

# 陈杰

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## 工作经历

- 2024.06-目前      博士后, 巴黎文理大学-高等师范学院 (ENS)  
研究课题: MUSH OCEAN  
合作导师: Jean-Arthur Olive
- 2022.08-2024.05      博士后, 巴黎西岱大学-巴黎地球物理学院 (IPGP)  
研究课题: 全球洋中脊热结构数值模拟  
合作导师: Mathilde Cannat 和 Jean-Arthur Olive
- 2022.01-2022.07      研究助理, 自然资源部第二海洋研究所  
研究课题: 北极 Gakkel 洋中脊微地震定位 (JASMINe 航次)  
合作者: 李家彪院士和张涛研究员

## 教育背景

- 2018.09-2021.12      博士 (海洋地球物理), IPGP, 巴黎西岱大学  
论文标题: 慢速-超慢速扩张洋中脊上岩浆供给对断层分布、火山作用以及热结构的影响.  
论文导师: Mathilde Cannat, Wayne. C. Crawford, Jean-Arthur Olive
- 2015.07-2018.08      硕士 (海洋地球物理), 自然资源部第二海洋研究所  
论文标题: 西南印度洋脊 Indomed 和 Gallieni 间 (46°-52°E) 分段性及岩浆供给研究  
论文导师: 陶春辉、张涛、李怀明
- 2011.08-2015.06      本科 (勘查技术与工程专业), 中国海洋大学-海洋地球科学学院

## 研究兴趣

洋中脊	热液循环系统
慢速-超慢速扩张洋中脊	海底火山活动
岩浆和构造过程	地震活动
水下自动机器人 (AUV)	数值模拟
高分辨率多波束水深	地理信息系统

## 发表论文

1. **Chen, J.**, Leroy, S., J., Watremez, L., Robinson, A. H. (2025). Mantle exhumation and post-rift magmatism at an oblique magma-poor continental margin. *Geophysical Research Letters*.  
<https://doi.org/10.1029/2024GL112069>.

2. **Chen, J.**, Escartín, J., M, Cannat., (2025). Fault scarps and tectonic strain in young volcanic seafloor. *Earth and Planetary Science Letters*. <https://doi.org/10.1016/j.epsl.2024.119174>.
3. Marjanović, M., **Chen, J. (co-first author)**, Escartín, J., Parnell-Turner, R., Wu, J.-N., (2024). Magma-induced tectonics at the East Pacific Rise 9°50'N: Evidence from high-resolution characterization of seafloor and subseafloor. *PNAS*. <https://doi.org/10.1073/pnas.2401440121>.
4. Yan K, **Chen J**, Zhang T, (2024). Teleseismic Indication of Magmatic and Tectonic Activities at Slow- and Ultraslow-Spreading Ridges. *JMSE*. <https://doi.org/10.3390/jmse12040605>.
5. **Chen J**, Olive J.A, and Cannat M (2023). Beyond Spreading Rate: Controls on the Thermal Regime of Mid-Ocean Ridges. *PNAS*. <https://www.pnas.org/doi/10.1073/pnas.2306466120>.
6. **Chen J**, Crawford W. C, and Cannat M (2023). Microseismicity and lithosphere thickness at a nearly-amagmatic oceanic detachment fault system. *Nature Communications*. <https://doi.org/10.1038/s41467-023-36169-w>.
7. **Chen J**, Zhang T, Li H, Tao C, Cannat M, and Sauter D (2023). Evolution of enhanced magmatism at the ultraslow spreading Southwest Indian Ridge between 46°E and 53.5°E. *Tectonophysics*. <https://doi.org/10.1016/j.tecto.2023.229903>.
8. **Chen J**, Zhang T, Tominaga M, Escartin J, and Kang R (2023). Ocean Sciences with the Spilhaus Projection: A Seamless Ocean Map for Spatial Data Recognition. *Scientific Data*. <https://doi.org/10.1038/s41597-023-02309-6>.
9. Tao C, Guo Z, Liang J, Ding T, Yang W, Liao S, Chen M, Zhou F, **Chen J**, Wang N, Liu X, Zhou J (2023). Sulfide metallogenic model for the ultraslow-spreading Southwest Indian Ridge. *Science China Earth Sciences*. <https://doi.org/10.1007/s11430-023-1108-7>.
10. **Chen J**, Olive J.A, and Cannat M. (2022) Thermal Regime of Slow and Ultraslow Spreading Ridges Controlled by Melt Supply and Modes of Emplacement. *Journal of Geophysical Research: Solid Earth*. <https://doi.org/10.1029/2021JB023715>.
11. **Chen J**, Cannat M, Tao C, Sauter D, and Munsch M. (2021). 780 thousand years of upper-crustal construction at a melt-rich segment of the ultraslow spreading Southwest Indian Ridge 50°28'E. *Journal of Geophysical Research: Solid Earth*. <https://doi.org/10.1029/2021JB022152>.
12. Ding T, Wang J, Tao C, Dias Á.A, Liang J, Wang Y, **Chen J.** et al. (2021). Trace-element compositions of sulfides from inactive Tianzuo hydrothermal field, Southwest Indian Ridge: Implications for ultramafic rocks hosting mineralization. *Ore Geology Reviews*. <https://doi.org/10.1016/j.oregeorev.2021.104421>.
13. Ding T, Tao C, Dias Á.A, Liang J, **Chen J.** et al. (2021). Sulfur isotopic compositions of sulfides along the Southwest Indian Ridge: implications for mineralization in ultramafic rocks. *Mineralium Deposita*. <https://doi.org/10.1007/s00126-020-01025-0>.
14. Li, H, Tao, C, Yue, X, Baker, E.T, Deng, X, Zhou, J, Wang, Y, Zhang, G, **Chen, J.** et al. (2020). Enhanced hydrothermal activity on an ultraslow-spreading supersegment with a seismically detected melting anomaly. *Marine Geology*. <https://doi.org/10.1016/j.margeo.2020.106335>.
15. **Chen J**, Tao C, Liang J, et al, (2018). Newly discovered hydrothermal fields along the ultraslow-spreading Southwest Indian Ridge around 63°E. *Acta Oceanologica Sinica*. <https://doi.org/10.1007/s13131-018-1333-y>.

