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Premixed and Non-premixed Flame Propagation and Suppression

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Deadline for manuscript submissions: closed (31 January 2024)

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.

Specialsue

We look forward to receiving your contributions.



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