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EDUCATION

Ph.D. Materials Science and Engineering	2023, University of Michigan
B.Sc. Engineering Physics	2016, Cornell University

APPOINTMENT

2023–	Postdoctoral Fellow (Advisor: Ismail El Baggari)	Rowland Institute at Harvard University
2017–2023	Research Assistant (Advisor: Robert Hovden)	University of Michigan
2019	Teaching Assistant	University of Michigan
2014–2016	Undergraduate Researcher (Advisor: Lena F. Kourkoutis)	Cornell University
2015	Teaching Assistant	Cornell University

PUBLICATIONS (H-INDEX: 16, LEAD AUTHORED: 10, GOOGLE SCHOLAR)

30. Y. Zhang, **S. H. Sung**, C. B. Clement, S.-W. Cheong, and I. El Baggari "Inverse Melting of Polar Order in a Ferroelectric Oxide", **Under Review** (2024) [10.48550/arXiv.2411.10445]

29. W. Qi, S. Ponzoni, G. Huitric, R. Gasset, Y. Laplace, L. Cario, M. Marsi, E. Papalazarou, A. Alekhin, Y. Gallais, A. Bendounan, **S. H. Sung**, N. Schnitzer, B. H. Goodge, R. Hovden, and R. Perfetti "Torque induced, reversible switching of Ferro-Rotational Order in bulk 1T-TaS_2 crystals", **Under Review** (2024)

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27. X. Guo, W. Liu, J. Schwartz, **S. H. Sung**, D. Zhang, M. Shimizu, A. L. N. Kondusamy, L. Li, K. Sun, H. Deng, H. O. Jeschke, I. I. Mazin, R. Hovden, B. Lv, and L. Zhao "Extraordinary Phase Transition Revealed in a van der Waals Antiferromagnet", **Nature Communications 15**, 6472 (2024) [10.1038/s41467-024-50900-1]

26. M.-K. Choi, **S. H. Sung**, R. Hovden, and E. B. Tadmor "Elastic plate basis for the deformation and electron diffraction of twisted bilayer graphene on a substrate", **Physical Review B 110**, 024116 (2024) [10.1103/PhysRevB.110.024116]

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23. M. Huang, Z. Sun, G. Yan, H. Xie, N. Agarwal, G. Ye, **S. H. Sung**, H. Lu, J. Zhou, S. Yan, S.-J. Tian, H. Lei, R. Hovden, R. He, H. Wang, L. Zhao, and C. R. Du "Revealing intrinsic domains and fluctuations of moiré magnetism by a wide-field quantum microscope", **Nature Communications 14**, 5259 (2023) [10.1038/s41467-023-40543-z]

22. H. Xie, X. Luo, Z. Ye, Z. Sun, G. Ye, **S. H. Sung**, H. Ge, S. Yan, Y. Fu, S. Tian, H. Lei, K. Sun, R. Hovden, R. Hui, and L. Zhao "Evidence of Noncollinear Spin Texture in Magnetic Moiré Superlattices", **Nature Physics 19**, 1150–1155 (2023) [10.1038/s41567-023-02061-z]

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20. E. Ahn, B. Kim, S. Park, A. L. Erwin, **S. H. Sung**, R. Hovden, S. Mosalaganti, and U.-S. Cho "Batch Production of High-Quality Graphene Grids for Cryo-EM: Cryo-EM Structure of Methylococcus capsulatus Soluble Methane Monooxygenase Hydroxylase", **ACS Nano 17**, 6011–6022 (2023) [10.1021/acsnano.3c00463]

19. **S. H. Sung** and R. Hovden "On Infinite Series of Bessel functions of the First Kind: $\sum_\nu J_{N\nu+p}(x), \sum_\nu (-1)^\nu J_{N\nu+p}(x)$", **arXiv** (2022) [10.48550/arXiv.2211.01148]

