

The Chinese University of Hong Kong  
Shun Hing Institute of Advanced Engineering  
List of Publications Arising from SHIAE Supported Projects  
(Batch 2016)

Project code	Publication
BME-p3-16 Prof. Liu Yun Hui / Prof. David Navarro-Alarcon (MAE-CUHK) (8115053)	J[1] D. Navarro-Alarcon and Y.-H. Liu, "Fourier-Based Shape Servoing: A New Feedback Method to Actively Deform Soft Objects into Desired 2-D Image Contours", IEEE Transactions on Robotics, vol. 34, no. 1, 272–1279, 2018
	J[2] D. Navarro-Alarcon, S. Saini, T. Zhang, H. Chung, K. W. Ng, M. K. Chow, Y.-H. Liu, "Developing a Compact Robotic Needle Driver for MRI-Guided Breast Biopsy in Tight Environments", IEEE Robotics and Automation Letters, vol. 2, no. 3, 1648–1655, 2017
	C[1] H. M. Yip, D. Navarro-Alarcon, Y.-H. Liu. An Image-Based Uterus Positioning Interface Using ADALINE Networks for Robot-Assisted Hysterectomy. IEEE Int. Conf. Real-time Computing and Robotics, pp. 182–187, 2017
	C[2] T. Zhang, D. Navarro-Alarcon, K. W. Ng, M. K. Chow, Y. Liu and H. L. Chung, "A novel palm-shape breast deformation robot for MRI-guided biopsy," 2016 IEEE Int. Conf. on Robotics and Biomimetics, pp. 527-532, 2016
	C[3] F. Zhong, D. Navarro-Alarcon, Z. Wang, Y.-H. Liu, T. Zhang, and H.M. Yip. Adaptive 3D Pose Computation of Suturing Needle Using Constraints From Static Monocular Image Feedback. IEEE/RSJ Int. Conf. Intelligent Robots and Systems, 5521–5526, 2016.
	C[4] H. M. Yip, D. Navarro-Alarcon and Y. Liu, "Development of an eye-gaze controlled interface for surgical manipulators using eye-tracking glasses," 2016 IEEE Int. Conf. on Robotics and Biomimetics, 2016, pp. 1900-1905
BME-p5-16 Prof. Darwin Tat Ming LAU (MAE-CUHK) (8115054)	C[1] Y. P. Chan, G. Abbasnejad, J. Eden, and D. Lau, "Improved Computational Speed of System Dynamics for Cable-Driven Robots through Generalised Model Compilation", in Proc. IEEE International Conference on Real-Time Computing and Robotics, pp. 230-235,
	C[2] Y. P. Chan, J. Eden, D. Lau, and D. Oetomo, "A Survey on Inverse Dynamics Solvers for Cable-Driven Parallel Robots", Proceedings Australasian Conference on Robotics and Automation, pp. 1-9, 2017
	J[1] G. Abbasnejad, J. Eden, D. Lau, "Generalised Ray-Based Lattice Generation and Graph Representation of Wrench-Closure Workspace for Arbitrary Cable-Driven Robots", IEEE Transactions on Robotics, accepted, 2018
BME-p6-16 Prof. Ping GUO (MAE-CUHK) (8115055)	J[1] Zhu, W. L., Zhu, Z., Guo, P., & Ju, B. F. (2018). A novel hybrid actuation mechanism based XY nanopositioning stage with totally decoupled kinematics. Mechanical Systems and Signal Processing, 99, 747-759.
	J[2] Yeung, C. S., Yang, Y., Du, H., Wang, J., & Guo, P. (2018). Friction reduction performance of microstructured surfaces generated by nonresonant modulation cutting. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering
	J[3] You, X., Ye, C., & Guo, P. (2017). Electric field manipulation for deposition control in near-field electrospinning. Journal of Manufacturing Processes, 30, 431-438.

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BME-p6-16 Prof. Ping GUO (MAE-CUHK) (8115055)	J[4] You, X., Ye, C., & Guo, P. (2017). Study of Microscale Three-Dimensional Printing Using Near-Field Melt Electrospinning. <i>Journal of Micro and Nano-Manufacturing</i> , 5(4), 040901.
	J[5] Yang, Y., Gao, S., Chen, K., Pan, Y., & Guo, P. (2017). Vibration analysis and development of an ultrasonic elliptical vibration tool based on a portal frame structure. <i>Precision Engineering</i> , 50, 421-432.
	C[6] Wang, J., Yang, Y., & Guo, P. (2018). Effects of vibration trajectory on ductile-to-brittle transition in vibration cutting of single crystal silicon using a non-resonant tool. <i>Procedia CIRP</i> , 71(1), 289-292.
	C[7] Yang, Y., & Guo, P. (2018). Effect of elliptical vibration trajectories on grating structure formation and its application in structural coloration. <i>Procedia Manufacturing</i> , 26, 543-551.
RNE-p1-16 Prof. CHEN Yongsheng (MAE-CUHK) (8115056)	J[1] J. Ren, A.C. Lee, K. Cheng, M. Li, Y. Chen, “Measure the unmeasurable by IR spectroscopy: carbon deposition kinetics in dry reforming of methane”. <i>ChemPhysChem</i> , 2018, 19, 1814-1819.
	J[2] M. Li, K. Cheng, J. Ren, A.C. Lee, Y. Chen, “Turning an ordinary Ni/Al <sub>2</sub> O <sub>3</sub> catalyst into a super performer for dry reforming of methane by controlled reduction”, submitted to <i>Energy and Environmental Science</i> .
	C[1] J. Ren, M. Li, A.C. Lee, K. Cheng, Y. Chen,, “IR SPECTROSCOPIC MEASUREMENT OF HYDROGEN PRODUCTION KINETICS IN METHANE DRY REFORMING”, <i>9th International Conference on Hydrogen Production</i> , submitted to a special issue in
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