



地 质 学 报

2016 年 第 90 卷 第 9 期

庆祝中国地质科学院成立六十周年论文集

目 次

31 位院士祝贺中国地质科学院成立六十周年签名和题词	(I)
地质科技殿堂,人才培养摇篮——贺中国地质科学院建院六十周年	莫宣学(XX)
勇攀高峰,科技报国——庆祝中国地质科学院建院 60 周年	王小烈(XXI)
全球冥古宙的研究进展和存在问题	沈其韩,耿元生,宋会侠(2083)
中国的全球构造位置和地球动力系统	任纪舜,赵磊,徐芹芹,朱俊宾(2100)
中国大陆科学钻探的过去、现在和未来——纪念中国大陆科学钻探实施 15 周年、国际大陆科学钻探委员会成立 20 周年	许志琴,杨文采,杨经绥,安芷生,王成善,李海兵,刘嘉麒,苏德辰,何碧竹,王达,张伟,张晓西(2109)
中国盐湖科学技术研究的若干进展与展望	郑绵平,张永生,刘喜方,齐文,孔凡晶,乜贞,贾沁贤,卜令忠,侯献华,王海雷,张震,孔维刚,林勇杰(2123)
从卫星重力资料看中国及邻区地壳密度结构	杨文采,陈召曦,侯遵泽,孟小红(2167)
“燕山运动”的分期及几个关键问题	张宏仁(2176)
西藏色林错及邻区古近纪沉积凹陷对地壳增厚的响应	吴珍汉,张其超,吴艳君,叶培盛(2181)
蒙古—鄂霍次克构造带的形成与演化	黄始琪,董树文,胡健民,施炜,陈宣华,刘志强(2192)
月球构造新认识:基于 60m 高精度全月月形图的月球构造形态学研究	杨宏伟,赵文津,吴珍汉(2206)
湘赣地区中生代基性岩地球化学特征与岩石圈厚度变化	刘勇,李廷栋,肖庆辉,邢光福,王涛,寇彩化,段政(2219)
长江中下游庐枞火山岩盆地南侧钾质侵入岩带的成因	薛怀民,马芳,曹光跃,王一鹏,郭秀艳(2233)
长江中下游地区基底与成矿	刘刚,董树文,马立成,崔建军,薛怀民,施炜,李建华,黄始琪(2258)
南阿尔金古生代花岗岩 U-Pb 定年及岩浆活动对造山带构造演化的响应	吴才来,雷敏,吴迪,张昕,陈红杰,李天啸(2276)
中祁连拉脊山早古生代沉积岩源区和时代限定	王涛,马振慧,王宗起,张晗,王东升(2316)
东天山哈密地区早二叠世花岗岩体及镁铁质包体的年代学,岩石地球化学特征及其构造意义	陈希节,张奎华,周健(2334)
西准噶尔北部早二叠世石英正长斑岩的地球化学特征及意义	尹继元,陈文,喻顺,孙敬博,张斌,杨莉,袁霞,张岩(2355)
华北克拉通北缘隆化地区蓝旗镇古元古代石榴石花岗岩的成因及地质意义	刘建峰,李锦轶,曲军峰,胡兆初,郭春丽,陈军强(2365)
亚洲最大铅锌矿——三阶段叠加成矿的金顶巨型铅锌矿床	曾普胜,李红,李延河,王兆全,温利刚,刘斯文(2384)
南岭东段九龙脑矿田成矿规律与找矿方向	王登红,赵正,刘善宝,郭娜欣,梁婷,陈伟,周新鹏(2399)
安徽池州马头铜矿床成因与成矿模式	席明杰,艾金彪,马生明,朱立新(2412)
矿化剂元素硫(S)与成矿	马生明,朱立新,苏磊,汤丽玲,刘艳鹏(2427)
从平衡—封闭—静态转向非平衡—开放—动力学研究—热液矿床成因的若干新概念概述	张荣华,胡书敏,张雪彤(2437)
矿产区划——地质科学研究与矿产勘查结合的新形式	朱裕生(2454)
矿区水文地质研究进展及中长期发展方向	张发旺,陈立,王滨,么红超,许柏青,李敏巍,胡博文,钱龙(2464)
地下水水质评价与水资源管理:水文地球化学与同位素方法的应用研究进展	焦杏春(2476)
塔河油田奥陶系岩溶储层垂向带发育特征及其识别标准	邹胜章,夏日元,刘莉,唐建生,梁彬(2490)
陆域冻土区天然气水合物多波地震数值模拟研究	韩建光,于常青,张晓波,谷丙洛,王赞,陈鹏(2502)
中国没有牙齿的翼龙化石	吕君昌,滕芳芳,孙德玉,沈才智,李国清,高霞,柳汉丰(2513)

