

ZAIZHENG ZHOU, Ph.D.

Associate Professor | Department of Geography, College of Urban Construction | Heze University, China

Email: zhouzaizheng8123@163.com | Phone: +86-15610005427

Academic Profile

Research focus: paleomagnetism and rock magnetism; plate reconstructions and tectonic evolution of Northeast Asia; magma emplacement and sill/dyke architecture.

Academic Appointments

Associate Professor, Heze University | Jan 2025-present

Lecturer, Heze University | June 2022-Dec 2024

Postdoctoral Researcher, Shandong University of Science and Technology | July 2019-May 2022

Education

Ph.D. in Marine Geology, Ocean University of China | Sept 2016-June 2019

M.Sc. in Geological Engineering, China University of Geosciences (Beijing) | Sept 2013-June 2016

B.Sc. in Resource Exploration Engineering, Shandong University of Science and Technology | Sept 2009-June 2013

Research Grants

NSFC General Program (Participant). Kinematic reconstruction and driving mechanisms of two intra-oceanic mantle plume groups since the Cretaceous. RMB 520K | 2026-2029

NSFC Joint Fund (Participant). Emplacement mechanism of the Yanshan-Liaoning mafic sills and their paleoenvironmental-paleogeographic responses. RMB 2.55M | 2023-2026

NSFC Young Scientist Fund (PI). Study on Pre-docking Movement Process of the Nadanhada Terrane During the Mesozoic. RMB 240K | 2021-2023

NSFC General Program (Participant). Tingjia-Xibaran Fault and tectonic evolution of the southern South China Sea. RMB 640K | 2020-2023

Open Project (PI). Magnetic fabric of the 1.32 Ga Yanshan-Liaoning sills and its implications for magma emplacement, Key Laboratory of Paleomagnetism and Tectonic Reconstruction. RMB 50K | 2023-2025

Publications

2026

周在征；曹现志；王鹏程；李玺瑶；王鹤达 (2026). 全球板块运动学重建模型的发展与应用. 地质学报 (待刊) .

Wang, Heda; Li, Sanzhong; Cao, Xianzhi; Suo, Yanhui; **Zhou, Zaizheng**; Liu, Qiuling; Deng, Dingshan; Zhou, Jianping; Wang, Liangliang; Liu, Jinping (2026). Mesozoic Microplates of East Asia: A New Reconstruction. *Tectonics*, 45(9), e2025TC009270. <https://doi.org/10.1029/2025TC009270>

Liu, Qiuling; Li, Sanzhong; Cao, Xianzhi; Wang, Heda; Deng, Dingshan; Wang, Pengcheng; **Zhou, Zaizheng** (2026). Reconstruction of Paleozoic microplates and the Tethys Ocean in East Asia. *Earth-Science Reviews*, 278, 105521. <https://doi.org/10.1016/j.earscirev.2026.105521>

Hou, Lifu; Lan, Lilin; **Zhou, Zaizheng**; Cai, Yuhang; Zhong, Qiwen; Liu, Fujun; Yu, Zhen; Tong, Yabo; Pei, Junling (2026). Cretaceous Spatiotemporal Variations in Tectonic Shortening Directions in the Longmen Shan Tectonic Belt and Geodynamic Implications: Constraints From AMS Fabrics and Crustal Rotation in the Western Sichuan Basin. *Geochemistry, Geophysics, Geosystems*, 27(7). <https://doi.org/10.1029/2025GC012896>

2024

Cai, Yuhang; Zhang, Shuan-Hong; Pei, Junling; Tong, Yabo; **Zhou, Zaizheng**; Hou, Lifu (2024). Paleomagnetic constraints on the primary iron minerals of the late Paleoproterozoic Xuanlong-type ironstone in the North China Craton. *Earth and Planetary Science Letters*, 647. <https://doi.org/10.1016/j.epsl.2024.119013>

