Special Issue

Mining Safety: Challenges and Prevention of Mine Disasters

Message from the Guest Editors

Preventing mine disasters and improving mine safety performance are important issues for both scientists and enterprises.

Common disasters in coal mines (coal and gas outbursts, gas explosions, roof falls, spontaneous combustion of coal, coal dust explosions, etc.) have emerged around the world. The increasing geostress, gas pressure, and geothermal gradient lead to nonlinear characteristics of the coal and rock mass, showing rheological behaviors. Dynamic disasters will occur more easily and their mechanism will be more complex with the increased depth. Thus, the prevention and control of coal mine disasters become more difficult. Coal mine safety is facing new and more severe challenges.

This Special Issue will be devoted to exploring new perspectives on safety challenges and protective measures encountered in the current coal-mining process. It will focus on the hot issues, latest research results, and future directions of mine disaster prevention and control through numerical simulations, laboratory studies, field applications, and reviews, mainly in the areas of coal and gas outburst mechanisms, roof falls, spontaneous combustion of coal, and other dynamic hazards.

Guest Editors

Prof. Dr. Jingyu Jiang

Prof. Dr. Wen Nie

Dr. Jia Lin

Dr. Wei Zhao

Deadline for manuscript submissions

closed (20 June 2023)

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/153305

Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applsci@mdpi.com

mdpi.com/journal/applsci

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/journal/applsci

MDPI

About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)