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LINKS

- Google Scholar: https://scholar.google.com/citations?hl=en&user=KxMlj2wAAAAJ&view_op=list_works&sortby=pubdate
- Personal Website: <https://manchen.sites.stanford.edu/>

Publications

PUBLICATIONS

- **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
- **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
- **Interfacial charge transfer states enable efficient solid-state upconversion** *MATTER*
Hu, M., Belliveau, E., Congreve, D. N.
2022; 5 (8): 2542-2545
- **Suppressing the Trapping Process by Interfacial Charge Extraction in Antimony Selenide Heterojunctions** *ACS ENERGY LETTERS*
Zhang, Z., Hu, M., Jia, T., Du, J., Chen, C., Wang, C., Liu, Z., Shi, T., Tang, J., Leng, Y.
2021; 6 (5): 1740-1748
- **Subwavelength-Polarized Quasi-Two-Dimensional Perovskite Single-Mode Nanolaser.** *ACS nano*
Liu, Z. n., Hu, M. n., Du, J. n., Shi, T. n., Wang, Z. n., Zhang, Z. n., Hu, Z. n., Zhan, Z. n., Chen, K. n., Liu, W. n., Tang, J. n., Zhang, H. n., Leng, et al
2021
- **Compact Optical Polarization-Insensitive Zoom Metalens Doublet** *ADVANCED OPTICAL MATERIALS*
Wei, Y., Wang, Y., Feng, X., Xiao, S., Wang, Z., Hu, T., Hu, M., Song, J., Wegener, M., Zhao, M., Xia, J., Yang, Z.
2020; 8 (13)
- **Antimony doped Cs₂SnCl₆ with bright and stable emission** *FRONTIERS OF OPTOELECTRONICS*
Li, J., Tan, Z., Hu, M., Chen, C., Luo, J., Li, S., Gao, L., Xiao, Z., Niu, G., Tang, J.

2019; 12 (4): 352-364

- **High-Throughput Combinatorial Optimizations of Perovskite Light-Emitting Diodes Based on All-Vacuum Deposition** *ADVANCED FUNCTIONAL MATERIALS*
Li, J., Du, P., Li, S., Liu, J., Zhu, M., Tan, Z., Hu, M., Luo, J., Guo, D., Ma, L., Nie, Z., Ma, Y., Gao, et al
2019; 29 (51)
- **Broadband emission of double perovskite Cs₂Na_{0.4}Ag_{0.6}In_{0.995}Bi_{0.005}Cl₆:Mn²⁺ for single-phosphor white-light-emitting diodes** *OPTICS LETTERS*
Hu, M., Luo, J., Li, S., Liu, J., Li, J., Tan, Z., Niu, G., Wang, Z., Tang, J.
2019; 44 (19): 4757–60
- **Inorganic antimony halide hybrids with broad yellow emissions** *SCIENCE BULLETIN*
Tan, Z., Hu, M., Niu, G., Hu, Q., Li, J., Leng, M., Gao, L., Tang, J.
2019; 64 (13): 904–9
- **Inorganic antimony halide hybrids with broad yellow emissions.** *Science bulletin*
Tan, Z., Hu, M., Niu, G., Hu, Q., Li, J., Leng, M., Gao, L., Tang, J.
2019; 64 (13): 904-909
- **Polarization-insensitive and achromatic metalens at ultraviolet wavelengths** *JOURNAL OF NANOPHOTONICS*
Hu, M., Wei, Y., Cai, H., Cai, Y.
2019; 13 (3)
- **7.5% n-i-p Sb₂Se₃ solar cells with CuSCN as a hole-transport layer** *JOURNAL OF MATERIALS CHEMISTRY A*
Li, K., Wang, S., Chen, C., Kondrotas, R., Hu, M., Lu, S., Wang, C., Chen, W., Tang, J.
2019; 7 (16): 9665-9672
- **Lead-Free Halide Perovskites and Perovskite Variants as Phosphors toward Light-Emitting Applications.** *ACS applied materials & interfaces*
Luo, J. n., Hu, M. n., Niu, G. n., Tang, J. n.
2019; 11 (35): 31575–84
- **X-ray scintillation in lead-free double perovskite crystals** *SCIENCE CHINA-CHEMISTRY*
Hu, Q., Deng, Z., Hu, M., Zhao, A., Zhang, Y., Tan, Z., Niu, G., Wu, H., Tang, J.
2018; 61 (12): 1581-1586