

Qi Zhou

Ph.D. Student in Electrical Engineering, admitted Autumn 2022

Publications

PUBLICATIONS

- **Alleviating Parasitic Back Energy Transfer Enhances Thin Film Upconversion** *ADVANCED OPTICAL MATERIALS*
Narayanan, P., Hu, M., Pucurimay, L., Gallegos, A. O., Zhou, Q., Belliveau, E., Ahmed, G. H., Fernandez, S., Michaels, W., Murrietta, N., Mutatu, V. E., Feng, D., Hamid, et al
2025
- **Understanding the Formation Dynamics and Physical Properties of Nanocapsules Using Charge Detection Mass Spectrometry.** *ACS nano*
Harper, C. C., Schloemer, T. H., Jordan, J. S., Heflin, N., Narayanan, P., Zhou, Q., Congreve, D. N., Williams, E. R.
2024
- **2D mixed halide perovskites for ultraviolet light-emitting diodes** *DEVICE*
Hu, M., Lyu, J., Murrietta, N., Fernandez, S., Michaels, W., Zhou, Q., Narayanan, P., Congreve, D. N.
2024; 2 (11)
- **Spatially Controlled Uv Light Generation at Depth Using Upconversion Micelles.** *Advanced materials (Deerfield Beach, Fla.)*
Zhou, Q., Wirtz, B. M., Schloemer, T. H., Burroughs, M. C., Hu, M., Narayanan, P., Lyu, J., Gallegos, A. O., Layton, C., Mai, D. J., Congreve, D. N.
2023: e2301563
- **Water additives improve the efficiency of violet perovskite light-emitting diodes** *MATTER*
Hu, M., Fernandez, S., Zhou, Q., Narayanan, P., Saini, B., Schloemer, T. H., Lyu, J., Gallegos, A. O., Ahmed, G. H., Congreve, D. N.
2023; 6 (7): 2356-2367
- **Controlling the durability and optical properties of triplet-triplet annihilation upconversion nanocapsules.** *Nanoscale*
Schloemer, T. H., Sanders, S. N., Narayanan, P., Zhou, Q., Hu, M., Congreve, D. N.
2023
- **Nanoengineering Triplet-Triplet Annihilation Upconversion: From Materials to Real-World Applications.** *ACS nano*
Schloemer, T., Narayanan, P., Zhou, Q., Belliveau, E., Seitz, M., Congreve, D. N.
2023
- **Triplet Fusion Upconversion Nanocapsule Synthesis.** *Journal of visualized experiments : JoVE*
Schloemer, T. H., Sanders, S. N., Zhou, Q., Narayanan, P., Hu, M., Gangishetty, M. K., Anderson, D., Seitz, M., Gallegos, A. O., Stokes, R. C., Congreve, D. N.
2022
- **A biomineral-inspired approach of synthesizing colloidal persistent phosphors as a multicolor, intravital light source.** *Science advances*
Yang, F., Wu, X., Cui, H., Ou, Z., Jiang, S., Cai, S., Zhou, Q., Wong, B. G., Huang, H., Hong, G.
2022; 8 (30): eabo6743
- **Tether-free photothermal deep-brain stimulation in freely behaving mice via wide-field illumination in the near-infrared-II window.** *Nature biomedical engineering*
Wu, X., Jiang, Y., Rommelfanger, N. J., Yang, F., Zhou, Q., Yin, R., Liu, J., Cai, S., Ren, W., Shin, A., Ong, K. S., Pu, K., Hong, et al
2022
- **Anisotropy and anharmonicity in polystyrene stable glass** *JOURNAL OF CHEMICAL PHYSICS*
Raegen, A. N., Zhou, Q., Forrest, J. A.
2020; 153 (21): 214508

- **Ultrastable monodisperse polymer glass formed by physical vapour deposition** *NATURE MATERIALS*
Raegen, A. N., Yin, J., Zhou, Q., Forrest, J. A.
2020
- **A highly sensitive double-layer structured nanodevice for moisture induced power generation** *NANOTECHNOLOGY*
Zhou, Q., Hui, Z., Xiao, M., Zhou, N. Y.
2020; 31 (26): 265401