

ION Publication List

(2010.01-2010.12)

1. Zhao, X., Wang, W., Tan, J., Huang, J., Zhang, X., Zhang, B., Wang, Y., YangCheng, H., Zhu, H., Sun, X., and **Huang, F.*** (2010) Expression of β -Amyloid Induced Age-Dependent Presynaptic and Axonal Changes in Drosophila. *J. Neurosci.* 30: 1512-1522.
2. Ye, C., Poo, M., Dan, Y.*, and **Zhang, X.*** (2010) Synaptic Mechanisms of Direction Selectivity in Primary Auditory Cortex. *J. Neurosci.* 30: 1861-1868.
3. Huang, C.*, Gu, S., Yu, P., Yu, F., Feng, C., Gao, N., and **Du, J.*** (2010) Deficiency of smarcal1 causes cell cycle arrest and developmental abnormalities in zebrafish. *Dev. Biol.* 339: 89-100.
4. Fung, C., Wong, M., and **Wu, S.*** (2010) A Moving Bump in a Continuous Manifold: A Comprehensive Study of the Tracking Dynamics of Continuous Attractor Neural Networks. *Neural Comput.* 22: 752-792.
5. Yu, P., Gu, S., Bu, J., and **Du, J.*** (2010) TRPC1 is essential for in vivo angiogenesis in zebrafish. *Circ. Res.* 106: 1221-1232.
6. He, S., Yao, J., Zhang, F., Wang, Q., Bao, L., and **Zhang, X.*** (2010) Inflammation and nerve injury induce expression of pancreatitis-associated protein-II in primary sensory neurons. *Mol. Pain* 6: 23.
7. Chen, Z., Wang, Q., and **Wang, Z.*** (2010) The Amiloride-Sensitive Epithelial Na⁺ Channel PPK28 Is Essential for Drosophila Gustatory Water Reception. *J. Neurosci.* 30: 6247-6252.
8. Li, N., Zhao, C., Wang, Y., and **Yuan, X.*** (2010) The Transcription Factor Cux1 Regulates Dendritic Morphology of Cortical Pyramidal Neurons. *PLoS One* 5: e10596.
9. Pan, X., Gong, N., Zhao, J., Yu, Z., Gu, F., Chen, J., Sun, X., Zhao, L., Yu, M., Xu, Z., Dong, W., Qin, Y., Fei, G., Zhong, C.*, and **Xu, T.*** (2010) Powerful beneficial effects of benfotiamine on cognitive impairment and beta-amyloid deposition in amyloid precursor protein/presenilin-1 transgenic mice. *Brain* 133: 1342-1351.
10. Tan, Z., Peng, Y., Song, H., Zheng, J., and **Yu, X.*** (2010) N-cadherin-dependent neuron–neuron interaction is required for the maintenance of activity-induced dendrite growth. *Proc. Natl. Acad. Sci. USA.* 107: 9873-9878.
11. Hu, A., Zhang W., and **Wang, Z.*** (2010) Functional feedback from mushroom bodies to antennal lobes in the Drosophila olfactory pathway. *Proc. Natl. Acad. Sci. USA.* 107: 10262-10267.
12. Huang, T., Liu, Y., Huang, M., Zhao, X., and **Cheng, L.*** (2010) Wnt1-cre-mediated

- conditional loss of Dicer results in malformation of the midbrain and cerebellum and failure of neural crest and dopaminergic differentiation in mice. *J. Mol. Cell Biol.* 2: 152-163.
13. He, S., Ma, J., Liu, N., and **Yu, X.*** (2010) Early enriched environment promotes neonatal GABAergic neurotransmission and accelerates synapse maturation. *J. Neurosci.* 30: 7910-7916.
 14. Wu, K., Zhou, X., and **Luo, Z.*** (2010) Geranylgeranyltransferase I is essential for dendritic development of cerebellar Purkinje cells. *Mol. Brain* 3: 18.
 15. Zhang, R., Wei, H., Xia, Y., and **Du, J.*** (2010) Development of light response and GABAergic excitation-to-inhibition switch in zebrafish retinal ganglion cells. *J. Physiol.* 588: 2557-2569.
 16. Wang, H., Zhao, B., Zhong, Y., Li, K., Li, Z., Wang, Q., Lu, Y., Zhang, Z., He, S., Zheng, H., Wu, S., Hökfelt, T.*, Bao, L.*, and **Zhang, X.*** (2010) Coexpression of δ - and μ -opioid receptors in nociceptive sensory neurons. *Proc. Natl. Acad. Sci. USA.* 107: 13117-13122.
 17. Ding, X., He, Z., Zhou, K., Cheng, J., Yao, H., Lu, D., Cai, R., Jin, Y., Dong, B., Xu, Y., and **Wang, Y.*** (2010) Essential Role of TRPC6 Channels in G2/M Phase Transition and Development of Human Glioma. *J. Natl. Cancer Inst.* 102: 1052-1068.
 18. Xue, X., and **Yuan, X.*** (2010) Nestin is essential for mitogen-stimulated proliferation of neural progenitor cells. *Mol. Cell Neurosci.* 45: 26-36.
 19. He, M., Zhang, Z., Guan, C., Xia, D., and **Yuan, X.*** (2010) Leading tip drives soma translocation via forward F-Actin flow during neuronal migration. *J. Neurosci.* 30: 10885-10898.
 20. Zhang, F., Liu, X., Gong, L., Yao, J., Li, K., Li, Z., Lin, L., Lu, Y., Xiao, H., Bao, L., Zhang, X., and **Zhang, X.*** (2010) Inhibition of inflammatory pain by activating B-Type natriuretic peptide signal pathway in nociceptive sensory neurons. *J. Neurosci.* 30: 10927-10938.
 21. Wang, J., Fu, X., Lei, W., Wang, T., Sheng, A., and **Luo, Z.*** (2010) Nuclear Factor κ B Controls Acetylcholine Receptor Clustering at the Neuromuscular Junction. *J. Neurosci.* 30: 11104-11113.
 22. Liang, B., Duan, B., Zhou, X., Gong, J., and **Luo, Z.*** (2010) Calpain activation promotes bace1 expression, APP processing, and amyloid plaque formation in a transgenic mouse model of Alzheimer disease. *J. Biol. Chem.* 285: 27737-27744.
 23. Chen, Q., Zhu, Y., Yu, J., Miao, S., Zheng, J., Xu, L., Zhou, Y., Li, D., Zhang, C., Tao, J., and **Xiong, Z.*** (2010) CDKL5, a protein associated with rett syndrome, regulates neuronal morphogenesis via rac1 signaling. *J. Neurosci.* 30: 12777-12786.
 24. Huang, J., Zhang, W., Qiao, W., Hu, A., and **Wang, Z.*** (2010) Functional connectivity and selective odor responses of excitatory local interneurons in Drosophila antennal lobe. *Neuron*

