

## Special Issue

# Advanced Materials and Their Sensing Applications in Intelligent Transportation Infrastructure

### Message from the Guest Editors

Advanced materials with sensing capabilities are playing a vital role in developing intelligent transportation infrastructure by providing real-time data on road conditions, traffic patterns, and structural health, leading to improved safety, efficiency, and maintenance practices. The scope of this Special Issue includes, but is not limited to, the following:

- Novel and sustainable materials for transportation infrastructure;
- Development and characterization of nanocomposites and their applications in infrastructure materials;
- Innovations in nondestructive evaluation techniques for assessing and monitoring infrastructure materials;
- Innovative material-based maintenance and rehabilitation methods for transportation infrastructure;
- Material-centric resilience and life-cycle assessment of transportation infrastructure components;
- Structural health monitoring, assessment, and damage diagnosis, with a focus on advanced materials and their sensing applications;
- Traffic assessment and monitoring, with a focus on advanced materials and their sensing applications.

We look forward to receiving your contributions.

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### Guest Editors

Dr. Xinxiang Zhang

Dr. Feng Guo

Dr. Honglei Chang

Dr. Chen Wei

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### Deadline for manuscript submissions

20 October 2025



## Materials

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## 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.

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### Editor-in-Chief

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