

中国地质

GEOLOGY IN CHINA

ISSN 1000-3657

CN 11-1167/P

CODEN ZDHIAH



2020

第 47 卷 第 5 期

Vol.47 No.5

特别关注

中国地质调查局——海洋基础地质调查工程

中生代以来东亚洋陆汇聚带多圈层动力下的中国海及邻区构造演化及资源环境效应
南海成因及其演化模式探讨

中国东部大陆边缘晚新生代构造演化及板块相互作用过程重建

南海东南部中生界识别及其构造属性

中国海域 1 : 100 万区域地质调查主要进成果与认识



科学出版社

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

2020年10月出版

中国地质(双月刊)

(ZHONGGUO DIZHI)

2020年10月第47卷第5期(总第400期)

目次

序——为“中国海域1:100万区域地质调查工程成果”专辑而作 任纪舜(i)

特别关注

中生代以来东亚洋陆汇聚带多圈层动力下的中国海及邻区构造演化及资源环境效应

..... 张勇,姚永坚,李学杰,尚鲁宁,杨楚鹏,王中波,王明健,高红芳,
彭学超,黄龙,孔祥淮,汪俊,密蓓蓓,钟和贤,陈泓君,吴浩,
罗伟东,梅西,胡刚,张江勇,徐子英,田陟贤,王哲,李霞,王忠蕾(1271)

南海成因及其演化模式探讨 李学杰,王哲,姚永坚,高红芳,祝嵩,徐子英(1310)

中国东部大陆边缘晚新生代构造演化及板块相互作用过程重建
..... 尚鲁宁,张勇,姚永坚,吴浩,胡刚,田陟贤(1323)

南海东南部中生界识别及其构造属性
..... 王利杰,姚永坚,孙珍,李付成,杨楚鹏,徐子英(1337)

综述性论文

中国海域1:100万区域地质调查主要成果与认识 秦绪文,石显耀,张勇,李学杰,
李军,肖桂义,许振强,王宏斌,吕文超,吴浩,姚永坚,尚鲁宁,杨楚鹏,王中波,高红芳,
王明健,密蓓蓓,钟和贤,胡刚,陈泓君,黄龙,罗伟东,梅西,徐子英,田陟贤,王忠蕾(1355)

学术论文

中国陆架海MIS5(74~128 ka)以来地层及其沉积环境 王中波,张江勇,梅西,
陈晓辉,赵利,张勇,张志珣,李学杰,李日辉,陆凯,孙荣涛,杨守业(1370)

南海海盆东南部大型深水浊积扇体系及其成因的构造控制
..... 高红芳,钟和贤,孙美静,聂鑫,姜涛,黄文凯,杜文波,陈家乐(1395)

南海南-北陆缘盆地地层沉积发育特征及其对油气成藏的差异性控制
..... 熊量莉,杨楚鹏,吴岐岐,高红芳,姚永坚,李学杰,朱雪影,程子华(1407)

福建北部近岸东台山岛火山岩形成时代、地球化学与古太平洋板块俯冲的响应
..... 王飞飞,张勇,韩宗珠,宋维宇,吴浩,宁泽(1426)

中沙地块南部断裂发育特征及其成因机制
..... 徐子英,汪俊,高红芳,姚永坚,朱荣伟,唐江浪,聂鑫,孙美静(1438)

[期刊基本参数]CN11-1167/P*1953*b*A4*340*zh*P*¥ 50.00*2000*21*2020-10

本期特约主编:张勇 李学杰

本期责任编辑:李亚萍 王学明 郭慧 英文审校:张中民 技术编辑:王巍 黄彩霞

中国海域表层沉积物分布规律及沉积分异模式	梅西,李学杰,密蓓蓓,赵利,王中波,钟和贤,杨浩,黄湘通,何梦颖,熊伟,张勇(1447)
南海西南次海盆构造特征及其沉积响应	聂鑫,邱燕,Manuel Pubellier,汪俊,朱荣伟,杜文波(1463)
东部海域地学大断面地质结构特征及其对综合地层分区的约束	王明健,张勇,潘军,黄龙,陈晓红,骆迪,侯方辉,尚鲁宁(1474)
南海与台湾岛东部海域浅地层碳酸盐旋回	张江勇,赵利,李波,李学杰,钟和贤,田成静(1486)
末次冰消期(1.9万年)以来冲绳海槽中部黏土矿物来源及其环境响应	田旭,胡邦琦,王飞飞,黄威,丁雪,宋维宇,徐方建(1501)
东海北部外陆架及邻区灾害地质体特征及成因研究	陈珊珊,王中波,张勇,张志珣,赵维娜,钟伟杰(1512)
中国东部海域表层沉积物稀土元素赋存特征及物源探讨	密蓓蓓,张勇,梅西,仇晓华,赵维娜,蓝先洪(1530)
台湾海峡西部海域沉积体系、地层架构与油气勘探前景	杜文波,黄文凯,朱红涛,张璐, Jakub Miluch(1542)
福建闽江口—三沙湾口近岸海域沙波群发育特征、成因及其对海洋工程应用的影响	伊善堂,吴承强,林纪江,胡小三,罗伟东(1554)
海南岛北部海域海砂资源潜力评价	全长亮,张匡华,陈飞,苟鹏飞(1567)
珠江口盆地荔湾凹陷上渐新统一早中新统物源特征及其对沉积充填的影响	邢作昌,张忠涛,林畅松,张博,洪方浩,张正涛(1577)

