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ACADEMIC APPOINTMENTS

- 2018- now Full Professor&PI, Institute of Automation, Chinese Academy of Sciences
- 2014-2018 Associate Professor, Institute of Automation, Chinese Academy of Sciences
- 2013-2014 Assistant Professor, Institute of Automation, Chinese Academy of Sciences
- 2011-2013 Postdoctoral researcher at the National Laboratory of Pattern Recognition, Institute of Automation, Chinese Academy of Sciences.

EDUCATION & TRAINING

- 2005-2010 M.D. Neuroanatomy and Neuroimaging, School of Medicine, Shandong University. Advisor: Shuwei Liu, M.D.
- 2008-2009 Visiting student, McConnell Brain Imaging Center, Montreal Neurological Institute, McGill University Advisor: Alan C. Evans, Ph.D.
- 2000-2005 B.A. Binzhou Medical University, Shandong Province, China. Major in Clinical Medicine

RESEARCH SUPPORT

- 2021-2026 *Brain Atlas: big data analysis and modeling, Cross-species brain atlas comparison*. Science and Technology Innovation 2030—Brain Science and Brain-Inspired Intelligence Project, MOST. 8,000,000 RMB (PI)
- 2025-2029 *Multimodal Individualized Brain Atlas Construction through Fusion of AutoEncoder and Graph Neural Network and its Clinical Applicability Evaluation*. Natural Science Foundation of China. 720,000 RMB (PI)
- 2021-2024 *Cross-species comparison of the cortical association cortices of the higher primates using MRI*. Natural Science Foundation of China. 720,000 RMB (PI)
- 2020-2023 *The individual human brain atlas and its clinical applications*. the Strategic Priority Research Program of the Chinese Academy of Sciences. 1,200,000 RMD (PI)
- 2020-2021 *A cross-species comparative study of high-order cognitive functions*. Beijing Advanced Discipline Fund. 200,000RMB(PI)
- 2017-2019 *Construction of Fine-grained Functional Dynamic Atlas of Human Brain Plasticity*, Beijing Municipal Science& Technology Commission, 1,500,000 RMB (Co-PI).

- 2016-2018 *Multi-modal MRI Mapping the Aberrant Neural Circuits of Treatment-Resistant Depression (TRD) at the Fine-grained Subregional Scale*, Natural Science Foundation of China. 210,000 RMB (PI)
- 2012-2017 *The Functional Brainnetome Atlas of Human Language*, National Basic Research Program of China (973 Program). 1,690,000 RMB (Site PI)

AWARDS & FELLOWSHIPS

- CAS Program of Youth Innovation Promotion Association
- Young Chinese Anatomical Scientist Award
- Professor Li Jishuo First Prize for Outstanding Youth Paper Award
- China Society of Image and Graphics Science and Technology Award (the Second Award) (2/5)
- Beijing Science and Technology Award (First Prize in the Natural Science Awards) (3/4)

EDITORIAL AND REVIEWING ACTIVITIES

- 2022-now, Youth Editor, The Innovation
- 2022-now, Youth Editor, The Innovation Medicine
- 2024-now, Editor, Journal of Aging and Rehabilitation
- 2021-now Associate Editor, Frontiers in Human Neuroscience
- 2017-now Guest Associate Editor for Frontiers in Computational Neuroscience
- Ad Hoc Reviewer for: *Nature Communications, Biological Psychiatry, Journal of Neuroscience, The Innovation, PLoS Biology, Cerebral Cortex, Neuroimage, Human Brain Mapping, Neuroscience, PLoS ONE, Biological Psychiatry: Cognitive Neuroscience and Neuroimaging, Scientific Data, Brain Structure & Function, Neuroscience, Neuroscience Bulletin, Frontier in Human Neuroscience, Frontiers In Neuroinformatics, Frontiers In Neuroanatomy, Brain Research, Scientific Reports.*

PROFESSIONAL AFFILIATIONS

- Chinese Society for Anatomical Sciences
- Organization for Human Brain Mapping
- Society for Neuroscience
- China Computer Federation
- Chinese Medical Doctor Association

TEACHING

- **Brainnetome and its Applications**
  - School of Artificial Intelligence, University of Chinese Academy of Sciences
  - Level: Graduate Course
  - Duration: 15 hours/year
  - Time Span: 2018 - present
- **Basic Neuroscience: Neuroanatomy**
  - Sino-Danish College, University of Chinese Academy of Sciences
  - Level: Graduate Course
  - Duration: 12 hours/year

  - Time Span: 2019 - present
- **Cognitive Neuroscience**
  - School of Artificial Intelligence, University of Chinese Academy of Sciences
  - Level: Undergraduate Course
  - Duration: 36 hours/year
  - Time Span: 2023 - present

