

Isaac Kauvar

Postdoctoral Scholar, Education

Publications

PUBLICATIONS

- **Deep posteromedial cortical rhythm in dissociation.** *Nature*
Vesuna, S., Kauvar, I. V., Richman, E., Gore, F., Oskotsky, T., Sava-Segal, C., Luo, L., Malenka, R. C., Henderson, J. M., Nuyujukian, P., Parvizi, J., Deisseroth, K.
2020
- **Optically sensing neural activity without imaging** *NATURE PHOTONICS*
Wetzstein, G., Kauvar, I.
2020; 14 (6): 340–41
- **Cortical Observation by Synchronous Multifocal Optical Sampling Reveals Widespread Population Encoding of Actions.** *Neuron*
Kauvar, I. V., Machado, T. A., Yuen, E. n., Kochalka, J. n., Choi, M. n., Allen, W. E., Wetzstein, G. n., Deisseroth, K. n.
2020
- **A Light-Field Metasurface for High-Resolution Single-Particle Tracking.** *Nano letters*
Holsteen, A. L., Lin, D., Kauvar, I., Wetzstein, G., Brongersma, M. L.
2019
- **Global Representations of Goal-Directed Behavior in Distinct Cell Types of Mouse Neocortex** *NEURON*
Allen, W. E., Kauvar, I. V., Chen, M. Z., Richman, E. B., Yang, S. J., Chan, K., Gradinaru, V., Deverman, B. E., Luo, L., Deisseroth, K.
2017; 94 (4): 891-?
- **Ancestral Circuits for the Coordinated Modulation of Brain State.** *Cell*
Lovett-Barron, M. n., Andalman, A. S., Allen, W. E., Vesuna, S. n., Kauvar, I. n., Burns, V. M., Deisseroth, K. n.
2017; 171 (6): 1411–23.e17
- **Modulation of prefrontal cortex excitation/inhibition balance rescues social behavior in CNTNAP2-deficient mice.** *Science translational medicine*
Selimbeyoglu, A. n., Kim, C. K., Inoue, M. n., Lee, S. Y., Hong, A. S., Kauvar, I. n., Ramakrishnan, C. n., Fenno, L. E., Davidson, T. J., Wright, M. n., Deisseroth, K. n.
2017; 9 (401)
- **Simultaneous fast measurement of circuit dynamics at multiple sites across the mammalian brain.** *Nature methods*
Kim, C. K., Yang, S. J., Pichamoorthy, N., Young, N. P., Kauvar, I., Jennings, J. H., Lerner, T. N., Berndt, A., Lee, S. Y., Ramakrishnan, C., Davidson, T. J., Inoue, M., Bito, et al
2016; 13 (4): 325-328
- **SPED Light Sheet Microscopy: Fast Mapping of Biological System Structure and Function** *CELL*
Tomer, R., Lovett-Barron, M., Kauvar, I., Andalman, A., Burns, V. M., Sankaran, S., Grosenick, L., Broxton, M., Yang, S., Deisseroth, K.
2015; 163 (7): 1796-1806
- **Extended field-of-view and increased-signal 3D holographic illumination with time-division multiplexing** *OPTICS EXPRESS*
Yang, S. J., Allen, W. E., Kauvar, I., Andalman, A. S., Young, N. P., Kim, C. K., Marshel, J. H., Wetzstein, G., Deisseroth, K.
2015; 23 (25): 32573-32581
- **Adaptive Color Display via Perceptually-driven Factored Spectral Projection** *ACM TRANSACTIONS ON GRAPHICS*
Kauvar, I., Yang, S. J., Shi, L., McDowall, I., Wetzstein, G.
2015; 34 (6)

- **Natural neural projection dynamics underlying social behavior.** *Cell*
Gunaydin, L. A., Grosenick, L., Finkelstein, J. C., Kauvar, I. V., Fenno, L. E., Adhikari, A., Lammel, S., Mirzabekov, J. J., Airan, R. D., Zalocusky, K. A., Tye, K. M., Anikeeva, P., Malenka, et al
2014; 157 (7): 1535-1551
- **The Role of Electron Affinity in Determining Whether Fullerenes Catalyze or Inhibit Photooxidation of Polymers for Solar Cells** *ADVANCED ENERGY MATERIALS*
Hoke, E. T., Sachs-Quintana, I. T., Lloyd, M. T., Kauvar, I., Mateker, W. R., Nardes, A. M., Peters, C. H., Kopidakis, N., McGehee, M. D.
2012; 2 (11): 1351-1357
- **Influence of the hole-transport layer on the initial behavior and lifetime of inverted organic photovoltaics** *SOLAR ENERGY MATERIALS AND SOLAR CELLS*
Lloyd, M. T., Peters, C. H., Garcia, A., Kauvar, I. V., Berry, J. J., Reese, M. O., McGehee, M. D., Ginley, D. S., Olson, D. C.
2011; 95 (5): 1382-1388
- **Unconventional Face-On Texture and Exceptional In-Plane Order of a High Mobility n-Type Polymer** *ADVANCED MATERIALS*
Rivnay, J., Toney, M. F., Zheng, Y., Kauvar, I. V., Chen, Z., Wagner, V., Facchetti, A., Salleo, A.
2010; 22 (39): 4359-?