## 学术会议

1. **Chen J**, Leroy S, Watremez L, and Robinson A. Three-dimensional crustal velocity structure of the north-eastern Gulf of Aden continental margin. EGU, 2024.
2. Cannat M, **Chen J**, and Escartin J. Fault scarps and tectonic strain in young seafloor. EGU, 2024.

3. Marjanović, M., **Chen, J.**, Escartín, J., Parnell-Turner, R., Wu, J.-N Magma-induced tectonics at the East Pacific Rise 9°50'N: Evidence from high-resolution characterization of seafloor and subseafloor. EGU, 2024.
4. **Chen J**, Cannat M, and Olive JA. Beyond Spreading Rate: Controls on the Thermal Regime of Mid-Ocean Ridges. Ocean Floor Symposium, 2022.
5. **Chen J**, Li J, Zhang T, Niu X, Ding W, and the Jasmine team. OBS-Recorded Microseismicity at the Slowest Spreading Gakkel Ridge 85°E, Arctic Ocean. AGU, 2022.
6. Cannat M, **Chen J**, and Olive JA. Beyond Spreading Rate: Controls on the Thermal Regime of Mid-Ocean Ridges. AGU, 2022.
7. Cannat M, **Chen J**, and JA Olive. The thermal regime of mid-ocean ridges: geological perspectives and numerical modelling. EGU, 2022.
8. **Chen J**, Crawford W C, and Cannat M. Microseismicity constraints on brittle lithosphere thickness at a nearly amagmatic spreading corridor of the ultraslow Southwest Indian Ridge. AGU, 2020.
9. **Chen J**, Cannat M, and Tao C. 780-thousand years of volcanic seafloor accretion at a melt-rich segment of the ultraslow-spreading Southwest Indian Ridge 50°28'E. AGU, 2019.
10. **Chen J**, Li H, Zhang T, et al, Characteristics and mechanisms of magma supply along Southwest Indian Ridge between 46°E and 52.3°E. CGU, 2017.

## 邀请报告

2024.06	海洋地质论坛半月谈 (MGF; 线上)
2023.11	Interridge-France 研讨会
2023.08	西欧三国中国学生学者学术研讨会 (线上)
2022.06	自然资源部第二海洋研究所-海底科学重点实验室
2021.09	南方科技大学-海洋科学与工程系
2021.06	巴黎西岱大学-巴黎地球物理学院

## 出海经历

法国 Pourquoi Pas 号, Momarsat19 航次, 大西洋, 2019 年 7 月  
中国雪龙号, 太平洋海试, 2017 年 7 月

## 获得资助

2018-2021 中国国家留学基金委员会 (CSC)

## 学生指导

苏道鑫 硕士(2022.01-2022.12, 自然资源部第二海洋研究所)  
闫凯宣 硕士(2022.01-2024.06, 自然资源部第二海洋研究所)

## 相关技能及其他

工作技能: GMT, Global Mapper, MATLAB, ArcGIS, Bash shell, Python, SEISAN, 云计算, Obspy, Seismic Unix  
语言: 英语 (流利)、法语 (初级) 和中文 (母语)  
爱好: 中国武术-梅花桩