PUBLICATION COUNT

- Brain atlas, Neuroimaging and Brain evolution, Explore the human brain using neuroimaging to better understand its functions and diseases at the system level
- The total number of peer-reviewed publications:90, Number of first and corresponding authorships(including Co-first and Co-corresponding):32, Google Scholar h-index: 35, Total Citations: 7060.
- ORCID: https://orcid.org/0000-0002-4813-621X

PEER-REVIEWED ARTICLES (CORRESPONDING AUTHOR & FIRST AUTHOR)

1. Wang Y, Cheng L, Li D, Lu Y, Wang C, Wang Y, Gao C, Wang H, Vanduffel W and Hopkins WD, Sherwood CC, Jiang T, Chu C*, **Fan L***. The Chimpanzee Brainnetome Atlas reveals distinct connectivity and gene expression profiles relative to humans. **The Innovation**. 2025, DOI: https://doi.org/10.1016/j.xinn.2024.100755**. (***Corresponding author**)**

2. Li D, Wang Y, Ma L, Wang Y, Cheng L, Liu Y, Shi W, Lu Y, Wang H and Gao C, Chu C*., and **Fan L***. Topographic Axes of Wiring Space Converge to Genetic Topography in Shaping Human Cortical Layout. **Journal of Neuroscience**. 2025, e1510242024, DOI: 10.1523/JNEUROSCI.1510-24.2024. (***Corresponding author**)

3. Wang Y, Wang Y, Wang H, Ma L, Eickhoff SB, Madsen KH, Chu C*, **Fan L***. Spatio-Molecular Profiles Shape the Human Cerebellar Hierarchy Along the Sensorimotor Association Axis. **Cell Reports**. 2024, 43(2), 113770. **(*Corresponding author)**

4. Wang Y, Wang K, Madsen KH, Chu C*, **Fan L***. Protocol to detect spatio-molecular profiles underlying neuroimaging features in the human cerebellum. **STAR Protocols**.*2024,* 5 (4), 103311. **(*Corresponding author)**

5. Lu Y, Cui Y, Cao L, Dong Z, Cheng L, Wu W, Wang C, Liu X, Liu Y, Zhang B, Li D, Zhao B, Wang H, Li K, Ma L, Shi W, Li W, Ma Y, Du Z, Zhang J, Xiong H, Luo N, Liu Y, Hou X, Han J, Sun H, Cai T, Peng Q, Feng L, Wang J, Paxinos G, Yang Z*, **Fan L***, Jiang T*. Macaque brainnetome atlas: A multifaceted brain map with parcellation, connection, and histology. **Science Bulletin**. 2024, 69(14):2241-2259. **(*Corresponding authors)**

6. Gao C, Wu X, Wang Y, Li G, Ma L, Wang C, Xie S, Chu C, Madsen K.H, Hou Z*, **Fan L***. Prior-guided Individualized Thalamic Parcellation based on Local Diffusion Characteristics. **Human Brain Mapping**. *2024,* 45(4):e26646. (***Corresponding author**)

7. Gao C, Wu X, Madsen KH, Chu C, Chu C, Yang Z, **Fan L***. Individualized Brain Mapping for Navigated Neuromodulation. **Chinese Medical Journal**, 2024, 137(5):508-523. (***Corresponding authors**)

8. C.T Erichsen, Li D, **Fan L***. Decoding human brain functions: Multi-modal, multi-scale insights. **The Innovation**, 2024, 5(1), 100554. (***Corresponding author**)

9. Chu C., Li W., Shi W., Wang H., Wang J., Liu Y., Liu B., Elmenhorst D., Eickhoff SB., **Fan L*,** Jiang T***.** Co-representation of functional brain networks is shaped by cortical myeloarchitecture and reveals individual behavioral ability. **Journal of Neuroscience***, 2024, 44 (13).* **(*Corresponding author)**

10. Wang Y, Chai L, Chu C*, Li D, Gao C, Wu X, Yang Z, Zhang Y, Xu J, Nyengaard JR, Eickhoff SB, Liu B, Madsen KH, Jiang T, **Fan L***. Uncovering the genetic profiles underlying the intrinsic organization of the human cerebellum. **Molecular Psychiatry**. 2022, 27:2619-2634. **(*Corresponding author)**

11. Ma L, Zhang Y, Zhang H, Cheng L, Zhuo J, Shi W, Lu Y, Li W, Yang Z, Wang J, **Fan L***, Jiang T*. BAI-Net: Individualized Anatomical Cerebral Cartography using Graph Neural Network. **IEEE Transactions on Neural Networks and Learning Systems**. 2022, 35(6), 7446-7457, doi: 10.1109/TNNLS.2022.3213581. **(*Corresponding author)**

