Zida Li, Ph.D.

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Education

University of Michigan, Ann Arbor — Ann Arbor, MI
Ph.D., Mechanical Engineering — Aug. 2013 – Apr. 2018
Dissertation: *Micro-Engineered Devices for Point-of-Care Blood Clot Retraction Testing*
Advisor: Prof. Jianping Fu

University of Science and Technology of China — Hefei, Anhui, China
B.Eng., Mechanical Engineering — Aug. 2008 – June 2012
Advisor: Prof. Liqun He

Tsinghua University — Beijing, China
Exchange Program – C9 University League — Sept. 2010 – Feb. 2011

Positions and Employment

Shenzhen University
Assistant Professor, Biomedical Engineering — June 2018 – present

University of Michigan
Graduate Student Research Assistant, Mechanical Engineering — Sept. 2013 – Apr. 2018
Graduate Student Teaching Assistant, Mechanical Engineering — Sept. 2014 – Apr. 2018

University of Hong Kong
Research Assistant, Mechanical Engineering — Aug. 2012 – June 2013
Advisor: Prof. Anderson Ho Cheung Shum

Peer Reviews

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

Awards

- Baxter Young Investigator Award First-Tier, Baxter Healthcare Inc. (2016)
- Provincial Honored Graduate, Department of Education, Anhui Province, China (2012)
- National Scholarship, Ministry of Education, China (2011)

Publications

[#]co-first authors; *co-corresponding authors.

[1] Luoquan Li[#], Ping Wu[#], Zhaofeng Luo, Lei Wang, Weiping Ding, Tao Wu, Jinyu Chen, Jinlong He, Ying Chen, Guibo Li, **Zida Li***, and Liqun He* (2019). Dean flow assisted single cell and bead encapsulation for high performance single cell expression profiling. ***ACS Sensors***, Under Review.

[2] **Zida Li***, Luoquan Li, Meixiang Liao, Liqun He, and Ping Wu* (2019). Multiple splitting of droplets using multi-furcating microfluidic channels. ***Biomicrofluidics***, In Press. DOI: https://doi.org/10.1101/513812

[3] **Zida Li**, Yize Wang, Xufeng Xue, Brendan McCracken, Kevin Ward, and Jianping Fu (2018). Carbon nanotube strain sensor based hemoretractometer for blood coagulation testing. ***ACS Sensors***, 3 (3), 670-676.

[4] **Zida Li**, Xufeng Xue, Feng Lin, Yize Wang, Kevin Ward, and Jianping Fu (2017). Capillary-assisted coating of carbon nanotube thin film as a strain gauge. ***Applied Physics Letters***, 111(17), 173105.

[5] Koh Meng Aw Yong, Zida Li, Sofia D. Merajver, and Jianping Fu (2017). Analysis of tumor invasion front using long-term fluidic tumoroid culture. ***Scientific Reports***, 7(1), 10784.

[6] Xufeng Xue, Xiaowei Hong, Zida Li, Cheri X. Deng, and Jianping Fu (2017). Acoustic tweezing cytometry enhances osteogenesis of human mesenchymal stem cells through cytoskeletal contractility and YAP activation. ***Biomaterials***, *134*, 22-30.

[7] Jianming Sang, Xiang Li, Yue Shao, Zida Li, and Jianping Fu (2016) Controlled tubular unit formation from collagen film for modular tissue engineering. ***ACS Biomaterials Science & Engineering***, 3(11), 2860-2868.

[8] **Zida Li**, Xiang Li, Brendan McCracken, Yue Shao, Kevin Ward, and Jianping Fu (2016). A miniaturized hemoretractometer for blood clot retraction testing. ***Small***, 12(29), 3926-3934.

[9] Ping Wu, Zhaofeng Luo, Zhifeng Liu, Zida Li, Chi Chen, Lili Feng, and Liqun He (2015). Drag-induced breakup mechanism for droplet generation in dripping within flow focusing microfluidics. ***Chinese Journal of Chemical Engineering***, *23*(1), 7-14.

[10] **Zida Li**, Sze Yi Mak, Alban Sauret, and Ho Cheung Shum (2014). Syringe-pump-induced fluctuation in all-aqueous microfluidic system implications for flow rate accuracy. ***Lab on a Chip***, 14(4), 744-749.

[11] Sze Yi Mak, Zida Li, Arnaud Frere, Tat Chuen Chan, and Ho Cheung Shum (2014). Musical Interfaces: Visualization and Reconstruction of Music with a Microfluidic Two-Phase Flow. ***Scientific Reports***, 4, 6675.

[12] Xiang Li, Weiqiang Chen, Zida Li, Ling Li, Hongchen Gu, and Jianping Fu (2014). Emerging microengineered tools for functional analysis and phenotyping of blood cells. ***Trends in Biotechnology***, 32(11), 586-594.

Book Chapters

[1] **Zida Li*** and Anderson Ho Cheung Shum* (2019). Nanotechnology and microfluidics for biosensing and biophysical property assessment: implications for next generation in vitro diagnostics. ***Nanotechnology and Microfluidics***, John Wiley & Sons, In Press.

Patents

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

[3] 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.

Conference Presentations

[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.