

# ION Publication List

(2012.01-2012.12)

1. Hou, Y., Zou, Q., Ge, R., Shen, F.\*, and **Wang, Y.\*** (2012) The critical role of CD133<sup>+</sup>CD44<sup>+/high</sup> tumor cells in hematogenous metastasis of liver cancers. *Cell Res.* 22: 259-272.
2. **Qiu, Z.**, Sylwestrak, E., Lieberman, D., Zhang, Y., Liu, X., and Ghosh, A.\* (2012) The Rett syndrome protein MeCP2 regulates synaptic scaling. *J. Neurosci.* 32: 989-994.
3. Guo, S., Tan, G., Li, S., Cheng, X., Zhou, Y., Jia, Y., Xiong, H., Tao, J., and **Xiong, Z.\*** (2012) Serum inducible kinase is a positive regulator of cortical dendrite development and is required for BDNF-promoted dendritic arborization. *Cell Res.* 22: 387-398.
4. Tan, G., Liu, Y., Hu, X., Yin, D., Mei, L.\*, and **Xiong, Z.\*** (2012) Neuregulin 1 represses limbic epileptogenesis through ErbB4 in parvalbumin-expressing interneurons. *Nat. Neurosci.* 15: 258-266.
5. Liu, N., He, S., and **Yu, X.\*** (2012) Early natural stimulation through environmental enrichment accelerates neuronal development in the mouse dentate gyrus. *PLoS One* 7: e30803.
6. Xu, S., Jiang, W., **Poo, M.\***, and Dan, Y. (2012) Activity recall in a visual cortical ensemble. *Nat. Neurosci.* 15: 449-455.
7. Liu, X., Zhang, F., Liu, H., Li, K., Lu, Y., Wu, Q., Li, J., Wang, B., Wang, Q., Lin, L., Zhong, Y., Xiao, H., Bao, L., and **Zhang, X.\*** (2012) Activin C expressed in nociceptive afferent neurons is required for suppressing inflammatory pain. *Brain* 135: 391-403.
8. Guan, S., Liu, Y., Xia, R., and **Zhang, M.\*** (2012) Covert attention regulates saccadic reaction time by routing between different visual-oculomotor pathways. *J. Neurophysiol.* 107: 1748-1755.
9. Hu, J., Huang, T., Li, T., Guo, Z., and **Cheng, L.\*** (2012) c-Maf is required for the development of dorsal horn laminae III/IV neurons and mechanoreceptive DRG axon projections. *J. Neurosci.* 32: 5362-5373.
10. Zheng, W., Geng, A., Li, P., Wang, Y., and **Yuan, X.\*** (2012) Robo4 regulates the radial migration of newborn neurons in developing neocortex. *Cereb. Cortex.* 22: 2587-2601.
11. Liu, X., Somel, M., Tang, L., Yan, Z., Jiang, X., Guo, S., Yuan, Y., Oleksiak, A., Zhang, Y., Li, N., Hu, Y., Chen, W., **Qiu, Z.\***, Pääbo, S.\*, and Khaitovich, P.\* (2012) Extension of cortical synaptic development distinguishes humans from chimpanzees and macaques. *Genome Res.* 22: 611-622.