12. Wang T, Xu Y, Li D, Tu W, Li Y, Miao S, Li J, Wang P, Zhao F, **Fan L***, Yu S*. Network localization of transient global amnesia beyond the hippocampus. **Neurological Sciences**. 2022, 44 (2), 649-657. **(*Corresponding author)**

13. Chai L., Wang Y., Shi W., Zhang Y., Liu B., Jiang T., **Fan L***. Linked psychopathology-specific factors and individual structural brain abnormalities in schizophrenia. **Proc. SPIE 12033, Medical Imaging** 2022: Computer-Aided Diagnosis, 1203323 (4 April 2022); https://doi.org/10.1117/12.2612266 (***Corresponding author**)

14. Cheng L., Zhang Y., Li G., Wang J., Sherwood C., Gong G., **Fan L***., Jiang T*. Connectional asymmetry of the inferior parietal lobule shapes hemispheric specialization in humans, chimpanzees, and rhesus macaques. **eLife***,* 2021, 10. doi: 10.7554/eLife.67600. **(*Corresponding authors)**

15. Zhang Z., Xu J., Cheng L., Cheng C., **Fan L***. Inter and Intra individual Variations of Cortical Fine-grained Functional Boundaries Depend on the Brain States, 2020, **ICONIP, 98-109, LNCS** (**Corresponding author)**

16. He B., Cao L., Xia X., Zhang B., Zhang D., You B., **Fan L***., Jiang T*. Fine-grained Topography and Modularity of the Macaque Frontal Pole Cortex Revealed by Anatomical Connectivity Profiles. **Neuroscience Bulletin**, 2020, 36, 1454-1473. **(Corresponding author)**

17. **Fan L***. Mapping the Human Brain: What is the Next Frontier? **The Innovation,** 2021,100073. **(*Corresponding author)**

18. Li K[#]., **Fan L**[#]., Cui Y., Wei X., He Y., Yang J., Lu Y., Li W., Shi W., Cao L., Cheng L., Li A., Yu B., Jiang T. The human mediodorsal thalamus: Organization, connectivity, and function. **NeuroImage**, 2022, 118876. **([#]Co-first Author)**

19. Wu D[#]., **Fan L**[#]., Song, M., Wang, H., Chu, C., Yu, S., & Jiang, T. Hierarchy of connectivity-function relationship of the human cortex revealed through predicting activity across functional domains. **Cerebral Cortex**, 2020, 30(8):4607-4616 **([#]Co-first Author)**

20. Cheng C[#]., **Fan L**[#]., Xia X., Eickhoff S.B., Li H., Li H., & Jiang T. Rostro-caudal organization of the human posterior superior temporal sulcus revealed by connectivity profiles **Human Brain Mapping**, 2018, DOI: https://doi.org/10.1002/hbm.24349. **([#]Co-first Author)**

21. Xia X[#]., **Fan L**[#]., Cheng C., Eickhoff S.B., Cheng J. Li H. & Jiang T. Multimodal connectivity-based parcellation reveals a shell-core dichotomy of the human nucleus accumbens. **Human Brain Mapping**, 2017, 38 (8), 3878-3898. **([#] Co-first Author)**

22. **Fan L**., Jiang T. Mapping Underlying Maturational Changes in Human Brain, **Neuroscience bulletin**, 2017, 33, 478-480.

23. **Fan L**., Li H., Zhuo J., Zhang Y., Wang J., Chen L., Yang Z., Chu C., Xie S., Laird A.R., Fox P.T., Eickhoff S.B., Yu C. & Jiang T. The Human Brainnetome Atlas: A New Brain Atlas Based on Connectional Architecture. **Cerebral Cortex**, 2016, 26 (8): 3508- 3526.

24. **Fan L**., Li H., Yu S. & Jiang T. Human Brainnetome Atlas and Its Potential Applications in Brain-Inspired Computing. **Lecture Notes in Computer Science**, 2016, DOI: 10.1007/978-3-319-50862-7_1.

25. Zhuo J[#]., **Fan L**[#]., Liu Y., Zhang Y., Yu C. & Jiang T. Connectivity Profiles Reveal a Transition Subarea in the Parahippocampal Region That Integrates the Anterior Temporal–Posterior Medial Systems. **Journal of Neuroscience**, 2016, 36, 2782- 2795. **([#]Co-first Author)**

26. Yang Y[#]., **Fan L**[#]., Chu C., Zhuo J., Wang J., Fox P.T., Eickhoff S.B. & Jiang T. Identifying functional subdivisions in the human brain using meta-analytic activation modeling-based parcellation. **NeuroImage**, 2016, 124, 300-309. **([#]Co-first Author)**

27. Chu C[#]., **Fan L**[#]., Eickhoff C.R., Liu Y., Yang Y., Eickhoff S.B. & Jiang T. Co- activation Probability Estimation (CoPE): An approach for modeling functional co- activation architecture based on neuroimaging coordinates. **NeuroImage**, 2015, 117, 397- 407. **([#]Co-first Author)**

28. Wang J[#]., **Fan L**[#]., Wang Y., Xu W., Jiang T., Fox P.T., Eickhoff S.B., Yu C. & Jiang T. Determination of the posterior boundary of Wernicke's area based on multimodal connectivity profiles. **Human Brain Mapping**, 2015, 36, 1908-1924. **([#] Co-first Author)**

29. **Fan L**., Wang J., Zhang Y., Han W., Yu C., Jiang T. Connectivity-Based Parcellation of the Human Temporal Pole Using Diffusion Tensor Imaging. **Cerebral Cortex**. 2014, 24:3365-3378.