2023

Hou, Lifu; Pei, Junling; Cai, Yuhang; **Zhou, Zaizheng**; Tong, Yabo; Zhao, Yue (2023). Upper Cretaceous-Paleocene Magnetostratigraphy of the Longmenshan Foreland Basin and Its Implications for the Tectonic Deformation of the Longmenshan Fault Zone. *Tectonics*, 42(2). <https://doi.org/10.1029/2022TC007660>

Sheng, Mei; Jiang, Kai; Wang, Xisheng; Jiang, Zhaoxia; Tang, Ling; **Zhou, Zaizheng** (2023). Magnetoclimatological Record of Late Pleistocene Loess in the Southern Hunshandake Sandy Land, Inner Mongolia: A Threshold Response to the East Asian Summer Monsoon Variations. *Geochemistry, Geophysics, Geosystems*, 24(7). <https://doi.org/10.1029/2023GC010905>

2022

Zhang, Shuan-Hong; Ernst, Richard E.; Yang, Zhenyu; **Zhou, Zaizheng**; Pei, Junling; Zhao, Yue (2022). Spatial distribution of 1.4-1.3 Ga LIPs and carbonatite-related REE deposits: Evidence for large-scale continental rifting in the Columbia (Nuna) supercontinent. *Earth and Planetary Science Letters*, 597. <https://doi.org/10.1016/j.epsl.2022.117815>

Zhou, Zaizheng; Pei, Junling; Li, Jianfeng; Cai, Yuhang; Hou, Lifu (2022). High-resolution magnetostratigraphic records of the Pliocene sedimentary successions in Yengisar section, NW China, and its tectonic implications. *Frontiers in Earth Science*, 10. <https://doi.org/10.3389/feart.2022.967346>

Zhou, Zaizheng; Han, Zuozhen; Li, Sanzhong; Jiang, Zhaoxia; Li, Xiyao; Lan, Haoyuan (2022). Kinematic reconstruction of the Raohe accretionary complex, Northeast China: Integration of onshore geologic evidence and global plate model. *Journal of Geodynamics*, 149. <https://doi.org/10.1016/j.jog.2021.101895>

2021

裴军令；赵越；周在征；杨振宇；刘晓春；郑光高；仝亚博；李建锋；侯礼富 (2021). 南极新生代海陆格局变迁对全球气候变化的影响. 地质力学学报, 27(5), 867-879. <https://doi.org/10.12090/j.issn.1006-6616.2021.27.05.070>

Jiang, Zhaoxia; Li, Sanzhong; Liu, Qingsong; Zhang, Jianli; **Zhou, Zaizheng**; Zhang, Yuzhen (2021). The trials and tribulations of the Hawaii hot spot model. *Earth-Science Reviews*, 215. <https://doi.org/10.1016/j.earscirev.2021.103544>

2020

周在征; 李三忠; 姜兆霞; 李玺瑶; 李阳 (2020). 东北亚陆缘中-新生代主要构造事件的古地磁学制约. *地球物理学进展*, 35(4), 1332-1351. <https://doi.org/10.6038/pg2020DD0132>

Zhou, Zaizheng; Li, Sanzhong; Guo, lingli; Li, xiyao; Jiang, zhaoxia; Liu, yongjiang; Li, Yang; Wang, Gangzeng; Lan, Haoyuan; Guo, Runhua; Wang, Yini; Somerville, I. (2020). Palaeomagnetic assessment of tectonic rotation in Northeast Asia: implications for the coupling of intracontinental deformation and mantle convection. *International Geology Review*, 62(17), 2166-2188. <https://doi.org/10.1080/00206814.2019.1689532>

2019

李阳; 李三忠; 郭玲莉; 周在征; 索艳慧; 王光增; 朱俊江; 刘一鸣; 刘博; 周洁; 李园洁; 张国伟 (2019). 拆离型微地块: 洋陆转换带和洋中脊变形机制. *大地构造与成矿学*, 43(4), 779-794. <https://doi.org/10.16539/j.ddgzyckx.2019.04.011>

