

Force-Detected Absorption Spectroscopy in Solution With Optical Tweezers

Department of Chemistry
Yale University
<https://ganim.yale.edu/>

Current Group:

Jacob Black
Anna Chen
Qixuan Yu
Madeline Hoffmann
Prof. Ziad Ganim

Alumni:

Prof. Jinqing Huang (HKUST)
Prof. Maria Kamenetska
(Boston U.)
Dr. Alexander Parobek
(Purdue U.)



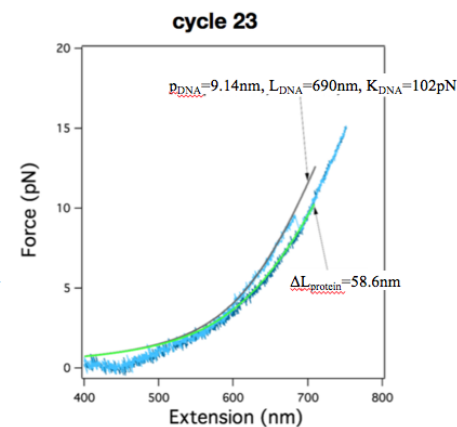
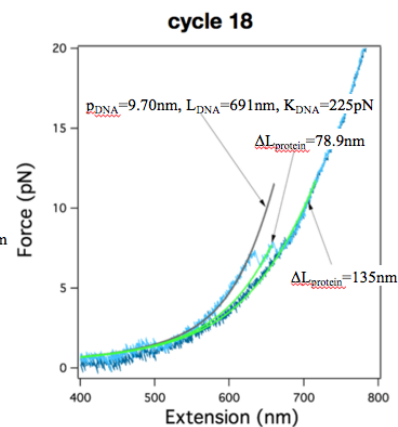
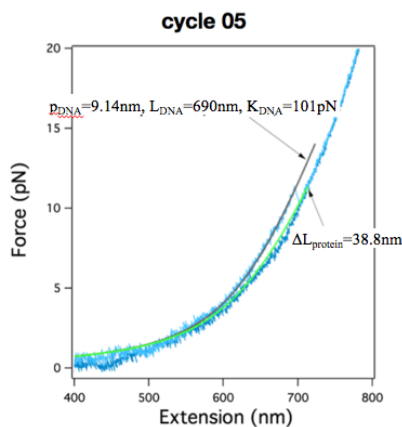
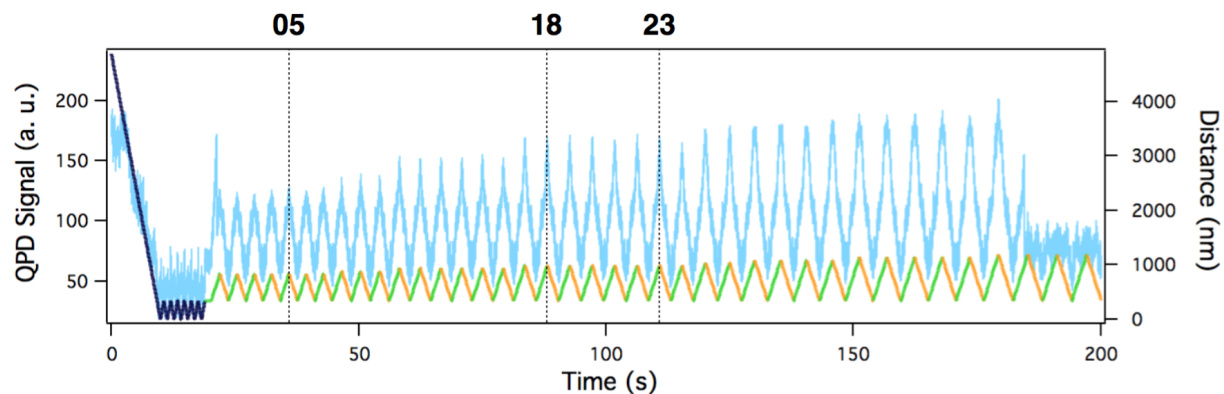
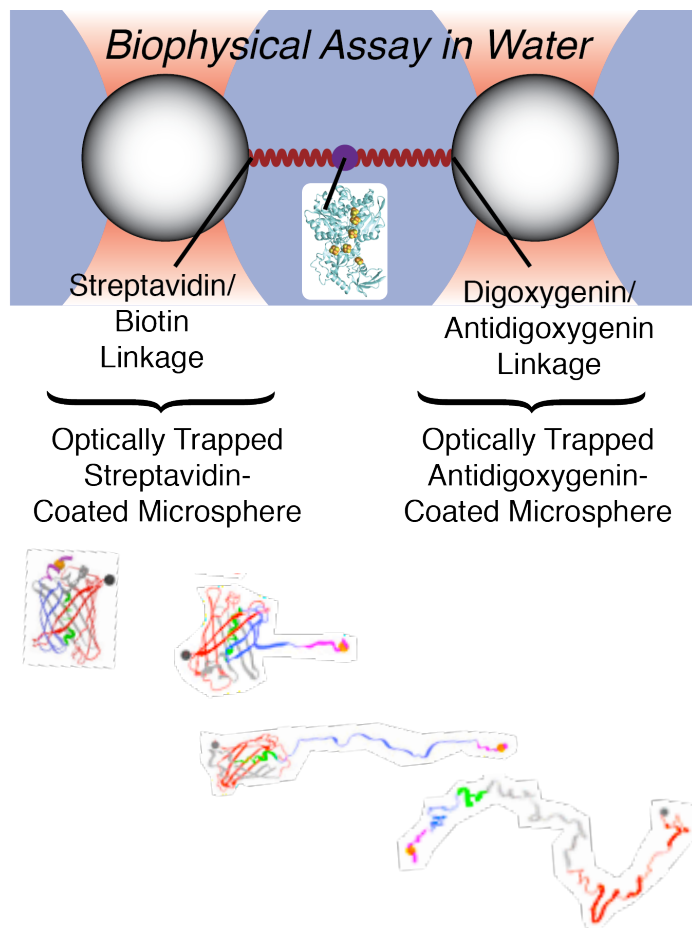
CHE-1752847



