

Curriculum Vitae

ZANG Yu-Feng (臧玉峰) (ORCID: 0000-0003-1833-8010), MD, professor, deputy dean of the Institutes of Psychological Sciences, and deputy director of Center for Cognition and Brain Disorders, Hangzhou Normal University. My research interests include resting-state fMRI computation and application to cognition and brain disorders. Together with my colleagues, we developed two metrics, amplitude of low frequency fluctuation (ALFF) (Zang et al., 2007) and regional homogeneity (ReHo) (Zang et al., 2004) to measure the local activity of resting-state fMRI. We developed REST (Song et al., 2011) and DPARSF (Yan & Zang 2010) tools for resting-state fMRI data analysis. We co-authored more than 130 papers in English. These papers were cited 19,851 times (h index = 64, Google Scholar). I was listed as Most Cited Chinese Researchers by Elsevier for 4 years (2014 – 2017, in Neuroscience) and Highly Cited Researchers by Clarivate Analytics in 2017 (Neuroscience and Behavior). The current research interests of Dr. Zang include resting-state fMRI computation, fMRI-guided TMS, and ADHD. (updated Aug 21, 2018)

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Research direction: The methodology of resting-state fMRI and its application to cognition and brain disorders

Personal resume

Learning experience:

Dates	Institution	Major & Degree
Aug 1998-Jul 2001	Institute of Mental Health, Peking University	Psychiatry, Doctor (Graduated in 2001. Got degree in 2002)
Aug 1988-Aug 1991	Tianjin Medical University	Neurosurgery, Master
Sep 1979-Aug 1984	Hebei Medical College	Medicine, Bachelor

Working experience :

Dates	Institution	Position
Feb 2011- now	Center for Cognition and Brain Disorders, Hangzhou Normal University	Professor, Deputy Director
Aug 2005-Feb 2011	State Key Lab of Cognitive Neuroscience and Learning, Beijing Normal University	Professor
Jul 2004-Aug 2005	National Lab of Pattern Recognition, Institute of Automation Chinese Academy of Sciences	Associate Professor
Jul 2002-July 2004	National Lab of Pattern Recognition, Institute of Automation Chinese Academy of Sciences	Postdoctoral Fellow
Jul 2001-July 2002	Institute of Psychology, Chinese Academy of Sciences	Visiting Scholar
Jan 1995-Aug 1998	Department of Neurosurgery, Shijiazhuang Brain Hospital	Director, Associate Professor
Sep 1991-Dec 1994	Department of Neurosurgery, 2 nd Hospital of Hebei Medical College	Physician-in-charge

Ongoing research projects as PI:

1. fMRI study and application of a new scale for orientation processing and automatic memory consolidation in Alzheimer's disease, NSFC, International collaborative project, 201610-201909, RMB 1,660,000
2. fMRI study on low frequency fluctuation of brain activity and sustained attention (31471084), NSFC, general program, 201501-201812, ZANG Yu-Feng, RMB 900,000
3. Amplitude of low frequency fluctuation of resting-state fMRI: its physiological mechanisms and application to accurate localization of abnormal activity (81520108016), NSFC, International collaborative project, 201601-202012, RMB 2,350,000