- 67: 1021-1033.
25. Chen, D., Li, S., Kourtzi, Z., and **Wu, S.*** (2010) Behavior-constrained support vector machines for fMRI data analysis. *IEEE Trans. Neural Netw.* 21: 1680-1685.
 26. Yu, Y., Chen, Z., Li, W., Cao, H., Feng, E., Yu, F., Liu, H., Jiang, H.*, and **Xu, T.*** (2010) A nonproton ligand sensor in the Acid-sensing ion channel. *Neuron* 68: 61-72.
 27. Du, W., Huang, J., Yao, H., Zhou, K., Duan, B., and **Wang, Y.*** (2010) Inhibition of TRPC6 degradation suppresses ischemic brain damage in rats. *J. Clin. Invest.* 120: 3480-3492.
 28. Peng, Y., Zeng, S., Song, H., Li, M., Yamada, M., and **Yu, X.*** (2010) Postsynaptic spiking homeostatically induces cell-autonomous regulation of inhibitory inputs via retrograde signaling. *J. Neurosci.* 30: 16220-16231.
 29. Li, S., Yin, M., Liu, S., Chen, Y., Yin, Y., Liu, T., and **Zhou, J.*** (2010) Expression of ventral diencephalon-enriched genes in zebrafish. *Dev. Dyn.* 239: 3368-3379.
 30. Li, W., Yu, Y., Zhang, Z., Cao, H., and **Xu, T.*** (2010) ASIC3 channels integrate agmatine and multiple inflammatory signals through the nonproton ligand sensing domain. *Mol. Pain* 6: 88.

 31. **Zhang, X.***, Bao, L.*, and Ma, G. (2010) Sorting of neuropeptides and neuropeptide receptors into secretory pathways. *Prog. Neurobiol.* 90: 276-283. (Review)
 32. Ding, X., He, Z., Shi, Y., Wang, Q., and **Wang, Y.*** (2010) Targeting TRPC6 channels in oesophageal carcinoma growth. *Expert Opin Ther Targets* 14: 513-527. (Review)
 33. **Xu, T.***, and Gong, N. (2010) Glycine and glycine receptor signaling in hippocampal neurons: diversity, function and regulation. *Prog. Neurobiol.* 91: 349-361. (Review)
 34. **Poo, M.*** (2010) Neuroscience in China 2000-2009: Introduction. *Sci China Life Sci.* 53: 301-303. (Review)
 35. **Yuan, X.*** (2010) Axon guidance and neuronal migration research in China. *Sci China Life Sci.* 53: 304-314. (Review)
 36. **Luo, Z.*** (2010) Synapse formation and remodeling. *Sci China Life Sci.* 53: 315-321. (Review)
 37. **Zhang, X.*** and Poo, M. (2010) Progress in neural plasticity. *Sci China Life Sci.* 53: 322-329. (Review)
 38. **Duan, S.*** (2010) Progress in glial cell studies in some laboratories in China. *Sci China Life Sci.* 53: 330-337. (Review)
 39. **Jiao, J.*** (2010) Embryonic and adult neural stem cell research in China. *Sci China Life Sci.* 53: 338-341. (Review)
 40. **Wang, Y.*** and **Xu, T.*** (2010) Ion channels in neuronal survival. *Sci China Life Sci.* 53:

- 342-347. (Review)
41. **Zhou, J.*** (2010) Recent progress in neurodegenerative disorder research in China. *Sci China Life Sci.* 53: 348-355. (Review)
 42. **Zhang, X.*** (2010) Pain research in China. *Sci China Life Sci.* 53: 356-362. (Review)
 43. **Yao, H.***, **Lu, H.***, and **Wang, W.*** (2010) Visual neuroscience research in China. *Sci China Life Sci.* 53: 363-373. (Review)
 44. **Guo, A.***, Zhang, K., Peng, Y., and Xi, W. (2010) Research progress on Drosophila visual cognition in China. *Sci China Life Sci.* 53: 374-384. (Review)
 45. **Wu, S.***, and Liang, P. (2010) Computational neuroscience in China. *Sci China Life Sci.* 53: 385-397. (Review)
 46. Wang, J., Lu, R., and **Wang, Y.*** (2010) Regulation of β cleavage of amyloid precursor protein. *Neurosci. Bull.* 26: 417-427. (Review)
 47. **Qiu, Z.***, and Cheng, J. (2010) The role of calcium-dependent gene expression in autism spectrum disorders: lessons from MeCP2, Ube3a and beyond. *Neurosignals* 18: 72-81. (Review)

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