Special Issue

Nanomaterials and Nanotechnology in Civil Engineering

Message from the Guest Editors

The field of civil engineering has witnessed substantial advancements with the integration of nanomaterials and nanotechnology, revolutionizing material performance and structural efficiency. The inclusion of various nanomaterials has provided novel solutions for improving the load-bearing capacity, crack resistance, and durability of traditional construction materials such as concrete, asphalt, steel, and composites. This Special Issue aims to explore how nanotechnology can transform the future of civil engineering, paving the way for more resilient, intelligent, and sustainable infrastructures. Submissions of original research articles, review articles, methodology articles, and case studies are all welcome to provide innovative insights into cutting-edge research on the application of nanomaterials and nanotechnologies in civil engineering.

- Nano-enhanced civil engineering materials;
- Nanotechnology for construction durability and protection;
- Smart infrastructures and structural health monitoring;
- Nano-scale characterizations and modeling;
- Nanotechnology in 3D printing and advanced manufacturing.

Guest Editors

Dr. Dawei Zhang

Department of Civil, Construction and Environmental Engineering, North Dakota State University, Fargo, ND 58102, USA

Prof. Dr. Ying Huang

Department of Civil, Construction and Environmental Engineering, North Dakota State University, Fargo, ND 58102, USA

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

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Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal–organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones
School of Geography, Earth and Environmental Science, University of Birmingham, Birmingham B15 2TT, UK

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