

Jeremy Treiber

Ph.D. Student in Materials Science and Engineering, admitted Autumn 2020

Publications

PUBLICATIONS

- **Electrodifusion through Pores in Supported Lipid Bilayers on PEDOT:PSS Electrodes: Bridging Equivalent Circuits and FEM Simulations.** *The journal of physical chemistry. B*
Mele, L. J., Treiber, J., Salleo, A.
2025
- **Automated Label-Free Assay for Viral Detection and Inhibitor Screening via Biomembrane-Functionalized Microelectrode Arrays.** *Advanced materials (Deerfield Beach, Fla.)*
Lu, Z., Treiber, J., Kallitsis, K., Selivanovitch, E., Wheeler, A., Lopez-Cavestany, M., Chao, Z., Barron, S. L., Park, J. A., Hoven, D., Scheeder, A., Withers, A., Hess, et al
2025: e01985
- **Electrical Monitoring of *Vibrio vulnificus*-Host Cell Membrane Interactions in Simple and Complex Matrices** *ADVANCED MATERIALS INTERFACES*
Wheeler, A., Lu, Z., Treiber, J., Salleo, A., Owens, R. M.
2025
- **Polarized Intestinal Cell Membrane-on-Chip for Bacterial Toxin Interaction Studies** *ADVANCED NANOBIOIMED RESEARCH*
McCoy, R., Treiber, J., Malliaras, G. G., Salleo, A., Owens, R. M.
2025
- **Mucus-on-a-chip: investigating the barrier properties of mucus with organic bioelectronics.** *Journal of materials chemistry. B*
McCoy, R., Wang, K., Treiber, J., Fu, Y., Malliaras, G. G., Salleo, A., Owens, R. M.
2024
- **Impact of Dilute DIO Additive on Local Microstructure of Fluorinated, pNDI-Based Polymer Solar Cells.** *Advanced materials (Deerfield Beach, Fla.)*
Cheng, C., Wu, Y., Cendra, C., Schneider, S., Treiber, J., Agarwala, P., Gomez, E. D., Bao, Z., Takacs, C., Toney, M. F., Salleo, A.
2024: e2409502
- **Origins of hydrogen peroxide selectivity during oxygen reduction on organic mixed ionic-electronic conducting polymers** *ENERGY & ENVIRONMENTAL SCIENCE*
Duran, A., Liang, A., Denti, I., Yu, H., Pearce, D., Marks, A., Penn, E., Treiber, J., Weaver, K., Turaski, L., Maria, I. P., Griggs, S., Chen, et al
2023
- **Multiparametric Sensing of Outer Membrane Vesicle-Derived Supported Lipid Bilayers Demonstrates the Specificity of Bacteriophage Interactions.** *ACS biomaterials science & engineering*
Bali, K., McCoy, R., Lu, Z., Treiber, J., Savva, A., Kaminski, C. F., Salmond, G., Salleo, A., Mela, I., Monson, R., Owens, R. M.
2023