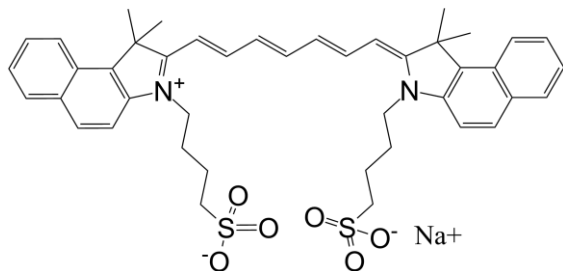
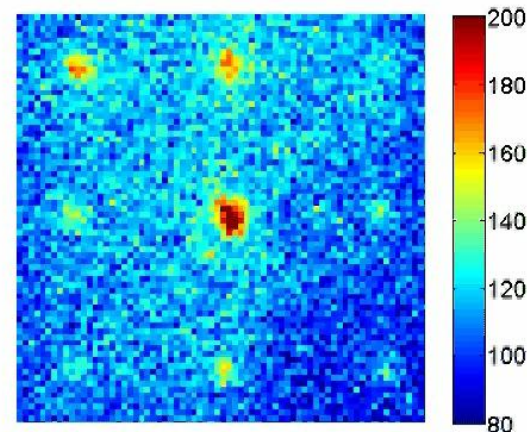
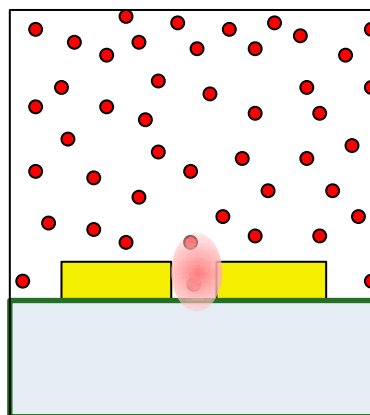


Fluorescence Correlation Spectroscopy at High Concentrations with Bowtie Nanoantennas



Indocyanine green (ICG)
QE = 2% in water



ICG 2 μM in water
Bowtie spacing 4 μm

- Use fluorescence enhancement in $\sim(20 \text{ nm})^3$ volume to make dim emitters visible
- Detected single molecule bursts from high concentration samples.
- Correlated FCS curves to photobleaching behavior using stretched exponentials.
- New method for studying single molecules at μM concentrations

