

CEBSIT Featured Publications

(2024.01-2024.12)

1. Zi, H., Peng, X., Cao, J., Xie, T., Liu, T., Li, H., Bu, J., **Du, J.***, Li, J.(2024)Piezo1-dependent regulation of pericyte proliferation by blood flow during brain vascular development.*Cell Rep.* 43:113652
2. Liao, Z., Zhang, J., Sun, Y., Li, Y., Xu, Y., Li, C., Cao, J., Nie, Y., Niu, Z., Liu, J., Lu, F.* , **Liu, Z.***, **Sun, Q.*** (2024) Reprogramming mechanism dissection and trophoblast replacement application in monkey somatic cell nuclear transfer. *Nat. Commun.* 15:5.
3. Qiu, S., Hu, Y., Huang, Y., Gao, T., Wang, X., Wang, D., Ren, B., Shi, X., Chen, Y., Wang, X., Wang, D., Han, L., Liang, Y., Liu, D., Liu, Q., Deng, L., Chen, Z., Zhan, L., Chen, T., Huang, Y., Wu, Q., Xie, T., Qian, L., Jin, C., Huang, J., Deng, W., Jiang, T., Li, X., Jia, X., Yuan, J., Li, A., Yan, J., Xu, N., Xu, L., Luo, Q., **Poo, M.**, Sun, Y.* , Li, C.* , **Yao, H.***, Gong, H.* , **Sun, Y.*** , **Xu, C.*** (2024)Whole-brain spatial organization of hippocampal single-neuron projectomes. *Science.* 383:eadj9198
4. Zou, Y., Tong, C., Peng, W., Qiu, Y., Li, J., Xia, Y., Pei, M., Zhang, K., Li, W., Xu, M.* , **Liang, Z.*** (2024)Cell-type-specific optogenetic fMRI on basal forebrain reveals functional network basis of behavioral preference. *Neuron.* 112: 1342-1357.e6.
5. Xu, P.* , Peng, J., Yuan, T., Chen, Z., He, H., Wu, Z., Li, T., Li, X., Wang, L., Gao, L., Yan, J., Wei, W., Li, C.* , Luo, Z.* , **Chen, Y.*** High-throughput mapping of single-neuron projection and molecular features by retrograde barcoded labeling. *eLife.* 91: 975-987.
6. Li, Y., Yu, S., Jia, X., Qiu, X., **He, J.*** Defining morphologically and genetically distinct GABergic/cholinergic amacrine cell subtypes in the vertebrate retina. *Plos Biol.* 16:3002506
7. Shang, C., Wang, Y., Zhao, M., Fan, Q., Zhao, S., Qian, Y., Xu, S., Mu, Y.* , Hao, J.* , **Du, J.*** (2024)Real-time analysis of large-scale neuronal imaging enables closed-loop investigation of neural dynamics. *Nat. Neurosci.* 27:1014-1018.
8. WANG, G., Gu, Y., **Liu, Z.*** (2024) Deciphering the genetic interactions between Pou4f3, Gfi1, and Rbm24 in maintaining mouse cochlear hair cell survival. *eLife.* 12: RP90025.
9. Fei, Y., Wu, Q., Zhao, S., Song, K., Han, J., **Liu, C.*** (2024) Diverse and Asymmetric Patterns of Single-Neuron Projectome in Regulating Interhemispheric Connectivity. *Nat. Commun.* 15: 3403.

10. Huang, J., He, B., Yang, X., Long, X., Wei, Y., Li, L., Tang, M., Gao, Y., Fang, Y., Ying, W., Wang, Z., Li, C., Zhou, Y., Li, S., Shi, L., Choi, S., Zhou, H.* , Guo, F.* , Yang, H.* , Wu, J.* (2024) Generation of rat forebrain tissues in mic. *Cell*. 187: 2129-2142.
11. Xiao, H., Liang, L., **Ye, Z.***, Wu, J.* (2024) Subthalamic Nucleus Stimulation Modulates Cognitive Theory of Mind in Parkinson's Disease. *Movement Disord*. 39: 1154-1165.
12. Shen, C., Shen, B., Liu, D., Han, L., Zou, K., Gan, L., Ren, J., Wu, B., Tang, Y., Zhao, J., Sun, Y., Liu, F., Yu, W., **Yao, H.***, Wu, J.* , Wang, J*. (2024) Bidirectional regulation of levodopa-induced dyskinesia by a specific neural ensemble in globus pallidus external segment. *Cell Rep. Med*. 16: 101566.
13. Bi, Z., Ren, M., Zhang, Y., He, S., Song, L., Li, X., **Liu, Z.***(2024) Revisiting the Potency of Tbx2 Expression in Transforming Outer Hair Cells into Inner Hair Cells at Multiple Ages In Vivo. *J. Neurosci*. 44:e1751232024
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15. Gou, L., Wang, Y., Gao, L., Zhong, Y., Xie, L., Wang, H., Zha, X., Shao, X., Xu, H., Xu, X., **Yan, J.***(2024) Gapr for large-scale collaborative single-neuron reconstruction. *Nat. Methods*. 21: 1926–1935.
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18. Xiao, Q., Li, G., Han, D., Wang, H., Yao, M., Ma, T., Zhou, J., Zhang, Y., Zhang, X., He, B., Yuan Y., Shi, L., Li, T.* , **Yang, H.***, Huang, J., Zhang, H.* (2024) Engineered IscB- ω RNA system with expanded target range for base editing. *Nat. Chem. Biol*. 21: 100–108.
19. Chen, T., Deng, Q., Lin, K., Zheng, X., Wang, X., Zhong, Y., Ning, X., Li, Y., Xu, F., **Du, J.***, **Du,**

