Special Issue

Investigation of Combustion Dynamics and Flame Properties of Fuel

Message from the Guest Editors

Combustion, as a fundamental chemical reaction process, spans various fields including industry, energy, environment, and safety, playing a crucial role in energy efficiency, environmental pollution control, and fire and explosion safety. With the urgent demand for renewable energy and a low-carbon economy in today's society, research on fuel combustion kinetics and flame characteristics has become even more crucial. A deeper understanding of the dynamic processes of fuel combustion can help optimize combustion systems, improve energy efficiency, and reduce emissions, thereby mitigating the impacts of climate change and environmental pollution, as well as aiding in fire and explosion safety prevention.

This Special Issue will provide a platform for researchers to jointly explore the latest advances and challenges in fuel combustion kinetics and flame characteristics. This Special Issue is dedicated to the publication of high-quality papers on fundamental principles and properties, theoretical calculations, and applied research in the field of fuel combustion for the growing community of scientists, engineers, and policy experts in fuel-energy-related fields.

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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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