

## Representative Publication of Prof. Yinning ZHOU

1. **Yinning Zhou**, Zhichao Ma and Ye Ai, [Dynamically tunable elasto-inertial particle focusing and sorting in microfluidics](#), *Lab on a Chip*, 2020; 20, 568-581, DOI: 10.1039/C9LC01071H
2. **Yinning Zhou**, Zhichao Ma, Mahnoush Tayebi and Ye Ai, [Submicron particle focusing and exosome sorting by wavy microchannel structures within viscoelastic fluids](#), *Analytical chemistry*, 2019; 91 (7), 4577-4584. DOI: 10.1021/acs.analchem.8b05749
3. **Yinning Zhou**, Zhichao Ma and Ye Ai, [Sheathless inertial cell focusing and sorting with serial reverse wavy channel structures](#), *Nature. Microsystems & Nanoengineering*, 2018;4:5. DOI: 10.1038/s41378-018-0005-6
4. **Yinning Zhou**, Zhichao Ma and Ye Ai, [Hybrid Microfluidic Sorting of Rare Cells based on High Throughput Inertial Focusing and High Accuracy Acoustic Manipulation](#), *RSC advances*, 2019, 9, 31186-31195. DOI: 10.1039/C9RA01792E
5. **Yinning Zhou**, Hao Wang, Zhichao Ma, Joel K. W. Yang and Ye Ai, [Acoustic vibration-induced actuation of multiple micro-rotors in microfluidics](#), *Advanced Materials Technologies*, 2020. DOI: 10.1002/admt.202000323
6. **Yinning Zhou**, Zhichao Ma and Ye Ai, [Submicron particle concentration and patterning with ultra-low frequency acoustic vibration](#), *Analytical Chemistry*, 2020, 92 (19), 12795-12800
7. **Yinning Zhou** and Ye Ai, [Microfluidic applications of acoustic vibration-based target manipulation](#), *Lab on a Chip*, 2021 (under review)
8. Zhichao Ma, **Yinning Zhou**, David J. Collins and Ye Ai, [Fluorescence activated cell sorting via a focused traveling surface acoustic beam](#), *Lab on a Chip*, 2017;17(18):3176-3185. DOI: 10.1039/C7LC00678K
9. Zhichao Ma, **Yinning Zhou**, Feiyan Cai, Long Meng, Longqiu Li, Hairong Zheng and Ye Ai, [Ultrasonic Microstreaming for Complex-trajectory Transport and Rotation of Single Particles and Cells](#), *Lab on a Chip*, 2020. DOI: 10.1039/D0LC00595A
10. Mahnoush Tayebi, **Yinning Zhou**, Pallavi Tripathi, Rajesh Chandramohanadas and Ye Ai, [Exosome Purification and Analysis Using a Facile Microfluidic Hydrodynamic Trapping Device](#), *Analytical chemistry*, 2020. DOI: 10.1021/acs.analchem.0c02006
11. Komal Agarwal, **Yinning Zhou**, Hashina Parveen Anwar Ali, Ihor Radchenko, Avinash Baji and Arief Suriadi Budiman, [Additive Manufacturing Enabled by Electrospinning for Tougher Bio-Inspired Materials](#), *Advances in Materials Science and Engineering*, 2018; 9. DOI: 10.1155/2018/8460751
12. Ying Zhou, Dahou Yang, **Yinning Zhou**, BL Khoo, Jongyoon Han and Ye Ai, [Characterizing deformability and electrical impedance of cancer cells in a microfluidic device](#), *Analytical Chemistry*, 2017; 90 (1), 912-919. DOI: 10.1021/acs.analchem.7b03859
13. Dahou Yang, Ying Zhou, **Yinning Zhou**, Jongyoon Han and Ye Ai, [Biophysical Phenotyping of Single Cells Using a Differential Multiconstriction Microfluidic Device with Self-Aligned 3D Electrodes](#), *Biosensors and Bioelectronics*, 2019; 133, 16-23. DOI: 10.1016/j.bios.2019.03.002
14. Peixian Li, Zhichao Ma, **Yinning Zhou**, David J. Collins, Zhenfeng Wang and Ye Ai, [Detachable Acoustophoretic System for Fluorescence Activated Sorting at Single Droplet Level](#), *Analytical chemistry*, 2019. DOI: 10.1021/acs.analchem.9b01708
15. Shuai Zhong, Xinglong Ji, **Yinning Zhou**, Yishu Zhang, Ye Ai and Rong Zhao, [CMOS Compatible Transient Resistive Memory with Prolonged Lifetime](#), *Advanced Materials Technologies*, 2019; 1900217. DOI: 10.1002/admt.201900217
16. Minhui Liang, Dahou Yang, **Yinning Zhou**, Peixian Li, Jianwei Zhong and Ye Ai, [Single cell stretching in viscoelastic fluids with electronically triggered imaging for the assessment of cellular mechanical properties](#), *Lab on a Chip*, 2020 (under review)

## Conference Papers

17. **Yinning Zhou**, Shiyang Liu and Ye Ai, [Cell differentiation within isolated cell-derived matrix in inertial serial reverse wavy microfluidic channel structure](#), *International Miniaturized Systems for Chemistry and Life Sciences (MicroTAS)*, 2018

Zhichao Ma, David J. Collins, **Yinning Zhou** and Ye Ai, [Fluorescence Activated Cell Sorting \(FACS\) System Based on Focused Traveling Surface Acoustic Waves \(FTSAWs\)](#), *International Multidisciplinary Conference on Optofluidics (IMCO)*, 2017