

# ION Publication List

(2016.01-2016.12)

1. Chen, M., Li, P., Zhu, S., Han, C., Xu, H., Fang, Y., Hu, J., Roe, A., and Lu, H.\* (2016) An orientation map for motion boundaries in macaque V2. *Cereb. Cortex* 26: 279-287.
2. Li, C., Li, K., Wu, D., Chen, Y., Luo, H., Zhao, J., Wang, S., Sun, M., Lu, Y., Zhong, Y., Hu, X., Hou, R., Zhou, B., Bao, L., Xiao, H., and **Zhang, X.\*** (2016) Somatosensory neuron types identified by high-coverage single-cell RNA-sequencing and functional heterogeneity. *Cell Res.* 26: 83-102.
3. Liu, Z., Nie, Y., Zhang, C., Cai, Y., Wang, Y., Lu, H., Li, Y., Cheng, C., Qiu, Z. and **Sun, Q.\*** (2016) Generation of macaques with sperm derived from juvenile monkey testicular xenografts. *Cell Res.* 26: 139-142.
4. Liu, Z., Li, X., Zhang, J., Cai, Y., Cheng, T., Cheng, C., Wang, Y., Zhang, C., Nie, Y., Chen, Z., Bian, W., Zhang, L., Xiao, J., Lu, B., Zhang, Y., Zhang, X., Sang, X., Wu, J., Xu, X., Xiong, Z., Zhang, F., Yu, X., Gong, N., Zhou, W., **Sun, Q.\***, and **Qiu, Z.\*** (2016) Autism-like behaviours and germline transmission in transgenic monkeys overexpressing MeCP2. *Nature* 530: 98-102.
5. Yao, Y., Li, X., Zhang, B., Yin, C., Liu, Y., Chen, W., Zeng, S., and **Du, J.\*** (2016) Visual Cue-discriminative dopaminergic control of visuomotor transformation and behavior selection. *Neuron* 89: 598-612.
6. Lv, Q., Yang, L., Li, G., Wang, Z., Shen, Z., Yu, W., Jiang, Q., Hou, B., Pu, J., Hu, H., and **Wang, Z.\*** (2016) Large-scale persistent network reconfiguration induced by ketamine in anesthetized monkeys: relevance to mood disorders. *Biol. Psychiat.* 79: 765-775.
7. Li, Y., Guo, A., and Li, H.\* (2016) CRASP: CFP reconstitution across synaptic partners. *Biochem Biophys Res Commun.* 469: 352-356.
8. Liu, L., She, L., Chen, M., Liu, T., Lu, H., Dan, Y., and **Poo, M.\*** (2016) Spatial structure of neuronal receptive field in awake monkey secondary visual cortex (V2). *Proc. Natl. Acad. Sci. USA.* 113: 1913-1918.
9. Xu, H., Han, C., Chen, M., Li, P., Zhu, S., Fang, Y., Hu, J., Ma, H., and Lu, H.\* (2016) Rivalry-like neural activity in primary visual cortex in anesthetized monkeys. *J. Neurosci.* 36: 3231-3242.
10. Feng, S., Ma, S., Jia, C., Su, Y., Yang, S., Zhou, K., Liu, Y., Cheng, J., Lu, D., Fan, L., and Wang, Y.\* (2016) Sonic hedgehog is a regulator of extracellular glutamate levels and epilepsy. *EMBO Rep.* 17: 682-694.

