Stanford



Qing (Andie) Zhang

Postdoctoral Scholar, Bioengineering

Bio

HONORS AND AWARDS

- Rising Stars in Soft and Biological Matter, UChicago, UCSD (2024)
- Rank 1 Poster Award of Bio-X Interdisciplinary Initiatives Seed Grants Program, Stanford University (2024)
- Featured Image, the Year in Back Scatter, Physics Today (2024)
- Bio-X Travel Award, Stanford University (2023)
- APS DSOFT Gallery of Soft Matter Awards, APS DSOFT (2022)
- Featured Image, Art of the Month, International Liquid Crystal Society (2022)
- Rising Stars in Mechanical Engineering, MIT (2021)
- Sontheimer Travel Grant Award in Mechanical Engineering, MIT (2021)
- Best M.S. Thesis Award, Beijing Insitute of Technology (2015)
- Outstanding Bachelor Award, Beijing Institute of Technology (2012)

PROFESSIONAL EDUCATION

- B. S., Beijing Institute of Technology
- M. S., Beijing Institute of Technology
- Ph. D., Massachusetts Institute of Technology

STANFORD ADVISORS

- Manu Prakash, Postdoctoral Faculty Sponsor

PATENTS

- Y Liang, Y Sun, Q Zhang, T Fang, AE Hosoi, I Bischofberger. "United States Patent US-2020-0003208-A1 Adaptive self-sealing microfluidic gear pump patent", Jan 2, 2020

LINKS

- Personal Site: https://andiezhang.com
- Google Scholar: https://scholar.google.com/citations?user=35ScEOUAAAAJ&hl=en

Research & Scholarship

LAB AFFILIATIONS

- Manu Prakash (10/17/2022)

Publications

PUBLICATIONS

- **Ice gliding diatoms establish record-low temperature limits for motility in a eukaryotic cell.** *Proceedings of the National Academy of Sciences of the United States of America*
  Zhang, Q., Leng, H. T., Li, H., Arrigo, K. R., Prakash, M.
  2025; 122 (37): e2423725122

- **Flow-induced periodic chiral structures in an achiral nematic liquid crystal.** *Nature communications*
  Zhang, Q., Wang, W., Zhou, S., Zhang, R., Bischofberger, I.
  2024; 15 (1): 7

- **Dendritic patterns from shear-enhanced anisotropy in nematic liquid crystals.** *Science advances*
  Zhang, Q., Zhou, S., Zhang, R., Bischofberger, I.
  2023; 9 (2): eabq6820

- **Editorial: First Annual APS DSOFT Gallery of Soft Matter.** *Physical review. E*
  Shishkov, O., Blonder, A., Gowen, S., Jones, T. J., Jouanlanne, M., Zhang, Q., Del Gado, E., Bischofberger, I.
  2022; 106 (5-1): 050001

- **Single-Shot Quantitative Polarization Imaging of Complex Birefringent Structure Dynamics.** *ACS photonics*
  Ge, B., Zhang, Q., Zhang, R., Lin, J. T., Tseng, P. H., Chang, C. W., Dong, C. Y., Zhou, R., Yaqoob, Z., Bischofberger, I., So, P. T.
  2021; 8 (12): 3440-3447

- **Structures and topological defects in pressure-driven lyotropic chromonic liquid crystals.** *Proceedings of the National Academy of Sciences of the United States of America*
  Zhang, Q., Zhang, R., Ge, B., Yaqoob, Z., So, P. T., Bischofberger, I.
  2021; 118 (35)

- **Structures and topological defects in pressure-driven lyotropic chromonic liquid crystals** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Zhang, Q., Zhang, R., Ge, B., Yaqoob, Z., So, P. T. C., Bischofberger, I.
  2021; 118 (35)

- **Growth morphology and symmetry selection of interfacial instabilities in anisotropic environments.** *Soft matter*
  Zhang, Q., Amooie, A., Bazant, M. Z., Bischofberger, I.
  2021; 17 (5): 1202-1209

- **Cyclic compressive creep-elastoplastic behaviors of in situ TiB₂/Al-reinforced composite** *MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING*
  Zhang, Q., Zhang, W., Liu, Y., Guo, B.
  2016; 666: 1-9

- **Evaluation and mathematical modeling of asymmetric tensile and compressive creep in aluminum alloy ZL109** *MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING*
  Zhang, Q., Zhang, W., Liu, Y.
  2015; 628: 340-349

- **Exergy-based assessment and optimisation for energy transportation: a case study of Inner Mongolia-Tianjin** *INTERNATIONAL JOURNAL OF EXERGY*
  Zhang, Q., Liu, Y., Zhang, W., Wu, X., Xia, X.
  2015; 18 (3): 298-322