12. Lei, W., Xing, S., Deng, C., Ju, X., Jiang, X., and **Luo, Z.\*** (2012) Laminin/ $\beta$ 1 integrin signal triggers axon formation by promoting microtubule assembly and stabilization. *Cell Res.* 22: 954-972.
13. Dou, Y., Wu, H., Li, H., Qin, S., Wang, Y., Li, J., Lou, H., Chen, Z., Li, X., Luo, Q., and Duan, S.\* (2012) Microglial migration mediated by ATP-induced ATP release from lysosomes. *Cell Res.* 22: 1022-1033.
14. Yang, Y., Yu, Y., Cheng, J., Liu, Y., Liu, D., Wang, J., Zhu, M., Wang, R.\*, and Xu, T.\* (2012) Highly conserved salt bridge stabilizes rigid signal patch at extracellular loop critical for surface expression of acid-sensing ion channels. *J. Biol. Chem.* 287: 14443-14455.
15. Duan, B., Liu, D., Huang, Y., Zeng, W., Wang, X., Yu, W., Zhu, M., Chen, Z., and Xu, T.\* (2012) PI3-kinase/Akt pathway-regulated membrane insertion of acid-sensing ion channel 1a underlies BDNF-induced pain hypersensitivity. *J. Neurosci.* 32: 6351-6363.
16. Jiang, M., Zhu, J., Liu, Y., Yang, M., Tian, C., Jiang, S., Wang, Y., Guo, H., Wang, K.\*, and **Shu, Y.\*** (2012) Enhancement of asynchronous release from fast-spiking interneuron in human and rat epileptic neocortex. *PLoS Biol.* 10: e1001324.
17. Pan, Y., Chen, M., Yin, J., An, X., Zhang, X., Lu, Y., Gong, H., Li, W., and **Wang, W.\*** (2012) Equivalent representation of real and illusory contours in macaque V4. *J. Neurosci.* 32: 6760-6770.
18. Zhou, Y., Liu, Y., Zhang, W., and **Zhang, M.\*** (2012) Asymmetric influence of egocentric representation onto allocentric perception. *J. Neurosci.* 32: 8354-8360.
19. Guo, Z., Zhao, C., Huang, M., Huang, T., Fan, M., Xie, Z., Chen, Y., Zhao, X., Xia, G., Geng, J., and **Cheng, L.\*** (2012) *Tlx1/3* and *Ptfla* control the expression of distinct sets of transmitter and peptide receptor genes in the developing dorsal spinal cord. *J. Neurosci.* 32: 8509-8520.
20. Li, Y., Huang, W., Huang, S., **Du, J.\***, and Huang, C.\* (2012) Screening of anti-cancer agent using zebrafish: Comparison with the MTT assay. *Biochem. Biophys. Res. Commun.* 422: 85-90.
21. Wu, Q., Yang, L., Li, S., Wang, Q., Yuan, X., Gao, X., Bao, L., and **Zhang, X.\*** (2012) Fibroblast growth factor 13 is a microtubule-stabilizing protein regulating neuronal polarization and migration. *Cell* 149: 1549-1564.
22. He, Z., Jia, C., Feng, S., Zhou, K., Tai, Y., Bai, X., and **Wang, Y.\*** (2012) TRPC5 channel is the mediator of neurotrophin-3 in regulating dendritic growth via CaMKII $\alpha$  in rat hippocampal neurons. *J. Neurosci.* 32: 9383-9395.
23. Chen, B., Liu, H., Ren, J., and **Guo, A.\*** (2012) Mutation of *Drosophila* dopamine receptor DopR leads to male-male courtship behavior. *Biochem Biophys Res Commun.* 423:

557-563.

