



Nahal Bagheri

Ph.D. Student in Electrical Engineering, admitted Winter 2021

Publications

PUBLICATIONS

- **Magnetic resonance control of spin-correlated radical pair dynamics in vivo.** *Nature*
Burd, S. C., Bagheri, N., Condon, A. F., Ingaramo, M., Mondal, S., Dowlatshahi, D. P., Summers, J. A., Mukherjee, S., York, A. G., Wakatsuki, S., Boxer, S. G., Kasevich, M.
2026
- **Magnetic-resonance control of spin-correlated radical pair dynamics in a transgenic animal**
Bagheri, N., Burd, S. C., Condon, A. F., Ingaramo, M., Mondal, S., Dowlatshahi, D. P., Summers, J. A., Mukherjee, S., York, A. G., Wakatsuki, S., Boxer, S. G., Kasevich, M.
CELL PRESS.2026: 22a
- **Covalent Drug Binding in Live Cells Monitored by Mid-Infrared Quantum Cascade Laser Spectroscopy: Photoactive Yellow Protein as a Model System.** *Journal of the American Chemical Society*
Mukherjee, S., Fried, S. D., Hong, N. Y., Bagheri, N., Kozuch, J., Mathews, I. I., Kirsh, J. M., Boxer, S. G.
2025
- **Covalent Drug Binding in Live Cells Monitored by Mid-IR Quantum Cascade Laser Spectroscopy: Photoactive Yellow Protein as a Model System.** *bioRxiv : the preprint server for biology*
Mukherjee, S., Fried, S. D., Hong, N. Y., Bagheri, N., Kozuch, J., Mathews, I. I., Kirsh, J. M., Boxer, S. G.
2025
- **Magnetic resonance control of reaction yields through genetically-encoded protein:flavin spin-correlated radicals in a live animal.** *bioRxiv : the preprint server for biology*
Burd, S. C., Bagheri, N., Ingaramo, M., Condon, A. F., Mondal, S., Dowlatshahi, D. P., Summers, J. A., Mukherjee, S., York, A. G., Wakatsuki, S., Boxer, S. G., Kasevich, M.
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**
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Fried, S. D. E., Mukherjee, S., Bagheri, N., Hong, N. Y., Boxer, S. G.
CELL PRESS.2025
- **A Fluorogenic Pseudoinfection Assay to Probe Transfer and Distribution of Influenza Viral Contents to Target Vesicles.** *Analytical chemistry*
Bhattacharya, A., Bagheri, N., Boxer, S. G.
2024