

目 次

·煤系气地质与勘探开发·

荆门探区五峰组—龙马溪组页岩储层特征及甜点层段评价····· 李小明, 柳吉荣, 吝 文, 马丽红, 刘德勋, 陈宇杰(1)

临兴地区海陆过渡相页岩及页岩气地球化学特征·····

陈 鑫, 吴 鹏, 高计县, 胡维强, 丁万贵, 李洋冰, 柳雪青, 马立涛, 刘 成, 孔 为, 曹 地, 陈建奇, 李 勇(12)

鄂尔多斯盆地东缘临兴地区海陆过渡相页岩气地质特征及成藏潜力·····

····· 吴 鹏, 曹 地, 朱光辉, 柳雪青, 李 勇, 李洋冰, 胡维强, 刘再振, 孔 为, 费景亮(24)

川东南东溪地区龙马溪组裂缝分布预测及页岩气保存条件评价····· 谢佳彤, 付小平, 秦启荣, 李 虎(35)

临兴区块上古生界煤系页岩孔隙结构多尺度定性—定量综合表征·····

····· 刘 成, 丁万贵, 张 健, 陈 鑫, 吴 鹏, 柳雪青, 李洋冰, 马立涛, 胡维强, 孔 为, 李 勇(46)

窑街矿区浅层煤系气储层特征及勘探开发关键技术·····

····· 杜新锋, 袁崇亮, 王正喜, 王君得, 李世兵, 刘敬丹, 何秀清, 张天国, 单元伟, 方佳伟(58)

基于煤层气井排采数据的储层含气量动态反演研究····· 马东民, 汲雨松, 陈 跃, 郑 超, 滕金祥, 马卓远, 肖嘉隆(67)

窑街矿区海石湾井田油 A 层腐泥煤有机质成熟度辨析····· 宋孝忠, 张炳忠, 雷 莹, 宋艳强(74)

·地球物理模型试验·

大型双三轴气浮定位多道三维地震物理模拟系统及其应用·····

····· 石显新, 刘 强, 胡继武, 王 盼, 连晨光, 贾 茜, 张淼淼, 聂爱兰(81)

黄土塬区延安组煤层地震响应特征物理模拟研究····· 邢廷栋, 薛诗桂, 黎小伟, 索重辉, 王辉明, 焦艳艳(87)

三维地震物理模拟采集技术及其应用····· 刘 强, 石显新, 胡继武, 董蕊静, 连晨光(95)

浅埋煤层房柱式采空巷道地震物理模型设计及制作····· 王 盼, 朱书阶, 贾 茜, 菅本启, 张淼淼, 董蕊静(101)

圆锥型场源瞬变电磁法试验研究····· 杨海燕, 刘志新, 张 华, 陈 晓, 李 哲, 汪 凌, 杨夫杰(107)

·煤炭地质 矿井地质·

河北省主要矿区关闭煤矿资源再利用模式探讨····· 殷全增, 陈中山, 冯启言, 耿丽娟, 台立勋, 李 芳, 刘 宁(113)

华北煤系变形特征与煤矿瓦斯赋存规律····· 王 蔚, 卫彦昭, 贾天让, 闫江伟(121)

基于塑性变形的煤体损伤本构关系及渗透率模型研究····· 吴学海, 李波波, 王 新, 高 政, 李建华, 许 江(131)

基于 SAXS 的不同变质程度煤纳米级孔隙结构特征研究····· 张 钰, 李 勇, 王延斌, 王壮森, 赵石虎, 韩文龙(142)

·水文地质 工程地质 环境地质·

基于遇水膨胀橡胶的分层抽水管外止水新方法及其优化····· 郑向华, 袁 伟, 罗运祥, 成 聪(151)

露天煤矿疏干—回灌水帷幕保水采煤模式探讨····· 李 颖, 杨 卓, 吴 桐(160)

极软中厚煤层越界开采区老空水害防治技术····· 李 智, 郑士田, 石志远, 王宇航(167)

