

Dong Liang

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RESEARCH INTERESTS

- Magnetic Resonance Imaging
- Compressed sensing
- Machine Learning
- Image reconstruction

EDUCATION

- **Ph.D. in Pattern Recognition and Intelligent System,**
Shanghai Jiaotong University, China 03/ 2006
- **M.S. in Signal and Information Processing,**
Hefei University of Technology, China 06/ 2002
- **B. S. in Electronics Engineering,**
Hefei University of Technology, China 06/1998

PROFESSIONAL POSITIONS

- **Full Professor,** 12/2014 – present
Institute of Biomedical and Health Engineering, *Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences*, China,
- **Associate Professor,** 04/2011 – 12/2014
Institute of Biomedical and Health Engineering, *Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences*, China,
- **Research Scientist and Postdoctoral Research Associate,** 11/2007 – 04/2011
Department of Electrical Engineering and Computer Science, *University of Wisconsin – Milwaukee*, USA,
- **Postdoctoral Research Associate and Postdoctoral Research Assistant,** 07/2006 – 08/2007
Department of Electrical and Electronic Engineering, *The University of Hong Kong*, Hong Kong.

PROFESSIONAL MEMBERSHIPS

- Senior Member, IEEE (Signal Processing Society, EMBS Society), 2014 – present
- Member, International Society of Magnetic Resonance in Medicine, 2009 – present

PROFESSIONAL ACTIVITIES AND SERVICE TO SCIENTIFIC COMMUNITY

- Associate Editor, IEEE Transactions on Medical Imaging, 2014-present
- Editorial Board Member, Magnetic Resonance in Medicine, 2018-present
- Editorial Board, Quantitative Imaging in Medicine and Surgery, 2014 – present
- Session chair/Co-chair, ISMRM 2017, ISMRM 2018

SELECTED PUBLICATIONS

1. Y Zhu, Y Liu, L Ying, X Peng, Y J Wang, X Liu, **D Liang**, “Bio-SCOPE: Fast bi-exponential T1 ρ mapping of the brain using signal-compensated low-rank plus sparse matrix decomposition”, *Magn Reson Med*, DOI:10.1002/mrm.28067, 2019.
2. H Wang, Z Qiu, S Su, S Jia, Y Li, X Liu, H Zheng, **D Liang**, Parameter Optimization Framework on Wave Gradients of WaveCAIPI Imaging. *Magn Reson Med*. DOI:10.1002/mrm.28034, 2019.
3. Q Liu, Q Yang, H Cheng, S Wang, M Zhang, **D Liang**, Highly undersampled magnetic resonance imaging reconstruction using autoencoding prior, *Magn Reson Med*, DOI: 10.1002/mrm.27921, 2019
4. S Jia, L Zhang, L Ren, Y Qi, J Ly, N Zhang, Y Li, X Liu, H Zheng, **D Liang**, Yiu-cho Chung, Joint intracranial and carotid vessel wall imaging in 5 minutes using compressed sensing accelerated DANTE-SPACE, *European Radiology*, DOI:10.1007/s00330-019-06366-7, 2019
5. S Wang, Z Ke, H Cheng, S Jia, L Ying, H Zheng, **D Liang**, DIMENSION: Dynamic MR Imaging with Both K-space and Spatial Prior Knowledge Obtained via Multi-Supervised Network Training, *NMR in Biomedicine*, DOI:10.1002/nbm.4131, 2019
6. C Shi, J Cheng, G Xie, S Su, Y Chang, H Chen, X Liu, H Wang, **D Liang**, Positive Contrast Susceptibility Imaging Based on First-order Primal-dual Optimization, *Magn Reson Med*, DOI: 10.1002/mrm.27791, 2019
7. C Cai, C Wang, Y Zeng, S Cai, **D Liang**, Y Wu, Z Chen, X Ding, J Zhong, “Single-shot T2 mapping using overlapping-echo detachment planar imaging and a deep convolutional neural network”, *Magn Reson Med*, 80:2201-2214, 2018.
8. J Cheng, S Jia, L Ying, Y Liu, S Wang, Y Zhu, Y Li, C Zou, X Liu, **D Liang**, Improved Parallel Image Reconstruction using Feature Refinement, *Magn Reson Med*, 80 (1):211-223, 2018.
9. X Peng, L Ying, Y Liu, J Yuan, X Liu, **D Liang**, "Accelerated exponential parameterization of T2 relaxation with model-driven low rank and sparsity priors (MORASA)", *Magn Reson Med*, 76(6):1865-1878, 2016.
10. X Peng, L Ying, Q Liu, Y Zhu, Y Liu, X Qu, X Liu, H Zheng, **D Liang**. Incorporating reference in parallel imaging and compressed sensing, *Magn Reson Med*, 73:1490-1504, 2015.
11. Y Zhu, Q Zhang, Q Liu, Y Wang, X Liu, H Zheng, **D Liang**, J Yuan, “PANDA-T1 ρ :Integrating principal component analysis and dictionary learning for fast T1 ρ mapping”, *Magn Reson Med*, 73:263-272, 2015.
12. Y Wu, Y Zhu, Q Tang, W Liu, R Dai, X Liu, Ed X. Wu, L Ying, **D Liang** “Accelerated MR diffusion tensor imaging using distributed compressed sensing” *Magn Reson Med*, 71(2), pp.763-772, 2014.
13. **D Liang**, E V. R. DiBella, R-R Chen, L Ying, “ k - t ISD: Dynamic cardiac MR imaging using compressed sensing with iterative support detection”, *Magn Reson Med*, 68, pp.41-53, 2012.
14. **D Liang**, H Wang, Y Chang, L Ying, “Sensitivity encoding reconstruction with nonlocal total variation regularization”, *Magn Reson Med*, 65, pp. 1384–1392, 2011.
15. **D Liang**, B Liu, J Wang, L Ying, “Accelerating SENSE using compressed sensing”, *Magn Reson Med*, 62, pp. 1574–1584, 2009.