封面照片说明:中国地质科学院京区地质科研实验基地(中国地质科学院京区基地办提供)

CONTENTS

Signatures and Messages from 31 Academicians for Celebrating the 60th Anniversary of the Founding of the Chinese Academy of Geological Sciences	(I)
Congratulations on the 60th Anniversary of the Founding of the Chinese Academy of Geological Sciences-Palace of Geosciences and Cradle of Talents	MO Xuanxue(XX)
Scaling New Heights, Serving Our Country with Science and Technology: Celebrate the 60th Anniversary of the Founding of Chinese Academy of Geological Sciences	WANG Xiaolie(XXI)
Progress and Problems in the Hadean Research of the Globe	SHEN Qihan, GENG Yuansheng, SONG Huixia(2098)
Global Tectonic Position and Geodynamic System of China	REN Jishun, ZHAO Lei, XU Qinqin, ZHU Junbin(2108)
15 Years of Hardship and Struggle History and the Prospects for the Future of the Chinese Continental Scientific Drilling Program (CCSD); In Memory of the 15 Year Anniversary of CCSD and 20 Year Anniversary of ICDP	XU Zhiqin, YANG Wencai, YANG Jingsui, AN Zhisheng, WANG Chengshan, LI Haibing, LIU Jiaqi, SU Dechen, HE Bizhu, WANG Da, ZHANG Wei, ZHANG Xiaoxi (2122)
Progress and Prospects of Salt Lake Research in China	ZHENG Mianping, ZHANG Yongsheng, LIU Xifang, QI Wen, KONG Fanjing, NIE Zhen, JIA Qingxian, PU linzhong, HOU Xianhua, WANG Hailei, ZHANG Zhen, KONG Weigang, LIN Yongjie (2165)
Crustal Density Structures Around Chinese Continent By Inversion of Satellite Gravity Data	YANG Wencai, CHEN Zhaoxi, HOU Zunze, MENG Xiaohong(2175)
The Phasing of Yanshan Movement and Its Several Important Questions	ZHANG Hongren(2180)
Response of Sedimentary Depression to Crustal Thickening in the Silin Co Basin and Its Adjacent Areas, Tibet	WU Zhenhan, ZHANG Qichao, WU Yanjun, YE Peisheng(2191)
The Formation and Tectonic Evolution of the Mongol-Okhotsk Belt	HUANG Shiqi, DONG Shuwen, HU Jianmin, SHI Wei, CHEN Xuanhua, LIU Zhiqiang(2205)
New Knowledge of Lunar Tectonics: Researches on Lunar Tectonics and Geomorphology with Global Topographic Maps in High Accuracy of 60 Meters	YANG Hongwei, ZHAO Wenjin, WU Zhenhan(2218)
Geochemistry of the Mesozoic Mafic Rocks of and Lithospheric Thickness Variation in Hunan-Jiangxi Province	LIU Yong, LI Tingdong, XIAO Qinghui, XING Guangfu, WANG Tao, KOU Caihua, DUAN Zheng(2232)
Petrogenesis of Potassic Intrusive Rocks along the Southern Margin of the Luzong Volcanic Basin, Middle and Lower Yangtze River Reaches, China	XUE Huaimin, MA Fang, CAO Guangyue, WANG Yipeng, GUO Xiuyan(2257)
Basement and Metallogeny Belt of the Middle-Lower Yangtze River, Eastern China	LIU Gang, DONG Shuwen, MA Licheng, CUI Jianjun, XUE Huaimin, SHI Wei, LI Jianhua, HUANG Shiqi(2275)
Zircon U-Pb Dating of Paleozoic Granites From South Altun and Response of the Magmatic Activity to the Tectonic Evolution of the Altun Orogenic Belt	WU Cailai, LEI Min, WU Di, ZHANG Xin, CHEN Hongjie, LI Tianxiao(2315)
Constraints of the Provenance and Deposition Time of the Early Paleozoic Sedimentary Rocks in the Lajishan Area, Central Qilian	WANG Tao, MA Zhenhui, WANG Zongqi, ZHANG Han, WANG Dongsheng(2333)
Geochronology and Geochemistry Characteristics of the Early Permian Monzogranite and Dioritic Enclaves of East Tianshan and Their Tectonic Implications	CHEN Xijie, ZHANG Kuihua, ZHOU Jian(2354)
Geochemical Characteristics of Early Permian Quartz Syenite Porphyry from Northern West Junggar and Their Tectonic Implication	YIN Jiyuan, CHEN Wen, YU Shun, SUN Jingbo, ZHANG Bin, YANG Li, YUAN Xia, ZHANG Yan(2364)
Petrogenesis of Lanqizhen Paleoproterozoic Garnet Granite at Longhua Area in the Northern Margin of the North China Craton and Its Geological Significance	LIU Jianfeng, LI Jinyi, QU Junfeng, HU Zhaochu, GUO Chunli, CHEN Junqiang(2383)
Asian Largest Lead-Zinc Ore Deposit: The Jinding Giant Pb-Zn Deposit by Three Stages Superimposed Mineralization	ZENG Pusheng, LI Hong, LI Yanhe, WANG Zhaoquan, WEN Ligang, LIU Siwen(2397)

