



Shay Laps

Postdoctoral Scholar, Endocrinology and Metabolism

Bio

PROFESSIONAL EDUCATION

- Postdoc, The Hebrew University of Jerusalem , Chemistry (2024)
- PhD, Technion-Israel Institute of Technology , Chemistry (2021)
- MSc, Technion-Israel Institute of Technology , Chemistry (2018)
- MA, Ben-Gurion University of the Negev , Science and Technology Education (2014)
- Chemistry Teaching Certificate, The Hebrew University of Jerusalem , Education (2011)
- BSc, The Hebrew University of Jerusalem , Chemistry (2011)

STANFORD ADVISORS

- Danny Chou, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Organic solvent enhances oxidative folding of disulfide-rich proteins.** *Nature chemistry*
Laps, S., Metanis, N.
2024
- **Selenium chemistry for spatio-selective peptide and protein functionalization.** *Nature reviews. Chemistry*
Zhao, Z., Laps, S., Gichtin, J. S., Metanis, N.
2024; 8 (3): 211-229
- **The semisynthesis of nucleolar human selenoprotein H.** *Chemical science*
Dardashti, R. N., Laps, S., Gichtin, J. S., Metanis, N.
2023; 14 (44): 12723-12729
- **Photocleavable Ortho-Nitrobenzyl-Protected DNA Architectures and Their Applications.** *Chemical reviews*
O'Hagan, M. P., Duan, Z., Huang, F., Laps, S., Dong, J., Xia, F., Willner, I.
2023; 123 (10): 6839-6887
- **Insight on the Order of Regioselective Ultrafast Formation of Disulfide Bonds in (Antimicrobial) Peptides and Miniproteins.** *Angewandte Chemie (International ed. in English)*
Laps, S., Atamleh, F., Kamnesky, G., Uzi, S., Meijler, M. M., Brik, A.
2021; 60 (45): 24137-24143
- **Harnessing the power of transition metals in solid-phase peptide synthesis and key steps in the (semi)synthesis of proteins.** *Chemical Society reviews*
Laps, S., Satish, G., Brik, A.
2021; 50 (4): 2367-2387

- **General synthetic strategy for regioselective ultrafast formation of disulfide bonds in peptides and proteins.** *Nature communications*
Laps, S., Atamleh, F., Kamnesky, G., Sun, H., Brik, A.
2021; 12 (1): 870
- **Palladium-Mediated Direct Disulfide Bond Formation in Proteins Containing S-Acetamidomethyl-cysteine under Aqueous Conditions.** *Angewandte Chemie (International ed. in English)*
Laps, S., Sun, H., Kamnesky, G., Brik, A.
2019; 58 (17): 5729-5733
- **Palladium prompted on-demand cysteine chemistry for the synthesis of challenging and uniquely modified proteins.** *Nature communications*
Jbara, M., Laps, S., Morgan, M., Kamnesky, G., Mann, G., Wolberger, C., Brik, A.
2018; 9 (1): 3154
- **Palladium-Assisted Cleavage of Peptides and Proteins Containing a Backbone with Thiazolidine Linkage.** *Chemistry (Weinheim an der Bergstrasse, Germany)*
Jbara, M., Laps, S., Maity, S. K., Brik, A.
2016; 22 (42): 14851-14855
- **Efficient Palladium-Assisted One-Pot Deprotection of (Acetamidomethyl)Cysteine Following Native Chemical Ligation and/or Desulfurization To Expedite Chemical Protein Synthesis.** *Angewandte Chemie (International ed. in English)*
Maity, S. K., Jbara, M., Laps, S., Brik, A.
2016; 55 (28): 8108-12
- **Palladium-Assisted Removal of a Solubilizing Tag from a Cys Side Chain To Facilitate Peptide and Protein Synthesis.** *Organic letters*
Maity, S. K., Mann, G., Jbara, M., Laps, S., Kamnesky, G., Brik, A.
2016; 18 (12): 3026-9