Stanford

Helen Tran

Postdoctoral Research Fellow, Chemical Engineering

Bio

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Columbia University (2016)
- Master of Philosophy, Columbia University (2015)

STANFORD ADVISORS

- Zhenan Bao, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **An Electrochemical Gelation Method for Patterning Conductive PEDOT:PSS Hydrogels.** *Advanced materials (Deerfield Beach, Fla.)*
  Feig, V. R., Tran, H., Lee, M., Liu, K., Huang, Z., Beker, L., Mackanic, D. G., Bao, Z.
  2019: e1902869
- **High-Transconductance Stretchable Transistors Achieved by Controlled Gold Microcrack Morphology** *ADVANCED ELECTRONIC MATERIALS*
  Matsuhisa, N., Jiang, Y., Liu, Z., Chen, G., Wan, C., Kim, Y., Kang, J., Tran, H., Wu, H., You, I., Bao, Z., Chen, X.
  2019; 5 (8)
- **Hierarchical patterns with sub-20 nm pattern fidelity via block copolymer self-assembly and soft nanotransfer printing** *POLYMER CHEMISTRY*
  Tran, H., Bergman, H. M., Parenti, K. R., van der Zande, A. M., Dean, C. R., Campos, L. M.
  2019; 10 (23): 3194–3200
- **Polymer Chemistries Underpinning Materials for Skin-Inspired Electronics** *MACROMOLECULES*
  Tran, H., Feig, V. R., Liu, K., Zheng, Y., Bao, Z.
  2019; 52 (11): 3965–74
- **Electrochemical patterning of tissue-mimetic conductive hydrogels**
  Feig, V., Tran, H., Lee, M., Huang, R., Liu, K., Baker, L., Mackanic, D., Bao, Z.
  AMER CHEMICAL SOC.2019
- **Designing a Quinone-Based Redox Mediator to Facilitate Li2S Oxidation in Li-S Batteries** *JOULE*
  Tsao, Y., Lee, M., Miller, E. C., Gao, G., Park, J., Chen, S., Katsumata, T., Tran, H., Wang, L., Toney, M. F., Cui, Y., Bao, Z.
  2019; 3 (3): 872–84
- **Biodegradable and flexible arterial-pulse sensor for the wireless monitoring of blood flow.** *Nature biomedical engineering*
  Boutry, C. M., Beker, L., Kaizawa, Y., Vassos, C., Tran, H., Hinckley, A. C., Pfattner, R., Niu, S., Li, J., Claverie, J., Wang, Z., Chang, J., Fox, et al
  2019; 3 (1): 47–57
- **Biodegradable and flexible arterial-pulse sensor for the wireless monitoring of blood flow** *NATURE BIOMEDICAL ENGINEERING*
  Boutry, C. M., Beker, L., Kaizawa, Y., Vassos, C., Tran, H., Hinckley, A. C., Pfattner, R., Niu, S., Li, J., Claverie, J., Wang, Z., Chang, J., Fox, et al

2019; 3 (1): 47–57

- **Mechanically tunable conductive interpenetrating network hydrogels that mimic the elastic moduli of biological tissue (vol 9, 2740, 2018)** *NATURE COMMUNICATIONS*
  Feig, V. R., Tran, H., Lee, M., Bao, Z.
  2018; 9: 5030

- **Biodegradable and stretchable electronic materials for transient electronics**
  Tran, H., Feig, V., Xu, J., Bao, Z.
  AMER CHEMICAL SOC.2018

- **Mechanically tunable conductive interpenetrating network hydrogels that mimic the elastic moduli of biological tissue.** *Nature communications*
  Feig, V. R., Tran, H., Lee, M., Bao, Z.
  2018; 9 (1): 2740

- **Skin-Inspired Electronics: An Emerging Paradigm** *ACCOUNTS OF CHEMICAL RESEARCH*
  Wang, S., Oh, J., Xu, J., Tran, H., Bao, Z.
  2018; 51 (5): 1033–45

- **Biodegradable Polymeric Materials in Degradable Electronic Devices** *ACS CENTRAL SCIENCE*
  Feig, V. R., Tran, H., Bao, Z.
  2018; 4 (3): 337–48