

## Special Issue

# Advanced Materials and Technologies in Pavement Engineering

### Message from the Guest Editors

Transportation infrastructure is facing unprecedented challenges due to increasing traffic loads, climate change, sustainability requirements, and the urgent need for digital transformation. Advanced materials and emerging technologies are offering innovative solutions to extend pavement service life, enhance resilience, and enable real-time performance monitoring. Recent breakthroughs in self-sensing asphalt and concrete, nanomaterial-modified binders, digital twins, and artificial intelligence applications are reshaping the future of pavement engineering. This Special Issue aims to collect high-quality research articles and reviews that present the latest progress in advanced materials and innovative technologies for pavement infrastructure. We are particularly interested in contributions that address both fundamental mechanisms and practical applications, bridging laboratory investigations with large-scale field implementations. We are pleased to invite you to submit your original research articles, reviews, or case studies to this Special Issue to showcase cutting-edge advances in advanced materials and innovative technologies for pavement engineering.

### Guest Editors

Dr. Yanhai Wang  
Dr. Yangming Gao  
Dr. Yuanyuan Li

### Deadline for manuscript submissions

31 August 2026



## Applied Sciences

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### Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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### Editor-in-Chief

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