete), or natural, which could include rock mass, is a very common problem to be solved in the design of modern, complex engineering structures. The operational safety of constructions very often depends on the correctness of forecasts regarding the value of destructive loads, the extent of damage zones, and the shape of propagating cracks. These types of issues include, for example, fixing anchors in concrete (civil engineering) or in rock mass (mining engineering). The certainty of fixing infrastructure elements in engineering structures made of concrete and in rock mass is one of the basic problems that should be solved in these cases. This aspect is of particular interest to researchers in civil engineering and mining. This Special Issue will present the results of experimental research and analyses carried out by analytical methods and numerical simulation methods.

Guest Editor

Prof. Dr. Józef Jonak
Department of Machine Design and Mechatronics, Faculty of Mechanical Engineering, Lublin University of Technology, Nadbystrzycka 36, 20-618 Lublin, Poland

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

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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.

Editor-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

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