



## Celeste Melamed

Postdoctoral Scholar, Materials Science and Engineering

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### Bio

#### STANFORD ADVISORS

- William Chueh, Postdoctoral Faculty Sponsor

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### Publications

#### PUBLICATIONS

- **Short-Range Order Tunes Optical Properties in Long-Range Disordered ZnSnN<sub>2</sub>-ZnO Alloy** *CHEMISTRY OF MATERIALS*  
Melamed, C. L., Miller, M. K., Cordell, J., Pucurimay, L., Livingood, A., Schnepf, R. R., Pan, J., Heinselman, K. N., Vila, F. D., Mis, A., Nordlund, D., Levy-Wendt, B., Lany, et al  
2022; 34 (9): 3910-3919
- **Utilizing Site Disorder in the Development of New Energy-Relevant Semiconductors** *ACS ENERGY LETTERS*  
Schnepf, R. R., Cordell, J. J., Tellekamp, M., Melamed, C. L., Greenaway, A. L., Mis, A., Brennecka, G. L., Christensen, S., Tucker, G. J., Toberer, E. S., Lany, S., Tamboli, A. C.  
2020; 5 (6): 2027-2041
- **Combinatorial Synthesis of Magnesium Tin Nitride Semiconductors** *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*  
Greenaway, A. L., Loutris, A. L., Heinselman, K. N., Melamed, C. L., Schnepf, R. R., Tellekamp, M., Woods-Robinson, R., Sherbondy, R., Bardgett, D., Bauers, S., Zakutayev, A., Christensen, S. T., Lany, et al  
2020; 142 (18): 8421-8430
- **Using resonant energy X-ray diffraction to extract chemical order parameters in ternary semiconductors** *JOURNAL OF MATERIALS CHEMISTRY C*  
Schnepf, R. R., Levy-Wendt, B. L., Tellekamp, M., Ortiz, B. R., Melamed, C. L., Schelhas, L. T., Stone, K. H., Toney, M. F., Toberer, E. S., Tamboli, A. C.  
2020; 8 (13): 4350-56
- **Heteroepitaxial Integration of ZnGeN<sub>2</sub> on GaN Buffers Using Molecular Beam Epitaxy** *CRYSTAL GROWTH & DESIGN*  
Tellekamp, M., Melamed, C. L., Norman, A. G., Tamboli, A.  
2020; 20 (3): 1868-1875
- **Combinatorial Tuning of Structural and Optoelectronic Properties in CuXZn<sub>1-X</sub>S** *MATTER*  
Woods-Robinson, R., Han, Y., Mangum, J. S., Melamed, C. L., Gorman, B. P., Mehta, A., Persson, K. A., Zakutayev, A.  
2019; 1 (4): 862-880
- **Ternary nitride semiconductors in the rocksalt crystal structure** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Bauers, S. R., Holder, A., Sun, W., Melamed, C. L., Woods-Robinson, R., Mangum, J., Perkins, J., Tumas, W., Gorman, B., Tamboli, A., Ceder, G., Lany, S., Zakutayev, et al  
2019; 116 (30): 14829-14834
- **COMBIgor: Data-Analysis Package for Combinatorial Materials Science** *ACS COMBINATORIAL SCIENCE*  
Talley, K. R., Bauers, S. R., Melamed, C. L., Papac, M. C., Heinselman, K. N., Khan, I., Roberts, D. M., Jacobson, V., Mis, A., Brennecka, G. L., Perkins, J. D., Zakutayev, A.

2019; 21 (7): 537-547

● **Large Area Atomically Flat Surfaces via Exfoliation of Bulk Bi<sub>2</sub>Se<sub>3</sub> Single Crystals** *CHEMISTRY OF MATERIALS*

Melamed, C. L., Ortiz, B. R., Gorai, P., Martinez, A. D., McMahon, W. E., Miller, E. M., Stevanovic, V., Tamboli, A. C., Norman, A. G., Toberer, E. S.

2017; 29 (19): 8472-8477