基于 SSA 优化的 GA-BP 神经网络煤层底板突水预测模型与应用·····

····· 尹会永, 周鑫龙, 郎 宁, 张历峰, 王明丽, 吴 焘, 李 鑫(175)

格宾网加筋煤矸石界面剪切特性及路堤边坡稳定性研究····· 杨果林, 陈子昂, 段君义, 张 雨, 张 震(186)

生石灰改良黄土的微观机制试验研究····· 谢 潇, 王璐瑶, 邓乐娟, 张国伟(193)

无人机在矿区表土特征及地质灾害监测中的应用····· 龙林丽, 刘 英, 张旭阳, 苏永东, 陈孝杨(200)

浅埋煤层过双沟地形开采地表裂缝发育规律····· 孙学阳, 张慧萱, 卢明皎, 李 成, 苗霖田(212)

不同土壤类型与含水率对水平埋管换热性能影响数值分析····· 邹 行, 裴 鹏, 郝定溢, 王 沉(221)

南水北调中线河南省受水区浅层地下水水位演化规律····· 景兆凯, 燕 青, 肖 航, 王盼盼, 王 欢, 李 洋(230)

·煤田物探 矿井物探·

不同年限采空区下地震勘探效果实例研究····· 张 昭, 殷全增(237)

基于 VMD 和 SVM 的煤厚预测方法研究····· 曾爱平, 张嘉玮, 任恩明, 刘 涛, 姜 飞, 刘兴金, 苏怀瑞(243)

低阶煤煤层气富集区预测方法研究与应用····· 罗忠琴, 刘 鹏, 孟凡彬(251)

无线电磁波随钻测量系统姿态精度的影响因素分析····· 王小波(258)

·钻掘工程·

我国煤矿井下智能化钻探技术装备发展与展望····· 李泉新, 刘 飞, 方 俊, 刘建林, 褚志伟(265)

大直径双钻孔强化抽采瓦斯效应及效果分析····· 张春华, 张子健, 年 军, 焦登铭(273)

