

3. Near-field optics

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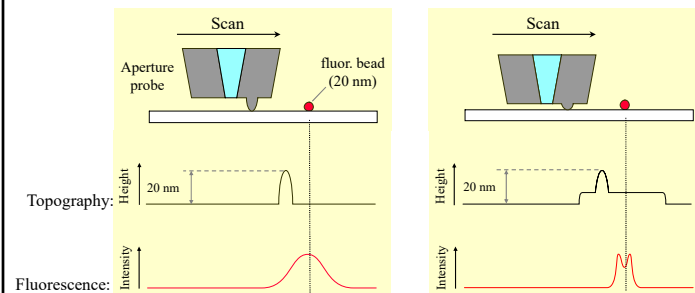
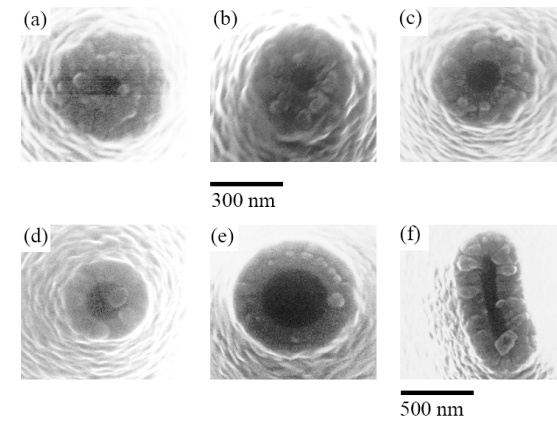
3.4 Scanning near-field optical microscopy : Methodology

3.4.1 Probe concepts and fabrication

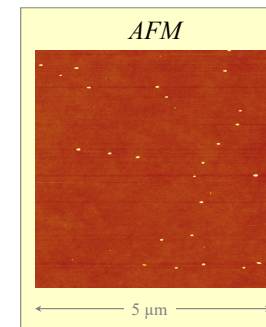
3.4.2 Surface distance control

3.4.3 Optical characterization

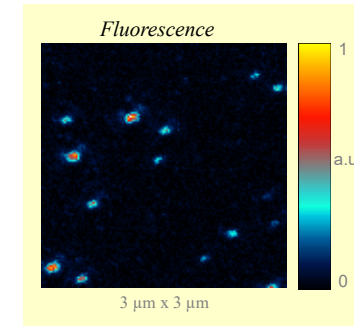
3.4.4 Artifacts



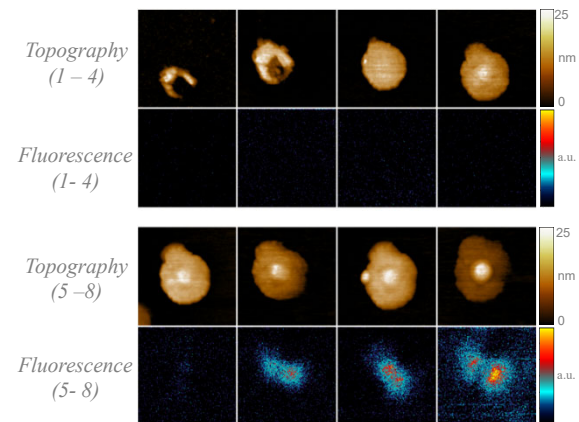
Sharp AFM tip



SNOM probe



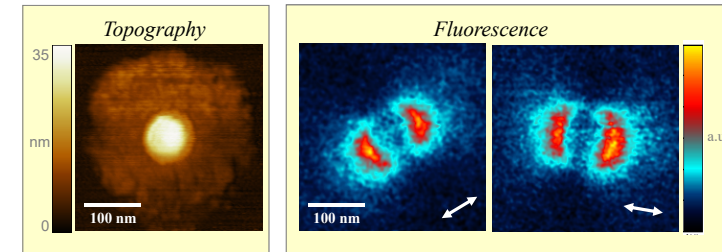
Modification and Characterization



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C. Höppener Dissertation (2003).

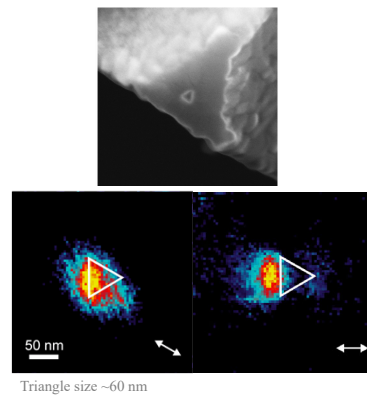
Characterization of a Fiber Probe



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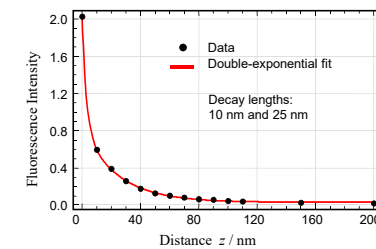
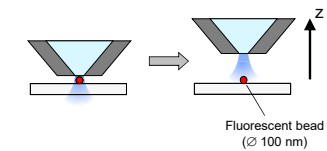
C. Höppener, Dissertation (2003)

Triangular Aperture: Characterization



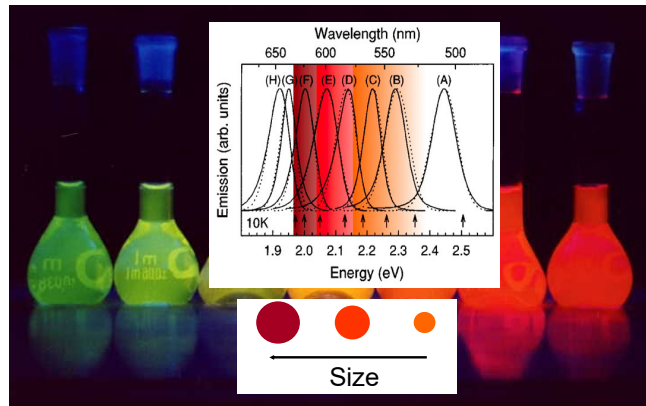
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Depth of Evanescent Field



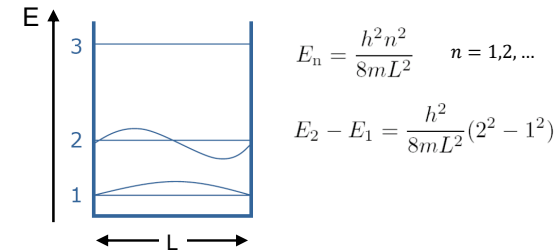
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CdSe Nanocrystals

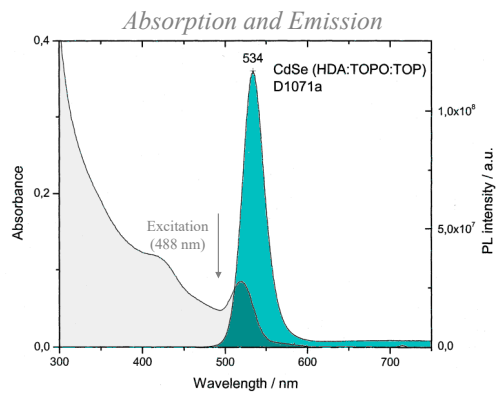


Energy states of a quantum well

Illustration: energy states of electrons in a quantum well ("particle in a box")



Spectroscopic properties of 5-nm-sized CdSe nanocrystals



Imaging of QD-Aggregates