发现与进展

胶东崮庄闪长岩辉钼矿 Re-Os 年龄及其地质意义	李杰,张丽鹏,李聪颖,宋明春(1589)
西昆仑大红柳滩伟晶岩型稀有金属矿的形成时代:来自白云母 $^{40}\text{Ar}/^{39}\text{Ar}$ 同位素年龄的证据	乔耿彪,伍跃中,刘拓(1591)
蒙西地 1 井发现下二叠统寿山沟组巨厚页岩气生烃层	施立志,张英利,张永生,苗忠英,赵撼霆,汪彪,姜鹏程,崔新宇(1594)
陕西北县向坪钨矿成矿时代:热液锆石 U-Pb 年龄证据	张望,王居里,张凯,胡洋,刘文建(1596)
秦岭造山带喂子坪秦岭杂岩中角闪岩的锆石 U-Pb 年龄	赵宇航,苟龙龙,徐晓飞,周峰(1599)

简讯与热点

世界 111 个金矿典型矿床地质特征一览	崔敏利,陈秀法,何学洲(1602)
海洋基础地质调查工程介绍	(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)

Oct. 2020 Vol. 47, No.5 (Serial No. 400)

Contents

In Focus

Tectonic evolution and resource–environmental effect of China Seas and adjacent areas under the multisphere geodynamic system of the East Asia ocean–continent convergent belt since Mesozoic

..... ZHANG Yong, YAO Yongjian, LI Xuejie, SHANG Luning, YANG Chupeng, WANG Zhongbo, WANG Mingjian, GAO Hongfang, PENG Xuechao, HUANG Long, KONG Xianghuai, WANG Jun, MI Beibei, ZHONG Hexian, CHEN Hongjun, WU Hao, LUO Weidong, MEI Xi, HU Gang, ZHANG Jiangyong, XU Ziyang, TIAN Zhixian, WANG Zhe, LI Xia, WANG Zhonglei(1271)

The formation and evolution of the South China Sea

..... LI Xuejie, WANG Zhe, YAO Yongjian, GAO Hongfang, ZHU Song, XU Ziyang(1310)

Late Cenozoic evolution of East China continental margin and restoration of plate interaction processes

..... SHANG Luning, ZHANG Yong, YAO Yongjian, WU Hao, HU Gang, TIAN Zhixian(1323)

The discrimination of Mesozoic sequence and its tectonic attribute in the southeastern South China Sea

..... WANG Lijie, YAO Yongjian, SUN Zhen, LI Fucheng, YANG Chupeng, XU Ziyang(1337)

Reviews

Main achievements and understanding of 1:1 million regional geological survey of China Seas

..... QIN Xuwen, SHI Xianyao, ZHANG Yong, LI Xuejie, LI Jun, XIAO Guiyi, XU Zhenqiang, WANG Hongbin, LÜ Wenchao, WU Hao, YAO Yongjian, SHANG Luning, YANG Chupeng, WANG Zhongbo, GAO Hongfang, WANG Mingjian, MI Beibei, ZHONG Hexian, HU Gang, CHEN Hongjun, HUANG Long, LUO Weidong, MEI Xi, XU Ziyang, TIAN Zhixian, WANG Zhonglei(1355)

Research Articles

The stratigraphy and depositional environments of China's sea shelves since MIS5 (74–128) ka

..... WANG Zhongbo, ZHANG Jiangyong, MEI Xi, CHEN Xiaohui, ZHAO Li, ZHANG Yong, ZHANG Zhixun, LI Xuejie, LI Rihui, LU Kai, SUN Rongtao, YANG Shouye(1370)

The large deep–water turbidity fan system in southeastern South China Sea Basin: Formation and tectonic constraint

..... GAO Hongfang, ZHONG Hexian, SUN Meijing, NIE Xin, JIANG Tao, HUANG Wenkai, DU Wenbo, CHEN Jiale(1395)

Characteristics of stratigraphic sedimentary in the south–north continental margin basin of the South China Sea and its differential control on hydrocarbon accumulation

..... XIONG Liangli, YANG Chupeng, WU Jiaoqi, GAO Hongfang, YAO Yongjian, LI Xuejie, ZHU Xueying, CHENG Zihua(1407)

The age and geochemistry of volcanic rocks of Dongtaishan Island in northern Fujian and their response to the subduction of the Paleo–Pacific Plate

