



Q K 2 2 4 6 9 9 4



中國地质大学

CHINA UNIVERSITY OF GEOSCIENCES

WUHAN

七十周年校庆

THE 70TH ANNIVERSARY

CSCD 核心期刊

北大中文核心期刊

中国科技核心期刊

ISSN 2096-8523

CN 42-1904/P

CODEN: DKTICM

地质科技通报

Bulletin of Geological Science and Technology

原《地质科技情报》

中国地质大学(武汉)

9月 2022

第41卷 第5期
Vol.41 No.5

中国地质大学校庆暨《地质科技通报》刊庆专辑



万方数据

地质科技通报

原《地质科技情报》

2022年 第41卷 第5期(总第206期) 2022年9月出版 双月刊 国内外公开发刊

目 次

中国地质大学校庆暨《地质科技通报》刊庆专辑

- 星辰大海,逐梦未来——中国地质大学校庆暨《地质科技通报》刊庆专辑序..... 王焰新
履践致远,进而有为——《地质科技通报》创刊40周年寄语..... 王 华
继往开来,再谱华章——《地质科技通报》创刊40周年回顾及展望..... 刘江霞,杨 勇,禹华珍

· 双庆特邀 ·

- 多维度矿床学研究:现状与未来展望..... 陈华勇,程佳敏,张俊岭(1)
南海北部莺—琼盆地典型重力流沉积特征与物源体系
..... 王 华,陈 思,刘恩涛,何 杰,甘华军,孟福林,年伟豪(5)
歧口凹陷沙一下亚段页岩形成环境及页岩油潜力综合评价
..... 周立宏,陈长伟,甘华军,张广旭,张亦康,刘海涛,陈 思,李志胜(19)
海洋沉积物释光测年现状与展望..... 姜 涛,胡亦潘,周从艳,陈康林,梁 晨,宋 霖(31)
四川盆地公山庙油田大安寨段湖相灰岩—页岩裂缝特征与测井识别
..... 吴 丰,罗莹莹,李昱翰,杨宗恒,张洪千,刘建锋,石祥超(55)
上斜坡区筲竹寺组沉积环境及其页岩气勘探潜力:以四川盆地威远地区威207井为例
..... 梁 霄,马韶光,李郭琴,夏国勇,刘若林,倪根生,张梦琳,寇一龙,袁翠平,陈 佳(68)
砂岩中碱性溶蚀研究进展..... 田建锋,喻 建,张志国(83)
基于波形指示模拟的致密砂岩储层预测..... 杜 佳,刘彦成,白洁玢,张迎春,林利明,师素珍(94)
断裂带和俯冲带中石墨碳质物的地质过程与碳循环意义..... 曹淑云,周丁奎(101)
岩石圈结构成像方法的进展与展望..... 单 斌,周万里(112)
基岩区断层泥的物质组成、定年方法与地震断层弱化机制研究进展..... 徐先兵,邓 飞,王 墩,罗锡宜(122)
豫北林州地区鼓山阶底部碳同位素组成及演化趋势... 陈泳霖,王 玺,王艳慧,姚 帅,白国典,方怀宾(132)
酸腐蚀作用下川渝红层砂岩蠕变特性试验研究..... 谢 妮,王丁浩,吕 阳,高 青(141)
二氧化碳爆破致裂激发干热岩储层作用效果..... 窦 斌,肖 鹏,郑 君,田 红,崔国栋,吴天予(150)
地下水硫酸盐溯源的进展、问题和发展趋势..... 靳孟贵,张 结,张志鑫,曹明达,黄 鑫(160)
高温热泉中稀土元素的地球化学行为及其指示意义:以西藏搭格架水热区为例..... 郭清海,张晓博(172)
基于多时间序列 Landsat-8 遥感影像的珊瑚礁白化监测..... 吴 柯,杨 帆,徐 莹(181)

· 双庆岩溶专题 ·

- 岩溶碳循环及碳汇效应研究与展望..... 章 程,肖 琼,孙平安,高旭波,郭永丽,苗 迎,汪进良(190)

