# ION Publication List

## （2014.01-2014.12）

1. Huang, W., She, L., Chang, X., Yang, R., Wang, L., Ji, H., Jiao, J., and **Poo, M.*** (2014) Protein kinase LKB1 regulates polarized dendrite formation of adult hippocampal newborn neurons. ***Proc. Natl. Acad. Sci. USA.*** 111: 469-474.
2. Xu, M., Zhang, S., Dan, Y., and **Poo, M.*** (2014) Representation of interval timing by temporally scalable firing patterns in rat prefrontal cortex. ***Proc. Natl. Acad. Sci. USA.*** 111: 480-485.
3. Wang, X., Chen, C., Zhang, D., and **Yao, H.*** (2014) Cumulative latency advance underlies fast visual processing in desynchronized brain state. ***Proc. Natl. Acad. Sci. USA.*** 111: 515-520.
4. Deng, C., Lei, W., Xu, X., Ju, X., Liu, Y., and **Luo, Z.*** (2014) JIP1 mediates anterograde transport of Rab10 cargos during neuronal polarization. ***J. Neurosci.*** 34: 1710-1723.
5. Zhang, Y., Mao, R., Chen, Z., Tian, M., Tong, D., Gao, Z., Huang, M., Li, X., Xu, X., Zhou, W., Li C., Wang, J., Xu, L.*, and **Qiu, Z.*** (2014) Deep-brain magnetic stimulation promotes adult hippocampal neurogenesis and alleviates stress-related behaviors in mouse models for neuropsychiatric disorders. ***Mol. Brain*** 7: 11.
6. Chen, X., Rasch, M., Chen, G., Wu, S., and **Zhang X.*** (2014) Binocular input coincidence mediates the critical period plasticity of developing mouse visual cortex. ***J. Neurosci.*** 34: 2940-2955.
7. Zheng, J., Li, S., Zhang, X., Miao, W., Zhang, D., Yao, H., and **Yu, X.*** (2014) Oxytocin mediates early experience–dependent cross-modal plasticity in the sensory cortices. ***Nat. Neurosci.*** 17: 391-399.
8. Wang, K., Gong, J., Wang, Q., Li, H., Cheng, Q., Liu, Y., Zeng, S., and **Wang, Z.*** (2014) Parallel pathways convey olfactory information with opposite polarities in Drosophila. ***Proc. Natl. Acad. Sci. USA.*** 111: 3164-3169.
9. Cheng, J., Huang, M., Zhu, Y., Xin, Y., Zhao, Y., Huang, J., Yu, J., Zhou, W.*, and **Qiu, Z.*** (2014) SUMOylation of MeCP2 is essential for transcriptional rep ression and hippocampal synapse development. ***J. Neurochem.*** 128: 798-806.
10. Cheng, T., Wang, Z., Liao, Q., Zhu, Y., Zhou, W., Xu, W., and **Qiu, Z.*** (2014) MeCP2 suppresses nuclear microRNA processing and dendritic growth by regulating the DGCR8/Drosha complex. ***Dev. Cell*** 28: 547-560.
11. Yin, J., Liu, X., Yuan, J., Jiang, J., and **Cai, S.*** (2014) Longevity manipulations differentially

affect serotonin/dopamine level and behavioral deterioration in aging *Caenorhabditis elegans.* ***J. Neurosci.*** 34: 3947-3958.

12. Wang, J., Chen, F., Fu, X., Ding, C., Zhou, L., Zhang, X., and **Luo, Z.*** (2014) Caspase-3 cleavage of dishevelled induces elimination of postsynaptic structures. ***Dev. Cell*** 28: 670-684.
13. An, X., Gong, H., McLoughlin, N., Yang, Y.*, and **Wang, W.*** (2014) The mechanism for processing random-dot motion at various speeds in early visual cortices. ***PLoS One*** 9: e93115.
14. Liu, Z., Zhou, X., Zhu, Y., Chen, Z., Yu, B., Wang, Y., Zhang, C., Nie, Y., Sang, X., Cai, Y., Zhang, Y., Zhang, C., Zhou, W., **Sun, Q.*,** and **Qiu, Z.*** (2014) Generation of a monkey with MECP2 mutations by TALEN-based gene targeting. ***Neurosci. Bull.*** 30: 381-386.
15. Wang, Y., Fang, Q., and **Gong, N.*** (2014) Motor assessment of developing common marmosets. ***Neurosci. Bull.*** 30: 387-393.
16. Wang, Y., Fang, Q., and **Gong, N.*** (2014) A modified light-dark box test for the common marmoset. ***Neurosci. Bull.*** 30: 394-400.
17. Hu, Y., Li, S., Jiang, H., Li, M.*, and **Zhou, J.*** (2014) Ephrin-B2/EphA4 forward signaling is required for regulation of radial migration of cortical neurons in the mouse. ***Neurosci. Bull.*** 30: 425-432.
18. Xu, X., Deng, C., Liu, Y., He, M., Peng, J., Wang, T., Yuan, L., Zheng, Z., Blackshear, P., and **Luo, Z.*** (2014) MARCKS regulates membrane targeting of Rab10 vesicles to promote axon development. ***Cell Res.*** 24: 576–594.
19. Liu, K., and **Yao, H.*** (2014) Contrast-dependent OFF-dominance in cat primary visual cortex facilitates discrimination of stimuli with natural contrast statistics. ***Eur. J. Neurosci.*** 39: 2060-2070.
20. Li, H., Luo, J., Lu, Y., Kan, J., Spillmann, L., and **Wang, W.*** (2014) Asymmetrical color filling-in from the nasal to the temporal side of the blind spot. ***Front. Hum. Neurosci.*** 8: 534.
21. Xia, Y., Zhao, Y., Yang, M., Zeng, S.*, and Shu, Y.* (2014) Regulation of action potential waveforms by axonal GABAA receptors in cortical pyramidal neurons. ***PLoS One*** 9: e100968.
22. Wu, K., He, M., Hou, Q., Sheng, A., Yuan, L., Liu, F., Liu, W., Li, G., Jiang, X., and **Luo, Z.*** (2014) Semaphorin 3A activates the guanosine triphosphatase Rab5 to promote growth cone collapse and organize callosal axon projections. ***Sci. Signal.*** 7: ra81.
23. Liu, H., Zhou, B., Yan, W., Lei, Z., Zhao, X., Zhang, K., and **Guo, A.*** (2014) Astrocyte-like glial cells physiologically regulate olfactory processing through the modification of ORN-PN synaptic strength in Drosophila. ***Eur. J. Neurosci.*** 40: 2744-2754.
24. Li, T., Tian, C., Scalmani, P., Frassoni, C., Mantegazza, M., Wang, Y., Yang, M., Wu, S., Shu,

