

## Special Issue

# Advanced Road Materials and Pavement: Design, Characterization, Structural and Mechanical Performance

### Message from the Guest Editors

High-performance materials, including innovative asphalt mixtures, composite pavements, and sustainable alternatives, are essential for enhancing the durability, safety, and efficiency of roadways. Key focus areas encompass various aspects of road material design, including the mechanical properties, structural behavior, and long-term performance under diverse environmental conditions and traffic loading scenarios. The current demand for resilient road materials necessitates a comprehensive analysis of characteristics, such as strength, elasticity, and resistance to deformation and fatigue. Additionally, multifunctional properties such as self-healing capabilities, enhanced skid resistance, and temperature stability are increasingly important for improving pavement performance and longevity. The aim of this Special Issue is to explore the latest advancements in the design and characterization of road materials and pavements. We seek contributions that address fundamental mechanisms influencing the mechanical and structural performance of these materials, including but not limited to the effects of composition, microstructural features, and environmental factors.

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### Deadline for manuscript submissions

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## Materials

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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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