24. Zheng, L., and **Yao H.\*** (2012) Stimulus-entrained oscillatory activity propagates as waves from area 18 to 17 in cat visual cortex. *PLoS One* 7: e41960.
25. Zhang, W., and Wu, S.\* (2012) Neural information processing with feedback modulations. *Neural Comput.* 24: 1695-1721.
26. Wei, H., Yao, Y., Zhang, R., Zhao, X., and **Du, J.\*** (2012) Activity-induced long-term potentiation of excitatory synapses in developing zebrafish retina in vivo. *Neuron* 75: 479-489.
27. Chen, Q., Jiang, L., Li, C., Hu, D., Bu, J., Cai, D., and **Du, J.\*** (2012) Haemodynamics-driven developmental pruning of brain vasculature in zebrafish. *PLoS Biol.* 10: e1001374.
28. Mu, Y., Li, X., Zhang, B., and **Du, J.\*** (2012) Visual input modulates audiomotor function via hypothalamic dopaminergic neurons through a cooperative mechanism. *Neuron* 75: 688-699.
29. Ren, Q., Li, H., Wu, Y., Ren, J., and **Guo, A.\*** (2012) A GABAergic inhibitory neural circuit regulates visual reversal learning in Drosophila. *J. Neurosci.* 32: 11524-11538.
30. He, W.\*, and **Wu, S.\*** (2012) A kernel-based perceptron with dynamic memory. *Neural Netw.* 25: 106-113.
31. An, X., Gong, H., Qian, L., Wang, X., Pan, Y., Zhang, X., Yang, Y., **Wang, W.\*** (2012) Distinct functional organizations for processing different motion signals in V1, V2, and V4 of macaque. *J. Neurosci.* 32: 13363-13379.
32. Yao, M., Chen, G., Zhao, P., Lu, M., Jian, J., Liu, M., and Yuan, X.\* (2012) Transcriptome analysis of microRNAs in developing cerebral cortex of rat. *BMC Genomics* 13: 232.
33. Wu, Y., Ren, Q., Li, H., and **Guo, A.\*** (2012) The GABAergic anterior paired lateral neurons facilitate olfactory reversal learning in Drosophila. *Learn. Mem.* 19: 478-486.
34. Xu, X.\*, Xu, Q., Zhang, Y., Zhang, X., Cheng, T., Wu, B., Ding, Y., Lu, P., Zheng, J., Zhang, M., Qiu, Z., and **Yu, X.\*** (2012) A case report of Chinese brothers with inherited MECP2-containing duplication: autism and intellectual disability, but not seizures or respiratory infections. *BMC Med. Genet.* 13: 75.
35. Li, Y., Du, X., Liu, C., Wen, Z., and **Du, J.\*** (2012) Reciprocal regulation between resting microglial dynamics and neuronal activity in vivo. *Dev. Cell* 23: 1189-1202.
36. Zhang, Q., Wen, Y., Zhang, D., She, L., Wu, J., Dan, Y., and **Poo, M.\*** (2012) Priming with real motion biases visual cortical response to bistable apparent motion. *Proc. Natl. Acad. Sci. USA.* 109: 20691-20696.
37. Wang, D., She, L., Sui, Y., Yuan, X., Wen, Y., and **Poo, M.\*** (2012) Forward transport of proteins in the plasma membrane of migrating cerebellar granule cells. *Proc. Natl. Acad. Sci.*

**USA.** 109: E3558-E3567.

38. Li, H., Huang, J., Du, W., Jia, C., Yao, H., and **Wang, Y.\*** (2012) TRPC6 inhibited NMDA receptor activities and protected neurons from ischemic excitotoxicity. *J. Neurochem.* 123: 1010-1018.
39. Ren, J., Sun, J., Zhang, Y., Liu, T., Ren, Q., Li, Y.\*, and **Guo, A.\*** (2012) Down-regulation of decapping protein 2 mediates chronic nicotine exposure-induced locomotor hyperactivity in *Drosophila*. *PLoS One* 7: e52521.
40. **Zhang, X.\***, and Bao, L. (2012) Interaction and regulatory functions of  $\mu$ - and  $\delta$ -opioid receptors in nociceptive afferent neurons. *Neurosci. Bull.* 28: 121-130. (Review)
41. Hu, W., and **Shu, Y.\*** (2012) Axonal bleb recording. *Neurosci. Bull.* 28: 342-350. (Review)
42. **Zhang, X.\***, Bao, L., Yang, L., Wu, Q., and Li, S. (2012) Roles of intracellular fibroblast growth factors in neural development and functions. *Sci China Life Sci.* 55: 1038-1044. (Review)
43. Ding, X., He, H., Lu, Y.\*, and **Wang, Y.\*** (2012) Ionic channels in the therapy of malignant glioma. *Novel Therapeutic Concepts in Targeting Glioma ISBN 978-953-51-0491-9, edited by Faris Farassati.* Chapter 13: 265-296.

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