Stanford

Austin Cristobal Flick

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Bio

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Stanford University , MATSC-PHD (2024)
- Master of Science, Stanford University , MATSC-MS (2021)
- Bachelor of Science, Stanford University , MATSC-BS (2019)
- Master of Science, Stanford University , Materials Science and Engineering (2021)
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STANFORD ADVISORS

- Reinhold Dauskardt, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Indirect Liftoff Mechanism for High-Throughput, Single-Source Laser Scribing for Perovskite Solar Modules** *ADVANCED ENERGY MATERIALS*
  Flick, A. C., Rolston, N., Dauskardt, R. H.
  2024

- **An open-source environmental chamber for materials-stability testing using an optical proxy** *DIGITAL DISCOVERY*
  Keesey, R., Tiihonen, A., Siemenn, A. E., Colburn, T. W., Sun, S., Hartono, N., Serdy, J., Zeile, M., He, K., Gurtner, C. A., Flick, A. C., Batali, C., Encinas, et al
  2023; 2 (2): 422-440

- **Machine learning with knowledge constraints for process optimization of open-air perovskite solar cell manufacturing** *JOULE*
  Liu, Z., Rolston, N., Flick, A. C., Colburn, T. W., Ren, Z., Dauskardt, R. H., Buonassisi, T.
  2022; 6 (4): 834-849

- **Low-temperature sprayed SnOx nanocomposite films with enhanced hole blocking for efficient large area perovskite solar cells** *JOURNAL OF MATERIALS CHEMISTRY A*
  Zhang, J., Ding, Y., Jiang, G., Flick, A. C., Pan, Z., Scheideler, W. J., Zhao, O., Chen, J. P., Yang, L., Rolston, N., Dauskardt, R. H.
  2021

- **Perspectives of Open-Air Processing to Enable Perovskite Solar Cell Manufacturing** *FRONTIERS IN ENERGY RESEARCH*
  Rolston, N., Sleugh, A., Chen, J. P., Zhao, O., Colburn, T. W., Flick, A. C., Dauskardt, R. H.
  2021; 9

- **Rapid Open-Air Processing of Low-Cost Perovskite Solar Modules**
  Rolston, N., Scheideler, W. J., Flick, A., Chen, J. P., Elmaraghi, H., Sleugh, A., Zhao, O., Woodhouse, M., Dauskardt, R. H., IEEE
  IEEE.2021: 88-91

- **Rapid Open-Air Fabrication of Perovskite Solar Modules** *JOULE*
  Rolston, N., Scheideler, W. J., Flick, A. C., Chen, J. P., Elmaraghi, H., Sleugh, A., Zhao, O., Woodhouse, M., Dauskardt, R. H.
  2020; 4 (12): 2675–92