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Advanced Technologies in Coal Flotation and Utilization of Coal Solid Waste Resources

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Deadline for manuscript submissions:
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Message from the Guest Editor

Dear Colleagues,

Coal plays an increasingly important role in global energy supply and chemical production, and its separation and recovery from ores is increasingly necessary. With the consumption of high-quality coal resources, their large scale separation from low-quality coal has become a strategic choice to ensure energy security and the high quality, green development of the coal industry. Flotation, which takes advantage of the differences in the physical and chemical properties of particle surfaces, is an efficient and economical technique for recovering fine-grained low-quality coal slime. The new principle of low-quality coal flotation separation based on multi-scale micro–nano force analysis, the intelligent directional screening design of flotation reagent molecules based on a single molecule force spectrum combined with deep learning, the refining of the construction of pulp mixing and flotation flow field based on accurate energy adaptation, and the resourceful utilization of coal series solid wastes encompass future research directions in low quality coal flotation processes and technology systems.

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Message from the Editor-in-Chief

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