

Special Issue

Ignition Mechanism and Advanced Combustion Technology

Message from the Guest Editors

Dear colleagues, Carbon reduction has become a global consensus, and the clean and efficient utilization (EEU) of carbon-containing fuels (coal/biomass) has received widespread attention. This Special Issue aims to bring together researchers to share their latest findings on the ignition mechanism and advanced combustion technology. Topics of interest include, but are not limited to, the following:

- Mechanism, prevention, and control technology of coal/biomass spontaneous combustion;
- Ignition characteristics, physico-chemical structure and reaction kinetics of coal/biomass conversion in self-heating conditions or in boilers;
- Prediction of coal/biomass ignition/combustion behavior or pollutant emission behavior by mechanism modeling or artificial intelligence technology;
- Advanced ignition technologies including plasma-enhanced ignition, high-temperature preheating combustion, etc.;
- Advanced combustion diagnosis technologies;
- Blending technology including co-firing of coal with coal, biomass, or ammonia, etc...
- Rapid load lifting technology, deep peak regulation technology, and intelligent control technology of coal-fired power units.

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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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