

Special Issue

Life-Cycle Assessment of Sustainable Concrete

Message from the Guest Editors

As one of the most carbon-intensive industries worldwide, the construction industry contributes to over one-third of total carbon emissions and energy consumption across all industries. Concrete is the most widely used construction material in the world. Finding sustainable alternatives to conventional concrete materials and developing advanced techniques for construction are crucial for mitigating the remarkable contribution of the construction industry to environmental impacts. This Special Issue aims to provide selected contributions on advances in the environmental assessment, economic analysis, and optimization design of sustainable concrete materials, with the aim of the sustainable development of the construction industry. Potential topics include, but are not limited to:

- Environmental assessment of sustainable concrete;
- Economic analysis of sustainable concrete;
- New materials and techniques for concrete construction;
- Recycled and reused materials for concrete;
- Concrete material optimization based on LCA;
- LCA of sustainable concrete considering durability;
- Case studies of LCA in practical applications.

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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.

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