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17. **S. H. Sung**, Y. M. Goh, H. Yoo, R. Engelke, H. Xie, K. Zhang, Z. Li, A. Ye, P. B. Deotare, E. B. Tadmor, A. J. Mannix, J. Park, L. Zhao, P. Kim, and R. Hovden "Torsional Periodic Lattice Distortions and Diffraction of Twisted 2D Materials", **Nature Communications 13**, 7826 (2022) [10.1038/s41467-022-35477-x]

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14. **S. H. Sung**, N. Schnitzer, S. Novakov, I. El Baggari, X. Luo, J. Gim, N. M. Vu, Z. Li, T. H. Brintlinger, Y. Liu, W. Lu, Y. P. Sun, P. Deotare, K. Sun, L. Zhoa, L. F. Kourkoutis, J. T. Heron, and R. Hovden "Two-dimensional charge order stabilized in clean polytype heterostructures", **Nature Communications 13**, 413 (2022) [10.1038/s41467-021-27947-5]

13. A. J. Mannix, A. Ye, **S. H. Sung**, A. Ray, F. Mujid, C. Park, M. Lee, J.-H. Kang, R. Shreiner, A. A. High, D. A. Muller, R. Hovden, and J. Park "Robotic Four-Dimensional Pixel Assembly of van der Waals Solids", **Nature Nanotechnology** (2022) [10.1038/s41565-021-01061-5]

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10. P. Meisenheimer, R. A. Steinhardt, **S. H. Sung**, L. D. Williams, S. Zhuang, M. E. Nowakowski, S. Novakov, M. M. Torunbalci, B. Prasad, C. J. Zollner, Z. Wang, N. M. Dawley, J. Schubert, A. H. Hunter, S. Manipatruni, D. E. Nikonov, I. A. Young, L. Q. Chen, J. Bokor, S. A. Bhave, R. Ramesh, J.-M. Hu, E. Kioupakis, R. Hovden, D. G. Schlom, and J. T. Heron "Engineering new limits to magnetostriction through metastability in iron-gallium alloys", **Nature Communications 12**, 2757 (2021) [10.1038/s41467-021-22793-x]

9. R. Yalisove*, **S. H. Sung***, P. Ercius, and R. Hovden "The Limits of Resolution and Dose for Aberration-Corrected Tomography", **Physical Review Applied 15**, 014003 (2021) [10.1103/PhysRevApplied.15.014003] **[Editors Choice]**

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6. Y. Wang, Y. Wu, J. Schwartz, **S. H. Sung**, R. Hovden, and Z. Mi "A Single-Junction Cathodic Approach for Stable Unassisted Solar Water Splitting", **Joule 3**, 10, 2444–2456 (2019) [10.1016/j.joule.2019.07.022]

5. **S. H. Sung***, N. Schnitzer*, L. Brown, J. Park, and R. Hovden "Stacking, strain, and twist in 2D materials quantified by 3D electron diffraction", **Physical Review Materials 3**, 6, 064003 (2019) [10.1103/PhysRevMaterials.3.064003]

4. N. Schnitzer, **S. H. Sung**†, and R. Hovden "Introduction to the Ronchigram and its Calculation with Ronchigram.com", **Microscopy Today 27**, 3, 12–15 (2019) [10.1017/S1551929519000427]

3. H. Yoo, R. Engelke, S. Carr, S. Fang, K. Zhang, P. Cazeaux, **S. H. Sung**, R. Hovden, A. W. Tsen, T. Taniguchi, K. Watanabe, G.-C. Yi, M. Kim, M. Luskin, E. B. Tadmor, E. Kaxiras, and P. Kim "Atomic and electronic reconstruction at the van der Waals interface in twisted bilayer graphene", **Nature Materials 18**, 448–453 (2019) [10.1038/s41563-019-0346-z]

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BOOK

1. M. Shah, **S. H. Sung**, and R. Hovden "The Atlas of Fourier Transform", **In Press** (2024)
   - Raised +$23,000 from +190 backers for Kickstarter Campaign [Link]

