

Featured Publications

(2009.01-2009.12)

1. Peng, Y., He, S., Marie, H., Zeng, S., Ma, J., Tan, Z., Lee, S., Malenka, R.*, and **Yu, X.*** (2009) Coordinated changes in dendritic arborization and synaptic strength during neural circuit development. *Neuron* 61: 71-84.
2. Li, S., Zhang, C., Takemori, H., Zhou, Y.*, and **Xiong, Z.*** (2009) TORC1 regulates activity-dependent CREB-Target gene transcription and dendritic growth of developing cortical neurons. *J. Neurosci.* 29: 2334-2343.
3. Yin, M., Liu, S., Yin, Y., Li, S., Wu, X., Ang, S., Ding, Y., and **Zhou, J.*** (2009) Ventral mesencephalon-enriched genes that regulate the development of dopaminergic neurons in vivo. *J. Neurosci.* 29: 5170-5182.
4. Song, A., Wang, D., Chen, G., Li, Y., Luo, J., **Duan, S.***, and **Poo, M.*** (2009) A selective filter for cytoplasmic transport at the axon initial segment. *Cell* 136: 1148-1160.
5. Gao, L., Meng, X., Ye, C., Zhang, H., Liu, C., Dan, Y., Poo, M., He, J.*, and **Zhang, X.*** (2009) Entrainment of slow oscillations of auditory thalamic neurons by repetitive sound stimuli. *J. Neurosci.* 29: 6013-6021.
6. Zhang, X., Zhou, Z., Wang, D., Li, A., Yin, Y., Gu, X., Ding, F., Zhen, X.*, and **Zhou, J.*** (2009) Activation of phosphatidylinositol-linked D1-like receptor modulates FGF-2 expression in astrocytes via IP3-dependent Ca²⁺ signaling. *J. Neurosci.* 29: 7766-7775.
7. Yang, H., Yu, Y., Li, W., Yu, F., Cao, H., **Xu, T.***, and Jiang, H.* (2009) Inherent dynamics of the acid-sensing ion channel 1 correlates with the gating mechanism. *PLoS Biol.* 7: e1000151.
8. Tong, X., Li, X., Zhou, B., Shen, W., Zhang, X., Xu, T., and **Duan, S.*** (2009) Ca²⁺ signaling evoked by activation of Na⁺ channels and Na⁺/Ca²⁺ exchangers is required for GABA-induced NG2 cell migration. *J. Cell Biol.* 186: 113-128.
9. Hu, W., Tian, C., Li, T., Yang, M., Hou, H., and **Shu, Y.*** (2009) Distinct contributions of Nav1.6 and Nav1.2 in action potential initiation and backpropagation. *Nat. Neurosci.* 12: 996-1002.
10. Tan, Z., and **Yao, H.*** (2009) The Spatiotemporal Frequency Tuning of LGN Receptive Field Facilitates Neural Discrimination of Natural Stimuli. *J. Neurosci.* 29: 11409-11416.
11. Zhu, X., Liu, Y., Yin, Y., Shao, A., Zhang, B., Kim, S., and **Zhou, J.*** (2009) MSC p43 required for axonal development in motor neurons. *Proc. Natl. Acad. Sci. USA.* 106: 15944-15949.

12. Zhang, S., Xu, M., Miao, Q., **Poo, M.***, and **Zhang, X.*** (2009) Endocannabinoid-dependent homeostatic regulation of inhibitory synapses by miniature excitatory synaptic activities. *J. Neurosci.* 29: 13222-13231.
13. Zhao, C., Li, K., Li, J., Zheng, W., Liang, X., Geng, A., Li, N., and **Yuan, X.*** (2009) PKC δ regulates cortical radial migration by stabilizing the Cdk5 activator p35. *Proc. Natl. Acad. Sci. USA.* 106: 21353-21358.
14. Gong, N., Li, Y., Cai, G., Niu, R., Fang, Q., Wu, K., Chen, Z., Lin, L., Xu, L., Fei, J., and **Xu, T.*** (2009) GABA Transporter-1 Activity Modulates Hippocampal Theta Oscillation and Theta Burst Stimulation-Induced Long-Term Potentiation. *J. Neurosci.* 29: 15836-15845.
15. Hao, J., Wang, X., Dan, Y., **Poo, M.***, and **Zhang, X.*** (2009) An arithmetic rule for spatial summation of excitatory and inhibitory inputs in pyramidal neurons. *Proc. Natl. Acad. Sci. USA.* 106: 21906-21911.

16. **Xu, T.***, and Duan, B. (2009) Calcium-permeable acid-sensing ion channel in nociceptive plasticity: a new target for pain control. *Prog. Neurobiol.* 87: 171-180. (Review)

*** Corresponding Authors**