30. Liu B[#]., **Fan L.,** Cui Y., Zhang X., Hou B., Li Y., Qin W., Wang D., Yu C., Jiang T.: DISC1 Ser704Cys impacts thalamic-prefrontal connectivity. **Brain Structure and Function**. 2013,1-10. **([#]Co-first Author)**

31. Wang J[#]., **Fan L**[#]., Zhang Y., Liu Y., Jiang D., Zhang Y., Yu C., & Jiang T. Tractography-based parcellation of the human left inferior parietal lobule. **NeuroImage**, 2012, 63, 641-652.**([#]Co-first Author)**

32. **Fan L**., Tang Y., Sun B., Gong G., Chen Z.J., Lin X., Yu T., Li Z., Evans A.C., Liu S.: Sexual dimorphism and asymmetry in human cerebellum: an MRI-based morphometric study. **Brain Research**, 2010,1353, 60-73.

PREPRINT AND SUBMITTED ARTICLES

1. Wang Y., Cheng L., Li D., Lu Y., Hopkins WD., Sherwood CC., Liu C., Jiang T., Chu C., **Fan L***., Evolutionary Convergence of the Arcuate Fasciculus in Marmosets and Humans. **Science** (Under Review)(***Corresponding author**)

2. Li D., Zalesky A., Wang Y., Wang H., Ma L., Cheng L., Banaschewski T., Barker G., Bokde A., Brühl R., Desrivières S., Flor H., Garavan H., Gowland P., Grigis A., Heinz A., Lemaître H., Martinot J.-L., Martinot M.-L., Artiges E., Nees F., Papadopoulos Orfanos D., Poustka L., Smolka M., Vaidya N., Walter H., Whelan R., Schumann G., Jia T., Chu C*. **Fan L***. Mapping the coupling between tract reachability and cortical geometry of the human brain. **Nature Neuroscience** (Under Review)(***Corresponding author**)

3. Li D., Wang Y., Cheng L., Eickhoff SB., Chu C*., **Fan L***. Mapping Early Brain Maturation: Anatomical Substrates of Cortical Connectivity Shifts in Neonates. bioRxiv 2025.01.07.627373; (***Corresponding author**)

4. Zhao Q., Xu J*., Li D., Wu X., **Fan L***., Chu C*. Unifying Object Category Representations in the Human Brain via Property-Defined Object Space: A Brain-Like ANN Paradigm. (Submitted) (***Corresponding author**)

5. Jia H., Wang K., Zhang P., Zhang M., Mai Y., Chu C., Yin X., **Fan L***., and Zhang L*. (2024) Normative Growth Modeling of Cortical Thickness Identify Neuroanatomical Variability and Distinct Subtypes in Brainstem Tumor Patients. bioRxiv:2024.08. 01.606270. (***Corresponding author**)

6. Jia H., Wang K., Zhang M., Gu G., Mai Y., Wu X., Chu C., Yin X., Zhang P., **Fan L***., and Zhang L. (2024) Uncovering Individualized Cerebellar Atrophy Pattern and Behavioral Links in Children with Brainstem Tumor. bioRxiv:2024.08. 01.606261. (***Corresponding author**)

PEER-REVIEWED ARTICLES (CO-AUTHOR)