CONFERENCE ABSTRACTS

41. **S. H. Sung**, M. Liu, T. Dinh, C. Broyles, J. Gardener, A. Akey, S. Ran, P. Kim, J. Hoffman, and I. El Baggari "Unveiling a Large Supermodulation Underlying Electronic Anisotropy in Uranium Chalcogenide", **Microscopy and Microanalysis 30 (S1)**, ozae044.727 (2024)

40. **S. H. Sung**, N. Agarwal, I. El Baggari, P. Kezer, Y. M. Goh, N. Schnitzer, J. M. Shen, T. Chiang, Y. Liu, W. Lu, Y. P. Sun, L. F. Kourkoutis, J. T. Heron, K. Sun, and R. Hovden "Endotaxial Polytype Engineering: Enhancement of Incommensurate Charge Density Waves in TaS_2", **Microscopy and Microanalysis 30 (S1)**, ozae044.692 (2024)

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38. M. Gates, E. Rennich, **S. H. Sung**, N. Agarwal, R. Kerns, R. Hovden, and I. El Baggari "Ultra-Cold Cryogenic TEM Sample Holder with Liquid Helium and High Stability", **Microscopy and Microanalysis 30 (S1)**, ozae044.688 (2024)

37. I. El Baggari, **S. H. Sung**, Y. Zhang, R. Hovden, M. Gates, E. Rennich, and N. Agarwal "Cryogenic Electron Microscopy of Quantum Matter", **Microscopy and Microanalysis 30 (S1)**, ozae044.671 (2024)

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36. J. M. Shen, **S. H. Sung**, N. Agarwal, A. Stangel, and R. Hovden "Evolution of Incommensurate Charge Density Waves Quantified with In Situ TEM", **Microscopy and Microanalysis 30 (S1)**, ozae044.797 (2024)

35. M. Shah, **S. H. Sung**, and R. Hovden "The Atlas of Fourier Transforms: A Guide to Reciprocal Space for Biologists and Materials Scientists", **Microscopy and Microanalysis 30 (S1)**, ozae044.437 (2024)

34. N. Agarwal, **S. H. Sung**, Z. Sun, L. Zhao, and R. Hovden "Uncventional Lattice Reconstruction in Twisted Multilayer CrI_3", **Microscopy and Microanalysis 30 (S1)**, ozae044.544 (2024)

33. R. Hovden, J. Schwartz, **S. H. Sung**, Z. W. Di, Y. Jiang, J. Manassa, J. Pietryga, Y. Qian, M. G. Cho, J. L. Rowell, H. Zheng, R. D. Robinson, J. Gu, A. Kirilin, S. Rozeveld, P. Ercius, and M. Scott "Chemical Electron Tomography at Lower Dose and Higher Resolution", **Microscopy and Microanalysis 30 (S1)**, ozae044.890 (2024)

32. **S. H. Sung**, N. Agarwal, I. El Baggari, Y. M. Goh, P. Kezer, N. Schnitzer, Y. Liu, W. Lu, Y. P. Sun, L. F. Kourkoutis, K. Sun, J. T. Heron, and R. Hovden "Endotaxial Polytype Engineering: Enhancement of Incommensurate Charge Density Waves in TaS_2", **Materials Research Society** (2024)

31. **S. H. Sung**, N. Schnitzer, J. L. Hart, A. Dabak-Wakankar, I. El Baggari, J. J. Cha, L. F. Kourkoutis, and R. Hovden "Imaging Mobility of Charge Order Topology via Charge Density Wave Interferometery", **Materials Research Society** (2024)

30. E. Rennich, **S. H. Sung**, N. Agarwal, R. Hovden, and I. El Baggari "Liquid Helium TEM Sample Holder with High Stability and Long Hold Times", **Microscopy and Microanalysis 29 (S1)**, 1696–1697 (2023)

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28. **S. H. Sung**, P. Kezer, N. Agarwal, Y. M. Goh, N. Schnitzer, I. El Baggari, K. Sun, L. F. Kourkoutis, J. T. Heron, and R. Hovden "Endotaxial Polytype Engineering: Enhancement of Incommensurate Charge Density Waves in TaS_2", **Microscopy and Microanalysis 29 (S1)**, 1646–1647 (2023)

