

The Chinese University of Hong Kong
Shun Hing Institute of Advanced Engineering
List of Publications Arising from SHIAE Supported Projects
(Batch 2017)

Project code	Publication
BME-p1-17 Professor AU Kwok Wai Samuel (MAE-CUHK) (8115057)	[1] J[1] X. Chu, H. W. Yip, Y. Cai, T. Y. Chung, S. Moran and K. W. S. Au, "A Compliant Robotic Instrument With Coupled Tendon Driven Articulated Wrist Control for Organ Retraction," in IEEE Robotics and Automation Letters, vol. 3, no. 4, pp. 4225-4232, Oct. 2018.
	[2] J[2] H. Lin, C. Vincent Hui, Y. Wang, A. Deguet, P. Kazanzides and K. W. S. Au, "A Reliable Gravity Compensation Control Strategy for dVRK Robotic Arms With Nonlinear Disturbance Forces," in IEEE Robotics and Automation Letters, vol. 4, no. 4, pp. 3892-3899, Oct. 2019.
BME-p2-17 Professor HO Yi- ping Megan (BME-CUHK) (8115058)	[1] C[1] C. Chang, Y. P. Ho and A. C. Wei, "Mathematical Modeling of Mitochondrial Quality Control in Mitochondrial Life Cycle and its Role in Ageing," Single-Cell Biophysics: Measurement, Modulation, and Modeling, Biophysical Society Thematic Meeting, Taipei, Taiwan, 2017.
	[2] C[2] C. Chang, Y. P. Ho and A. C. Wei, "Computational Modeling of Mitochondrial Metabolism and Dynamics in Ageing," <i>The 1st International Mitochondria Meeting for Young Scientists</i> , Kyoto, Japan, 2018.
	[3] C[3] Q. Xiao, M. H. Rahman, S. Zhao and Y. P. Ho*, "Continuous Deformation of Cell Membrane On-Chip for Effective Cell Lysis," 22th International Conference on Miniaturized Systems for Chemistry and Life Sciences (MicroTAS), Kaohsiung, Taiwan, 2018.
	[4] C[4] M. H. Rahman, S. Zhao Q. Xiao, C. Tesauro, F. Qu, T. Stevnsner, A. C. Wei, and Y. P. Ho*, "Extraction and Isolation of Mitochondria from Biological Samples via Microfluidics," 14th Annual IEEE International Conference on Nano/Micro Engineered and Molecular Systems, Bangkok, Thailand, 2019.
	[5] C[5] C. Chang, Y. Ye, Q. Xiao, Y. P. Ho, A. C. Wei, "In silico simulation of metabolic regulation on mitochondrial dynamics in ageing," 9th WACBE World Congress in Bioengineering, Taipei, Taiwan, 2019.
	[6] J[1] M. H. Rahman, Q. Xiao, S. Zhao, F. Qu, C. Chang, and A. C. Wei, Y. P. Ho*, "Demarcating the Membrane Damage for the Extraction of Functional Mitochondria," <i>Microsystems & Nanoengineering</i> , 4 (1), 39, 2018.

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Project code	Publication
MMT-p1-17 Professor MA Wing Kin (EE-CUHK) (8115059)	[1] C[1] R. Wu, C.-H. Chan, H.-T. Wai, W.-K. Ma, and X. Fu, "Hi, BCD! Hybrid Inexact Block Coordinate Descent for Hyperspectral Super-Resolution," IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), IEEE, Calgary, Canada, pp. 2426-2430, April 15-20, 2018 .
	[2] C[2] C. I. Kanatsoulis, X. Fu, N. D. Sidiropoulos, and W.-K. Ma, "Hyperspectral Super-Resolution via Coupled Tensor Factorization: Identifiability and Algorithms," IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), IEEE, Calgary, Canada, pp. 3191-3195, April 15-20, 2018 .
	[3] C[3] Q. Li, W.-K. Ma and Q. Wu, "Hyperspectral Super-Resolution: Exact Recovery in Polynomial Time," IEEE Statistical Signal Processing Workshop (SSP), IEEE, Freiburg, Germany, June 10-13, 2018 .
	[4] C[4] R. Wu, Q. Li, X. Fu and W.-K. Ma, "A Convex Low-Rank Regularization Method For Hyperspectral Super-Resolution," IEEE Statistical Signal Processing Workshop (SSP), IEEE, Freiburg, Germany, June 10-13, 2018 .
	[5] C[5] C. I. Kanatsoulis, X. Fu, N. D. Sidiropoulos, and W.-K. Ma, "Hyperspectral Super-Resolution: Combing Low Rank and Matrix Structure," to appear in IEEE International Conference on Image Processing (ICIP), IEEE, Athens, Greece, October 2018 .
	[6] C[6] H. Liu, R. Wu, and W.-K. Ma, "Is There Any Recovery Guarantee with Coupled Structured Matrix Factorization for Hyperspectral Super-Resolution?," 2019 IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing, IEEE, Guadeloupe, French West Indies, December 2020 . Online available at https://arxiv.org/pdf/1907.12728.pdf
	[7] J[1] C. I. Kanatsoulis, X. Fu, N. D. Sidiropoulos, and W.-K. Ma, "Hyperspectral Super-Resolution: A Coupled Tensor Factorization Approach," submitted to IEEE Transactions on Signal Processing, April 2018 , online available at https://arxiv.org/abs/1804.05307 .
	[8] J[2] R. Wu, W.-K. Ma, X. Fu, and Q. Li, "Hyperspectral Super-Resolution via Global-Local Low-Rank Matrix Estimation," submitted to IEEE Transactions on Geoscience and Remote Sensing, June 2019 , under first-round revision. Online available at https://arxiv.org/pdf/1907.01149.pdf
	[9] J[3] R. Wu, H.-T. Wai, and W.-K. Ma, "Hybrid Inexact BCD for Coupled Structured Matrix Factorization in Hyperspectral Super-Resolution," submitted to IEEE Transactions on Signal Processing, September 2019 . Online available at