Publications

- Wang J, Zhang JR, **Zang YF**, Wu T. Consistent decreased activity in the putamen in Parkinson's disease: a meta-analysis and an independent validation of resting-state fMRI. *Gigascience*. 2018 Jun 1;7(6). doi: 10.1093/gigascience/giy071.
- Wang DJJ, Jann K, Fan C, Qiao Y, **Zang YF**, Lu H, Yang Y. Neurophysiological Basis of Multi-Scale Entropy of Brain Complexity and Its Relationship With Functional Connectivity. *Front Neurosci*. 2018 May 29;12:352. doi: 10.3389/fnins.2018.00352. eCollection 2018. Erratum in: *Front Neurosci*. 2018 Jul 30;12:539.
- Yuan LX, Wang JB, Zhao N, Li YY, Ma Y, Liu DQ, He HJ, Zhong JH, **Zang YF**. Intra- and Inter-scanner Reliability of Scaled Subprofile Model of Principal Component Analysis on ALFF in Resting-State fMRI Under Eyes Open and Closed Conditions. *Front Neurosci*. 2018 May 25;12:311. doi: 10.3389/fnins.2018.00311. eCollection 2018.
- Zhou Z, Wang JB, **Zang YF**, Pan G. PAIR Comparison between Two Within-Group Conditions of Resting-State fMRI Improves Classification Accuracy. *Front Neurosci*. 2018 Jan 9;11:740. doi: 10.3389/fnins.2017.00740. eCollection 2017.
- Huang H, Lu J, Wu J, Ding Z, Chen S, Duan L, Cui J, Chen F, Kang D, Qi L, Qiu W, Lee SW, Qiu S, Shen D, **Zang YF**, Zhang H. Tumor Tissue Detection using Blood-Oxygen-Level-Dependent Functional MRI based on Independent Component Analysis. *Sci Rep*. 2018 Jan 19;8(1):1223. doi: 10.1038/s41598-017-18453-0.
- Xue SW, Guo Y, Peng W, Zhang J, Chang D, **Zang YF**, Wang Z. Increased Low-Frequency Resting-State Brain Activity by High-Frequency Repetitive TMS on the Left Dorsolateral Prefrontal Cortex. *Front Psychol*. 2017 Dec 22;8:2266. doi: 10.3389/fpsyg.2017.02266. eCollection 2017.
- Zhao QH, Li H, Yu XY, Huang F, Wang YF, Liu L, Cao QJ, Qian QJ, **Zang YF**, Sun L. Abnormal Resting-State Functional Connectivity of Insular Subregions and Disrupted Correlation with Working Memory in Adults with Attention Deficit/Hyperactivity Disorder. *FRONTIERS IN PSYCHIATRY*, OCT 11 2017, 8: 200.
- Liu ZZ, Qu HJ, Tian ZL, Han MJ, Fan Y, Ge LZ, **Zang YF**, Zhang H. Reproducibility of frequency-dependent low frequency fluctuations in reaction time over time and across tasks. *PLoS ONE*, Sep 14 2017, 12(9): e0184476.
- Li D, Huang PY, **Zang YF**, Lou YT, Cen ZD, Gu QQ, Xuan M, Xie F, Ouyang ZY, Wang B, Zhang M, Luo W. Abnormal Baseline Brain Activity in Parkinson's Disease With and Without REM Sleep Behavior Disorder: A Resting-State Functional MRI Study. *JOURNAL OF MAGNETIC RESONANCE IMAGING*, SEP 2017, 46(3): 697-703.
- Ge Q, Peng W, Zhang J, Weng XC, Zhang Y, Liu T, **Zang YF**, Wang Z. Short-term apparent brain tissue changes are contributed by cerebral blood flow alterations. *PLOS ONE*, AUG 18 2017, 2(8): e0182182.

