

Special Issue

Simulation, Experiment and Modeling of Coal Fires (2nd Edition)

Message from the Guest Editors

Coal fires are a global environmental catastrophe & are also severe disasters in the mining industry. One of the biggest obstacles to locating underground fire sources & to actively preventing & controlling this hazard is that coal fires are a complicated dynamic process coupled by chemical reaction, heat & mass transfer, as well as rock/soil mechanics. Therefore, it is important to investigate how coal ignites & coal fire spreads widely & persistently underground using experimental, numerical & modelling approaches.

This SI aims to reveal the disaster-causing mechanism of coal fires from the perspective of simulation, experimentation & modeling, to elucidate the spatio-temporal evolution process of the occurrence & development of underground coal fires, & to provide a theoretical basis for the accurate prevention & control of coal fires. It includes, but is not limited to:

Mechanism of coal fires/spontaneous combustion;
Early warning method of coal fires/spontaneous combustion;

Judgment theory of multi-information fusion in dangerous areas;

Prevention & control technology of coal fires/spontaneous combustion;

Extraction & utilization of thermal energy from underground coal fires.

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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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