27. **S. H. Sung** and R. Hovden "The Structure of Charge Density Waves in TaS_2 across Temperature and Dimensionality", **Microscopy and Microanalysis 29 (S1)**, 1694 (2023)

26. N. Agarwal, **S. H. Sung**, J. Schwartz, N. Schnitzer, Z. Xi, J. Hung, I. El Baggari, L. F. Kourkoutis, L. Qi, A. Van der Ven, and R. Hovden "Native Intercalant Order in TaS_2 Achieved Through in situ Thermal Heating", **Microscopy and Microanalysis 29 (S1)**, 1583–1584 (2023)

25. M. Shah, **S. H. Sung**, and R. Hovden "An Atlas of Fourier Transforms", **Microscopy and Microanalysis 29 (S1)**, 1404–1405 (2023)

24. **S. H. Sung**, N. Schnitzer, A. Dabak-Wakankar, I. El Baggari, L. F. Kourkoutis, and R. Hovden "Moiré Magnification of Charge Density Wave Dislocations using 4D-STEM", **Microscopy and Microanalysis 29 (S1)**, 260–261 (2023)

23. A. Mireles, C. Shi, J. Park, B. Shin, **S. H. Sung**, C. Ophus, R. Hovden, K. Kang, and Y. Han "Using 4D-STEM to Map 3D Morphologies of 2D Materials", **Microscopy and Microanalysis 29 (S1)**, 262–263 (2023)

22. **S. H. Sung**, Y. M. Goh, H. Yoo, R. Engelke, H. Xie, Z. Li, A. Ye, P. B. Deotare, A. J. Mannix, J. Park, L. Zhao, P. Kim, and R. Hovden "Universal Torsional Periodic Lattice Distortion in Twisted 2D Materials", **Materials Research Society** (2022)

21. **S. H. Sung**, Y. M. Goh, N. Agarwal, N. Schnitzer, I. El Baggari, K. Sun, L. F. Kourkoutis, and R. Hovden "Engineering Charge Density Waves using Interleaved Polytype Heterostructures", **Materials Research Society** (2022)

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19. **S. H. Sung**, Y. M. Goh, N. Agarwal, N. Schnitzer, I. El Baggari, K. Sun, L. F. Kourkoutis, and R. Hovden "Engineering Charge Density Waves using Interleaved Polytype Heterostructures", **Microscopy and Microanalysis 28 (S1)**, 2362–2364 (2022)

18. Y. M. Goh*, **S. H. Sung***, B. Yang, G. Ye, S. Biswas, D. A. S. Kaib, R. Dhaka, S. Yan, C. Li, S. Jiang, F. Chen, H. Lei, R. Valent, S. M. Winter, R. Hovden, and A. W. Tsen "Pico-scale Distortions in Encapsulated Monolayer α-$RuCl_3$ Characterized with 3D Electron Diffraction", **Microscopy and Microanalysis 28 (S1)**, 1982–1985 (2022) [**1st Place Poster Award (Physical Sciences)**]

17. N. Agarwal*, **S. H. Sung***, J. Schwartz, and R. Hovden "Accessing Chemically Ordered Phases in TaS_2 via High Temperature In-situ TEM", **Microscopy and Microanalysis 28 (S1)**, 1926–1927 (2022) [**M&M Student Scholar Awards**]

16. **S. H. Sung**, Y. M. Goh, H. Yoo, R. Engelke, P. Kim, and R. Hovden "Torsional Periodic Lattice Distortion in Twisted Bilayer Graphene", **Bulletin of the American Physical Society 67**, 3, K56.2 (2022)

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11. **S. H. Sung**, Y. M. Goh, I. El Baggari, K. Sun, and R. Hovden "Recovery of long-range order in two-dimensional charge density waves at high temperatures", **Microscopy and Microanalysis 27 (S1)**, 852–854 (2021) [**M&M Student Scholar Awards**]