Yale University

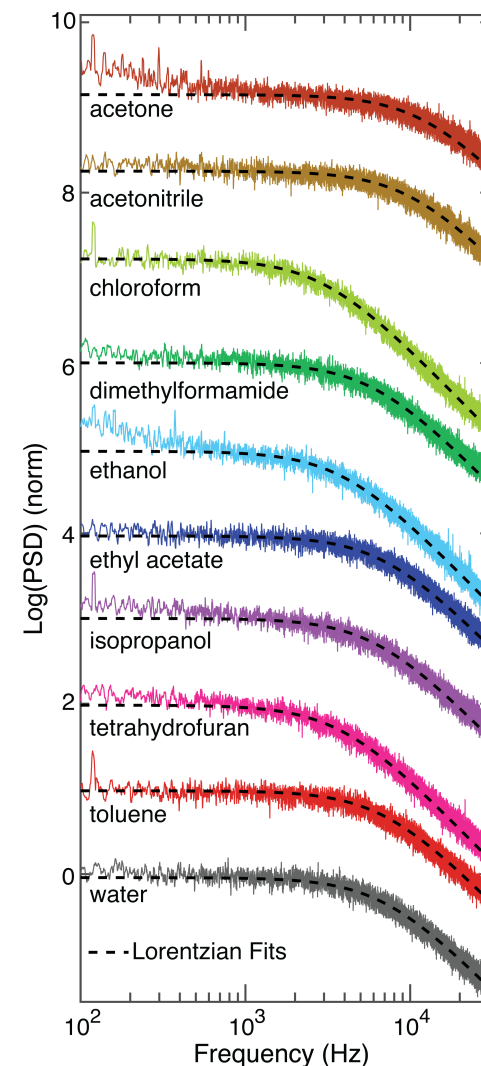
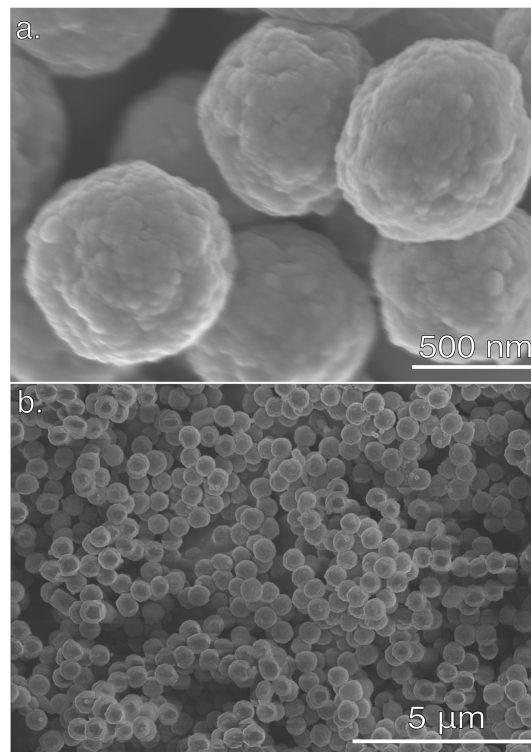
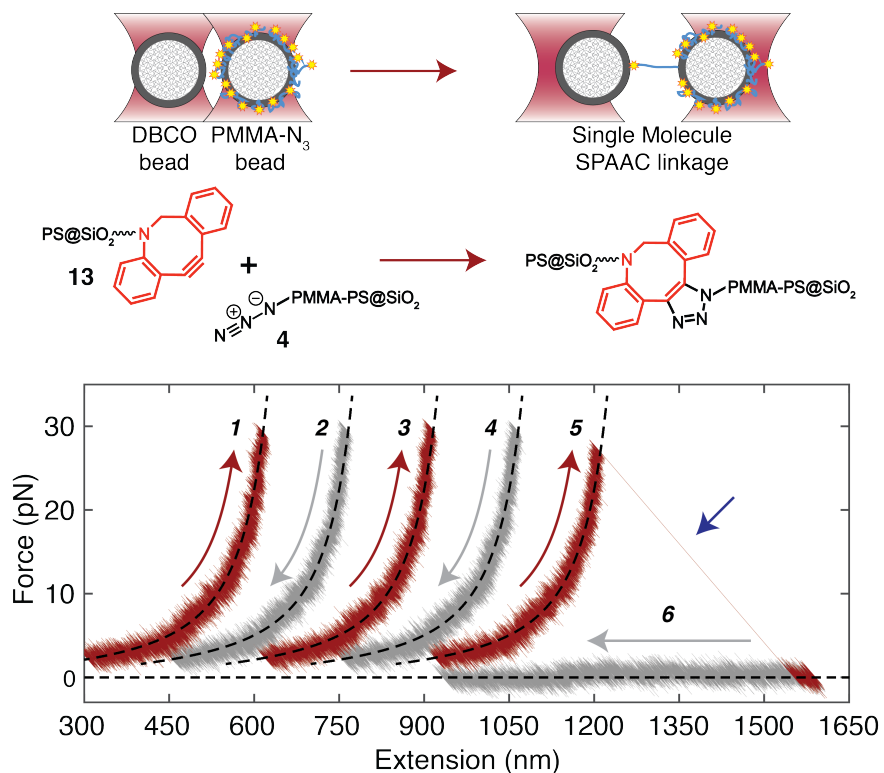


