Wei Yue

University of California, Berkeley, USA
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EDUCATION

Peking University, Beijing, China Sep. 2017- June 2021
Bachelor of Science in Theoretical and Applied Mechanics June 2021
GPA: 3.90/4.00 (No. 1/45)

University of California, Berkeley, USA Aug. 2021- present
GPA: 3.97/4.00
(ME 226 **A+**, ME 271 **A+**, ME 219 **A+**, ME 280A **A+**)

RESEARCH EXPERIENCE

Berkeley Sensor and Actuator Center Aug. 2021- present

- Sensing and Actuation Applications Using Lithium Niobate PMUTs
- Ultrasound-induced Haptic Interface
- Insect-scale Flying Robots

ACTIVITIES & AWARDS

●Merit Student of 2017-2018, Peking University Dec. 2018
●Benz Scholarship of 2017-2018, Peking University Dec. 2018
●First Prize of National Physical Competition for College Students in China Dec. 2018
●Merit Student of 2018-2019, Peking University Nov. 2019
●Academician Yang Fuqing and Wang Yangyuan scholarship, Peking University Nov. 2019
●First Prize of National Zhou Peiyuan College Student Mechanics Competition Aug. 2019
●Merit Student of 2019-2020, Peking University Nov. 2020
●Peking University first-class scholarship, Peking University Nov. 2020
●Graduate Division Block Grant, UC Berkeley May 2022
●Graduate Division Block Grant, UC Berkeley May 2023

PUBLICATIONS

1. **Yue W**, et al. Ultrafast Biomimetic Untethered Soft Actuators with Bone-in-Flesh Constructs Actuated by Magnetic Field[J]. Advanced Functional Materials, 2024. (Accepted)
2. **Yue W**, et al. Mid-air Particle Manipulations by a 2by2 PMUT Array[C]// Proceedings of the Hilton Head Workshop 2024: A Solid-State Sensors, Actuators and Microsystems Workshop, June 2-6, Hilton head Island, SC, 2024. (Accepted)
3. Ding R, Teng J, Cao Z, Cao Y, Qian X, **Yue W**, et al. Self-powered Autonomous Electrostatic Dust Removal for Solar Panels by an Electret Generator[J]. Advanced Science, 2024. (Accepted)
4. Tsao P, Teng M, Peng Y, Premanadhan V, Chen T, Averrit S, **Yue W**, et al. Simultaneous Detection of Fluid Viscosity and Density via PMUTs Assisted by Machine Learning[C]// Proceedings of the Hilton Head Workshop 2024: A Solid-State Sensors, Actuators and Microsystems Workshop, June 2-6, Hilton head Island, SC, 2024. (Accepted)
5. Teng M, **Yue W**, et al. Continuous Volumetric Indoor Temperature Monitoring via PMUTs[C]//2024 IEEE 37th International Conference on Micro Electro Mechanical Systems (MEMS). IEEE, 2024: 967-970.
6. Teng M, **Yue W**, et al. PMUT Package Design Optimization via Machine Learning[C]//2024 IEEE 37th International Conference on Micro Electro Mechanical Systems (MEMS). IEEE, 2024: 971-974.
7. Chen X, Wang Z, **Yue W**, et al. A Non-Volatile Surface Tension-Driven Electrochemical Liquid Metal Actuator[C]//2024 IEEE 37th International Conference on Micro Electro Mechanical Systems

(MEMS). IEEE, 2024: 705-708.
8. Peng Y, Liu H, Chen C, **Yue W**, et al. 9-Meter-Long 3d Ultrasonic Objects Detection via Packaged Lithium-Niobate PMUTs[C]//2024 IEEE 37th International Conference on Micro Electro Mechanical Systems (MEMS). IEEE, 2024: 124-127.
9. **Yue W**, Peng Y, Liu H, et al. Auto-Positioning and Haptic Stimulations via A 35 mm Square PMUT Array[C]//2023 IEEE 36th International Conference on Micro Electro Mechanical Systems (MEMS). IEEE, 2023: 941-944.
10. **Yue W**, et al. Untethered Swarm Robots with Independent Crawling and Rolling Motions[C]//2023 22st International Conference on Solid-State Sensors, Actuators and Microsystems (Transducers). pp. 678-681, Kyoto Japan, June 2023.
11. **Yue W**, et al. Asymmetrical PMUTs for Focused Acoustic Pressure by Reinforcement Learning[C]//2023 22st International Conference on Solid-State Sensors, Actuators and Microsystems (Transducers). pp. 808-811, Kyoto Japan, June 2023.
12. **Yue W**, et al. Low-cost and Rapid Fabrication of Microchannels by Kirigami-based Soot Coating for the Detection of Explosives[C]//2023 22st International Conference on Solid-State Sensors, Actuators and Microsystems (Transducers). pp. 1329-1332, Kyoto Japan, June 2023.
13. Liu Y, **Yue W**, Cui Y. Development of an Amperometric Biosensor on a Toothbrush for Glucose[J]. Sensors and Actuators Reports, 2023, 5: 100133.
14. Xia F, Deng H, **Yue W**, et al. PMUT Array for Mid-Air Thermal Display[C]//2023 IEEE International Ultrasonics Symposium (IUS). IEEE, 2023: 1-3.
15. Xia F, Peng Y, **Yue W**, et al. High-SPL PMUT Array for Mid-Air Haptic Interface[C]// 2023 22st International Conference on Solid-State Sensors, Actuators and Microsystems (Transducers). pp. 124-127, Kyoto Japan, June 2023.
16. Xia F, Peng Y, Pala S, Arakawa R, **Yue W**, et al. High-SPL and Low-Driving-Voltage PMUTs by Sputtered Potassium Sodium Niobate[C]//2023 IEEE 36th International Conference on Micro Electro Mechanical Systems (MEMS). IEEE, 2023: 135-138.
17. Liu H, Peng Y, **Yue W**, et al. Drone-Mounted Low-Frequency PMUTS for> 6-Meter Rangefinder in Air[C]//2023 IEEE 36th International Conference on Micro Electro Mechanical Systems (MEMS). IEEE, 2023: 957-960.
18. Sui F, **Yue W**, Zhang Z, et al. Trial-and-Error Learning for MEMS Structural Design Enabled by Deep Reinforcement Learning[C]//2023 IEEE 36th International Conference on Micro Electro Mechanical Systems (MEMS). IEEE, 2023: 503-506.
19. Luo X, **Yue W**, Yao X, et al. A Highly Transparent Chip for Sensing Hydrogen Peroxide[J]. IEEE Sensors Letters, 2022, 6(9): 1-4.
20. Guo R, Sui F, **Yue W**, et al. Deep learning for non-parameterized MEMS structural design[J]. Microsystems & Nanoengineering, 2022, 8(1): 91.
21. Sui F, **Yue W**, Guo R, et al. Designing Weakly Coupled Mems Resonators with Machine Learning-Based Method[C]//2022 IEEE 35th International Conference on Micro Electro Mechanical Systems Conference (MEMS). IEEE, 2022: 454-457.
22. Sui F, Guo R, **Yue W**, et al. Customizing Mems Designs via Conditional Generative Adversarial Networks[C]//2022 IEEE 35th International Conference on Micro Electro Mechanical Systems Conference (MEMS). IEEE, 2022: 450-453.