- X.*** (2024) An applicable and efficient retrograde monosynaptic circuit mapping tool for larval zebrafish. *Elife*. 100880.1.
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22. Xu, X., Du, K., **Mao, D.** (2024) Spatial dissociation between recognition and navigation in the primate hippocampus. *Sci. Adv.* 10:ado7392
23. Tian, Z., Chen, J., Zhang, C., Min, B.*, Xu, B., **Wang, L.*** (2024) Mental programming of spatial sequences in working memory in the macaque frontal cortex. *Science*. 385:adp60.
24. Hao, S., Zhu, X., Huang, Z., Yang, Q., Liu, H., Wu, Y., Zhan, Y., Dong, Y., Li, C., Wang, H., Haasdijk, E., Wu, Z., Li, S., Yan, H., Zhu, L., Guo, S., Wang, Z., Ye, A., Lin, Y., Cui, L., Tan, X., Liu, H., Wang, M., Chen, J., Zhong, Y., Du, W., Wang, G., Lai, T., Cao, M., Yang, T., Xu, Y., Li, L., Yu, Q., Zhuang, Z., Xia, Y., Lei, Y., An, Y., Cheng, M., Zhao, Y., Han, L., Yuan, Y., Song, X., Song, Y., Gu, L., Liu, C., Lin, X., Wang, R., Wang, Z., Wang, Y., Li, S., Li, H., Song, J., Chen, M., Zhou, W., Yuan, N., Sun, S., Wang, S., Chen, Y., Zheng, M., Fang, J., Zhang, R., Zhang, S., Chai, Q., Liu, J., Wei, W., He, J., Zhou, H., Sun, Y., Liu, Z., Liu, C., Yao, J., Liang, Z., Xu, X., Poo, M., Li, C., De Zeeuw, C.*, Shen, Z.*, Liu, Z.*, Liu, L.*, Liu, S.*, **Sun, Y.***, **Liu, C.*** (2024) Cross-species single-cell spatial transcriptomic atlases of the cerebellar cortex. *Science*. 385.
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28. Ye, S., Song, S., Liu, X., Luo, Y., **Cai, S.*** (2024) A small-molecule screen identifies novel aging modulators by targeting 5-HT/DA signaling pathway. *Aging Cell.* 24:e14411.

29. Zhang, Y., Bai, L., Wang, X., Zhao, Y., Zhang, T., Ye, L., Du, X., Zhang, Z., Du, J., **Wang, K.** *(2024) Super-resolution imaging of fast morphological dynamics of neurons in behaving animals. *Nat. Methods.* 22: 177–186.
30. Jiao, Z., Zhang, M., Wu, Y., Li, S., Gao, M., Zhang, W., **Xu, X.** *(2024) Acute Recruitment of VTA Dopamine Neurons by mPOA Esr1+ Neurons to Facilitate Consummatory Male Mating Actions. *Neurosci. Bull.* 40:1745-1750.
31. **Poo, M.***(2024)China's new ethical guidelines for the use of brain-computer interfaces. *NSR.* 11.
32. **Poo, M.***(2024)In search of problems. *Cell.* 187
33. Zhang, M., **Yu, Q.***(2024) The representation of abstract goals in working memory is supported by task-congruent neural geometry. *Plos Biol.* 22.
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35. Dou, Y.* , Liu, Y., Ding, W., Li, Q., Zhou, H., Li, L., Zhao, M., Li, Z., Yuan, J., Wang, X., Zou, W., Li, A., **Sun, Y.***(2024)Single-neuron projectome-guided analysis reveals the neural circuit mechanism underlying endogenous opioid antinociception. *NSR.* 11.
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39. Zhang, R., Deng, H., **Xiao, X.***(2024)The Insular Cortex: An Interface Between Sensation, Emotion and Cognition. *Neurosci. Bull.* 40: 1763.
40. Huang, Y., Wang, S., Wang, Q., Zheng, C., Yang, F., Wei, L., Zhou, X., **Wang, Z.*** (2024) Glutamatergic Circuits in the Pedunculopontine Nucleus Modulate Multiple Motor Functions. *Neurosci. Bull.* 40: 1713.
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memory in the macaque frontal cortex. *Neuron*. 112.

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