Single Molecule Protein Unfolding with Optical Tweezers



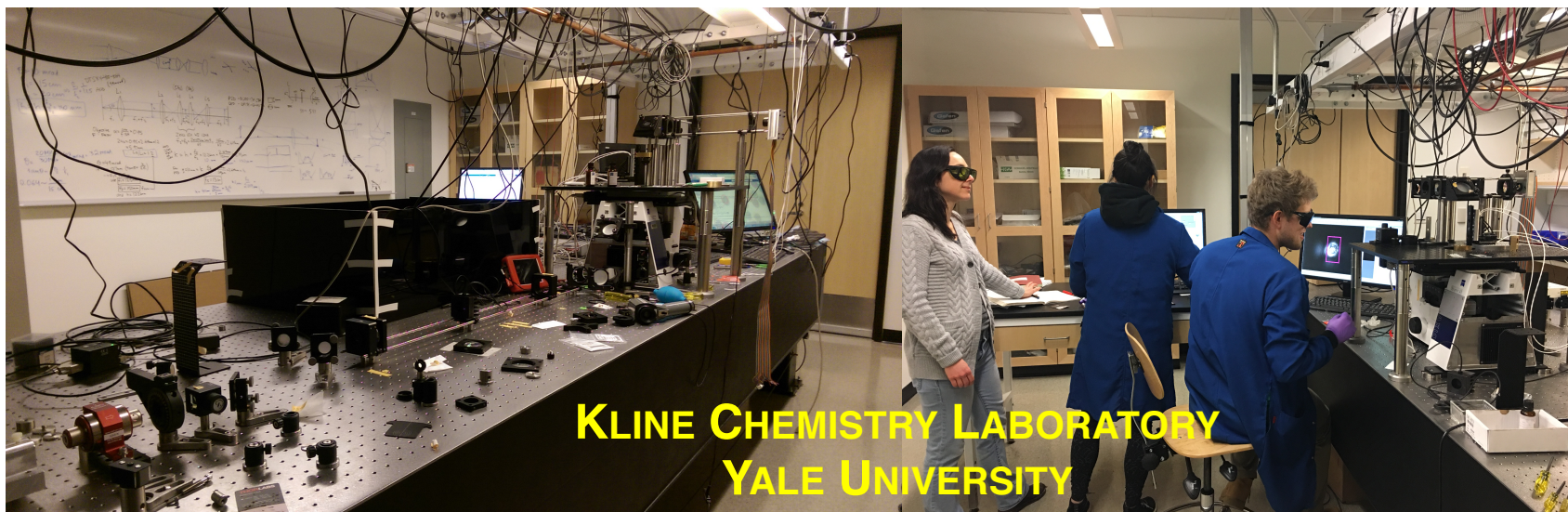
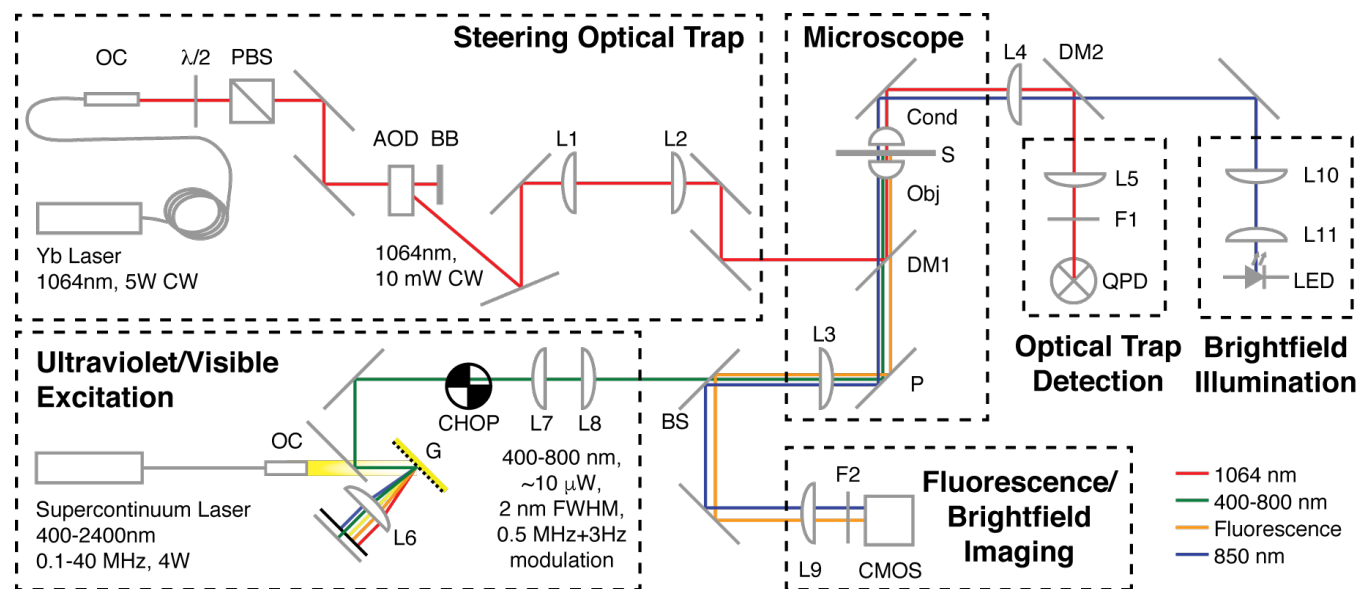
SM Immobilization and Polymer Force-Extension in Organic Solvents

