# TABLE OF CONTENTS

| Study on Comprehensive Prevention and Control Method of Coal Spontaneous Combustion in Huge Thick Seam  
| The Technology of Retaining Lanes along Empty Cutting Roof in Xinwei Coal Mine Application of Large Mining High and Fire-Fired Coal Seams  
| 沿空切顶留巷技术在新维煤矿大采高、发火煤层的应用 | Z. C. YIN, C. YANG, Z. CHEN, L. CHEN, P. YU | 8 |
| Feasibility Analysis of Upward Mining of Coal Seam Group in a Coal Mine  
| 某煤矿煤层群上行开采可行性分析研究 | X. M. YAN, P. ZHANG | 15 |
| Research and Application of Safety Management for Preventing Damage to Film in Middle Thick Seam and Oblique Mining in Xinwei Coal Mine  
| 新维煤矿中厚煤层、仰斜开采矿片帮伤人安全管理研究与应用 | C. YANG, Z. C. YIN, G. M. ZHONG, G. B. WEI, H. Z. YU | 21 |
| Application of Comprehensive Control Technology for Pressure Relief Gas in Protective Seam on Short Distance Coal Seam Group  
| 近距离煤层群上保护层卸压瓦斯综合治理技术应用 | X. YANG, C. YANG | 26 |
| Assessment of Reserves of Mineral Resources in Road Construction Construction  
| 道路工程建设用地压覆矿产资源储量评估 | X. C. AN, B. F. HAN | 34 |
| Research on Support Technology of Soft and Broken Roof Coal Roadway in Shangkong Coal Mine  
| 上孔煤业松软破碎顶板巷道支护技术研究 | S. F. LI, W. B. CAO, Q. S. WANG | 39 |
| Application of Comprehensive Test Method in Grouting Effect at Huangdeng Hydropower Station Dam Project  
| 综合测试方法在黄登水电站工程大坝灌浆效果检测中应用 | Q. B. YU, Z. L. MAO, S. L. LI | 47 |
| Application of Gas Control Technology in Adjacent Seam of Very Thin Coal Seam  
| 近距离极薄煤层邻近层瓦斯治理技术应用研究 | S. YANG | 57 |
Xinhu Coal Mine Kilometers Deputy Well −960 m Matoumen Construction Technology
(信湖煤矿千米副立井−960 m 马头门施工技术)
X. T. MENG, J. S. WEI………………………………………………………………………………………………..………………………………..……………64

Study on Numerical Simulation of Short-Distance Extremely Thin Coal Seam
Mining Based on FLAC3D
(基于 FLAC3D 的近距离极薄煤层开采数值模拟研究)
S. YANG, B. Y. YANG………………………………………………………………………………………………………….…..…………………………………69

Study of Large-Scale Mining Groundwater Multi-Source Pollution Risk Assessment
and Long-Term Monitoring Mechanism Based on FEFLOW
(基于 FEFLOW 的大型矿区地下水多源污染风险评价及长效监控机制研究)
R. LI, H. ZHANG, Z. X. ZHANG…………………………………………………………………………………………………………………………………………………………76

Analysis and Discussion on Promoting 3D Collaborative Design of Underground Mining Based
on Bentley Software
(基于 Bentley 软件推广地下采矿三维协同设计分析与探讨)
Y. Z. LU, L. J. LI…………………………………………………………………………………………………………………………………………………………………………………91

Present Situation and Treatment Countermeasures of Mine Geological Environment in Shandong
(山东矿山地质环境现状及治理对策研究)
H. K. LI, D. C. HAN, G. D. CHEN, Y. B. ZHANG……………………………………………………………………………………………………………………………………………………………98