10. R. Engelke, H. Yoo, S. Carr, **S. H. Sung***, K. Zhang, A. M. Valdiva, E. B. Tadmor, R. Hovden, E. Kaxiras, and P. Kim "Imaging of 2-Dimensional Dislocation Networks in Twisted Bilayer Graphene and Beyond", **Microscopy and Microanalysis 26 (S2)**, 854–855 (2020)

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5. R. Yalisove*, **S. H. Sung***, and R. Hovden "Defining Theoretical Limits of Aberation-Corrected Electron Tomography: New Bounds for Resolution, Ojbect Size, and Dose", **Microscopy and Microanalysis 25 (S2)**, 1810–1811 (2019) [**M&M Student Scholar Awards**]

4. N. Schnitzer*, **S. H. Sung***, and R. Hovden "Maximal Resolution from the Ronchigram: Human vs. Deep Learning", **Microscopy and Microanalysis 25 (S2)**, 160–161 (2019)

3. N. Schnitzer*, **S. H. Sung***, and R. Hovden "Stacking, Strain, & Stiffness of 2D Transition Metal Dichalcogenides Quantified through Reciprocal Space", **Microscopy and Microanalysis 24 (S1)**, 1586–1587 (2018) [**M&M Student Scholar Awards**]

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*The authors contributed equally

PRESENTATIONS

25. **S. H. Sung**, M. Liu, T. Dinh, C. Broyles, J. Gardener, A. Akey, S. Ran, P. Kim, J. Hoffman, and I. El Baggari "Unveiling a Large Supermodulation Underlying Electronic Anisotropy in Uranium Chalcogenide", **Microscopy and Microanalysis** (2024) Cleveland, OH

24. **S. H. Sung**, N. Agarwal, I. El Baggari, P. Kezer, Y. M. Goh, N. Schnitzer, J. M. Shen, T. Chiang, Y. Liu, W. Lu, Y. P. Sun, L. F. Kourkoutis, J. T. Heron, K. Sun, and R. Hovden "Endotaxial Polytype Engineering: Enhancement of Incommensurate Charge Density Waves in TaS_2", **Microscopy and Microanalysis** (2024) Cleveland, OH

23. **S. H. Sung**, N. Agarwal, I. El Baggari, Y. M. Goh, P. Kezer, N. Schnitzer, Y. Liu, W. Lu, Y. P. Sun, L. F. Kourkoutis, K. Sun, J. T. Heron, and R. Hovden "Endotaxial Polytype Engineering: Enhancement of Incommensurate Charge Density Waves in TaS_2", **Gordon Research Conference: Strongly Correlated Matters** (2024) Mount Holyoke University, MA

22. **S. H. Sung** "Endotaxial stabilization of 2D charge density waves with long-range order", **Invited Talk, Max Planck Institute for Chemical Physics of Solids** (2024) Dresden, Germany

21. **S. H. Sung**, N. Agarwal, I. El Baggari, Y. M. Goh, P. Kezer, N. Schnitzer, Y. Liu, W. Lu, Y. P. Sun, L. F. Kourkoutis, K. Sun, J. T. Heron, and R. Hovden "Endotaxial Polytype Engineering: Enhancement of Incommensurate Charge Density Waves in TaS_2", **Materials Research Society** (2024) Seattle, WA

20. **S. H. Sung**, N. Schnitzer, J. L. Hart, A. Dabak-Wakankar, I. El Baggari, J. J. Cha, L. F. Kourkoutis, and R. Hovden "Imaging Mobility of Charge Order Topology via Charge Density Wave Interferometery", **Materials Research Society** (2024) Seattle, WA

19. **S. H. Sung**, N. Agarwal, I. El Baggari, Y. M. Goh, P. Kezer, N. Schnitzer, Y. Liu, W. Lu, Y. P. Sun, L. F. Kourkoutis, K. Sun, J. T. Heron, and R. Hovden "Endotaxial Polytype Engineering: Enhancement of Incommensurate Charge Density Waves in TaS_2", **The 20th International Microscopy Congress** (2023) Busan, South Korea

