The Chinese University of Hong Kong
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List of Publications Arising from SHIAE Supported Projects
(Batch 2013)

Project code		Publication
BME-p2-13 Prof Defeng WANG (Imaging/ BME) (8115042)	[1]	Liu RW, Shi L, Huang W, Xu J, Yu SC, Wang D, Generalized total variation-based MRI Rician denoising model with spatially adaptive regularization parameters. Magnetic Resonance Imaging, Elsevier Science Inc, Amsterdam, 2014 Mar 18. pii: S0730-725X(14)00086-1.
	[2]	Kong Y, Wang D, Shi L, Hui SC, Chu WC, Adaptive distance metric learning for diffusion tensor image segmentation. PLOS One, Public Library of Science, San Francisco. 2014 Mar 20;9(3):e92069. doi: 10.1371/journal.pone.0092069. eCollection 2014.
	[3]	Luo Y, Shi L, Weng J, He H, Chu WC, Chen F, Wang D, Intensity and sulci landmark combined brain atlas construction for Chinese pediatric population. Human Brain Mapping, Wiley-Blackwell, New Jersey. 2014 Jan 17. doi: 10.1002/hbm.22444. [Epub ahead of print]
	[4]	Kong Y, Shi L, Hui SCN, Wang D, Deng M, Chu WCW, Cheng JCY, Variation in Anisotropy and Diffusivity Along Medulla Oblongata and the Whole Spinal Cord in Adolescent Idiopathic Scoliosis: A Pilot Study Using Diffusion Tensor Imaging, American Journal of
	[5]	Wang D, Kong Y, Chu WC, Tam CW, Lam LC, Wang Y, Northoff G, Mok VC, Shi L. Generation of the probabilistic template of default mode network derived from resting-state fMRI. IEEE transactions on bio-medical engineering 2014;61(10):2550-2555
	[6]	Defeng Wang, Ka Ming Fung, Lin Shi, Fengping Zhu, Ying Mao. Evaluation of Surgical Outcome of Moyamoya Disease Patients after Revascularization using Atlas-based Magnetic Resonance Brain Perfusion Analysis. European Congress of Radiology. Mar. 6-10, 2014.
	[7]	Wong Kok Cheung, Luo Yishan, Shi Lin, Chen Feiyan and Wang Defeng, "Template Building For Chinese Children And Adolescent And Comparison With Western Standard Template", The Conjoint Congress of 18th Convention of Academia Eurasiana Neurochirurgica
	[8]	Yan-Jia Deng, Lin Shi , Vincent Mok, Winnie Chu, Defeng Wang, Anil T. Ahuja. Mapping the Visual Functions in Dorsal and Ventral Stream using Activation Likelihood Estimation. (Under review at Human Brain Mapping)
	[9]	Kai Liu, Lin Shi, Feiyan Chen, Mary MY Waye, Vincent CT Mok, Winnie CW Chu, Defeng Wang. Increased Local Segregation of Brain Structural Network in Chinese Children with Developmental Dyslexia (Under review at Cortex)
	[10]	Defeng Wang, Ping Liu, Lin Shi, Ang Li, Wen-Hua Huang, Jing Qin, Pheng-Ann Heng, Anil T., Ahuja. GPU-accelerated Image Registration based on the FLIRT Algorithm. (Under review at Journal of Medical Systems)
	[11]	Defeng Wang, Fengping Zhu, Ka Ming Fung, Wei Zhu, Yishan Luo, Winnie CW Chu, Vincent CT Mok, Jinsong Wu, Lin Shi, Ying Mao. Predicting Cerebral Hyperperfusion Syndrome Following Superficial Temporal Artery to Middle Cerebral Artery Bypass based on
	[12]	Defeng Wang, Yishan Luo, Junfeng Lu, Winnie CW Chu, George KC Wong, Vincent CT Mok, Lin Shi, Jinsong Wu. Non-rigid Registration of Preoperative Images with Intraoperative Images for functional data visualization in Image-Guided Neurosurgery. (Under
	[13]	Liu RW, Shi L, Yu SC, Wang D. A two-step optimization approach for nonlocal total variation-based Rician noise reduction in magnetic resonance images. Medical physics 2015;42(9):5167-5187.
	[14]	Luo YG, Liu P, Shi L, Luo Y, Yi L, Li A, Qin J, Heng PA, Wang D. Accelerating Neuroimage Registration through Parallel Computation of Similarity Metric. PloS one 2015;10(9):e0136718.
	[15]	Sun X, Shi L, Luo Y, Yang W, Li H, Liang P, Li K, Mok VC, Chu WC, Wang D. Histogram-based normalization technique on human brain magnetic resonance images from different acquisitions. Biomedical engineering online 2015;14:73.

