



Jiaen Wu

Postdoctoral Scholar, Mechanical Engineering

Bio

STANFORD ADVISORS

- Steve Collins, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Detecting artificially impaired balance in human locomotion: metrics, perturbation effects and detection thresholds.** *The Journal of experimental biology*
Wu, J., Raitor, M., Tan, G. R., Staudenmayer, K. L., Delp, S. L., Liu, C. K., Collins, S. H.
2025; 228 (10)
- **ECR SPOTLIGHT JOURNAL OF EXPERIMENTAL BIOLOGY**
Wu, J.
2025; 228 (10)
- **Real-Time Gait Phase Detection on Wearable Devices for Real-World Free-Living Gait.** *IEEE journal of biomedical and health informatics*
Wu, J., Becsek, B., Schaer, A., Maurenbrecher, H., Chatzipirpiridis, G., Ergeneman, O., Pane, S., Torun, H., Nelson, B. J.
2022; PP
- **Human gait-labeling uncertainty and a hybrid model for gait segmentation** *FRONTIERS IN NEUROSCIENCE*
Wu, J., Maurenbrecher, H., Schaer, A., Becsek, B., Easthope, C., Chatzipirpiridis, G., Ergeneman, O., Pane, S., Nelson, B. J.
2022; 16: 976594
- **Motion Analysis and Real-Time Trajectory Prediction of Magnetically Steerable Catalytic Janus Micromotors** *ADVANCED INTELLIGENT SYSTEMS*
Wu, J., Folio, D., Zhu, J., Jang, B., Chen, X., Feng, J., Gambardella, P., Sort, J., Puigmarti-Luis, J., Ergeneman, O., Ferreira, A., Pane, S.
2022; 4 (11)
- **An Intelligent In-Shoe System for Gait Monitoring and Analysis with Optimized Sampling and Real-Time Visualization Capabilities** *SENSORS*
Wu, J., Kuruvithadam, K., Schaer, A., Stoneham, R., Chatzipirpiridis, G., Easthope, C., Barry, G., Martin, J., Pane, S., Nelson, B. J., Ergeneman, O., Torun, H.
2021; 21 (8)
- **Helical Klinotactic Locomotion of Two-Link Nanoswimmers with Dual-Function Drug-Loaded Soft Polysaccharide Hinges** *ADVANCED SCIENCE*
Wu, J., Jang, B., Harduf, Y., Chapnik, Z., Avci, O., Chen, X., Puigmarti-Luis, J., Ergeneman, O., Nelson, B. J., Or, Y., Pane, S.
2021; 8 (8): 2004458
- **Peroxymonosulfate activation for efficient sulfamethoxazole degradation by Fe₃O₄/beta-FeOOH nanocomposites: Coexistence of radical and non-radical reactions** *CHEMICAL ENGINEERING JOURNAL*
Li, C., Wu, J., Peng, W., Fang, Z., Liu, J.

2019; 356: 904-914

- **Optimal Operation and Control of Fluidized Bed Membrane Reactors for Steam Methane Reforming**

Marquez-Ruiz, A., Wu, J., Ozkan, L., Gallucci, F., Annaland, M.

edited by Kiss, A. A., Zondervan, E., Lakerveld, R., Ozkan, L.

ELSEVIER SCIENCE BV.2019: 1231-1236