https://scholar.google.com/citations?user=wN0hOHIAAAAJ

1. Zhong G., Jin F., Ma L. Yang Y, Zhang B, Cao D, Li J, Zuo N, **Fan L**, Yang Z, Jiang T. Stimulation Effects Mapping for Optimizing Coil Placement for Transcranial Magnetic Stimulation. **Neuroinformatics**. (2025). 23,1.
2. Yang Y, Cao TQ, He SH, Wang LC, He QH, Fan LZ, Huang YZ, Zhang HR, Wang Y, Dang YY, Wang N, Chai XK, Wang D, Jiang QH, Li XL, Liu C, Wang SY. Revolutionizing treatment for disorders of consciousness: a multidisciplinary review of advancements in deep brain stimulation. **Military Medical Research**. 2024 Dec 18;11(1):81. doi: 10.1186/s40779-024-00585-w.
3. Liu, H., Qi, Z., Wang, Y. Yang Z., Zuo N., **Fan L**., Jiang T. A Novel Real-time Phase Prediction Network in EEG Rhythm. **Neuroscience Bulletin**. (2024). https://doi.org/10.1007/s12264-024-01321-z
4. Zhang Y, **Fan L**, Hao Y, Dagher A, Jiang T and Bellec P (2024) Connectome-constrained neural decoding reveals a representational hierarchy from perception to cognition to action. **Science Bulletin**. 27:S2095-9273(24)00609-1. doi: 10.1016/j.scib.2024.08.029.
5. Ding C, Li A, Xie S, Tian X, Li K, **Fan L**, Yan H, Chen J, Chen Y and Wang H (2024) Mapping Brain Synergy Dysfunction in Schizophrenia: Understanding Individual Differences and Underlying Molecular Mechanisms. **Advanced Science**:2400929.
6. Wang M, Yan H, Tian X, Yue W, Liu Y, **Fan L**, Hu K, Sun Y, Zhao Y and Lou J (2023) Neuroimaging and multiomics reveal cross-scale circuit abnormalities in schizophrenia. **Nature Mental Health**. 1:633-654.
7. Xiong H, Chu C, **Fan L**, Song M, Zhang J, Ma Y, Zheng R, Zhang J, Yang Z and Jiang T (2023) The digital twin brain: A bridge between biological and artificial intelligence. **Intelligent Computing**. 2:0055.
8. Qi Z, Yang Z, Liu H, **Fan L**, Zuo N and Jiang T (2024) Enhancing Transcranial Magnetic Stimulation Comfort: The Role of Electrical Stimulation in Pain Reduction. **Neuroscience Bulletin**:1-4.
9. Ma L, Zhong G, Yang Z, Lu X, **Fan L**, Liu H, Chu C, Xiong H and Jiang T (2023) In-vivo verified anatomically aware deep learning for real-time electric field simulation. **Journal of Neural Engineering** 20:066018.
10. Lu Y, Cui Y, Ma L, Li W, **Fan L** and Jiang T (2023) An Individualized Cortical Mapping of Macaque Brain Using Fusion Joint Embedding. 2023 IEEE 20th International Symposium on Biomedical Imaging **(ISBI**), IEEE, pp. 1-5
11. Li X, Liu Q, Chen Z, Li Y, Yang Y, Wang X, Guo X, Luo B, Zhang Y, Shi H, Zhang L, Su X, Shao M, Song M, Guo S, **Fan L**, Yue W, Li W, Lv L, Yang Y (2023) Abnormalities of regional brain activity in patients with schizophrenia: a longitudinal resting-state fMRI study. **Schizophrenia Bulletin** 49:1336-1344.
12. Li W, **Fan L**, Shi W, Lu Y, Li J, Luo N, Wang H, Chu C, Ma L, Song M, Li K, Cheng L, Cao L, Jiang T. (2022). Brainnetome atlas of preadolescent children based on anatomical connectivity profiles. **Cerebral Cortex** bhac415.
13. Shi W, **Fan L**, Wang H, Liu B, Li W, Li J, Cheng L, Chu C, Song M, Sui J, Luo N, Cui Y, Dong Z, Lu Y, Ma Y, Ma L, Li K, Chen J, Chen Y, Guo H, Li P, Lu L, Lv L, Wan P, Wang H, Wang H, Yan H, Yan J, Yang Y, Zhang H, Zhang D, Jiang T.

(2022) Two subtypes of schizophrenia identified by an individual-level atypical pattern of tensor-based morphometric measurement. **Cerebral Cortex** bhac301.