18. **S. H. Sung**, Y. M. Goh, H. Yoo, R. Engelke, H. Xie, K. Zhang, Z. Li, A. Ye, P. B. Deotare, E. B. Tadmor, A. J. Mannix, J. Park, L. Zhao, P. Kim, and R. Hovden "Universal Torsional Periodic Lattice Distortion in Twisted 2D Materials", **The 20th International Microscopy Congress** (2023) Busan, South Korea

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17. **S. H. Sung**, R. Yalisove, J. Schwartz, Y. Jiang, C. Ophus, M. C. Scott, P. Ercius, and R. Hovden "Achieving High-Resolution of Large Specimens Using Aberration-Corrected Tomography", **The 20th International Microscopy Congress** (2023) Busan, South Korea

16. **S. H. Sung**, P. Kezer, N. Agarwal, Y. M. Goh, N. Schnitzer, I. El Baggari, K. Sun, L. F. Kourkoutis, J. T. Heron, and R. Hovden "Endotaxial Polytype Engineering: Enhancement of Incommensurate Charge Density Waves in TaS_2", **Microscopy and Microanalysis** (2023) Minneapolis, MN

15. **S. H. Sung** and R. Hovden "The Structure of Charge Density Waves in TaS_2 across Temperature and Dimensionality", **Microscopy and Microanalysis** (2023) Minneapolis, MN

14. M. Shah, **S. H. Sung**, and R. Hovden "An Atlas of Fourier Transforms", **Microscopy and Microanalysis** (2023) Minneapolis, MN

13. **S. H. Sung**, N. Schnitzer, A. Dabak-Wakankar, I. El Baggari, L. F. Kourkoutis, and R. Hovden "Moiré Magnification of Charge Density Wave Dislocations using 4D-STEM", **Microscopy and Microanalysis** (2023) Minneapolis, MN

12. **S. H. Sung**, Y. M. Goh, H. Yoo, R. Engelke, H. Xie, Z. Li, A. Ye, P. B. Deotare, A. J. Mannix, J. Park, L. Zhao, P. Kim, and R. Hovden "Universal Torsional Periodic Lattice Distortion in Twisted 2D Materials", **Materials Research Society** (2022)

11. **S. H. Sung**, Y. M. Goh, N. Agarwal, N. Schnitzer, I. El Baggari, K. Sun, L. F. Kourkoutis, and R. Hovden "Engineering Charge Density Waves using Interleaved Polytype Heterostructures", **Materials Research Society** (2022)

10. **S. H. Sung** "Periodic Lattice Distortions in Low Dimensional Materials", **Invited Talk, Harvard University** (2023) Cambridge, MA

9. **S. H. Sung**, Y. M. Goh, H. Yoo, R. Engelke, H. Xie, Z. Li, A. Ye, P. B. Deotare, A. J. Mannix, J. Park, L. Zhao, P. Kim, and R. Hovden "Universal Torsional Periodic Lattice Distortion in Twisted 2D Materials", **Microscopy and Microanalysis** (2022) Portland, OR

8. **S. H. Sung**, Y. M. Goh, N. Agarwal, N. Schnitzer, I. El Baggari, K. Sun, L. F. Kourkoutis, and R. Hovden "Engineering Charge Density Waves using Interleaved Polytype Heterostructures", **Microscopy and Microanalysis** (2022) Portland, OR

7. **S. H. Sung**, Y. M. Goh, N. Agarwal, N. Schnitzer, I. El Baggari, K. Sun, L. F. Kourkoutis, and R. Hovden "Two-dimensional charge order stabilized in clean polytype heterostructures", **PARADIM** (2022) Baltimore, MD **[Invited Presentation]**

