Special Issue

Advances in Fire Safety Engineering and Applications

Message from the Guest Editors

This Special Issue aims to showcase cutting-edge research, innovative methodologies, and practical applications in fire safety engineering, addressing both fundamental challenges and emerging technologies. We welcome contributions that advance the understanding of fire dynamics, improve fire prevention and mitigation strategies, and integrate interdisciplinary approaches to enhance structural and environmental resilience against fire hazards. Topics of interest include, but are not limited to, the following:

- Fire dynamics and combustion science: Modeling fire spread, flame behavior, and smoke management.
- Structural fire safety: Fire-resistant materials, passive/active protection systems, and performance-based design.
- Evacuation and human behavior: Crowd dynamics, risk communication, and smart evacuation systems.
- Wildfire management: Detection, prediction, and mitigation strategies for urban and wildland interfaces.
- Fire safety in smart cities: IoT-based monitoring, AI-driven risk assessment, and resilient infrastructure.
- Regulatory frameworks and standards: Policy advancements, case studies, and lessons from fire incidents.

Guest Editors

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Applied Sciences

About the Journal

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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