李自达 博士

助理教授
深圳大学生物医学工程学院
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研究兴趣

- 微流控技术、单细胞液滴包裹与基因测序
- 纳米材料，尤其是碳纳米管的溶液沉积
- 小型化生物检验芯片，例如凝血功能检验芯片

教育背景

密歇根大学安娜堡分校 Ann Arbor, MI, USA
博士，机械工程 2013.8 – 2018.4
毕业论文: *Micro-Engineered Devices for Point-of-Care Blood Clot Retraction Testing*
导师：Prof. Jianping Fu

中国科学技术大学 安徽合肥
工学学士，热能与动力工程 2008.8 – 2012.6
导师：何立群老师

清华大学 北京
交换生 – 中国 C9 高校联盟 2010.9 – 2011.2

工作经历

深圳大学 广东深圳
助理教授，生物医学工程学院 2018.6 至今

密歇根大学安娜堡分校 Ann Arbor, MI, USA
研究助理，机械工程 2013.8 – 2018.4

香港大学 安徽合肥
研究助理，机械工程 2012.8 – 2013.6
导师：Prof. Anderson Ho Cheung Shum

同行审稿

- Scientific Reports ▪ IEEE Transactions in Nanotechnology ▪ Applied Sciences ▪ Micromachines
- Engineering ▪ Design of Medical Devices Conference 2018

获得奖项

- Baxter Young Investigator Award First-Tier, Baxter Healthcare Inc. ($3,000, 2016)

- Departmental Fellowship, Mechanical Engineering, University of Michigan ($60,000, 2013-2014)
- Provincial Honored Graduate, Department of Education, Anhui Province, China (2012)
- National Scholarship, Ministry of Education, China (¥8,000, 2011)

发表论文

[1] **Li, Z.**, Wang Y., Xue, X., McCracken B., Ward K., & Fu, J. (2018). Carbon nanotube strain sensor based hemoretractometer for blood coagulation testing. ***ACS Sensors***, 3 (3), 670-676.

[2] **Li, Z.**, Xue, X., Peyer, D., McCracken, B., Ward, K., & Fu, J. (2017). Capillary-assisted coating of carbon nanotube thin film as a strain gauge. ***Applied Physics Letters***, 111(17), 173105.

[3] Aw Yong, K., **Li, Z.**, Merajver, S., & Fu, J. (2017). Analysis of tumor invasion front using long-term fluidic tumoroid culture. ***Scientific Reports***, 7(1), 10784.

[4] Xue, X., Hong, X., **Li, Z.**, Deng, C. X., & Fu, J. (2017). Acoustic tweezing cytometry enhances osteogenesis of human mesenchymal stem cells through cytoskeletal contractility and YAP activation. ***Biomaterials***, *134*, 22-30.

[5] Sang, J., Li, X., Shao, Y., **Li, Z.**, & Fu, J. (2016) Controlled tubular unit formation from collagen film for modular tissue engineering. ***ACS Biomaterials Science & Engineering***, 3(11), 2860-2868.

[6] **Li, Z.**, McCracken, B., Li, X., Shao, Y., Ward, K., & Fu, J. (2016). A miniaturized hemoretractometer for blood clot retraction testing. ***Small***, 12(29), 3926-3934.

[7] Wu, P., Luo, Z., Liu, Z., **Li, Z.**, Chen, C., Feng, L., & He, L. (2015). Drag-induced breakup mechanism for droplet generation in dripping within flow focusing microfluidics. ***Chinese Journal of Chemical Engineering***, *23*(1), 7-14.

[8] **Li, Z.**, Mak, S. Y., Sauret, A., & Shum, H. C. (2014). Syringe-pump-induced fluctuation in all-aqueous microfluidic system implications for flow rate accuracy. ***Lab on a Chip***, 14(4), 744-749.

[9] Mak, S. Y., **Li, Z.**, Frere, A., Chan, T. C., & Shum, H. C. (2014). Musical Interfaces: Visualization and Reconstruction of Music with a Microfluidic Two-Phase Flow. ***Scientific Reports***, 4, 6675.

[10] Li, X., Chen, W., **Li, Z.**, Li, L., Gu, H., & Fu, J. (2014). Emerging microengineered tools for functional analysis and phenotyping of blood cells. ***Trends in Biotechnology***, 32(11), 586-594.

专利

[1] Fu, J., Ward, K., **Li, Z.**, & Li, X. (2017). A microscale device for blood coagulation assay. *U.S. Provisional Patent Application* 62/304,385.

[2] Shum, H. C., Sauret, A., **Li, Z.**, & Song, Y. (2013). System and method for generation of emulsions with low interfacial tension and measuring frequency of vibrations in the system. *U.S. Patent Application* 13/839,072.

会议演讲

[1] **Li, Z.**, Xue, X., Peyer, D., McCracken, B., Ward, K., & Fu, J. Capillary-facilitated coating of carbon nanotube thin film as a strain gauge for blood retraction testing. **Poster Presentation**. *MicroTAS 2017*, Savannah, GA, USA. Oct 2017.

[2] **Li, Z.**, Xue, X., Peyer, D., McCracken, B., Ward, K., & Fu, J. Capillary-assisted coating of carbon nanotube thin film for blood retraction testing. **Panel Speech**. *BMES 2017*, Phoenix, AZ, USA. Oct 2017.

[3] **Li, Z.**, McCracken, B., Li, X., Shao, Y., Ward, K., & Fu, J. A miniaturized hemoretractometer for blood clot retraction testing. **Panel Speech**. *8th International Symposium on Microchemistry and Microsystems*, Hong Kong, May 2016.