



Maritha Wang

Ph.D. Student in Materials Science and Engineering, admitted Autumn 2020

Bio

BIO

Maritha Wang is a Ph.D. candidate in the Department of Materials Science and Engineering at Stanford University, advised by Prof. Eric Pop. She received her B.A. in Physics and B.S. in Chemistry with Honors from the University of Chicago in 2020. Her research focuses on elucidating the electronic transport properties of 2D materials using simulations towards next-generation electronics. She is a recipient of the NSF Graduate Research Fellowship and the Stanford Shoucheng Zhang Graduate Fellowship.

HONORS AND AWARDS

- Best Need Award, Stanford Health Technology Showcase (2025)
- Biodesign NEXT, Stanford University (2025)
- Graduate Public Service Fellowship, Stanford University (2024-2025)
- Shoucheng Zhang Graduate Fellowship (Quantum Science and Engineering Fellowship), Stanford University (2020 - 2025)
- NSF Graduate Research Fellowship, National Science Foundation (2020 - 2025)
- Norman H. Nachtrieb Memorial Award, University of Chicago (2020)
- Barry M. Goldwater Scholarship, Barry Goldwater Scholarship and Excellence in Education Foundation (2019)

EDUCATION AND CERTIFICATIONS

- M.S., Stanford University , Materials Science and Engineering (2024)
- B.A., University of Chicago , Physics (2020)
- B.S., University of Chicago , Chemistry (2020)

LINKS

- <http://poplab.stanford.edu/>: <http://poplab.stanford.edu/>
- Google Scholar Profile: <https://scholar.google.com/citations?user=2QWWoDYAAAAJ&hl=en>

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Computational modeling of nanoscale transistors and brain-computer interfaces

Publications

PUBLICATIONS

- **Monte Carlo Simulation of Electrical Transport with Joule Heating and Strain in Monolayer MoS₂ Devices.** *Nano letters*
Wang, M. A., Pop, E.
2025
- **Stretchable transistors and functional circuits for human-integrated electronics** *NATURE ELECTRONICS*
Dai, Y., Hu, H., Wang, M., Xu, J., Wang, S.
2021; 4 (1): 17-29
- **Capillary Origami with Atomically Thin Membranes** *NANO LETTERS*
Reynolds, M. F., McGill, K. L., Wang, M. A., Gao, H., Mujid, F., Kang, K., Park, J., Miskin, M. Z., Cohen, I., McEuen, P. L.
2019; 19 (9): 6221-6226