Y.* (2014) Action potential initiation in neocortical inhibitory interneurons. ***PLoS Biol.*** 12: e1001944.

25. Tian, C., Wang, K., Ke, W., Guo, H., and Shu, Y.* (2014) Molecular identity of axonal sodium channels in human cortical pyramidal cells. ***Front. Cell Neurosci.*** 8: 297.
26. He, L., Liu, N., Cheng, T., Chen, X., Li, Y., Shu, Y., Qiu, Z., and Zhang, X.* (2014) Conditional deletion of Mecp2 in parvalbumin-expressing GABAergic cells results in the absence of critical period plasticity. ***Nat. Commun.*** 5: 5036.
27. Liu, D., Gu, X., Zhu, J., Zhang, X., Han, Z., Yan, W., Cheng, Q., Hao, J., Fan, H., Hou, R., Chen, Z., Chen, Y., and **Li, C.*** (2014) Medial prefrontal activity during delay period contributes to learning of a working memory task. ***Science*** 346: 458-463.
28. Xiu, J., Zhang, Q., Zhou, T., Zhou, T., Chen, Y., and **Hu, H.*** (2014) Visualizing an emotional valence map in the limbic forebrain by TAI-FISH. ***Nat. Neurosci.*** 17: 1552-1559.
29. An, X., Gong, H., Yin, J., Wang, X., Pan, Y., Zhang, X., Lu, Y., Yang, Y., Toth, Z., Schiessl, I., Mcloughlin, N., and **Wang, W. *** (2014) Orientation-cue invariant population responses to contrast-modulated and phase-reversed contour stimuli in macaque V1 and V2. ***PLoS One*** 9: e106753.
30. Zhang, Y., Qin, W., Qian, Z., Liu, X., Wang, H., Gong, S., **Sun, Y.*,** Snutch, T., Jiang, X., and Tao, J.* (2014) Peripheral pain is enhanced by insulin-like growth factor 1 through a G protein-mediated stimulation of T-type calcium channels. ***Sci. Signal.*** 7: ra94.
31. Guo, Y., Wang, Y., Wang, Q., and **Wang, Z.*** (2014) The role of PPK26 in Drosophila larval mechanical nociception. ***Cell Rep.*** 9: 1183-1190.
32. Ma, C.*, Yao, M., Zhai, Q., Jiao, J., Yuan, X., and **Poo, M.*** (2014) SIRT1 suppresses self-renewal of adult hippocampal neural stem cells. ***Development*** 141: 4697-4709.
33. Cheng, T.*, and Qiu, Z. (2014) MeCP2: multifaceted roles in gene regulation and neural development. ***Neurosci. Bull.*** 30: 601-609. (Review)
34. Wang, J., and **Luo, Z.*** (2014) Non-apoptotic role of caspase-3 in synapse refinement. ***Neurosci. Bull.*** 30: 667-670. (Perspective)
35. Miao, Q.*, Ye, Q., and Zhang, X. (2014) Perineuronal net, CSPG receptor and their regulation of neural plasticity. ***Sheng Li Xue Bao.*** 66(4): 387-397. (Review)
36. Wang, F., Kessels, H.*, and **Hu, H.*** (2014) The mouse that roared: neural mechanisms of social hierarchy. ***Trends Neurosci.*** 37: 674-682. (Review)
37. Yu, W., Lv, Q., Zhang, C., Shen, Z., Sun, B., **Wang, Z**.* (2014) High-angular diffusion MRI in reward-based psychiatric disorders. ***Sun BM and De Salles A (Eds.) Neurosurigcal Treatments for Psychiatric Disorders*** Chapter 2, pp.21-34. Springer Netherlands.

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