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- Ph.D. Student in Materials Science and Engineering, admitted Autumn 2019
- Masters Student in Materials Science and Engineering, admitted Spring 2024

Publications

PUBLICATIONS

- **Field-Induced Ferroelectric Phase Evolution During Polarization "Wake-Up" in Hf_{0.5}Zr_{0.5}O₂ Thin Film Capacitors** *ADVANCED ELECTRONIC MATERIALS*
Saini, B., Huang, F., Choi, Y., Yu, Z., Thampy, V., Baniecki, J. D., Tsai, W., McIntyre, P. C.
2023
- **Dimensional Scaling of Ferroelectric Properties of Hafnia-Zirconia Thin Films: Electrode Interface Effects.** *ACS nano*
Huang, F., Saini, B., Wan, L., Lu, H., He, X., Qin, S., Tsai, W., Gruverman, A., Meng, A. C., Wong, H. P., McIntyre, P. C., Wong, S.
2024
- **Atomic Layer Deposition of WO₃-Doped In₂O₃ for Reliable and Scalable BEOL-Compatible Transistors.** *Nano letters*
Yoo, C., Hartanto, J., Saini, B., Tsai, W., Thampy, V., Niavol, S. S., Meng, A. C., McIntyre, P. C.
2024
- **Enhanced Switching Reliability of Hf_{0.5}Zr_{0.5}O₂ Ferroelectric Films Induced by Interface Engineering.** *ACS applied materials & interfaces*
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- **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.
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- **Nanocrystallite Seeding of Metastable Ferroelectric Phase Formation in Atomic Layer-Deposited Hafnia-Zirconia Alloys.** *ACS applied materials & interfaces*
Yu, Z., Saini, B., Liu, Y., Huang, F., Mehta, A., Baniecki, J. D., Wong, H. P., Tsai, W., McIntyre, P. C.
2022
- **CeO₂ Doping of Hf_{0.5}Zr_{0.5}O₂ Thin Films for High Endurance Ferroelectric Memories** *ADVANCED ELECTRONIC MATERIALS*
Yu, Z., Saini, B., Liao, P., Chang, Y., Hou, D., Nien, C., Shih, Y., Yeong, S., Afanas'ev, V., Huang, F., Baniecki, J. D., Mehta, A., Chang, et al
2022
- **Imaging light-induced phase separation dynamics of inorganic halide perovskites**
Peng, S., Meng, A., Tan, W., Braun, M., Saini, B., Severson, K., Marshall, A., McIntyre, P. C., IEEE
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