Special Issue

Cable and Wire Fires

Message from the Guest Editors

Research on cable and wire fires has become a hot topic. Cables and wires are more easily ignited, as the insulation and sheath layers are combustible.

Meanwhile, the fire spread after ignition will be very complex, under the impacts of pipe gallery environments, electrical conditions, and confined spaces and structures. At the same time, flame-retardant treatment can be applied to the insulation and sheath layers, or physical flame-retardant methods can be used to limit the spread of fire and effectively control the harm of cable and wire fires. The corresponding findings can be adopted to refine and quantify and provide basic theoretical and technical support for improving fire prevention and control.

The SI focus on advances in distinctive fire behaviors, fire dynamics, heat transfer mechanisms and flame-retardant methods for the cable and wire fires. Research topics may include, but are not limited to: Ignition of cable and wire;

Pyrolysis model of cable and wire;
Fire spread and heat transfer models;
Smoke movement and control;
Dripping behaviors during combustion;
Flame retardant technology and methods;
Fire safety design and protection.

Guest Editors

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Deadline for manuscript submissions

closed (31 July 2025)



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About the Journal

Message from the Editor-in-Chief

Fire is an international open-access journal about the science, policy, and technology of fires and how they interact with communities and the environment. Fire seeks to provide a forum to help the fire science community convey how we can live with fire in a changing world. Fire seeks submissions from interdisciplinary studies that take a pyrogeography perspective of fires occurring in natural, cultural, and industrial landscapes and how they interact with communities in the science-policy interface. Fire's Editorial Board are widely recognized international leaders. The journal emphasizes quality and innovation and has a rigorous peer-review process. I strongly recommend Fire for the rapid publication of your innovative research publications and case studies.

Editor-in-Chief

Dr. Grant Williamson

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