14. Zhao Y, Wang M, Hu K, Wang Q, Lou J, **Fan L,** Liu B. (2022) The development of cortical functional hierarchy is associated with the molecular organization of prenatal/postnatal periods. **Cerebral Cortex** bhac340.
15. Li, J., Cao, D., Dimakopoulos, V., Shi, W., Yu, S., **Fan, L.**, Stieglitz, L., Imbach, L., Sarnthein, J., and Jiang, T. (2022). Anterior–Posterior Hippocampal Dynamics Support Working Memory Processing. **Journal of Neuroscience** 42, 443-453.
16. Chu, C., Guan, H., Xie, S., Wang, Y., Luo, J., Zhao, G., Pan, Z., Hu, M., Men, W., Tan, S. Gao, J., Qin, S., He, Y., **Fan, L.**, Dong, Q., Tao., S. (2022). The SACT Template: A Human Brain Diffusion Tensor Template for School-age Children. **Neuroscience Bulletin**, 1-15.
17. Chen P, Yao H, Tijms BM, Wang P, Wang D, Song C, Yang H, Zhang Z, Zhao K, Qu Y, Kang X, Du K, **Fan L**, Han T, Yu C, Zhang X, Jiang T, Zhou Y, Lu J, Han Y, Liu B, Zhou B, Liu Y. Four Distinct Subtypes of Alzheimer's Disease Based on Resting-State Connectivity Biomarkers. **Biological Psychiatry**. 2022. doi: https://doi.org/10.1016/j.biopsych.2022.06.019
18. Wang M, **Fan L**, Liu B. Structural Brain Atrophy Predict Symptom Severity in Schizophrenia Based on Generalized Additive Models. 2022 IEEE 19th International Symposium on Biomedical Imaging (**ISBI)**. 2022:1-5
19. Wang, H., **Fan, L.,** Song, M., Liu, B., Wu, D., Jiang, R., Li, J., Li, A., Banaschewski, T., Bokde, A. L. W., Quinlan, E. B., Desrivieres, S., Flor, H., Grigis, A., Garavan, H., Chaarani, B., Gowland, P., Heinz, A., Ittermann, B., Martinot, J. L., Martinot, M. P., Artiges, E., Nees, F., Orfanos, D. P., Poustka, L., Millenet, S., Frohner, J. H., Smolka, M. N., Walter, H., Whelan, R., Schumann, G. and Jiang, T. (2021) Functional Connectivity Predicts Individual Development of Inhibitory Control during Adolescence. **Cerebral Cortex,** DOI: 10.1093/cercor/bhaa383
20. Friedrich, P., Forkel, S. J., Amiez, C., Balsters, J. H., Coulon, O., **Fan, L.**, Goulas, A., Hadj-Bouziane, F., Hecht, E. E., Heuer, K., Jiang, T., Latzman, R. D., Liu, X., Loh, K. K., Patil, K. R., Lopez-Persem, A., Procyk, E., Sallet, J., Toro, R., Vickery, S., Weis, S., Wilson, C. R. E., Xu, T., Zerbi, V., Eickoff, S. B., Margulies, D. S., Mars, R. B. and Thiebaut de Schotten, M. (2021). Imaging evolution of the primate brain: the next frontier? **Neuroimage** 228, 117685.
21. Zhang, H., Wang, Y., **Fan, L**., Li, F., Liu, J., Yu, S., Hou, Y., Bai, C., Li, B., Du, X., et al. (2021). Differences of Structural Plasticity between Hemispheres during Rehabilitation for Subacute Stroke. **Chinese Journal of Rehabilitation Theory and Practice** 27, 436-444.
22. He, B., Yang, Z., **Fan, L.,** Gao, B., Li, H., Ye, C., Jiang, T. (2020). MonkeyCBP: A toolbox for connectivity-based parcellation of monkey brain. **Frontiers in Neuroinformatics**, 14, 14.
23. Li, A., Zalesky, A., Yue, W., Howes, O., Yan, H., Liu, Y., **Fan, L.,** Whitaker, K. J., Xu, K., Rao, G., Li, J., Liu, S., Wang, M., Sun, Y., Song, M., Li, P., Chen, J., Chen, Y., Wang, H., Liu, W., Li, Z., Yang, Y., Guo, H., Wan, P., Lv, L., Lu, L., Yan, J., Song, Y., Wang, H., Zhang, H., Wu, H., Ning, Y., Du, Y., Cheng, Y., Xu, J., Xu, X.,

Zhang, D., Wang, X., Jiang, T. and Liu, B.: A neuroimaging biomarker for striatal dysfunction in schizophrenia. **Nature Medicine** 13, 709 (2020) DOI: 10.1038/s41591-020-0793-8

