



Yangjie Li

Postdoctoral Scholar, Chemistry

Bio

BIO

- Stanford scholar and Purdue PhD seeking for faculty position in analytical chemistry. Please contact Yangjie: lyj@stanford.edu
- Research of reaction acceleration studied by mass spectrometry highlighted in multiple international news (Chemistry World, C&EN, etc.)
- Leadership experience as an elected president in local chapter of national chemistry honor society

HONORS AND AWARDS

- Project Pitch Competition Award - Research Grant, Stanford University Mass Spectrometry (2023 Oct 17)
- Stanford Postdoc Travel Award, Stanford Office of Postdoctoral Affairs (2023 May 5)
- ASMS Postdoctoral Career Development Award, American Society for Mass Spectrometry (2022 Jul 1)
- Purdue InnovatED Award, The Purdue Graduate School (2022 Jan)
- Interviewed and highlighted in C&EN, 99(25), American Chemical Society (2021 Jul 8)
- Interviewed and highlighted in Chemistry World, The Royal Society of Chemistry (2021 Jul 7)
- ASMS Graduate Student Travel Award, American Society for Mass Spectrometry (2021 Jul 29)
- Purdue Graduate Student Government Travel Grant, PGSG, Purdue University (2021 Apr 23)
- Highlighted in Chemistry World, The Royal Society of Chemistry (2020 Nov 30)
- Highlighted in Purdue News, Department of Chemistry, Purdue University (2020 Nov 12)
- Thomas W. Keough Graduate Scholarship, Department of Chemistry, Purdue University (2020 Apr 16)
- Women in Science Program Travel Grant, College of Science, Purdue University (2019 Apr 4)
- Featured in C&EN, 96 (35), Chemical & Engineering News, American Chemical Society (2018 Sep 3)
- Henry Bohn Hass Memorial Fellowship, Department of Chemistry, Purdue University (2018 May 5)
- National Phi Lambda Upsilon Travel Grant, Phi Lambda Upsilon, National Chemistry Honor Society (2018 Jun 14)
- Excellent Graduate Thesis Award, Beijing Normal University (2016 Jun)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- President, Phi Lambda Upsilon, Nu Chapter (2019 - 2020)
- Vice President, Phi Lambda Upsilon, Nu Chapter (2018 - 2019)
- Treasurer, Phi Lambda Upsilon, Nu Chapter (2017 - 2018)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Purdue University (2021)

- Bachelor of Science, Beijing Normal University , Chemistry (2016)

STANFORD ADVISORS

- Richard Zare, Postdoctoral Faculty Sponsor

PATENTS

- R. Graham Cooks, Roy Helmy, Yangjie Li, Yong Liu. "United States Patent US16/245,703 Methods for Analyzing Stability of an Active Pharmaceutical Ingredient", Purdue Research Foundation, Jan 11, 2019

LINKS

- Yangjie Li's LinkedIn profile: <https://www.linkedin.com/in/yangjie-li/>
- Yangjie Li's twitter: <https://twitter.com/YangjieLi1>

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Dr. Yangjie Li is currently a postdoc in chemistry in the lab of Prof. Richard Zare at Stanford University and she obtained her PhD in Analytical Chemistry working with Prof. Graham Cooks at Purdue University. Her dissertation is on "Reaction Acceleration at Interfaces Studied by Mass Spectrometry". Prior to her PhD studies, she received a Bachelor of Science in chemistry with Excellent Graduation Thesis Award in Organic Chemistry from Beijing Normal University. Her research interests are expansive across synthesis using different microdroplet platforms and glass/silica particles, with a focus to probe unique reactivity at surfaces, for both air/liquid and solid/liquid interfaces. A few of her publications for both applications and mechanisms of these subjects were highlighted in C&EN and Chemistry World. She is currently actively applying for faculty positions in the US to continue her enthusiasm for study unique reactivity at surfaces using mass spectrometry-based high-throughput experimentation.

Publications

PUBLICATIONS

- **Silica particles convert thiol-containing molecules to disulfides.** *Proceedings of the National Academy of Sciences of the United States of America*
Li, Y., Kolasinski, K. W., Zare, R. N.
2023; 120 (34): e2304735120
- **Glass surface as strong base, 'green' heterogeneous catalyst and degradation reagent** *CHEMICAL SCIENCE*
Li, Y., Huang, K., Morato, N. M., Cooks, R.
2021; 12 (28): 9816-9822
- **Reaction Acceleration at Solid/Solution Interfaces: Katritzky Reaction Catalyzed by Glass Particles** *ANGEWANDTE CHEMIE-INTERNATIONAL EDITION*
Li, Y., Mehari, T., Wei, Z., Liu, Y., Cooks, R.
2021; 60 (6): 2929-2933
- **High-Throughput Screening of Reductive Amination Reactions Using Desorption Electrospray Ionization Mass Spectrometry** *ORGANIC PROCESS RESEARCH & DEVELOPMENT*
Logsdon, D. L., Li, Y., Sobreira, T., Ferreira, C. R., Thompson, D. H., Cooks, R.
2020; 24 (9): 1647-1657
- **Reaction acceleration at air-solution interfaces: Anisotropic rate constants for Katritzky transamination** *JOURNAL OF MASS SPECTROMETRY*
Li, Y., Mehari, T. F., Wei, Z., Liu, Y., Cooks, R.
2021; 56 (4): e4585
- **Accelerated Forced Degradation of Therapeutic Peptides in Levitated Microdroplets** *PHARMACEUTICAL RESEARCH*
Li, Y., Hu, Y., Logsdon, D. L., Liu, Y., Zhao, Y., Cooks, R.
2020; 37 (7): 138
- **Accelerated Reaction Kinetics in Microdroplets: Overview and Recent Developments** *ANNUAL REVIEW OF PHYSICAL CHEMISTRY, VOL 71*

Wei, Z., Li, Y., Cooks, R., Yan, X., Johnson, M. A., Martinez, T. J.

2020; 71: 31-51

- **A BODIPY-carbazole hybrid as a fluorescent probe: the design, synthesis, and discrimination of surfactants and the determination of the CMC values** *ANALYST*

Niu, X., Xu, Q., Li, A., Li, Y., Zhang, X., Zhang, Y., Xing, G.

2019; 144 (23): 6866-6870

- **Accelerated Forced Degradation of Pharmaceuticals in Levitated Microdroplet Reactors** *CHEMISTRY-A EUROPEAN JOURNAL*

Li, Y., Liu, Y., Gao, H., Helmy, R., Wuelfing, W., Welch, C. J., Cooks, R.

2018; 24 (29): 7349-7353

- **Recent Progresses on Mitochondria-Targetable Fluorescent Probes** *CHINESE JOURNAL OF ORGANIC CHEMISTRY*

Li, Y., Lu, Z., Liu, M., Xing, G.

2016; 36 (5): 962-975

- **A pyrene-functionalized Zinc(II)-BPEA complex: sensing and discrimination of ATP, ADP and AMP** *RSC ADVANCES*

Xu, Q., Lv, H., Lv, Z., Liu, M., Li, Y., Wang, X., zhang, Y., Xing, G.

2014; 4 (88): 47788-47792