中国北方岩溶地下水的研究进展·····	梁永平,申豪勇,高旭波(199)
岩溶多重介质地下水模拟技术及应用进展·····	成建梅,罗一鸣(220)
地球关键带与岩溶关键带:结构、特征、底界·····	蒲俊兵(230)
地下工程建设对岩溶水流场的影响及其修复·····	邢立亭,于苗,宿庆伟,赵振华,高扬,张云峰(242)
灰岩基缓释材料原位注入修复酸性矿山废水模拟研究·····	高旭波,李鸿煜,龚培俐,张兴周,方健聪(255)
大汶河流域中上游地区岩溶地下水水化学特征及其控制因素分析 ·····	高宗军,万志澎,贺可强,维克多·库金,刘久潭(264)
宜昌长江南岸岩溶地下水中水生动物群落分布特征及其环境响应 ·····	刘伟,段佳文,赵瑞超,王一安,李寅,陈伟,李秋华,周宏,Anton Brancelj(273)
典型石漠化峰丛洼地土壤重金属的空间分异特征及其影响因素 ·····	章星铭,马国斌,蒋忠诚,胡宝清,谢薇薇,谭帅,曹雨薇(283)
基于岩溶水动态模拟的补给面积计算方法·····	罗明明,姜光辉(293)
基于改进的 Vensim 模型模拟岩溶泉水文过程·····	常勇,齐尧勇,刘玲(301)
东亚季风区石笋 $\delta^{18}\text{O}$ 解译:基于夏季风与夏季风降雨的思考·····	殷建军(308)
黄陵背斜东北翼岩溶水系统特征及其对引调水隧洞工程的影响 ·····	颜慧明,常威,季怀松,邓争荣,郭绪磊,陈林,黄琨(315)
基于多源人工示踪试验表征岩溶管道结构特征:以贵州苍蒲凹地下河为例 ·····	耿新新,张凤娥,陈宗宇,聂振龙,朱谱成(324)
硫氧同位素在识别辛安泉域岩溶水 SO_4^{2-} 来源中的应用 ·····	胡晓兵,方健聪,翟虎威,张凯,马永明,靳建红,高旭波(333)
中国西南喀斯特地区水库溶解态与颗粒态碳研究进展·····	易沅璧,王万发,王宝利,汪福顺,李思亮(341)
滇中高原岩溶关键带典型含水系统水化学特征及成因分析 ·····	黄靖宇,许模,许汉华,刘文连,杨艳娜,唐一格,肖先焯(347)
岩溶含水层饱和-非饱和流动与污染物运移数值模拟·····	郑小康,杨志兵(357)
基于系统空间特征识别的岩溶地下水污染成因分析 ·····	宁航,王宗星,柳富田,蒋万军,常威,张竞,万军伟(367)
聚龙山向斜三叠系含水层岩溶发育史及地下水水流场控制意义·····	樊焯,常威,魏世毅,万军伟,黄琨(377)
川东北普光地区下三叠统飞仙关组岩溶段的地质意义·····	梁欣阳,付德奎,张宁,高秋灵,张雄华,陈建(386)
武汉两湖隧道岩溶水系统结构及水循环规律·····	马超,曾斌,罗明明,权锋,於李军,李期佳,代昂(395)
隔档式构造区岩溶地下水水流系统多级次嵌套结构的水化学识别 ·····	李雅依,夏强,许模,曹聪(405)
· 科技新闻报道 ·	
中国地质大学(武汉)第二次大学生长江源科考圆满完成·····	李长安(414)

主 编:王 华 副 主 编:甘义群 李长冬 姜 涛 孙自永 刘江霞
 特邀执行主编:高旭波 罗维均 蒲俊兵 郭 芳 史浙明 李成城 赵新福 蔡建超
 编辑部主任:刘江霞 责任编辑:杨 勇

期刊基本参数:CN42-1904/P*1982*b*A4*414*zh*P*¥25.00*1200*40*2022-09

BULLETIN OF GEOLOGICAL SCIENCE AND TECHNOLOGY

(Bimonthly)

