Special Issue

Materials Informatics and Machine Learning in Pavement Engineering

Message from the Guest Editors

We are pleased to announce this Special Issue, entitled "Material Informatics and Machine Learning in Pavement Engineering". This Special Issue aims to highlight innovative research at the intersection of material science, informatics, machine learning, and infrastructure engineering. We invite original research articles, reviews, and case studies that explore the use of material informatics and machine learning for the design, analysis, and maintenance of pavement systems. Topics of interest for this Special Issue include, but are not limited to, the predictive modeling of material properties, optimization of pavement materials, data-driven approaches for infrastructure health monitoring, and the integration of machine learning algorithms in material selection and performance prediction. This Special Issue seeks to provide a platform for interdisciplinary collaboration and to advance the application of cutting-edge informatics and analytic tools in enhancing the durability, sustainability, and safety of road pavement infrastructures.

Guest Editors

Dr. Jin Li

Lyles School of Civil Engineering, Purdue University, West Lafayette, IN, USA

Dr. Gengren Hao

National Key Laboratory of Green and Long-Life Road Engineering in Extreme Environment, Shenzhen University, Shenzhen 518060, China

Deadline for manuscript submissions

20 October 2025

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/208097

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

mdpi.com/journal/materials

MDPI

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/journal/materials

MDPI

About the Journal

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

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)