..... WANG Feifei, ZHANG Yong, HAN Zongzhu, SONG Weiyu, WU Hao, NING Ze(1426)

The characteristics and formation mechanism of the faults in the southern part of the Zhongsha Bank

..... XU Ziyang, WANG Jun, GAO Hongfang, YAO Yongjian, ZHU Rongwei, TANG Jianglang, NIE Xin, SUN Meijing(1438)

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

- Distribution regularity and sedimentary differentiation patterns of China seas surface sediments
 *MEI Xi, LI Xuejie, MI Beibei, ZHAO Li, WANG Zhongbo, ZHONG Hexian, YANG Hao, HUANG Xiangtong, HE Mengying, XIONG Wei, ZHANG Yong*(1447)
- Tectonic characteristics and sedimentary responses of the southwest Subbasin of the South China Sea
 *NIE Xin, QIU Yan, MANUEL Pubellier, WANG Jun, ZHU Rongwei, DU Wenbo*(1463)
- Geological structure of the large section in eastern China's sea areas and its constraint on comprehensive stratigraphic division *WANG Mingjian, ZHANG Yong, PAN Jun, HUANG Long, CHEN Xiaohong, LUO Di, HOU Fanghui, SHANG Luning*(1474)
- Carbonate cycle in sub-bottom strata in the South China Sea and the east of sea area Taiwan Island
 *ZHANG Jiangyong, ZHAO Li, LI Bo, LI Xuejie, ZHONG Hexian, TIAN Chengjing*(1486)
- Clay mineral provenance and its response to paleochimate in the central Okinawa Trough since the last Deglaciation (19 ka) *TIAN Xu, HU Bangqi, WANG Feifei, HUANG Wei, DING Xue, SONG Weiyu, XU Fangjian*(1501)
- Characteristics and origin of disaster geological bodies in the northern outer shelf of the East China Sea and its adjacent areas *CHEN Shanshan, WANG Zhongbo, ZHANG Yong, ZHANG Zhixun, ZHAO Weina, ZHONG Weijie*(1512)
- The rare earth element content in surface sediments of coastal areas in eastern China's sea areas and an analysis of material sources *MI Beibei, ZHANG Yong, MEI Xi, QIU Xiaohua, ZHAO Weina, LAN Xianhong*(1530)
- Sedimentary system, stratigraphic architecture and petroleum exploration prospect in the western Taiwan Strait
 *DU Wenbo, HUANG Wenkai, ZHU Hongtao, ZHANG Lu, JAKUB Miluch*(1542)
- Development characteristics and genesis of sand wave groups and their influence on offshore engineering applications in Minjiang estuary-Sansha bay estuary coastal area, Fujian Province
 *YI Shantang, WU Chengqiang, LIN Jijiang, HU Xiaosan, LUO Weidong*(1554)
- The potential evaluation of marine sand resources in the northern sea areas of Hainan Island
 *TONG Changliang, ZHANG Kuanghua, CHEN Fei, GOU Pengfei*(1567)
- Provenance feature of Upper Oligocene to Early Miocene in Liwan Sag, Pearl River Mouth Basin and its influence on depositional filling *XING Zuochang, ZHANG Zhongtao, LIN Changsong, ZHANG Bo, HONG Fanghao, ZHANG Zhengtao*(1577)

Discoveries and Developments

- Re-Os dating of molybdenite from Guzhuang diorite in the Jiaodong peninsula and its geological significance
 *LI Jie, ZHANG Lipeng, LI Congying, SONG Mingchun*(1589)
- Formation age of the Dahongliutan pegmatite type rare metal deposit in Western Kunlun Mountains: Evidence from muscovite ⁴⁰Ar/ ³⁹Ar isotopic dating *QIAO Gengbiao, WU Yuezhong, LIU Tuo*(1591)
- The discovery of a thick shale gas hydrocarbon-generating layer in the Lower Permian Shoushangou Formation, Mengxidi No. 1 Well, Erlian Basin, Inner Mongolia *SHI Lizhi, ZHANG Yingli, ZHANG Yongsheng, MIAO Zhongying, ZHAO Hanting, WANG Biao, LOU Pengcheng, CUI Xingyu*(1594)
- Metallogenic epoch of the Xiangping tungsten deposit in Ningshan County, Shaanxi Province: Evidence from hydrothermal zircon U-Pb age *ZHANG Wang, WANG Juli, ZHANG Kai, HU Yang, LIU Wenjian*(1596)
- Eircon U-Pb age of amphibolite from the Qinling Complex in the Weiziping area, Qinling Orogenic Belt
 *ZHAO Yuhang, GOU Longlong, XU Xiaofei, ZHOU Feng*(1599)

News and Highlights

- Geological characteristics of 111 typical gold deposits in the world
 *CUI Minli, CHEN Xiufa, HE Xuezhou*(1602)