conduct tests over the two geothermal systems, including soil gas, headspace gas , thermally-released mercury, adsorbed hydrocarbon, carbonate, soil gas mercury, soil gas radon, soil elements. The effective geochemical indicators were optimized based on the most favorable heat zone of the thermal reservoirs in response. The differences of surface geochemical anomaly patterns between the two types of geothermal systems was analyzed based on the geological factors.

Results: It shows that surface geochemical anomaly patern of the rifted mountain type geothermal system is positive anomaly controlled by the water transmitting fault and fracture zonel; gas geochemical anomaly pattern of sedimentary basin type geothermal system is positive anomaly controlled by hot water reservoir structure, and geochemical anomaly pattern of the trace elements are negative anomaly controlled by REDOX environment. The effective geochemical indicators and abnormal morphology are different between the two type of geothermal systems.

Conclusions: There are great differences between sedimentary basin type geothermal system and rifted mountain type geothermal system in terms of the effective geochemical identification indicators and geochemical anomaly patterns of the most favorable heat zones, which are closely related to geological factors such as heat source, hot water, thermal reservoir, migration channel, caprock of geothermal system. The results in this study is significant for prospecting for the most favorable heat zones of different types of geothermal systems.

Keywords: geothermal system; geochemical prospecting; sedimentary basin type; rifted moutain type; abnormal pattern; analysis of differences

Acknowledgements: This research was supported by the National Key R & D Project Funding of China(No. 2019YFC0604902)and the National Natural Science Foundation of China (Nos. 41872126 and U2003101)

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Manuscript received on:2020-04-16;Accepted on: 2020-11-24; Edited by: ZHANG Yuxu

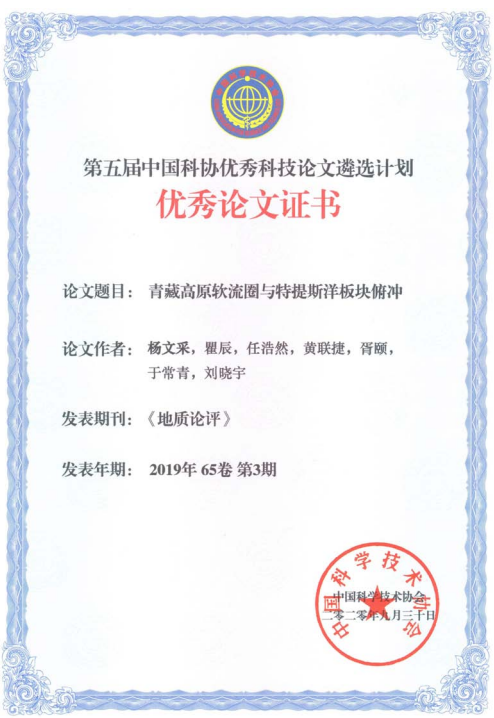
Doi: 10. 16509/j. georeview. 2021. 01. 009

第五届“中国科学技术协会优秀科技论文”评选揭晓

为深入贯彻落实党的十九大精神,服务创新型国家建设,响应习近平总书记“把论文写在祖国大地上”号召,引导更多高水平科研成果在我国科技期刊首发,提高我国科技期刊汇聚科学发现、引领学科发展、培育顶尖人才的能力,中国科学技术协会组织开展了第五届全国优秀科技论文遴选,根据《第五届中国科协优秀科技论文遴选计划实施方案》,经专家推荐, 各学科集群有关学会组织专家遴选,中国科协终审认定等程序,2020年全国共有 96 篇科技论文入选第五届“中国科协优秀科技论文”(https://www. cast. org. cn/art/2020/10/9/art_458_136138. html)。

《地质论评》主编杨文采院士等发表于《地质论评》的“青藏高原软流圈与特提期洋板块俯冲”一文,光荣上榜。《地质学报》、《地质学报》(英文版)、《古生物学报》等地学期刊另有 8 篇论文榜上有名(表 1,见 246 页)。

《地质学报》、《地质学报》(英文版)和《地质论评》三刊编辑部对获奖论文的各位作者表示热烈祝贺,希望各位地学工作者继续支持我刊,将咱们的刊物办得更好。 (刘萌 供稿)



LIU Meng: The fifth “Outstanding scientific papers of *China Association for Science and Technology*” published

Review of the birth of the first National Geopark in China and prospect

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Abstract: The scientific value discovery of national and world significance of Shilin karst was derived from the comprehensive investigation and evaluation path of earth science integrating time, space and evolution, which reveals the scientific value of the scenic spots, described as "Mountain stones crown world, folk feelings drink tourists", of stone forests , which also provides the basis for the sustainable utilization and management of Shilin geoparks. The Shilin Geological Park is a complete geographical area integrating karst geology, geomorphology, hydrology and water resources, soil, biology, human settlements and cultural customs, and has the resource base of scientific value, aesthetic value, economic value and humanistic value for building a demonstration area of sustainable development. The Shilin Geopark must keep pace with the our time concepts and action in order to make itself serve the well-being of local community residents.

Keywords: geopark; stone forest; water resource; intangible cultural heritage; geological tourism; sustainable development

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Manuscript received on: 2020-08-17; Accepted on: 2020-11-19; Edited by: ZHANG Yuxu

Doi: 10. 16509/j. georeview. 2021. 01. 023

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第五届中国科学技术协会优秀科学技术论文(地学集群)

(依获奖第一作者姓名汉语拼音字母为序)

作者	文章题目	期刊名称	年/期
曹雪峰,万刚,张宗佩	Hilbert 曲线层级演进关系	测绘学报	2016/S1
陈连增,雷波	中国海洋科学技术发展 70 年	海洋学报	2019/10
丁文龙,曾维特,王濡岳,久凯,王哲,孙雅雄,王兴华	页岩储层构造应力场模拟与裂缝分布预测方法及应用	地学前缘	2016/2
宋博文,刘志远,韦一,艾可可,徐亚东,侯亚飞,张克信	青海可可西里盆地雅西措组介形类动物群及其地层意义	古生物学报	2019/3
王劲峰,徐成东	地理探测器:原理与展望	地理学报	2017/1
Xiong Fahui, Yang Jingsui, Robinson Paul T., Xu Xiangzhen, Ba Dengzhu, Li Yuan, Zhang Zhongming, Rong He	Diamonds and Other Exotic Minerals Recovered from Peridotites of the Dangqiong Ophiolite, Western Yarlung Zangbo Suture Zone, Tibet	Acta Geologica Sinica (English Edition)	2016/2
杨文采,瞿辰,任浩然,黄联捷,胥颐,于常青,刘晓宇	青藏高原软流圈与特提斯洋板块俯冲	地质论评	2019/3
ZHAI Panmao(翟盘茂), YU Rong, GUO Yanjun, LI Qingxiang, REN Xuejuan, WANG Yaqiang, XU Wenhui, LIU Yanju, DING Yihui	The Strong El Niño of 2015/16 and Its Dominant Impacts on Global and China's Climate	Journal of Meteorological Research	2016/3
张岳桥,董树文,贾东	2017 年九寨沟 Ms7. 0 地震揭示青藏高原东缘岷山地区一条新的左旋走滑断裂	地质学报	2018/12