24. Tao, Q., Yang, Y., Yu, H., **Fan, L.**, Luan, S., Zhang, L., Zhao, H., Lv, L., Jiang, T., and Song, X. (2020). Anatomical Connectivity-based Strategy for Targeting Transcranial Magnetic Stimulation as Antidepressant Therapy. **Frontiers in Psychiatry**, 11, 236.
25. Xia, X., **Fan, L.,** Hou, B., Zhang, B., Zhang, D., Cheng, C., Deng, H., Dong, Y., Zhao, X., Li, H.: Fine-Grained Parcellation of the Macaque Nucleus Accumbens by High-Resolution Diffusion Tensor Tractography. **Frontiers in Neuroscience** 13, 709 (2019)
26. Xia, X., **Fan, L.,** Cheng, C., Yao, R., Deng, H., Zhao, D., Li, H., Jiang, T.: Interspecies Differences in the Connectivity of Ventral Striatal Components Between Humans and Macaques. **Frontiers in neuroscience** 13, 623 (2019)
27. Liu, S., Li, A., Liu, Y., Yan, H., Wang, M., Sun, Y., **Fan, L.,** Song, M., Xu, K., Chen, J.: Polygenic effects of schizophrenia on hippocampal grey matter volume and hippocampus–medial prefrontal cortex functional connectivity. **The British Journal of Psychiatry** 1-8 (2019)
28. Yang, Y., Liu, S., Jiang, X., Yu, H., Ding, S., Lu, Y., Li, W., Zhang, H., Liu, B., Cui, Y., **Fan, L.**, Lv, L., Jiang, T.Common and specific functional activity features in schizophrenia, major depressive disorder, and bipolar disorder. **Frontiers in psychiatry** 10, 52 (2019)
29. Cui, Y., Song, M., Lipnicki, D. M., Yang, Y., Ye, C., **Fan, L.,** Sui, J., Jiang, T & He, J.& Subdivisions of the posteromedial cortex in disorders of consciousness **Neuroimage Clin** , 20, 260-266. doi:10.1016/j.nicl.2018.07.025.(2018)
30. Genon, S., Reid, A., Li, H., **Fan, L.,** Müller, V.I., Cieslik, E.C., Hoffstaedter, F., Langner, R., Grefkes, C., Laird, A.R.: The heterogeneity of the left dorsal premotor cortex evidenced by multimodal connectivity-based parcellation and functional characterization. **Neuroimage** 170, 400-411 (2018)
31. Luo, N., Sui, J., Chen, J., Zhang, F., Tian, L., Lin, D., Song, M., Calhoun, V.D., Cui, Y., Vergara, V.M. **Fan, L.,** : A schizophrenia-related genetic-brain-cognition pathway revealed in a large Chinese population. **EBioMedicine** 37, 471-482 (2018)
32. Liu, S., Wang, H., Song, M., Lv, L., Cui, Y., Liu, Y., **Fan, L.,** Zuo, N., Xu, K., Du, Y.: Linked 4-way multimodal brain differences in schizophrenia in a large chinese han population. **Schizophrenia bulletin** 45, 436-449 (2018)
33. Jiang, R., Calhoun, V.D., Zuo, N., Lin, D., Li, J., **Fan, L.,** Qi, S., Sun, H., Fu, Z., Song, M.: Connectome-based individualized prediction of temperament trait scores. **NeuroImage** 183, 366-374 (2018)
34. Li, H., **Fan, L.,** Zhuo, J., Wang, J., Zhang, Y.,Yang, Z.& Jiang, T. ATPP: A Pipeline for Automatic Tractography-Based Brain Parcellation **Frontiers in neuroinformatics** , 11:35(2017).
35. Zhang, Y., **Fan, L.,** Caspers, S., Heim, S., Song, M., Liu, C., Mo, Y., Eickhoff, S.B., Amunts, K. & Jiang, T. Cross-cultural Consistency and Diversity in Intrinsic Functional Organization of Broca's Region **NeuroImage** , 150:177-190 (2017).

