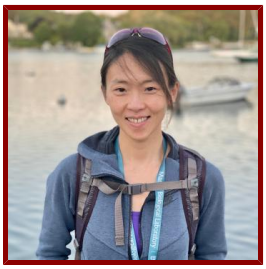
Stanford



Shannon Yan

Assistant Professor of Biology

Bio

ACADEMIC APPOINTMENTS

- Assistant Professor, Biology
- Member, Bio-X
- Member, Stanford Cancer Institute

PROFESSIONAL EDUCATION

- PhD, University of California, Berkeley , Chemistry (2015)
- BS, National Taiwan University , Chemistry (2006)

LINKS

- Yan Lab @ Stanford: https://www.yanlabstanford.org/

Teaching

COURSES

2025-26

- Advanced Imaging Lab in Biophysics: APPPHYS 232, BIO 132, BIO 232, BIOE 232, BIOPHYS 232, GENE 232 (Spr)
- Frontiers in Biology: BIO 301 (Aut)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Will Dwyer, Chuofan Yu

Doctoral Dissertation Advisor (AC)

Umay Ertekin, Carly Stein

Publications

PUBLICATIONS

- **Cell protrusions and contractions generate long-range membrane tension propagation.** *Cell*
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- **Mechanical regulation of the helicase activity of Zika virus NS3.** *Biophysical journal*

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- **The development of single molecule force spectroscopy: from polymer biophysics to molecular machines.** *Quarterly reviews of biophysics*
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- **The Biogenesis of SRP RNA Is Modulated by an RNA Folding Intermediate Attained during Transcription.** *Molecular cell*
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- **ATP-dependent force generation and membrane scission by ESCRT-III and Vps4.** *Science (New York, N.Y.)*
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- **Ribosome excursions during mRNA translocation mediate broad branching of frameshift pathways.** *Cell*
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- **Frameshifting dynamics.** *Biopolymers*
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- **Mode specificity in reactions of Cl with CH2 stretch-excited CH2D2(v1, v6 = 1).** *The journal of physical chemistry. A*
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  Riedel, J., Yan, S., Kawamata, H., Liu, K.
  2008; 79 (3): 033105
- **Unraveling multicomponent images by extended cross correlation analysis.** *The journal of physical chemistry. A*
  Zhang, B., Yan, S., Liu, K.
  2007; 111 (38): 9263-8
- **Pair-correlated dynamics of Cl+CHD₃(u₁=1) reaction:: Effects of probe laser frequency** *CHINESE JOURNAL OF CHEMICAL PHYSICS*
  Yan, S., Liu, K.
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- **Do vibrational excitations of CHD3 preferentially promote reactivity toward the chlorine atom?** *Science (New York, N.Y.)*
  Yan, S., Wu, Y. T., Zhang, B., Yue, X. F., Liu, K.
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- **Disentangling mode-specific reaction dynamics from overlapped images.** *Physical chemistry chemical physics : PCCP*
  Yan, S. S., Wu, Y. T., Liu, K.
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- **Unusual ambiphilic carbenoid equivalent in amide cyclopropanation.** *Organic letters*
  Lin, K. W., Yan, S., Hsieh, I. L., Yan, T. H.
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