CONTENTS

Characteristics of the shale gas reservoirs and evaluation of sweet spots in Wufeng Formation and Longmaxi Formation in Jingmen exploration area	LI Xiaoming, LIU Jirong, LIN Wen, <i>et al</i> (1)
Geochemical characteristics of marine-continental transitional facies shale and shale gas in Linxing area	CHEN Xin, WU Peng, GAO Jixian, <i>et al</i> (12)
Geological characteristics and reservoir-forming potential of shale gas of transitional facies in Linxing area, eastern margin of Ordos Basin	WU Peng, CAO Di, ZHU Guanghui, <i>et al</i> (24)
Prediction of fracture distribution and evaluation of shale gas preservation conditions in Longmaxi Formation in Dongxi area	XIE Jiatong, FU Xiaoping, QIN Qirong, <i>et al</i> (35)
Qualitative-quantitative multi scale characteristics of shale pore structure from Upper Paleozoic coal-measures in Linxing area	LIU Cheng, DING Wangui, ZHANG Jian, <i>et al</i> (46)
Characteristics of shallow coal measure gas reservoir and key technologies of exploration and development in Yaojie mining area	DU Xinfeng, YUAN Chongliang, WANG Zhengxi, <i>et al</i> (58)
CBM well drainage data-based dynamic inversion study of reservoir gas content	MA Dongmin, JI Yusong, CHEN Yue, <i>et al</i> (67)
Analysis of organic matter maturity of sapropel coal in oil layer A of Haishiwan mine field of Yaojie mining area	SONG Xiaozhong, ZHANG Bingzhong, LEI Ying, <i>et al</i> (74)
A 3D seismic physical modeling system of large double triaxial air-supported positioning and multichannel data acquisition and its application	SHI Xianxin, LIU Qiang, HU Jiwu, <i>et al</i> (81)
Physical modeling of seismic response for the coal seams of Yan'an Formation in loess tableland of North China	XING Tingdong, XUE Shigui, LI Xiaowei, <i>et al</i> (87)
3D seismic physical modeling acquisition technology and its application	LIU Qiang, SHI Xianxin, HU Jiwu, <i>et al</i> (95)
Design and construction of a seismic physical model of room-pillar goafs in shallow coal seams	WANG Pan, ZHU Shujie, JIA Qian, <i>et al</i> (101)
Experimental study on transient electromagnetic method with a conical source	YANG Haiyan, LIU Zhixin, ZHANG Hua, <i>et al</i> (107)
Discussion on the recommended models for resource reuse of closed coal mines in main mining areas of Hebei Province	YIN Quanzeng, CHEN Zhongshan, FENG Qiyan, <i>et al</i> (113)
Deformation characteristics of coal measures and gas occurrence law of coal mines in North China	WANG Wei, WEI Yanzhao, JIA Tianrang, <i>et al</i> (121)
Plastic deformation-based constitutive relation of coal damage and permeability model	WU Xuehai, LI Bobo, WANG Xin, <i>et al</i> (131)
SAXS-based nano-scale pore structure characteristics of coals with different metamorphic degrees	ZHANG Yu, LI Yong, WANG Yanbin, <i>et al</i> (142)
New method and optimization research on water sealing outside casing based on water-swelling rubber for stratified pumping	ZHENG Xianghua, YUAN Wei, LUO Yunxiang, <i>et al</i> (151)
Discussion on the water-preserved coal mining by dewatering-reflooding water curtain in open-pit coal mines	LI Ying, YANG Zhuo, WU Tong(160)
Prevention and control technology of goaf water hazard in unauthorized mining areas of extremely soft and medium-thick coal seams	LI Zhi, ZHENG Shitian, SHI Zhiyuan, <i>et al</i> (167)
Prediction model of water inrush from coal floor based on GA-BP neural network optimized by SSA and its application	YIN Huiyong, ZHOU Xinlong, LANG Ning, <i>et al</i> (175)
Interfacial shear behavior of gabion reinforced coal gangue and stability of embankment slope	YANG Guolin, CHEN Zi'ang, DUAN Junyi, <i>et al</i> (186)
Study on the microscopic mechanism of the loess improved by quicklime	XIE Xiao, WANG Luyao, DENG Lejuan, <i>et al</i> (193)
Application of unmanned aerial vehicle in surface soil characterization and geological disaster monitoring in mining areas	LONG Linli, LIU Ying, ZHANG Xuyang, <i>et al</i> (200)
The development law of surface cracks in shallow coal seam mining through double gullies terrain	SUN Xueyang, ZHANG Huixuan, LU Mingjiao, <i>et al</i> (212)
Numerical analysis of the effect of different soil types and water content on heat transfer performance of horizontal buried pipes	ZOU Hang, PEI Peng, HAO Dingyi, <i>et al</i> (221)
Evolution law of the phreatic aquifer water table in the water intake area of South-to-North Water Diversion Central Line in Henan Province	JING Zhaokai, YAN Qing, XIAO Hang, <i>et al</i> (230)
Case study on the effects of seismic exploration beneath the goafs of different ages	ZHANG Zhao, YIN Quanzeng(237)
Research on the coal thickness prediction method based on VMD and SVM	ZENG Aiping, ZHANG Jiawei, REN Enming, <i>et al</i> (243)
Research and application of the prediction method for CBM enrichment area of low rank coal	LUO Zhongqin, LIU Peng, MENG Fanbin(251)
Factors affecting the attitude accuracy of wireless electromagnetic wave MWD system	WANG Xiaobo(258)
Development and prospect of intelligent drilling technology and equipment for underground coal mines in China	LI Quanxin, LIU Fei, FANG Jun, <i>et al</i> (265)
Mechanism and effect analysis of enhanced gas drainage with large diameter double boreholes	ZHANG Chunhua, ZHANG Zijian, NIAN Jun, <i>et al</i> (273)