36. Zhang, W., Wang, J., **Fan, L.,** Xu, J., Li, C., Liu, Y., Fox, P.T., Eickhoff, S.B., Yu, C. & Jiang, T. Functional organization of the fusiform gyrus revealed with connectivity profiles. **Human Brain Mapping**, doi: 10.1002/hbm.23222,(2016).
37. Genon, S., Li, H., **Fan, L.,** Müller, V.I., Cieslik, E.C., Hoffstaedter, F., Reid, A.T., Langner, R., Grefkes, C. & Fox, P.T. The right dorsal premotor mosaic: organization, functions, and connectivity. **Cerebral Cortex**, doi: 10.1093/cercor/bhw065, (2016).
38. Zuo, N., Song, M., **Fan, L.,** Eickhoff, S.B., Jiang, T.: Different interaction modes for the default mode network revealed by resting state functional magnetic resonance imaging. **European journal of neuroscience** 43, 78-88 (2016)
39. Zheng, F., Yan, H., Liu, B., Yue, W., **Fan, L.,** Liao, J., Cui, Y., Lu, T., Jiang, T., Zhang, D.: ALDH2 Glu504Lys Confers Susceptibility to Schizophrenia and Impacts Hippocampal-Prefrontal Functional Connectivity. **Cerebral Cortex** (2016)
40. Cui, Y., Liu, B., Zhou, Y., **Fan, L.,** Li, J., Zhang, Y., Wu, H., Hou, B., Wang, C., Zheng, F., Qiu, C., Rao, L.L., Ning, Y., Li, S. & Jiang, T. Genetic Effects on Fine-Grained Human Cortical Regionalization. **Cerebral Cortex**, doi:10.1093/cercor/bhv176, (2015).
41. Wang, J., Yang, Y., **Fan, L.,** Xu, J., Li, C., Liu, Y., Fox, P.T., Eickhoff, S.B., Yu, C. & Jiang, T. Convergent functional architecture of the superior parietal lobule unraveled with multimodal neuroimaging approaches. **Human Brain Mapping**, 36, 238-257, (2015).
42. Li, Q., Song, M., **Fan, L.,** Liu, Y. & Jiang, T. Parcellation of the primary cerebral cortices based on local connectivity profiles. **Frontiers in Neuroanatomy**, 9, 50, (2015).
43. Xu, J., Wang, J., **Fan, L.**, Li, H., Zhang, W., Hu, Q. & Jiang, T. Tractography-based Parcellation of the Human Middle Temporal Gyrus. **Scientific Reports** ,5: 18883,(2015).
44. Zhang, Y., Caspers, S., **Fan, L**., Fan, Y., Song, M., Liu, C., Mo, Y., Roski, C., Eickhoff, S., Amunts, K. & Jiang, T. Robust brain parcellation using sparse representation on resting-state fMRI. **Brain Structure & Function** 220, 3565-3579,(2015).
45. Xie, S., Zuo, N., Shang, L., Song, M., **Fan, L.** & Jiang, T. How does B-value affect HARDI reconstruction using clinical diffusion MRI data? **PloS ONE** ,10, e0120773,(2015).
46. Zhou, Y., **Fan, L.**, Qiu, C. & Jiang, T. Prefrontal cortex and the dysconnectivity hypothesis of schizophrenia. **Neuroscience Bulletin** ,31, 207-219,(2015).
47. Wang, C., Liu, B., Long, H., **Fan, L.,** Li, J., Zhang, X., Qiu, C., Yu, C., Jiang, T.: Epistatic interaction of BDNF and COMT on the frontostriatal system. **Neuroscience** 298, 380-388 (2015)
48. Hou, B., Zhang, D., Zhao, S., Wei, M., Yang, Z., Wang, S., Wang, J., Zhang, X., Liu, B., **Fan, L.** Jiang, T.: Scalable and DiI-compatible optical clearance of the mammalian brain. Frontiers in neuroanatomy 9, 19 (2015)
49. Chen, F., Lv, X., Fang, J., Yu, S., Sui, J., **Fan, L.,** Li, T., Hong, Y., Wang, X., Wang, W.: The effect of body–mind relaxation meditation induction on major depressive

disorder: A resting-state fMRI study. **Journal of affective disorders** 183, 75-82 (2015)

50. Zhang, Y., **Fan, L.,** Zhang, Y., Wang, J., Zhu, M., Zhang, Y., Yu, C. & Jiang, T. Connectivity-based parcellation of the human posteromedial cortex. **Cerebral Cortex** 24, 719-727, (2014).
51. Liu, H., Qin, W., Li, W., **Fan, L.,** Wang, J., Jiang, T. & Yu, C. Connectivity-based parcellation of the human frontal pole with diffusion tensor imaging. **The Journal of Neuroscience** ,33, 6782-6790, (2013).
52. Li, W., Qin, W., Liu, H., **Fan, L.,** Wang, J., Jiang, T. & Yu, C. Subregions of the human superior frontal gyrus and their connections. **NeuroImage** ,78, 46-58, (2013).
53. Yin, X., Han, Y., Ge, H., Xu, W., Huang, R., Zhang, D., Xu, J., **Fan, L.,** Pang, Z., Liu, S.: Inferior frontal white matter asymmetry correlates with executive control of attention. **Human brain mapping** 34, 796-813 (2013)
54. Tang, Y., Hojatkashani, C., Dinov, I.D., Sun, B., **Fan, L.,** Lin, X., Qi, H., Hua, X., Liu, S., Toga, A.W.: The construction of a Chinese MRI brain atlas: a morphometric comparison study between Chinese and Caucasian cohorts. **NeuroImage** 51, 33-41 (2010)
55. Tang, Y., Zhao, M., Lin, T., Sun, B., **Fan, L.,** Hou, Y., Qi,T., Li, Z., Liu, S.: The thin sectional anatomy of the sellar region with MRI correlation. **Surg Radiol Anat** 32, 573-580 (2010)
56. Zhang, Y., Li, Z., Liu, S., **Fan, L.,** Dong, L., Liu, L., Liang, B.: The study on sectional anatomy and imaging of accessory hepatic veins. **Surg Radiol Anat** 31, 739-743 (2009)
57. Sun, B., Wang, D., Tang, Y., Fan, L., Lin, X., Yu, T., Qi, H., Li, Z., Liu, S.: The pineal volume: a three-dimensional volumetric study in healthy young adults using 3.0 T MR data. **Int J Dev Neurosci** 27, 655-660 (2009)
58. Sun, B., Tang, Y., **Fan, L.,** Lin, X., Li, Z, Qi, H., Liu, S. The pineal region: thin sectional anatomy with MR correlation in the coronal plane. **Surg Radiol Anat** 30, 575-582 (2008)