11. Cheng, Z., and **Gu, Y.\*** (2016) Distributed representation of curvilinear self-motion in the macaque parietal cortex. *Cell Rep.* 15: 1013-1023.
12. Pan, Y., Wang, L., Wang, Z., Xu, C., Yu, W., Spillmann, L., **Gu, Y.\***, **Wang, Z.\***, and **Wang, W.\*** (2016) Representation of illusory and physical rotations in human MST: A cortical site for the pinna illusion. *Hum. Brain Mapp.* 37: 2097-2113.
13. Wu, K., Zuo, G., Li, X., Ye, Q., Deng, Y., Huang, X., Cao, W., Qin, C.\*, and **Luo, Z.\*** (2016) Vertical transmission of Zika virus targeting the radial glial cells affects cortex development of offspring mice. *Cell Res.* 26: 645-654.
14. Liu, Q., Yang, X., Tian, J., Gao, Z., Wang, M., Li, Y.\*, and **Guo, A.\*** (2016) Gap junction networks in mushroom bodies participate in visual learning and memory in *Drosophila*. *Elife* 5: e13238.
15. Guo, Y., Wang, Y., Zhang, W., Meltzer, S., Zanini, D., Yu, Y., Li, J., Cheng, T., Guo, Z., Wang, Q., Jacobs, J., Sharma, Y., Eberl, D., Göpfert, M., Jan, L., Jan, Y.\*, and **Wang, Z.\*** (2016) Transmembrane channel-like (tmc) gene regulates *Drosophila* larval locomotion. *Proc. Natl. Acad. Sci. USA.* 113: 7243-7248.
16. Zhang, S., Duan, L., Qian, H., and **Yu, X.\*** (2016) Actin aggregations mark the sites of neurite initiation. *Neurosci. Bull.* 32: 1-15.
17. Xu, Y. Guo, W., Li, P., Zhang, Y., Zhao, M., Fan, Z., Zhao, Z., and **Yan, J.\*** (2016) Long-range chromosome interactions mediated by cohesin shape circadian gene expression. *PLoS Genet.* 12: e1005992.
18. Wang, H., Fan, Z., Zhao, M., Li, J., Lu, M., Liu, W., Ying, H., Liu, M., and **Yan, J.\*** (2016) Oscillating primary transcripts harbor miRNAs with circadian functions. *Sci. Rep.* 6: 21598.
19. Deng, H., Xiao, X., and **Wang Z.\*** (2016) Periaqueductal gray neuronal activities underlie different aspects of defensive behaviors. *J. Neurosci.* 36: 7580-7588.
20. Zhang, Y., Guo, J., **Guo, A.\***, and Li, Y.\* (2016) Nicotine-induced acute hyperactivity is mediated by dopaminergic system in a sexually dimorphic manner. *Neuroscience* 322: 149-159.
21. Wang, T., Xu, W., Qin, M., Yang, Y., Bao, P., Shen, F., Zhang, Z. and **Xu, J.\*** (2016) Pathogenic mutations in the Valosin-containing protein/p97(VCP) N-domain inhibit the SUMOylation of VCP and lead to impaired stress response. *J. Biol. Chem.* 291: 14373-14384.
22. **Gu, Y.\***, Cheng, Z., Yang, L., Deangelis, G., and Angelaki, D.\* (2016) Multisensory convergence of visual and vestibular heading cues in the pursuit area of the frontal eye field. *Cereb. Cortex* 26: 3785-3801.
23. Yu, G., Xu, B., Zhao, Y., Zhang, B., Yang, M., Kan, J., Milstein, D., Thevarajah, D., and

- Dorris, M.\*** (2016) Microsaccade direction reflects the economic value of potential saccade goals and predicts saccade choice. *J. Neurophysiol.* 115: 741-751.
24. Zhang, R.\*, Li, X., Kawakami, K. and **Du, J.\*** (2016) Stereotyped initiation of retinal waves by bipolar cells via presynaptic NMDA autoreceptors. *Nat. Commun.* 7: 12650.
25. Xiao, X., Deng, H., Wei, L., Huang, Y., and **Wang, Z.\*** (2016) Neural activity of orbitofrontal cortex contributes to control of waiting. *Eur. J. Neurosci.* 44: 2300-2313.
26. Ju, X., Hou, Q., Sheng, A., Wu, K., Zhou, Y., Jin, Y., Wen, T., Yang, Z., Wang, X., and **Luo, Z.\*** (2016) The hominoid-specific gene TBC1D3 promotes generation of basal neural progenitors and induces cortical folding in mice. *eLife* 5: e18197.
27. Yang, Y.\*, Liu, D., Huang, W., Deng, J., Sun, Y., Zuo, Y., and **Poo, M.** (2016) Amygdalaocortical projection in fear memory. *Nat. Neurosci.* 19: 1348-1355.
28. Yin, D., Liu, W., Zeljic, K., Wang, Z., Lv, Q., Fan, M., Cheng, W.\*, and **Wang, Z.\*** (2016) Dissociable changes of frontal and parietal cortices in inherent functional flexibility across the human life span. *J. Neurosci.* 36: 10060-10074.
29. He, M., Ding, Y., Chu, C., Tang, J., Xiao, Q., and **Luo, Z.\*** (2016) Autophagy induction stabilizes microtubules and promotes axon regeneration after spinal cord injury. *Proc. Natl. Acad. Sci. USA.* 113: 11324-11329.
30. **Poo, M.\***, Pignatelli, M., Ryan, T., Tonegawa, S.\*, Bonhoeffer, T., Martin, K., Rudenko, A., Tsai L., Tsien, R., Fishell, G., Mullins, C., Gonçalves, J., Shtrahman, M., Johnston, S., Gage, F., Dan, Y., Long, J., Buzsáki, G., Stevens, C. (2016) What is memory? The present state of the engram. *BMC Biol.* 14: 40. (Review)
31. **Du, X.\***, and **Du, J.\*** (2016) A death trap for microglia. *Dev. Cell* 38: 120-121. (Invited Preview)
32. Xu, B.\*, Zhang, Y., and Du, J. (2016) Progress in the study of the blood-brain barrier. *Acta Physica Sinica* 68(3): 306-322 (Review, in Chinese)
33. **Cui H.\*** (2016) Forward prediction in the posterior parietal cortex and dynamic brain-machine interface. *Front. Integr. Neurosci.* 10: 35. (Perspective)
34. **Poo, M.\***, Du, J., Ip, N., Xiong, Z., Xu, B., and Tan, T.\* (2016) China brain project: basic neuroscience, brain diseases, and brain-inspired computing. *Neuron* 92: 591-596. (NeuroView)

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