



中国地质

GEOLOGY IN CHINA

ISSN 1000-3657

CN 11-1167/P

CODEN ZDHIAH

2023

第50卷第1期

Vol.50 No.1

特别关注

中国地质调查局——西北干旱内陆盆地区水文地质调查工程

南疆地区水资源问题与对策建议

黄河中游沁河流域环境敏感性分析评价

节水灌溉对黄河流域宁夏引黄灌区水平衡的影响机制及其生态效应

山区小流域矿集区土壤重金属污染生态风险评价基准与模型

矿区土壤重金属污染及修复技术研究进展

盐湖卤水型锂矿基本特征及其开发利用潜力评价

主管 中国地质调查局
主办 中国地质调查局
中国地质科学院

2023年2月出版

科学出版社

中国地质

2023

第五十卷
第一期

科学出版社



中国地质(双月刊)

(ZHONGGUO DIZHI)

2023年2月第50卷第1期(总第414期)

目次

特别关注

南疆地区水资源问题与对策建议

..... 尹立河,张俊,姜军,张鹏伟,顾小凡,董佳秋,郭培宏,杨炳超,李瑛(1)

黄河中游沁河流域环境敏感性分析评价

..... 史佩东,刘义,孙娅琴,陈彭,许凯然,姜禹戈,刘森,臧明东(13)

节水灌溉对黄河流域宁夏引黄灌区水平衡的影响机制及其生态效应

王思源,韩双宝,王赛,李甫成,李海学,袁磊,马涛,魏世博,吴玺,蔺鹏飞,鲍晶(26)

山区小流域矿集区土壤重金属污染生态风险评价基准与模型

..... 孙厚云,卫晓锋,孙晓明,张会琼,殷志强(36)

中高热解温度下秸秆基生物炭对铅、镉的吸附特性研究

..... 杨育振,高宝龙,黄屹,肖德长,陈飞,罗恒,李丽芬,吴刚(52)

中国海岸20 ka以来的演替过程及趋势分析:对现代海岸生态保护修复的启示

..... 王福,王宏,李建芬,汪翡翠,田立柱,于谦,黄昭权,方晶,胡云壮,肖国强,李畅(61)

综述论文

矿区土壤重金属污染及修复技术研究进展

赵鑫娜,杨忠芳,余涛(84)

盐湖卤水型锂矿基本特征及其开发利用潜力评价

..... 王卓,黄冉笑,吴大天,许逢明,孙巍,张德会,赵院冬(102)

镍矿床分布、成矿背景和开发现状

..... 刘金龙,李仁民,周永恒,王力,王冠,姜平,陈良玺,董存杰(118)

铍矿分布特点、主要类型与勘查开发现状

..... 伍月,鞠楠,张森,马维,郭常来,吴涛涛,周永恒(133)

湖南省银矿资源概况及成矿规律

付胜云,陈启亮,安江华,邓蕾,李湘玉(146)

学术论文

内蒙古额济纳平原地下水氢氧稳定同位素和水化学特征及其演化规律

..... 魏世博,王哲,李飞,吴玺,徐蓉楦(159)

老挝万象海夏峰钾盐矿床水不溶矿物及其对沉积环境的约束

..... 赵雪,陈忠,石国成,唐启亮,李雯霞,张西营(170)

吉林省长春莲花山地区地下水中锑及偏硅酸的形成机理研究

…………… 孙岐发,孙茁桢,贾林刚,田辉,郭晓东,都基众,李旭光,李霄,贾立国(181)

贵州省惠水土壤-灌溉水-雨水-大气降尘中Cd、As等微量元素特征及来源讨论

…………… 息朝庄,吴林锋,张鹏飞,杨茗钛,范云飞,夏浩东,邓会娟(192)

滇东典型煤矿区小流域沉积物重金属来源及风险评价

…………… 涂春霖,杨坤,和成忠,张连凯,李博,魏总,姜昕,杨明花(206)

河南省桐柏—泌阳地区表层土壤钒和钴的分布特征及健康风险评价

…………… 赖书雅,董秋瑶,宋超,杨振京,严明疆(222)

广西贵港市覃塘区土壤Cu地球化学特征与生态健康研究

…………… 王懿铮,杨忠芳,刘旭,李程,季文兵,张起钻,卓小雄,王磊(237)

湘西南黔阳盆地“大塘坡式”锰矿成因分析:以湖南靖州地区为例

…………… 王佳,李凤杰,张奎华,陈聪,高兆龙(249)

鄂尔多斯盆地塔然高勒地区砂岩型铀矿含矿层砂岩特征及成矿作用…………… 彭胜龙,

田家鹏,郭晓宇,靳云鹏,孙波,窦洪鑫,张帆,郝静,胡英莲,陈琳,许伟,佟野(264)