刘一鸣; 李三忠; 于胜尧; 曹现志; 周洁; 李阳; 王誉桦; 徐林山; 郭润华; 周在征 (2019). 青藏高原班公湖-怒江缝合带及周缘燕山期微地块聚合与增生造山过程. *大地构造与成矿学*, 43(4), 824-838. <https://doi.org/10.16539/j.ddgzyckx.2019.04.013>

李园洁; 李三忠; 姜兆霞; 索艳慧; 周在征 (2019). 海洋磁异常及其动力学. *大地构造与成矿学*, 43(04), 678-699. Guo, Runhua; Li, Sanzhong; Yu, Shengyao; Dai, Liming; Liu, Yongjiang; Peng, Yinbiao; Zhou, Zaizheng; Wang, Yuhua; Liu, Yiming; Wang, Qian; Somerville, I. (2019). Collisional processes between the Qiangtang Block and the Lhasa Block: Insights from structural analysis of the Bangong-Nujiang Suture Zone, central Tibet. *Geological Journal*. <https://doi.org/10.1002/gj.3420> Liu, Yiming; Li, Sanzhong; Santosh, M.; Cao, Huahua; Yu, Shengyao; Wang, Yuhua; Zhou, Jie; Zhou, Zaizheng (2019). The generation and reworking of continental crust during early Paleozoic in Gondwanan affinity terranes from the Tibet Plateau. *Earth-Science Reviews*, 190, 486-497. <https://doi.org/10.1016/j.earscirev.2019.01.019>

2018

李少俊; 李三忠; 李玺瑶; 索艳慧; 王鹏程; 王倩; 张剑; 周在征 (2018). 鲁西地块新生代断裂体系活动性与深部动力机制. *海洋地质与第四纪地质*, 38(4), 123-134. <https://doi.org/10.16562/j.cnki.0256-1492.2018.04.010>

牟墩玲; 李三忠; 王倩; 李玺瑶; 王鹏程; 于胜尧; 周在征; 刘晓光 (2018). 塔里木盆地东南缘早古生代穹山构造. *岩石学报*, 34(12), 3739-3757.

牟墩玲; 李三忠; 王倩; 赵淑娟; 李玺瑶; 周在征; 刘晓光 (2018). 柴达木盆地东缘早古生代穹山构造. *岩石学报*, 34(12), 3721-3738.

Dmitrienko, Liudmila V.; Wang, Pengcheng; Li, Sanzhong; Cao, Xianzhi; Somerville, Ian; Zhou, Zaizheng; Hu, Mengying; Suo, Yanhui; Guo, Lingli; Wang, Yongming; Li, Xiyao; Liu, Xin; Yu, Shengyao; Zhu, Junjiang (2018). Meso-Cenozoic Evolution of Earth Surface System under the East Asian Tectonic Superconvergence. *Acta Geologica Sinica - English Edition*, 92(2), 814-849. <https://doi.org/10.1111/1755-6724.13556>

Liu, Xiaoguang; Li, Sanzhong; Li, Xiyao; Zhao, Shujuan; Wang, Tongshan; Yu, Shengyao; Dai, Liming; Zhou, Zaizheng; Guo, Runhua (2018). Detrital zircon U-Pb geochronology and provenance of the Sanxiatian Formation (Huade Group) in the North China Craton: Implications for the breakup of the Columbia supercontinent. *Precambrian Research*, 310, 305-319. <https://doi.org/10.1016/j.precamres.2018.02.006>

李三忠; 索艳慧; 李玺瑶; 王永明; 曹现志; 王鹏程; 郭玲莉; 于胜尧; 兰浩圆; 李少俊; 赵淑娟; 周在征; 张臻; 张国伟 (2018). 西太平洋中生代板块俯冲过程与东亚洋陆过渡带构造-岩浆响应. *科学通报*, 63(16), 1550-1593.

