

# Stanford

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## William Carpenter

Postdoctoral Scholar, Chemistry

### Bio

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#### STANFORD ADVISORS

- William Moerner, Postdoctoral Faculty Sponsor

### Publications

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#### PUBLICATIONS

- **Amplification of mid-IR continuum for broadband 2D IR spectroscopy** *OPTICS LETTERS*  
Hack, J. H., Lewis, N. C., Carpenter, W. B., Tokmakoff, A.  
2023; 48 (4): 960-963
- **Ratiometric sensing of redox environments inside individual carboxysomes trapped in solution.** *Biophysical journal*  
Carpenter, W. B., Lavania, A. A., Turnsek, J. B., Perez, D., Oltrogge, L. M., Dahlberg, P. D., Savage, D. F., Moerner, W. E.  
2023; 122 (3S1): 304a
- **Exploring Masses and Internal Mass Distributions of Single Carboxysomes in Free Solution Using Fluorescence and Interferometric Scattering in an Anti-Brownian Trap.** *The journal of physical chemistry. B*  
Lavania, A. A., Carpenter, W. B., Oltrogge, L. M., Perez, D., Turnsek, J. B., Savage, D. F., Moerner, W. E.  
2022
- **Ratiometric Sensing of Redox Environments Inside Individual Carboxysomes Trapped in Solution.** *The journal of physical chemistry letters*  
Carpenter, W. B., Lavania, A. A., Borden, J. S., Oltrogge, L. M., Perez, D., Dahlberg, P. D., Savage, D. F., Moerner, W. E.  
2022: 4455-4462
- **Characterizing physical properties of single carboxysomes in the Interferometric Scattering Anti-Brownian EElectrokinetic trap**  
Lavania, A. A., Carpenter, W. B., Oltrogge, L. M., Borden, J., Perez, D. D., Squires, A. H., Dahlberg, P. D., Savage, D. F., Moerner, W. E.  
CELL PRESS.2022: 431A
- **Redox sensing inside individual carboxysomes in the ISABEL trap**  
Carpenter, W. B., Borden, J., Oltrogge, L. M., Lavania, A., Perez, D., Dahlberg, P. D., Savage, D., Moerner, W. E.  
CELL PRESS.2022: 104