- Wu ZM, Bralten J, An L, Cao QJ, Cao XH, Sun L, Liu L, Yang L, Mennes M, **Zang YF**, Franke B, Hoogman M, Wang YF. Verbal working memory-related functional connectivity alterations in boys with attention-deficit/hyperactivity disorder and the effects of methylphenidate. *JOURNAL OF PSYCHOPHARMACOLOGY*, AUG 2017, 31(8): 1061-1069.
- Huang P, Tan YY, Liu DQ, Herzallah MM, Lapidow E, Wang Y, **Zang YF**, Gluck MA, Chen SD. Motor-Symptom Laterality Affects Acquisition in Parkinson's Disease: A Cognitive and Functional Magnetic Resonance Imaging Study. *MOVEMENT DISORDERS*, JUL 2017, 32(7): 1047-1055.
- Wang JB, Zheng LJ, Cao QJ, Wang YF, Sun L, **Zang YF**, Zhang H. Inconsistency in abnormal brain activity across cohorts of ADHD-200 in children with attention deficit hyperactivity disorder. *Frontiers in Neuroscience*, Jun 6 2017, 11: 320.
- Ji LX, Zhang H, Potter G, **Zang YF**, Steffens DC, Guo H, Wang LH. Multiple Neuroimaging Measures for Examining Exercise-induced Neuroplasticity in Older Adults: A Quasi-experimental Study. *FRONTIERS IN AGING NEUROSCIENCE*. APR 20 2017, 9: 102.
- Li ZJ, **Zang YF**, Ding JP, Wang Z. Assessing the mean strength and variations of the time-to-time fluctuations of resting-state brain activity. *MEDICAL & BIOLOGICAL ENGINEERING & COMPUTING*. APR 2017. 55(4): 631-640.
- Zhao HZ, Wang CH, Gao ZZ, Ma JD, Huang P, Li HF, Sang DE, Shan XW, Kou SJ, Li ZR, Ma L, Zhang ZH, Zhang JH, Ouyang H, Lian HK, **Zang YF**, Hu XZh. Effectiveness of cognitive-coping therapy and alteration of resting-state brain function in obsessive-compulsive disorder. *JOURNAL OF AFFECTIVE DISORDERS*. JAN 15 2017. 208:184-190.
- Wu ZM, Bralten J, Cao QJ, Hoogman M, Zwiers MP, An L, Sun L, Yang L, **Zang YF**, Franke B, Wang YF. White Matter Microstructural Alterations in Children with ADHD: categorical and Dimensional Perspectives. *NEUROPSYCHOPHARMACOLOGY*, JAN 2017. 42(2): 572-580.
- Jia XZ, Zhang YW, **Zang YF**, Li HJ. Frequency-dependent alterations in regional homogeneity in young carriers of the apolipoprotein E genotype. *SCIENCE BULLETIN*, 2017, 62(9): 654-655.
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- Huang H, Ding Z, Mao D, Yuan J, Zhu F, Chen S, Xu Y, Lou L, Feng X, Qi L, Qiu W, Zhang H, **Zang YF**. PreSurgMapp: a MATLAB Toolbox for Presurgical Mapping of Eloquent Functional Areas Based on Task-Related and Resting-State Functional MRI. *Neuroinformatics*. 2016 May 24. [Epub ahead of print]
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- Wang J, Zhang Z, Ji GJ, Xu Q, Huang Y, Wang Z, Jiao Q, Yang F, Zang YF, Liao W, Lu G. Frequency-Specific Alterations of Local Synchronization in Idiopathic Generalized Epilepsy. *Medicine (Baltimore)*. 2015 Aug;94(32):e1374.
- Kiviniemi V, Wang X, Korhonen V, Keinänen T, Tuovinen T, Autio J, LeVan P, Keilholz S, **Zang YF**, Hennig J, Nedergaard M. Ultra-fast magnetic resonance encephalography of physiological brain activity -

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- Wang J, Yang N, Liao W, Zhang H, Yan CG, **Zang YF**, Zuo XN. Dorsal anterior cingulate cortex in typically developing children: Laterality analysis. *Dev Cogn Neurosci.* 2015 Oct 8. pii: S1878-9293(15)00092-4. doi: 10.1016/j.dcn.2015.10.002. [Epub ahead of print]
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- An L, Cao QJ, Sui MQ, Sun L, Zou QH, **Zang YF**, Wang YF. Local synchronization and amplitude of the fluctuation of spontaneous brain activity in attention-deficit hyperactivity disorder: a resting-state fMRI study. *Neurosci Bull*. 2013 Oct;29(5):603-13.
- Zhou F, Gong H, Li F, Zhuang Y, **Zang Y**, Xu R, Wang Z. Altered motor network functional connectivity in amyotrophic lateral sclerosis: a resting-state functional magnetic resonance imaging study. *Neuroreport*. 2013 Aug 21;24(12):657-62.
- Tian L, Kong Y, Ren J, Varoquaux G, **Zang Y**, Smith SM. Spatial vs. Temporal Features in ICA of Resting-State fMRI - A Quantitative and Qualitative Investigation in the Context of Response Inhibition. *PLoS One*. 2013 Jun 18;8(6):e66572.
- Cao Q, Shu N, An L, Wang P, Sun L, Xia MR, Wang JH, Gong GL, **Zang YF**, Wang YF, He Y. Probabilistic diffusion tractography and graph theory analysis reveal abnormal white matter structural connectivity networks in drug-naive boys with attention deficit/hyperactivity disorder. *J Neurosci*. 2013 Jun 26;33(26):10676-87.

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