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Project code	Publication
RNE-p4-17 Professor LIAO, Wei-Hsin/ Professor GUO Ping (MAE-CUHK) (8115060)	[1] J[1] J. Wang, P. Feng, J. Zhang, and P. Guo, "Experimental study on vibration stability in rotary ultrasonic machining of ceramic matrix composites: Cutting force variation at hole entrance," <i>Ceramics International</i> , 2018 .
	[2] J[2] P. Guo and H. Gao, "An active non-contact journal bearing with bi-directional driving capability utilizing coupled resonant mode," <i>CIRP Annals Manufacturing Technology</i> , 2018 .
	[3] C[3] S. Gao and P. Guo, "Modeling and tool trajectory monitoring of an ultrasonic elliptical vibration tool," <i>International Symposium on Flexible Automation</i> , Kanazawa, Japan, 15-19 July, 2018 .
	[4] C[4] R. Yang, J. Huang and P. Guo, "Frequency dependence of levitation force in near-field acoustic levitation," <i>International Symposium on Flexible Automation</i> , Kanazawa, Japan, 15-19 July, 2018 .
	[5] C[5] J. Wang, Y. Yang, and P. Guo, "Effects of vibration trajectory on ductile-to-brittle transition in vibration cutting of single crystal silicon using a non-resonant tool," <i>CIRP Conference on Surface Integrity</i> , Tianjin, 11-13 July, 2018, China .
	[6] C[6] R. Yang, J. Huang and P. Guo, "Frequency dependence of levitation force in near-field acoustic levitation," <i>International Symposium on Flexible Automation</i> , Kanazawa, Japan, 15-19 July, 2018 .
	[7] C[7] J. Wang, Y. Yang, and P. Guo, "Effects of vibration trajectory on ductile-to-brittle transition in vibration cutting of single crystal silicon using a non-resonant tool," <i>CIRP Conference on Surface Integrity</i> , Tianjin, 11-13 July, 2018, China .
	[8] J[8] J. Wang, W. H. Liao, and P. Guo, "Modulated Ultrasonic Elliptical Vibration Cutting for Ductile-Regime Texturing of Brittle Materials with 2-D Combined Resonant and Non-Resonant Vibrations," <i>International Journal of Mechanical Sciences</i> , Vol. 170, 105347, 2020 .
	[9] J[9] Q. Gao, W. H. Liao, and L. Wang, "An Analytical Model of Cylindrical Double-Arrowed Honeycomb with Negative Poisson's Ratio," <i>International Journal of Mechanical Sciences</i> , Vol. 173, 105400, 2020 .
	[10] J[10] Q. Gao, W. H. Liao, and L. Wang, "On the Low-Velocity Impact Responses of Auxetic Double Arrowed Honeycomb," <i>Aerospace Science and Technology</i> , Vol. 98, 105698, 2020 .
	[11] J[11] J. Wang, Y. Yang, Z. Zhu, Y. Wang, W. H. Liao, and P. Guo, "On Ductile-Regime Elliptical Vibration Cutting of Silicon with Identifying the Lower Bound of Practicable Nominal Cutting Velocity," <i>Journal of Materials Processing Technology</i> , Vol. 283, 116720, 2020 .
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