Patterns of Metallogenesis of Jiulongnao Orefield in the East Section of the Nanling Region and Direction for Prospecting	
..... WANG Denghong, ZHAO Zheng, LIU Shanbao, GUO Naxin, LIANG Ting, CHEN Wei, ZHOU Xinpeng(2411)	
The Genesis and Metallogenic Pattern of the Matou Mo-Cu Deposit in Chizhou District, Anhui Province, China	
..... XI Mingjie, AI Jinbiao, MA Shengming, ZHU Lixin(2426)	
Mineralizing Agent Sulfur and Metallogenic Process	
..... MA Shengming, ZHU Lixin, SU Lei, TANG Liling, LIU Yanpeng(2436)	
From Equilibrium-static-close System to Non-equilibrium-kinetics-open Study;New Conception Outline of Hydrothermal ore Deposition	
..... ZHANG Ronghua, HU Shumin, ZHANG Xuotong(2453)	
Mineral Resources Assessment; A New Combination Model of Scientific Research with Mineral Exploration	
..... ZHU Yusheng(2463)	
Progress of Hydrogeological Research in Mining Areas and Its Mid- and Long-Term Trend	
..... ZHANG Fangwang, CHEN Li, WANG Bin, YAO Hongchao, XU Baiqing, LI Minwei, HU Bowen, QIAN Long(2475)	
Groundwater Quality Assessment and Groundwater Resource Management; A Review on Hydrogeochemical and Stable Isotope Approaches	
..... JIAO Xingchun(2489)	
Vertical Zone Characteristics and Identification Standard of Ordovician Karst Reservoirs in the Tahe Oilfield	
..... ZOU Shengzhang, XIA Riyuan, LIU Li, TANG Jiansheng, LIANG Bin(2501)	
Multiwave Seismic Numerical Simulation Study on Terrestrial Gas Hydrate in Permafrost Area	
..... HAN Jianguang, YU Changqing, ZHANG Xiaobo, GU Bingluo, WANG Yun, CHEN Peng(2512)	
The Toothless Pterosaurs from China	
..... LÜ Junchang, TENG Fangfang, SUN Deyu, SHEN Caizhi, LI Guoqing, GAO Xia, LIU Hanfeng(2525)	

(Executive editor of this issue: Hao Ziguo and Huang Min)