Vol. 41 No. 5 Sep. 2022

CONTENTS

- Multidimensional study of ore deposits: Current status and future prospects
..... *Chen Huayong, Cheng Jiamin, Zhang Junling* (1)
- Typical gravity flow sedimentary features and provenance system in Yinggehai-Qiongdongnan Basin, northern South China Sea ... *Wang Hua, Chen Si, Liu Entao, He Jie, Gan Huajun, Meng Fulin, Nian Weihao* (5)
- Shale formation environment and comprehensive evaluation of shale oil potential of the Lower First Member of Shahejie Formation in Qikou Sag *Zhou Lihong, Chen Changwei, Gan Huajun, Zhang Guangxu, Zhang Yikang, Liu Haitao, Chen Si, Li Zhisheng* (19)
- A review of luminescence dating on marine sediments
..... *Jiang Tao, Hu Yipan, Zhou Congyan, Chen Kanglin, Liang Chen, Song Lin* (31)
- Fracture characteristics and logging identification of lacustrine limestone-shale reservoirs in Da'anzhai Member, Gongshanmiao Oilfield, Sichuan Basin *Wu Feng, Luo Yingying, Li Yuhan, Yang Zongheng, Zhang Hongqian, Liu Jianfeng, Shi Xiangchao* (55)
- Sedimentary environment and shale gas exploration potential of Qiongzhusi Formation in the upslope area: A case study on Well W-207, Weiyuan area, Sichuan Basin ... *Liang Xiao, Ma Shaoguang, Li Guoqin, Xia Guoyong, Liu Ruolin, Ni Gensheng, Zhang Menglin, Kou Yilong, Yuan Cui ping, Chen Jia* (68)
- Advance in alkaline dissolution of sandstone *Tian Jianfeng, Yu Jian, Zhang Zhiguo* (83)
- Prediction of tight sandstone reservoirs based on waveform indication simulation
..... *Du Jia, Liu Yancheng, Bai Jiebin, Zhang Yingchun, Lin Liming, Shi Suzhen* (94)
- Geological process and carbon cycle significance of graphite carbon material in faults and subduction zones
..... *Cao Shuyun, Zhou Dingkui* (101)
- Methods and prospects for lithospheric structure imaging *Shan Bin, Zhou Wanli* (112)
- Advances in composition and dating methods of fault gouge and weakening mechanisms of earthquake faults in bedrock area *Xu Xianbing, Deng Fei, Wang Dun, Luo Xiyi* (122)
- Carbon isotope composition and its evolution around the base of the Drumian Stage in Linzhou area, northern Henan *Chen Yonglin, Wang Xi, Wang Yanhui, Yao Shuai, Bai Guodian, Fang Huaibin* (132)
- Experimental study on creep behaviors of red sandstone in Sichuan and Chongqing under acid corrosion
..... *Xie Ni, Wang Dinghao, Lü Yang, Gao Qing* (141)
- Effect of stimulation in hot dry rock reservoirs from carbon dioxide blasting-induced cracking
..... *Dou Bin, Xiao Peng, Zheng Jun, Tian Hong, Cui Guodong, Wu Tianyu* (150)
- A review on source identification of dissolved sulfate in groundwater: Advances, problems and development trends *Jin Menggui, Zhang Jie, Zhang Zhixin, Cao Mingda, Huang Xin* (160)
- Geochemical behavior of rare earth elements in high-temperature hot springs and its indications: A case study in the Daggyai hydrothermal area, Tibet *Guo Qinghai, Zhang Xiaobo* (172)
- Coral reef bleaching monitoring based on multitime Landsat-8 remote sensing image series
..... *Wu Ke, Yang Fan, Xu Ying* (181)
- Progress on karst carbon cycle and carbon sink effect study and perspective
..... *Zhang Cheng, Xiao Qiong, Sun Ping'an, Gao Xubo, Guo Yongli, Miao Ying, Wang Jinliang* (190)
- Review of research progress of karst groundwater in northern China
..... *Liang Yongping, Shen Haoyong, Gao Xubo* (199)

