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# 煤矿安全<sup>®</sup>

## Safety in Coal Mines

基于GIS的煤矿瓦斯大数据管理与分析系统及应用  
 基于差减图谱分析的煤低温氧化活性基团转化规律  
 深埋缓倾斜双煤层开采导水断裂带发育规律研究  
 大型物理三维模拟实验中传感器布置优化方法研究



# 3

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