

**1. Yitshak Zohar**

**2. Education:** Ph.D. Aerospace Engineering, University of Southern California, 1990

**3. Academic experience:**

1990-1991     Research Associate, University of Southern California  
1991-1992     Research Associate, University of California at Los Angeles  
1992-2000     Assistant Professor, Hong Kong University of Science & Technology  
2000-2003     Associate Professor, Hong Kong University of Science & Technology  
2004-         Professor, Mechanical & Aerospace Engineering, University of Arizona  
2005-         Professor, Bio5 Institute, University of Arizona  
2006-         Member, Arizona Cancer Center, University of Arizona  
2010-         Professor, Biomedical Engineering, University of Arizona

**4. Non-academic experience:** None

**5. Certifications or professional registrations:** None

**6. Current membership in professional organizations:**

American Society of Mechanical Engineers (ASME) – Fellow

**7. Honors and awards:**

Teaching Excellence Appreciation, Hong Kong University of Science and Technology, 1995  
Technology Innovation Award, University of Arizona, 2007  
21<sup>st</sup> IEEE International Conference on Micro Electro Mechanical Systems – Co-Chair, 2008  
Excellence at the Student Interface, College of Engineering, University of Arizona, 2010

**8. Service activities**

2005-         Editor, Journal of Microelectromechanical Systems  
2008-         Editor, Microfluidics and Nanofluidics Journal  
2011-         Editorial Board Member, Journal of Physical Chemistry & Biophysics  
2006-2009     Associate Editor, Sensors and Actuators A: Physical  
2009-2015     Integration Panel member, CDMRP – Breast Cancer Research Program  
2008, 2016     NSF review panels (CBS, IHCS)  
2004-2008     Director, Micro/Nano Fabrication Center, University of Arizona  
2006-2011     Member & Co-Chair, International Steering Committee of the Int Conf on MEMS  
2000-2009     Member & Co-Chair, Technical Program Committee of the Int Conf on MEMS

## 9. Publications (partial list from last 5 years)

- Zhao, C., Lee, Y.K., Xu, R., Liang, C., Liu, D., Ma, W., Piyawattanametha, W. & Zohar, Y. "Isolation of circulating tumor cells under hydrodynamic loading using microfluidic technology," *Advances in Mechanics*, **44**, 201412 (2015)
- Zeng, L., Jiang, L., Teng, W., Cappello, J., Zohar, Y. & Wu, X. "Engineering aqueous fiber assembly into silk-elastin-like protein polymers," *Macromol. Rapid Commun.*, **35**, 1273-1279. DOI: 10.1002/marc.201400058 (2014)
- Zheng, X.J., Jiang, L., Schroeder, J.A., Stopeck, A.T. & Zohar, Y. "Isolation of viable circulating tumor cells in antibody-functionalized microfluidic devices," *Biomicrofluidics*, **8**, 024119. DOI: 10.1063/1.4873956 (2014)
- Riahi, R., Yang, Y.L., Kim, H., Jiang, L., Wong, P.K. & Zohar, Y. "A microfluidic model for organ-specific extravasation of circulating tumor cells," *Biomicrofluidics*, **8**, 024103. DOI: 10.1063/1.4868301 (2014)
- Stamm, M., Trickey-Glassman, A.S., Jiang, L. & Zohar, Y. "Specific interactions between functionalized particles and circulating tumor cells," *IET Nanobiotechnol.*, **8**, 18-23. DOI:10.1049/iet-nbt.2013.0034 (2014)
- Lee, M., Lee, Y.K. & Zohar, Y. "Single-phase liquid flow forced convection under nearly uniform heat flux boundary condition in microchannels," *J. Micromech. Microeng.*, **22**, 035015. DOI:10.1088/0960-1317/22/3/035015 (2012)
- Zheng, X.J., Cheung, L.S.L., Schroeder, J.A., Jiang, L. & Zohar, Y. "Cell receptor and surface ligand density effects on dynamic states of adhering circulating tumor cells," *Lab Chip*, **11**, 3431-3439. DOI:10.1039/C1LC20455F (2011)
- Stamm, M.T., Gudipaty, T., Rush, C., Jiang, L. & Zohar, Y. "Particle aggregation rate in a microchannel due to a dilute suspension flow," *Microfluid Nanofluid*, **11**, 395-403. DOI:10.1007/s10404-011-0805-6 (2011)
- Zheng, X.J., Cheung, L.S.L., Schroeder, J.A., Jiang, L. & Zohar, Y. "A high-performance microsystem for isolating circulating tumor cells," *Lab Chip*, **11**, 3269-3276. DOI:10.1039/C1LC20331B (2011)
- Cheung, L.S.L., Zheng, X.J., Wang, L., Baygents, J.C., Guzman, R., Schroeder, J.A., Heimark, R.L. & Zohar, Y. "Adhesion dynamics of circulating tumor cells under shear flow in a bio-functionalized microchannel," *J. Micromech. Microeng.*, **21**, 054033. DOI:10.1088/0960-1317/21/5/054033 (2011)
- Yetisen, A.K., Jiang, L., Cooper, J.R., Qin, Y., Palanivelu, R. & Zohar, Y. "A microsystem-based assay for studying pollen tube guidance in plant reproduction," *J. Micromech. Microeng.*, **21**, 054018. DOI:10.1088/0960-1317/21/5/054018 (2011)

**10. Professional development:** Participant in the Annual Arizona Faculty Doctoral Mentoring Institute; Participant in the NSF workshop for Control and System Integration of Micro- and Nano-scale Systems; Organized the University of Arizona workshop on Bio-Chem Research and Microsystem Technology.