Stanford

Nofar Mintz Hemed

Physical Science Research Scientist

Electrical Engineering

Bio

BIO

Nofar Hemed received her Ph.D. from Tel-Aviv University (Israel) in 2017 for her work on the performance and reliability of Si nanowire-forest structure for biosensor applications. She joined Stanford on September 2017 as a recipient of the prestigious "The Eric and Wendy Schmidt Postdoctoral Award", and she is currently working on multi-array for electrochemical brain mapping.

ACADEMIC APPOINTMENTS

- Physical Science Research Scientist, Electrical Engineering

HONORS AND AWARDS

- Postdoctoral Award Program for Advancing Women in Science, Ben-Gurion University (08/2018)
- VATAT Postdoctoral Award for Excellent candidates, The Council for Higher Education of Israel (07/2017)
- Prize for Initiative and Academic Excellence, Tel-Aviv University (05/2017)
- Marian Gertner Institute for MedicalNanosystems, Marian Gertner (04/2017)
- The Eric and Wendy Schmidt Postdoctoral Award for Women in Mathematical and Computing Sciences, Schmidt foundation (11/2016)
- International Travel Grant, Israeli Ministry of Science (05/2016)

Publications

PUBLICATIONS

- **Multiplexed neurochemical sensing with sub-nM sensitivity across 2.25 mm2 area.** *Biosensors & bioelectronics*
  Mintz Hemed, N., Hwang, F. J., Zhao, E. T., Ding, J. B., Melosh, N. A.
  2024; 261: 116474

- **Enhanced Thin-Film Encapsulation Through Micron-Scale Anchors** *ADVANCED FUNCTIONAL MATERIALS*
  Hemed, N., Pham, A., Zhao, E. T., Wang, P., Melosh, N. A.
  2024

- **Direct electron beam patterning of electro-optically active PEDOT:PSS** *NANOPHOTONICS*
  Doshi, S., Ludescher, D., Karst, J., Floess, M., Carlstrom, J., Li, B., Hemed, N., Duh, Y., Melosh, N. A., Hentschel, M., Brongersma, M., Giessen, H.
  2024

- **Spiral NeuroString: High-Density Soft Bioelectronic Fibers for Multimodal Sensing and Stimulation.** *bioRxiv : the preprint server for biology*
  Khatib, M., Zhao, E. T., Wei, S., Abramson, A., Bishop, E. S., Chen, C., Thomas, A., Xu, C., Park, J., Lee, Y., Hamnett, R., Yu, W., Root, et al
  2023

- **A CMOS-based highly scalable flexible neural electrode interface.** *Science advances*
  Zhao, E. T., Hull, J. M., Mintz Hemed, N., Uluşan, H., Bartram, J., Zhang, A., Wang, P., Pham, A., Ronchi, S., Huguenard, J. R., Hierlemann, A., Melosh, N. A.
  2023; 9 (23): eadf9524

- **On-Demand, Reversible, Ultrasensitive Polymer Membrane Based on Molecular Imprinting Polymer.** *ACS nano*
  Mintz Hemed, N., Leal-Ortiz, S., Zhao, E. T., Melosh, N. A.
  2023
- **An integrated perspective for the diagnosis and therapy of neurodevelopmental disorders - From an engineering point of view.** *Advanced drug delivery reviews*
  Mintz Hemed, N., Melosh, N. A.
  2023; 194: 114723
- **A scalable bonding technique for the development of next-generation brain-machine interfaces**
  Wang, P., Goh, T., Hemed, N., Melosh, N., IEEE
  IEEE.2019: 863–66
- **Local electrochemical control of hydrogel microactuators in microfluidics** *JOURNAL OF MICROMECHANICS AND MICROENGINEERING*
  Engel, L., Liu, C., Hemed, N., Khan, Y., Arias, A., Shacham-Diamand, Y., Krylov, S., Lin, L.
  2018; 28 (10)