

Noah Shevy

Madison, WI 53719 — noahshevy@gmail.com — (906) 360-3263

Research Interests: Semiconductor physics · Quantum materials · Condensed matter · Nanoscience

Education

Northern Michigan University
B.S. Physics & B.S. Mathematics
Upper-Division GPA: 3.41

Marquette, MI
May 2025

Awards

Outstanding Graduating Senior in Physics — Northern Michigan University (2025)

Awarded annually to one graduating senior for exceptional academic performance, leadership, and research contributions in physics.

Research Experience

Ames National Laboratory

DOE SULI Intern — Advisor: Prof. Alex Travesset

Ames, IA
Aug 2025 – Dec 2025

- Performing GPU-accelerated molecular-dynamics simulations of different water models.
- Investigating the dielectric behavior of the TIP3P and TIP4P-Ew models using PPPM electrostatics and dielectric function analysis.
- Developing scalable HPC workflows on Expanse, Bridges-2, and Delta using SLURM and Conda.
- Paper and oral presentation: *A comparison of the dielectric function for p-point water models* (2025-2026).

Washington State University, McCluskey Laboratory

NSF REU Summer Researcher — Advisor: Prof. Matthew D. McCluskey

Pullman, WA
Jun 2024 – Aug 2024

- Characterized β -Ga₂O₃ via FTIR and Raman spectroscopy.
- Practiced diamond anvil cell methods for high-pressure measurements.
- Utilized OriginPro for data analysis.
- Poster: *Temperature-Dependence of Hydrogen, Deuterium, and Iridium Defects in β -Ga₂O₃* (2024).
- Submitted paper: *Functionality of Hydrogen, Deuterium, and Iridium as Donors for β -Ga₂O₃ at Low Temperatures* (2025).
- Paper in preparation: *Characterization of β -Ga₂O₃ at Low Temperatures* (2025-2026).

Northern Michigan University, Physics Department

Undergraduate Researcher

Marquette, MI
Jul 2023 – Dec 2023

- Completed directed study on semiconductor physics.
- Designed and built an apparatus to measure the band gap of heavily doped silicon.
- Applied MATLAB for data analysis.
- Poster and oral presentation: *Functionality of Hydrogen, Deuterium, and Iridium as Donors for β -Ga₂O₃ at Low Temperatures* (2025).

Teaching & Mentoring

Northern Michigan University, Digital Media Tutoring Center

Student Tutor

Marquette, MI

Aug 2018 – May 2025

- Mentored students on digital media projects and effective communication strategies.
- Designed and delivered lectures on multimedia development (story boarding, workflow, editing, etc.).
- Guided students to adopt VR/AR technologies and administered empathy training simulations to nursing students.

NICE Community School District

Substitute Teacher

Ishpeming, MI

January 2026 – June 2026

- Teaching mathematics and science lectures to students in middle school through high school.
- Helping students understand difficult material through one on one sessions.
- Encouraging students to continue learning about science and mathematics by showing them real research topics and results.

Publications (Submitted & Preparing)

1. **N. Shevy**, *Functionality of Hydrogen, Deuterium, and Iridium as Donors for β -Ga₂O₃ at Low Temperatures*, JURPA via AIP Publishing, submitted (2025).
2. **J. Miller, N. Shevy, M. D. McCluskey**, *Characterization of β -Ga₂O₃ at Low Temperatures*, in preparation (2025-2026).
3. **N. Shevy, P. Kakkar, A. O'Neil, A. Travasset**, *A comparison of the dielectric function for p-point water models*, Published (<https://doi.org/10.1063/5.0344621>) (2026).

Presentations

1. **N. Shevy**, *Temperature-Dependence of Hydrogen, Deuterium, and Iridium Defects in β -Ga₂O₃*, Poster — NSF REU Physics Symposium, Washington State University (2024).
2. **N. Shevy**, *Functionality of Hydrogen, Deuterium, and Iridium as Donors for β -Ga₂O₃ at Low Temperatures*, Oral presentation — Senior Seminar, Northern Michigan University (2025).
3. **N. Shevy**, *Functionality of Hydrogen, Deuterium, and Iridium as Donors for β -Ga₂O₃ at Low Temperatures*, Poster — Student Research Symposium, Northern Michigan University (2025).
4. **N. Shevy**, *Water Dielectric Function at Finite Wavelength: 3,4,5 Point Models*, Oral presentation — DOE SULI Final Presentations, Ames National Laboratory (2025).

Technical Skills

Programming & Simulation: Python, MATLAB, HOOMD-blue, NumPy, Matplotlib, PPPM methods

HPC & Systems: CUDA, Open MPI, Linux (Fedora, Manjaro), SLURM, Expanse, Delta, and Bridges-2

Data Analysis: OriginPro, Pandas, SciPy

Experimental Techniques: FTIR, Raman, Diamond Anvil Cell, Circuit design and testing

Communication & Leadership: Mentoring, Technical writing, Public speaking