2017

- 李三忠；臧艺博；王鹏程；索艳慧；李玺瑶；刘鑫；**周在征**；刘晓光；王倩 (2017). 华南中生代构造转换和古太平洋俯冲启动. *地学前缘*, 24(4), 213-225. <https://doi.org/10.13745/j.esf.yx.2017-4-13>
- 郭玲莉；李三忠；赵淑娟；刘博；索艳慧；王倩；**周在征** (2017). 洋-陆转换带类型与成因机制. *地学前缘*, 24(4), 320-328. <https://doi.org/10.13745/j.esf.yx.2017-3-15>
- 李三忠；郑祺亮；李玺瑶；赵淑娟；索艳慧；郭玲莉；王永明；**周在征**；刘晓光；兰浩圆；张剑；郭润华；李少俊 (2017). 中国东部苏鲁造山带的印支期俯冲极性及其造山过程. *海洋地质与第四纪地质*, 37(4), 18-32. <https://doi.org/10.16562/j.cnki.0256-1492.2017.04.002>
- 李建锋；赵越；裴军令；刘锋；**周在征**；高海龙；高亮；付自波 (2017). 塔里木盆地新生代海相沉积问题. *地质力学学报*, 23(01), 141-149. <https://doi.org/10.3969/j.issn.1006-6616.2017.01.010>
- Dmitrienko Liudmila Valer'evna；王鹏程；李三忠；曹现志；**周在征**；胡梦颖；索艳慧；郭玲莉；王永明；李玺瑶；刘鑫；于胜尧 (2017). 东亚大汇聚与中—新生代地球表层系统演变. *海洋地质与第四纪地质*, 37(04), 33-64.
- Zhou, Zaizheng**; Li, Sanzhong; Li, Xiyao; Guo, Lingli; Liu, Xiaoguang; Guo, Runhua; Somerville, Ian (2017). Triassic orocline in East Asia: Insights from a transition from passive margin to foreland basin in eastern North China Block. *Geological Journal*, 52(S1), 59-69.
- 郭润华；李三忠；索艳慧；王倩；赵淑娟；王旖旎；刘晓光；**周在征**；李瑾；兰浩圆；王鹏程；郭玲莉 (2017). 华北地块楔入大华南地块和印支期弯山构造. *地学前缘*, 24(04), 171-184.
- 李三忠；张勇；郭玲莉；索艳慧；曹花花；李玺瑶；**周在征**；王鹏程；郭润华 (2017). 那丹哈达地体及周缘中生代变形与增生造山过程. *地学前缘*, 24(04), 200-212.

2016

- 裴军令；**周在征**；李海兵；孙知明 (2016). 中中新世以来阿尔金断裂走滑未造成柴达木盆地整体旋转. *吉林大学学报(地球科学版)*, 46(1), 163-174. <https://doi.org/10.13278/j.cnki.jjuese.201601114>
- 裴军令；**周在征**；李海兵；王焕；刘锋；盛美；赵越 (2016). 汶川地震断裂带多次地震活动新证据. *中国地质*, 43(1), 43-55.
- 罗明中；裴军令；唐玲；**周在征**；盛美 (2016). 汶川地震最大垂直位移处同震滑移带特征及其高磁化率意义. *第四纪研究*, 36(2), 484-491.
- 周在征**；裴军令；李建锋；刘锋；盛美；赵越 (2016). 帕米尔东北缘晚新生代旋转运动新证据. *地球物理学报*, 59(02), 633-642.

2015

- 裴军令；刘锋；胡云壮；**周在征**；李建锋；赵越 (2015). 河北平原第四纪火山岩时代. *中国地质*, 42(6), 1765-1773.

2014

- Pei, Junling; Li, Haibing; Wang, Huan; Si, Jialiang; Sun, Zhiming; **Zhou, Zaizheng** (2014). Magnetic properties of the Wenchuan Earthquake Fault Scientific Drilling Project Hole-1 (WFSD-1), Sichuan Province, China. *Earth, Planets and Space*, 66(1), 23. <https://doi.org/10.1186/1880-5981-66-23>
- Pei, Junling; **Zhou, Zaizheng**; Dong, Shuguo; Tang, Ling (2014). Magnetic evidence revealing frictional heating from fault rocks in granites. *Tectonophysics*, 637, 207-217. <https://doi.org/10.1016/j.tecto.2014.10.008>