Special Issue

Premixed and Non-premixed Flame Propagation and Suppression

Message from the Guest Editors

Premixed flames and non-premixed flames are the typical flames inside combustion. Many practical combustion and fire suppression conditions, such as diesel engines, liquid rocket motors, liquid pool fires, and gas explosions, involve two types of flames. Propagation and suppression is a basic phenomenon of flame that involve chemical reaction fluid dynamics, heat transfer, and chemical reactions, which is the important characteristics of flame. An in-depth understanding of flame propagation and suppression is demanded to improve combustion efficiency in the field of energy usage and enhance the ability of fire prevention and control. This Special Issue aims to the development and validation of reaction kinetics, understand reaction/suppression mechanisms, and modeling of combustion and suppression. We encourage papers on flames in different combustion systems. Papers on the application of advances in diagnostic and computational methods in flames and flame suppression mechanisms are also encouraged. In particular, research on low pressure and low oxygen fires are also encouraged. We look forward to receiving your contributions.

Guest Editors

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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

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