a. Polymer-Bead Tether Formation

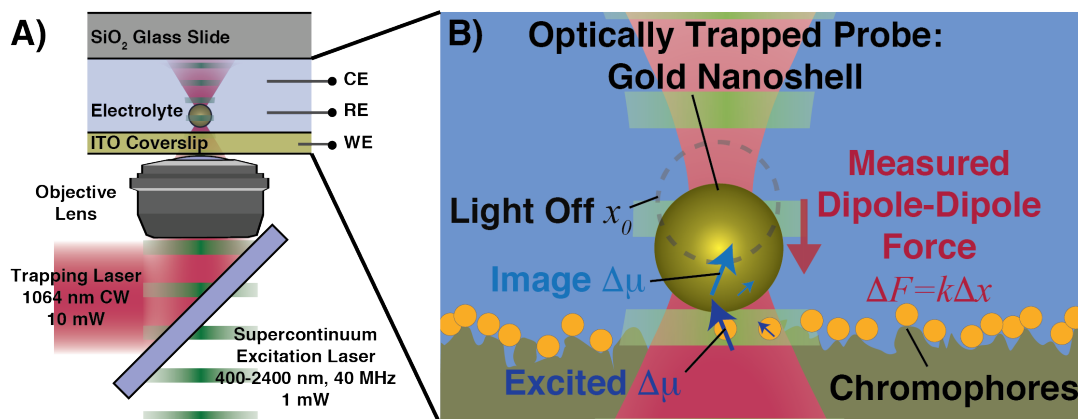
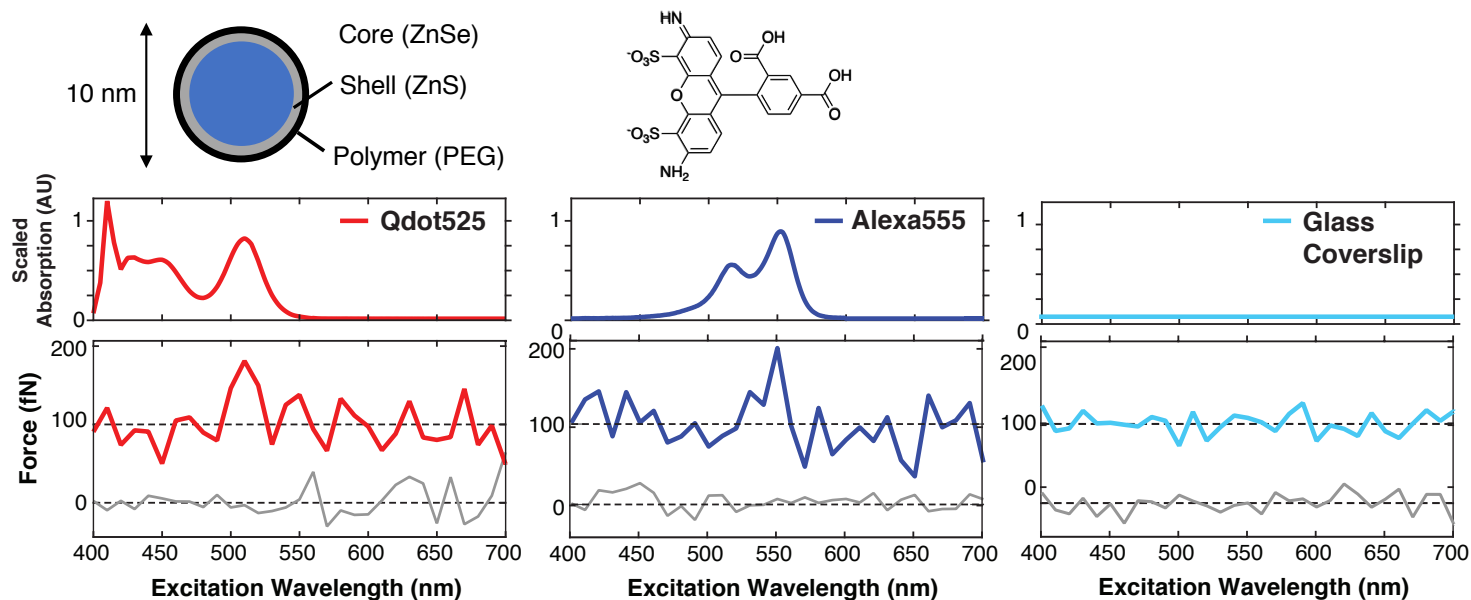


Black, Jacob W., Maria Kamenetska, and Ziad Ganim. "An Optical Tweezers Platform for Single Molecule Force Spectroscopy in Organic Solvents." Nano Letters 17.11 (2017): 6598-6605.

HOME-BUILT OPTICAL TRAP AND NANOSCALE ABSORPTION SPECTROMETER



Nanoscale Spectroscopy With Optical Tweezers



“Feature Article: Force-Detected Nanoscale Absorption Spectroscopy in Water at Room Temperature using an Optical Trap,”
A Parobek, JW Black, M Kamenetska, Z Ganim,
J. Chem. Phys. **148**, 144201 (2018);
<https://doi.org/10.1063/1.5017853>