陕西省庞家河金矿黄铁矿标型特征及对深部找矿的启示

…………… 卢飞,吕新彪,杨帅,肖强,李军,任龙(277)

发现与进展

四川广元地区首次发现构造-层控型天然沥青矿

…………… 张君,陈敏,贺勇,游学军,赵伟,凌茂前,张芹贵,祝建华(289)

雪峰隆起西南缘(贵丹地1井)震旦—寒武系获多层系页岩气重大发现

…………… 淡永,闫剑飞,包书景,梁彬,马龙,聂国权,曹竣锋,季少聪,韩凯(291)

敦煌地块大水峡北地区发现130万t大型晶质石墨矿床

…………… 宋宏,汤庆艳,方绍忠,付全,陈世强,刘聪,樊新祥,杨镇熙,赵吉昌(293)

甘肃两当县火漆沟地区新发现超大型单体方解石矿床

…………… 龙登红,杨忠明,王泽俊,牟银军,柳鑫(295)

内蒙古花脑特银铅锌矿床矿化二长花岗岩锆石U-Pb年龄及其对成矿时间的指示

…………… 何鹏,张壮(297)

简讯与热点

欧洲地质调查局联盟的组织架构和业务模式概况…………… 徐佳佳,王欢,于洋,马冰(299)

西北干旱内陆盆地区水文地质调查工程介绍…………… (封二)

《中国地质》编辑工作指导委员会、《中国地质》(中文)编辑委员会…………… (封三)

《中国地质》(双月刊)栏目设置与稿约…………… (I)

GEOLOGY IN CHINA

(Bimonthly)

Feb. 2023 Vol. 50, No.1 (Serial No. 414)

Contents

In Focus

- Issues and countermeasures on water resources in the Southern Xinjiang *YIN Lihe, ZHANG Jun, JIANG Jun, ZHANG Pengwei, GU Xiaofan, DONG Jiaqiu, GUO Peihong, YANG Bingchao, LI Ying*(1)
- Analysis and evaluation of environmental sensitivity in the Qinhe River Basin in the middle reaches of the Yellow River *SHI Peidong, LIU Yi, SUN Yaqin, CHEN Peng, XU Kairan, JIANG Yuge, LIU Miao, ZANG Mingdong*(13)
- Influence mechanism and ecological effect of water saving irrigation on water balance in the Yellow River irrigation area of Ningxia *ZHAO Minmin, WANG Siyuan, HAN Shuangbao, WANG Sai, LI Fucheng, LI Haixue, YUAN Lei, MA Tao, WEI Shibo, WU Xi, LIN Pengfei, BAO Jing*(26)
- An overview of evaluation criteria and model for heavy metal pollution ecological risk in small-scale drainage catchment of mountainous area *SUN Houyun, WEI Xiaofeng, SUN Xiaoming, ZHANG Huiqiong, YIN Zhiqiang*(36)
- The adsorption characteristics of Pb^{2+} and Cd^{2+} by straw based biochars generated at medium-high pyrolysis temperatures *YANG Yuzhen, GAO Baolong, HUANG Yi, XIAO Dechang, CHEN Fei, LUO Heng, LI Lifeng, WU Gang*(52)
- Evolution and trending prediction of the Chinese mainland coasts since 20 ka BP: Implication for ecological protection and restoration *WANG Fu, WANG Hong, LI Jianfen, WANG Feicui, TIAN Lizhu, YU Qian, HUANG Zhaoquan, FANG Jing, HU Yunzhuang, XIAO Guoqiang, LI Chang*(61)

Reviews

- Review on heavy metal pollution and remediation technology in the soil of mining areas *ZHAO Xinna, YANG Zhongfang, YU Tao*(84)
- The basic characteristics and development potential evaluation of salt lake brine-type lithium deposits ... *WANG Zhuo, HUANG Ranxiao, WU Datian, XU Fengming, SUN Wei, ZHANG Dehui, ZHAO Yuandong*(102)
- Distribution, geology and development status of nickel deposits *LIU Jinlong, LI Zhumin, ZHOU Yongheng, WANG Li, WANG Guan, JIANG Ping, CHEN Liangxi, DONG Cunjie*(118)
- The distribution features, main types and present situation of exploration and development for rhenium *WU Yue, JU Nan, ZHANG Sen, MA Wei, GUO Changlai, WU Taotao, ZHOU Yongheng*(133)
- General situation and metallogenic regularity of silver deposits in Hunan Province *FU Shengyun, CHEN Qiliang, AN Jianghua, DENG Lei, LI Xiangyu*(146)