- Overview of groundwater modeling technology and its application in karst areas with multiple-void media
..... *Cheng Jianmei, Luo Yiming* (220)
- Earth's critical zone and karst critical zone: Structure, characteristic and bottom boundary
..... *Pu Junbing* (230)
- Influence and repair of underground engineering construction on karst flow field
..... *Xing Liting, Yu Miao, Su Qingwei, Zhao Zhenhua, Gao Yang, Zhang Yunfeng* (242)
- Simulation study on remediation of acid mine drainage by in-situ injection of limestone based sustained
release materials *Gao Xubo, Li Hongyu, Gong Peili, Zhang Xingzhou, Fang Jiancong* (255)
- Hydrochemical characteristics and controlling factors of karst groundwater in middle and upper reaches
of Dawen River basin *Gao Zongjun, Wan Zhipeng, He Keqiang, Victor Kuzin, Liu Jiutan* (264)
- Distribution of aquatic fauna in karstic groundwater and its environmental response on the south bank
of the Yangtze River in Yichang *Liu Wei, Duan Jiawen, Zhao Ruichao,
Wang Yi'an, Li Yin, Chen Wei, Li Qiuhua, Zhou Hong, Anton Brancelj* (273)
- Spatial variations and influencing factors analysis of heavy metals in the soil of typical rocky desertifica-
tion peak cluster depression *Qin Xingming, Ma Guobin, Jiang Zhongcheng,
Hu Baoqing, Xie Weiwei, Tan Shuai, Cao Yuwei* (283)
- Estimation method of recharge area based on hydrograph simulation of karst water
..... *Luo Mingming, Jiang Guanghui* (293)
- Modelling the hydrological process of the karst spring using a revised Vensim model
..... *Chang Yong, Qi Yaoyong, Liu Ling* (301)
- Interpretation of stalagmite $\delta^{18}\text{O}$ in East Asian summer monsoon region: Based on the relationship
between summer monsoon and summer monsoon rainfall *Yin Jianjun* (308)
- Characteristics of the karst water system on the northeast wing of the Huangling anticline and its
impact on water diversion tunnel engineering *Yan Huiming, Chang Wei, Ji Huaisong,
Deng Zhengrong, Guo Xulei, Chen Lin, Huang Kun* (315)
- Characterization of karst conduit structure based on multisource artificial tracer test: A case study of
the Cangpuwa underground river in Guizhou Province
..... *Geng Xinxin, Zhang Feng'e, Chen Zongyu, Nie Zhenlong, Zhu Pucheng* (324)
- Application of sulfur and oxygen isotopes in identifying the source of sulfate in karst water from Xin'an
spring area *Hu Xiaobing, Fang Jiancong, Zhai Huwei,
Zhang Kai, Ma Yongming, Jin Jianhong, Gao Xubo* (333)
- Research progress on the dissolved and particulate carbon of reservoirs in karst areas of Southwest
China *Yi Yuanbi, Wang Wanfa, Wang Baoli, Wang Fushun, Li Siliang* (341)
- Hydrochemical characteristics and genesis analysis of typical aquifer system in karst critical zone of
Central Yunnan Plateau *Huang Jingyu, Xu Mo, Xu Hanhua, Liu Wenlian,
Yang Yanna, Tang Yige, Xiao Xianxuan* (347)
- Numerical simulation of saturated-unsaturated groundwater flow and contaminant transport in a karst
aquifer *Zheng Xiaokang, Yang Zhibing* (357)
- Genesis of karst groundwater contamination based on system spatial feature recognition
..... *Ning Hang, Wang Zongxing, Liu Futian, Jiang Wanjun, Chang Wei, Zhang Jing, Wan Junwei* (367)
- History of karstification and groundwater flow field within Triassic water-bearing strata in Julongshan
syncline *Fan Yu, Chang Wei, Wei Shiyi, Wan Junwei, Huang Kun* (377)
- Geological significance of karst section of Lower Triassic Feixianguan Formation in Puguang area, Nor-
theast Sichuan *Liang Xinyang, Fu Dekui, Zhang Ning,
Gao Qiuling, Zhang Xionghua, Chen Jian* (386)
- Structure of karst water system and hydrological circulation characteristics of Lianghu Tunnel in Wuhan
..... *Ma Chao, Zeng Bin, Luo Mingming, Quan Feng, Yu Lijun, Li Qijia, Dai Ang* (395)
- Hydrogeochemical indicators of hierarchically nested structure of karst groundwater flow systems in the
ejective folds area *Li Yayi, Xia Qiang, Xu Mo, Cao Cong* (405)

2021 年“科技创新源泉工程”优秀科技期刊
2020 年度中国高校优秀科技期刊
2020 年获第十一届湖北省优秀期刊奖
2018 年度中国高校优秀科技期刊
2017 年获第十届湖北省优秀期刊奖
2016 年度中国高校优秀科技期刊
2015 年获第九届湖北省优秀期刊奖
2014 年获第五届中国高校优秀科技期刊奖

地质科技通报
DIZHI KEJI TONGBAO
(双月刊)1982 年创刊

第 41 卷 第 5 期 (总第 206 期) 2022 年 9 月

BULLETIN OF GEOLOGICAL
SCIENCE AND TECHNOLOGY
(Bimonthly)Established in 1982

Vol. 41 No. 5(Tot. No. 206) Sep. 2022

主管单位: 中华人民共和国教育部
主办单位: 中国地质大学(武汉)
主 编: 王 华
编辑出版: 中国地质大学(武汉)《地质科技通报》编辑部
地 址: 湖北省武汉市洪山区鲁磨路 388 号
电 话: +86-27-67885048
传 真: +86-27-67884173
电子信箱: kjqb@cug.edu.cn
印 刷: 武汉市籍缘印刷厂
国内发行: 湖北省邮政局
邮发代号: 38-130
海外总发行: 中国国际图书贸易集团有限公司
国外发行代号: BM7999
广告经营许可证: 4201003002914

Edited by Editorial Department of
*Bulletin of Geological Science and
Technology of China University
of Geosciences (Wuhan)*
Chief Editor: Wang Hua
Postal Address: 430074, Wuhan, Hubei, China
Tel: +86-27-67885048
Fax: +86-27-67884173
E-mail: kjqb@cug.edu.cn
Overseas Distributed by China National
Publishing Industry Trading Corpo-
ration(Address: P. O. Box 782, Beijing)

公开发行 刊号: ISSN 2096-8523 (国际标准刊号)
CN 42-1904/P (国内统一刊号)

定价: 25.00 元/本

