Stanford

Steven Fried

Ph.D. Student in Chemistry, admitted Autumn 2020

Publications

PUBLICATIONS

- **Detection of covalent drug binding in live cells using a quantum cascade laser and nitrile-labeled amino acids**
  Fried, S. D. E., Mukherjee, S., Bagheri, N., Hong, N. Y., Boxer, S. G.
  CELL PRESS.2025
- **Detection of covalent drug binding in live cells using a quantum cascade laser and nitrile-labeled amino acids**
  Fried, S. D. E., Mukherjee, S., Bagheri, N., Hong, N. Y., Boxer, S. G.
  CELL PRESS.2025
- **Detection of covalent drug binding in live cells using a quantum cascade laser and nitrile-labeled amino acids**
  Fried, S. D. E., Mukherjee, S., Bagheri, N., Hong, N. Y., Boxer, S. G.
  CELL PRESS.2025
- **Cartography of electric fields in enzyme catalysis**
  Mukherjee, S., Fried, S. D. E., Mao, Y., Boxer, S. G.
  CELL PRESS.2025: 372A
- **Environment- and Conformation-Induced Frequency Shifts of C-D Vibrational Stark Probes in NAD(P)H Cofactors.** *The journal of physical chemistry letters*
  Fried, S. D., Mukherjee, S., Mao, Y., Boxer, S. G.
  2024: 10826-10834
- **Hydration and membrane lipids influence rhodopsin activation**
  Hewage, K. S. K., Chen, S. J. X., Fried, S. D. E., Luu, T. N., Struts, A. V., Perera, S. C., Brown, M. F.
  CELL PRESS.2024: 515A
- **Osmotic stress studies of G-protein-coupled receptor rhodopsin activation.** *Biophysical chemistry*
  Struts, A. V., Barmasov, A. V., Fried, S. D., Hewage, K. S., Perera, S. M., Brown, M. F.
  2023; 304: 107112
- **Carbon-deuterium bonds as reporters of electric fields in solvent and protein environments**
  Fried, S. D. E., Kirsh, J. M., Zheng, C., Mao, Y., Markland, T. E., Boxer, S. G.
  CELL PRESS.2023: 481A
- **Carbon-deuterium bonds as reporters of electric fields in solvent and protein environments.** *Biophysical journal*
  Fried, S. D., Kirsh, J. M., Zheng, C., Mao, Y., Markland, T. E., Boxer, S. G.
  2023; 122 (3S1): 481a
- **Solvent Organization and Electrostatics Tuned by Solute Electronic Structure: Amide versus Non-Amide Carbonyls.** *The journal of physical chemistry. B*
  Fried, S. D., Zheng, C., Mao, Y., Markland, T. E., Boxer, S. G.
  2022
- **Tuning solvent electrostatic environment of amide carbonyls as prototypical peptide backbones**
  Fried, S. D. E., Zheng, C., Mao, Y., Markland, T. E., Boxer, S. G.
  CELL PRESS.2022: 186A

- **Activation of G-protein-coupled receptors by hydration driven sponge mechanism**
  Fried, S. D. E., Hewage, K. S. K., Eitel, A. R., Struts, A. V., Weerasinghe, N., Perera, S. C., Brown, M. F.
  CELL PRESS.2022: 458A