



Ching Ting Tsai

Postdoctoral Scholar, Chemistry

Bio

INSTITUTE AFFILIATIONS

- Member (Student), Cardiovascular Institute

HONORS AND AWARDS

- Botha-Chan Fellowship, Stanford University (2022)
- Dean Award (Top 10% Outstanding students), College of Science, National Taiwan University (2017)
- 45th International Chemistry Olympiad Gold Prize, Russia (2013)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Stanford University , CHEM-PHD (2024)
- B.S., National Taiwan University , Chemistry (2017)

Publications

PUBLICATIONS

- **Curved adhesions mediate cell attachment to soft matrix fibres in three dimensions.** *Nature cell biology*
Zhang, W., Lu, C. H., Nakamoto, M. L., Tsai, C. T., Roy, A. R., Lee, C. E., Yang, Y., Jahed, Z., Li, X., Cui, B.
2023
- **A NanoCurvS platform for quantitative and multiplex analysis of curvature-sensing proteins.** *Biomaterials science*
Lu, C. H., Tsai, C. T., Jones Iv, T., Chim, V., Klausen, L. H., Zhang, W., Li, X., Jahed, Z., Cui, B.
2023
- **Engineering cell morphology using maskless 2D protein micropatterning on 3D nanostructures**
Sarikhani, E., Klausen, L., Meganathan, D., Serrano, A., Tsai, C., Cui, B., Jahed, Z.
CELL PRESS.2023: 553A
- **Modulation of nuclear membrane repair machinery by nano-needle arrays.** *Biophysical journal*
Hosseini, R., Shukla, S., Sarikhani, E., Meganathan, D., Badle, R., Spain, L., Okerblom, J., Tsai, C., Cui, B., Jahed, Z.
2023; 122 (3S1): 552a
- **A versatile nanoelectrode platform for electrical recording of diverse cell types.** *Biophysical journal*
Shukla, S. R., Tsai, C., Jahed, Z., Cui, B.
2023; 122 (3S1): 431a
- **Engineering cell morphology using maskless 2D protein micropatterning on 3D nanostructures.** *Biophysical journal*
Sarikhani, E., Klausen, L., Pushpa Meganathan, D., Marquez Serrano, A., Tsai, C., Cui, B., Jahed, Z.
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- **Expansion microscopy for imaging the cell-material interface.** *Biophysical journal*
Nakamoto, M. L., Forro, C., Zhang, W., Tsai, C., Cui, B.
2023; 122 (3S1): 133a
- **Expansion microscopy for imaging the cell-material interface**
Nakamoto, M. L., Forro, C., Zhang, W., Tsai, C., Cui, B.
CELL PRESS.2023: 133A
- **Modulation of nuclear membrane repair machinery by nano-needle arrays**
Hosseini, R., Shukla, S., Sarikhani, E., Meganathan, D., Badle, R., Spain, L., Okerblom, J., Tsai, C., Cui, B., Jahed, Z.
CELL PRESS.2023: 552A
- **A versatile nanoelectrode platform for electrical recording of diverse cell types**
Shukla, S. R., Tsai, C., Jahed, Z., Cui, B.
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- **A NanoCurvS platform for quantitative and multiplex analysis of curvature-sensing proteins** *Biomaterials Science*
Lu, C., et al
2023
- **Quantitative phase contrast imaging with a nonlocal angle-selective metasurface.** *Nature communications*
Ji, A., Song, J. H., Li, Q., Xu, F., Tsai, C. T., Tiberio, R. C., Cui, B., Lalanne, P., Kik, P. G., Miller, D. A., Brongersma, M. L.
2022; 13 (1): 7848
- **Cardiotoxicity drug screening based on whole-panel intracellular recording.** *Biosensors & bioelectronics*
Yang, Y., Liu, A., Tsai, C., Liu, C., Wu, J. C., Cui, B.
2022; 216: 114617
- **Expansion Microscopy for Imaging the Cell-Material Interface.** *ACS nano*
Nakamoto, M. L., Forro, C., Zhang, W., Tsai, C., Cui, B.
2022
- **Nanocrown electrodes for parallel and robust intracellular recording of cardiomyocytes.** *Nature communications*
Jahed, Z., Yang, Y., Tsai, C., Foster, E. P., McGuire, A. F., Yang, H., Liu, A., Forro, C., Yan, Z., Jiang, X., Zhao, M., Zhang, W., Li, et al
2022; 13 (1): 2253
- **Exploring cell-surface nanopillar interactions with 3D superresolution microscopy**
Roy, A. R., Zhang, W., Jahed, Z., Tsai, C., Cui, B., Moerner, W. E.
CELL PRESS.2022: 278A
- **Intracellular recording of cardiac action potentials via membrane electroporation**
Cui, B., Jahed, Z., Yang, Y., Tsai, C.
CELL PRESS.2022: 304A
- **Mesh electrode arrays for integration with electrogenic organoids**
Forro, C., Li, T., Yang, X., Tsai, C., Cui, B., Pasca, S.
CELL PRESS.2022: 16
- **Membrane curvature regulates the spatial distribution of bulky glycoproteins** *NATURE COMMUNICATIONS*
Lu, C., Pedram, K., Tsai, C., Jones IV, T., Li, X., Nakamoto, M. L., Bertozzi, C. R., Cui, B.
2022; 13
- **Nanoscale Surface Topography Reduces Focal Adhesions and Cell Stiffness by Enhancing Integrin Endocytosis.** *Nano letters*
Li, X., Klausen, L. H., Zhang, W., Jahed, Z., Tsai, C., Li, T. L., Cui, B.
2021
- **Exploring Cell Surface-Nanopillar Interactions with 3D Super-Resolution Microscopy.** *ACS nano*
Roy, A. R., Zhang, W., Jahed, Z., Tsai, C. T., Cui, B., Moerner, W. E.
2021

- **Quantitative Nano-Platforms for Interrogation of Curvature Sensitive Proteins**
Tsai, C.
CELL PRESS.2020: 249A–250A