6. **S. H. Sung**, Y. M. Goh, H. Yoo, R. Engelke, P. Kim, and R. Hovden "Torsional Periodic Lattice Distortion in Twisted Bilayer Graphene", **APS March Meeting** (2022) Chicago, IL

5. **S. H. Sung**, N. Schnitzer, S. Novakov, I. El Baggari, X. Luo, J. Gim, N. Vu, Z. Li, T. Brintlinger, Y. Liu, W. Lu, Y. P. Sun, P. Deotare, K. Sun, L. Zhao, L. F. Kourkoutis, J. T. Heron, and R. Hovden "Two-dimensional charge order stabilized in clean polytype heterostructures", **Materials Research Society** (2021)

4. **S. H. Sung**, N. Schnitzer, S. Novakov, I. El Baggari, X. Luo, J. Gim, N. Vu, Z. Li, T. Brintlinger, Y. Liu, W. Lu, Y. P. Sun, P. Deotare, K. Sun, L. Zhao, L. F. Kourkoutis, J. T. Heron, and R. Hovden "Two-dimensional charge order stabilized in clean polytype heterostructures", **Microscopy and Microanalysis** (2021) Virtual Conference

3. **S. H. Sung**, Y. M. Goh, I. El Baggari, K. Sun, and R. Hovden "Recovery of long-range order in two-dimensional charge density waves at high temperatures", **Microscopy and Microanalysis** (2021) Virtual Conference

2. **S. H. Sung**, N. Schnitzer, and R. Hovden "Maximal Resolution from the Ronchigram: Human vs. Deep Learning", **AI for Atoms: How to Machine Learn STEM** (2020) ORNL/CNMS Virtual Workshop

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1. **S. H. Sung**, Y. M. Goh, H. Yoo, R. Engelke, P. Kim, and H. Robert "Torsional Periodic Lattice Distrtion in Twisted Bilayer Graphene", **Microscopy and Microanalysis** (2020) Virtual Conference

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AWARDS & GRANTS

Microscopy & Microanalysis 2024 Postdoctoral Scholar Award	July 2024
Best Presentation Award: The 20th International Microscopy Congress	Sept. 2023
Rackham Predoctral Fellowship	2022–2023
Rackham Conference Travel Grant	2021, 2022, 2023
Molecular Foundry User Proposal	May 2022
Microscopy & Microanalysis 2021 Student Scholar Award	Aug. 2021
Rackham Graduate Student Research Grant	Jun. 2021
NVIDIA GPU Grant	Sept. 2018
PARADIM User Proposal	Aug. 2018
Dorothy & Fred Chau Award: Excellence in Undergraduate Research	May 2016
Engineering Learning Initiatives Undergraduate Research Award	Apr. 2014 & Sept. 2014

TEACHING EXPERIENCES, OUTREACH & ACADEMIC SERVICES

Cornell NSF-PARADIM Summer School Instructor on Scanning Transmission Electron Microscopy June. 2024

- Designed a tutorial module for PARADIM 2024 Summer school supported under NSF Grant No. DMR-2039380.

MSE 593 – Design, Data, & Visualization for High Impact Sciences Fall. 2023

- Designed and taught a new course at University of Michigan.
- Maximum enrollment reached

Cornell NSF-PARADIM Summer School Instructor on Scanning Transmission Electron Microscopy June. 2021

- Designed a tutorial module for PARADIM 2021 Summer school supported under NSF Grant No. DMR-2039380.

Ronchigram.com: Open-source education tool for advanced Electron Microscopy Jul. 2018 – Current

- Built and maintains '**ronchigram.com**', an open-source, cross-platform electron microscopy training tool.

Peer Review: Peer Reviewer for *Science* and *Nature Communications*

Graduate Student Instructor, University of Michigan Aug. 2019 – Dec. 2019

- Teaching assistant for 'Introduction to Electron Microscopy (MSE 562)'

Undergraduate Teaching Assistant, Cornell University Aug. 2015 – Dec. 2015

- Assisted graduate TA for 'Physics I: Mechanics and Heat (PHYS 1112)'

REFERENCES

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