Research Articles

- Characteristics of hydrogen and oxygen stable isotopes and hydrochemistry in the groundwater of Ejina plain, Inner Mongolia and its hydrochemical evolution *WEI Shibo, WANG Zhe, LI Fei, WU Xi, XU Rongzhen*(159)
- Insoluble minerals of potash deposits in Haixiafeng mining area of Vientiane, Laos: Constraints on their sedimentary environment *ZHAO Xue, CHEN Zhong, SHI Guocheng, TANG Qiliang, LI Wenxia, ZHANG Xiying*(170)

(Executive editors of this issue: LI Yaping, GUO Hui, GUO Boran)

- Formation mechanism of strontium and metasilicic acid groundwater in the Lianhuashan area, Changchun, Jilin Province *SUN Qifa, SUN Zhuoan, JIA Lingang, TIAN Hui, GUO Xiaodong, DU Jizhong, LI Xuguang, LI Xiao, JIA Ligu*(181)
- Characteristics and sources of Cd and As trace elements in soil–irrigation–rainwater–atmospheric dust–fall in Huishui County, Guizhou Province *XI Chaozhuang, WU Linfeng, ZHANG Pengfei, YANG Mingtai, FAN Yunfei, XIA Haodong, DENG Huijuan*(192)
- Sources and risk assessment of heavy metals in sediments of small watersheds in typical coal mining areas of Eastern Yunnan *TU Chunlin, YANG Kun, HE Chengzhong, ZHANG Liankai, LI Bo, WEI Zong, JIANG Xin, YANG Minghua*(206)
- Distribution characteristics and health risk assessment of vanadium and cobalt in surface soil of the Tongbai–Biyang Area, Henan Province *LAI Shuya, DONG Qiuyao, SONG Chao, YANG Zhenjing, YAN Mingjiang*(222)
- Geochemical characteristics of copper in soil of Qintang district, Guigang city, Guangxi and its ecological health research *WANG Yizheng, YANG Zhongfang, LIU Xu, LI Cheng, JI Wenbing, ZHANG Qizuan, ZHUO Xiaoxiong, WANG Lei*(237)
- Genetic analysis of "Datangpo type" manganese deposit in Qianyang Basin, southwest Hunan: A case study of Jingzhou, Hunan Province *WANG Jia, LI Fengjie, ZHANG Xihua, CHEN Cong, GAO Zhaolong*(249)
- Characteristics and metallogenesis ore–bearing sandstone in the Tarangaole sandstone type uranium deposit, Ordos Basin *PENG Shenglong, TIAN Jiapeng, GUO Xiaoyu, JIN Yunpeng, SUN Bo, DOU Hongxin, ZHANG Fan, HAO Jing, HU Yinglian, CHEN Lin, XU Wei, TONG Ye*(264)
- Typomorphic characteristics of pyrites in the Pangjiahe gold deposit, Shaanxi Province and indication for deep ore prospecting *LU Fei, LÜ Xinbiao, YANG Shuai, XIAO Qiang, LI Jun, REN Long*(277)

Discoveries and Developments

- Discovery of tectono–stratabound natural asphaltite in Guangyuan, Sichuan Province *ZHANG Jun, CHEN Min, HE Yong, YOU Xuejun, ZHAO Wei, LING Maoqian, ZHANG Qingui, ZHU Jianhua*(289)
- Discovery of Sinian–Cambrian multi–tier shale gas in Guidandi–1 well of southwest margin of Xuefeng uplift *DAN Yong, YAN Jianfei, BAO Shujing, LIANG Bin, MA Long, NIE Guoquan, CAO Junfeng, JI Shaocong, HAN Kai*(291)
- Discovery of large type crystalline graphite deposit (1.3 Mt) in the Dashuixiabei area of Dunhuang block *SONG Hong, TANG Qingyan, FANG Shaozhong, FU Quan, CHEN Shiqiang, LIU Cong, FAN Xinxiang, YANG Zhenxi, ZHAO Jichang*(293)
- Discovery of supergiant calcite deposit in Huoqigou area, Liangdang, Gansu Province *LONG Denghong, YANG Zhongming, WANG Zejun, MOU Yinjun, LIU Xin*(295)
- Zircon U–Pb dating of monzogranite in the Huanaote Ag–Pb–Zn deposit, Inner Mongolia and its indication of metallogenic time *HE Peng, ZHANG Zhuang*(297)

News and Highlights

- Overview of the organizational structure and business model of EuroGeoSurveys *XU Jiajia, WANG Huan, YU Yang, MA Bing*(299)