materials

an Open Access Journal by MDPI

IMPACT FACTOR 3.2

Indexed in: PubMed

CITESCORE 6.4

Self-Healing and Smart Cementitious Construction Materials

Guest Editors:

Prof. Dr. Nele De Belie

Dr. Didier Snoeck

Dr. Ir. Maria Adelaide Pereira Gomes de Araújo

Prof. Dr. Ing. Kim Van Tittelboom

Deadline for manuscript submissions:
closed (30 April 2020)

Message from the Guest Editors

Dear Colleagues,

In this Special Issue, the recent advances in the development of these smart admixtures are discussed. The compatibility of the smart admixtures with other concrete components and the effects on fresh and hardened concrete properties are considered. Modelling of the hydration reactions and microstructure formation in the novel durable concrete, of the activation of smart properties, of the service life in specific environments, and of environmental impacts, is of importance as well. Evaluation of the resistance to extreme conditions is also included, with consideration of extreme thermal gradients, ice impact and abrasion, corrosion, freeze–thaw actions, deep-sea conditions, mechanical fatigue, and acid attack.

All these topics are considered in the "Conference on Durable Concrete for Infrastructure under Severe Conditions—Smart Admixtures, Self-Responsiveness and Nano-Additions", organized in Ghent, 10–11 September 2019, by the partners of the European H2020 project Lorcenis.

materials

IMPACT FACTOR 3.2 | Indexed in: PubMed | CITESCORE 6.4

an Open Access Journal by MDPI

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

Message from the Editorial Board

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.
Journal Rank: JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)

Contact Us

Materials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/materials
materials@mdpi.com
𝕏@Materials_Mdpi