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BME-p2-13 Prof Defeng WANG (Imaging/ BME) (8115042)	[16]	Lou W, Shi L, Wang D, Tam CW, Chu WC, Mok VC, Cheng ST, Lam LC. Decreased activity with increased background network efficiency in amnestic MCI during a visuospatial working memory task. Human brain mapping 2015;36(9):3387-3403.
	[17]	Liu K, Shi L, Chen F, Waye MM, Lim CK, Cheng PW, Luk SS, Mok VC, Chu WC, Wang D. Altered topological organization of brain structural network in Chinese children with developmental dyslexia. Neuroscience letters 2015;589:169-175.
	[18]	Luo YG, Wang D, Liu K, Weng J, Guan Y, Chan KC, Chu WC, Shi L. Brain Structure Network Analysis in Patients with Obstructive Sleep Apnea. PloS one 2015;10(9):e0139055
	[19]	Zhang Q, Shen J, Wu J, Yu X, Lou W, Fan H, Shi L, Wang D. Altered default mode network functional connectivity in schizotypal personality disorder. Schizophrenia research 2014;160(1-3):51-56.
	[20]	Luo YG, Ko JK, Shi L, Guan Y, Li L, Qin J, Heng PA, Chu WC, Wang D. Myocardial Iron Loading Assessment by Automatic Left Ventricle Segmentation with Morphological Operations and Geodesic Active Contour on T2* images. Scientific reports 2015;5:12438.
BME-p3-13 Prof BIAN Liming (MAE-CUHK) (8115043)	[1]	1. +Feng, Q.; +Zhu, M.; Wei, K.; *Bian, L. Cell-mediated degradation regulates human mesenchymal stem Cell chondrogenesis and hypertrophy in MMP-sensitive hyaluronic acid hydrogels. PLoS ONE, 2014 Jun 9;9(6) (+ Equal contribution) (IF=3.73)
	[2]	2. +Zhu, M.; +Feng, Q.; *Bian, L. Differential effect of hypoxia on human mesenchymal stem cell chondrogenesis and hypertrophy in hyaluronic acid hydrogels. Acta Biomaterialia (+ Equal contribution) 2014 Mar;10(3):1333-40.PMID: 24342044 (IF=5.09)
	[3]	3. Choi, C.K.; Xu, Y.; Wang, B.; Zhu, M.; Zhang, L.; *Bian, L. Substrate coupling strength of integrin-binding ligands modulates adhesion, spreading, and differentiation of Human mesenchymal stem cells. Nano Letters, 2015 Oct 14;15(10):6592-600.
RNE-p1-13 Prof LU Yi-Chun (MAE-CUHK) (8115044)	[1]	H. Chen, Q. Zou, Z. Liang, H. Liu, Q. Li, and Y.C. Lu, "Sulphur-Impregnated Flow Cathode to Enable High-Energy-Density Lithium Flow Batteries, " Nature Communications, Nature Publishing Group, 6, Article number: 5877, Jan. 07 2015
	[2]	Y. Wang; Z. Liang, and Y.C. Lu, "Probing the Working Mechanism of Electrocatalyst-Assisted Nonaqueous Lithium-Oxygen Evolution Reaction," 227th Electrochemical Society (ECS) Meeting, Electrochemical Society, Chicago, United States of America, May 27 2015.
	[3]	H. Chen, Q. Zou, Z. Liang, H. Liu, Q. Li, and Y.C. Lu. "A Sulfur-Impregnated Flow Cathode for High-Energy Lithium Flow Batteries," 227th Electrochemical Society (ECS) Meeting, Electrochemical Society, Chicago, United States of America, May 27 2015.
	[4]	Q. Zou, and Y.C. Lu, "Influence of Electrolyte on Sulfur Redox Reactions: Combined RRDE and in situ UV-VIS Studies" The 66th Annual Meeting of the International Society of Electrochemistry, International Society of Electrochemistry, Taipei, Taiwan, 4-9 October

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Project code		Publication
RNE-p4-13 Prof ZHANG Li (MAE-CUHK) (8115045)	J[1]	L. J. Han, Y. J. Cai, P. Y. Tang*, L. Zhang*, Microscale Flowers: Controlled Synthesis of Co3O4 Nanostructures Using Soft-Templates-assisted Self-assembly, ***Materials Today*** , Vol. 18, 410-411, 2015. **(impact factor: 14.107)**
	J[2]	L. J. Han, P. Y. Tang, L. Zhang*, Encapsulation Architecture for Energy Storage, ***Materials Today***, Vol. 18, 352-353, 2015. **(impact factor: 14.107)**
	J[3]	P. Y. Tang, L. J. Han, L. Zhang, S. Wang, W. Feng, G. Xu, L. Zhang*, Controlled Construction of Hierarchical Nanocomposites Consisting of MnO2 and PEDOT for High-performance Supercapacitor Applications, ***ChemElectroChem*** , Vol. 2, 949-957, 2015.
	J[4]	P. Y. Tang, L. J. Han, L. Zhang*, Facile Synthesis of Graphite/PEDOT/MnO2 Composites on Commercial Supercapacitor Separator Membranes as Flexible and High-Performance Supercapacitor Electrodes, ***ACS Applied Materials & Interfaces*** , Vol. 6, 10506-10515,
	J[5]	L. J. Han, P. Y. Tang, L. Zhang*, Hierarchical Co3O4@PPy@MnO2 Core−shell−shell Nanowire Arrays for Enhanced Electrochemical Energy Storage, ***Nano Energy*** , Vol. 7, 42-51, 2014. **(highlighted as the front cover), impact factor: 10.325**
	J[6]	Q. Li, J. Cheng*, B. Wang, L. Zhang*, Activated Carbon Modified by CNTs/Ni-Co Oxide as Hybrid Electrode Materials for High Performance Supercapacitors, ***IEEE Transactions on Nanotechnology*** , Vol. 13, 557-562, 2014. **Impact factor: 1.825**
	C[1]	Q. Li, J. Cheng, L. Zhang, Nickel-cobalt Oxide Coated CNTs as Additives of Activated Carbon Electrode for High-performance Supercapacitors, Proc. of The 13th IEEE International Conference on Nanotechnology (**IEEE NANO 2013**), Beijing, China, Aug. 5-8,
	P[1]	P.Y. Tang, L.J. Han, L. Zhang, "基於超級電容器隔膜的復合平面電極及其製備方法", Chinese Invention Patent (Pending), 201410101760.1, applied in Mar. 2014.