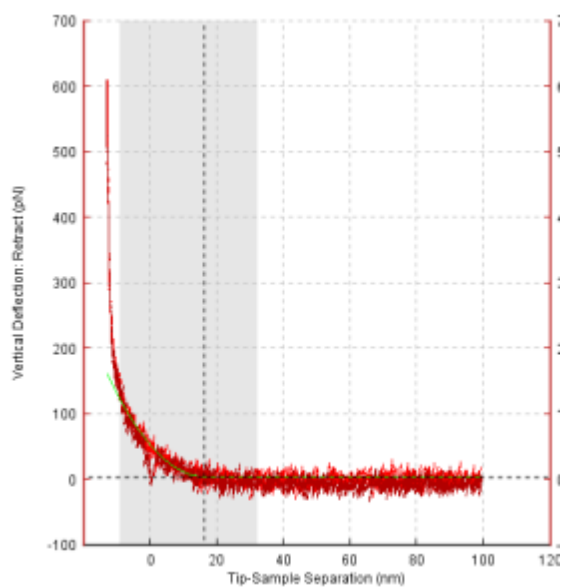
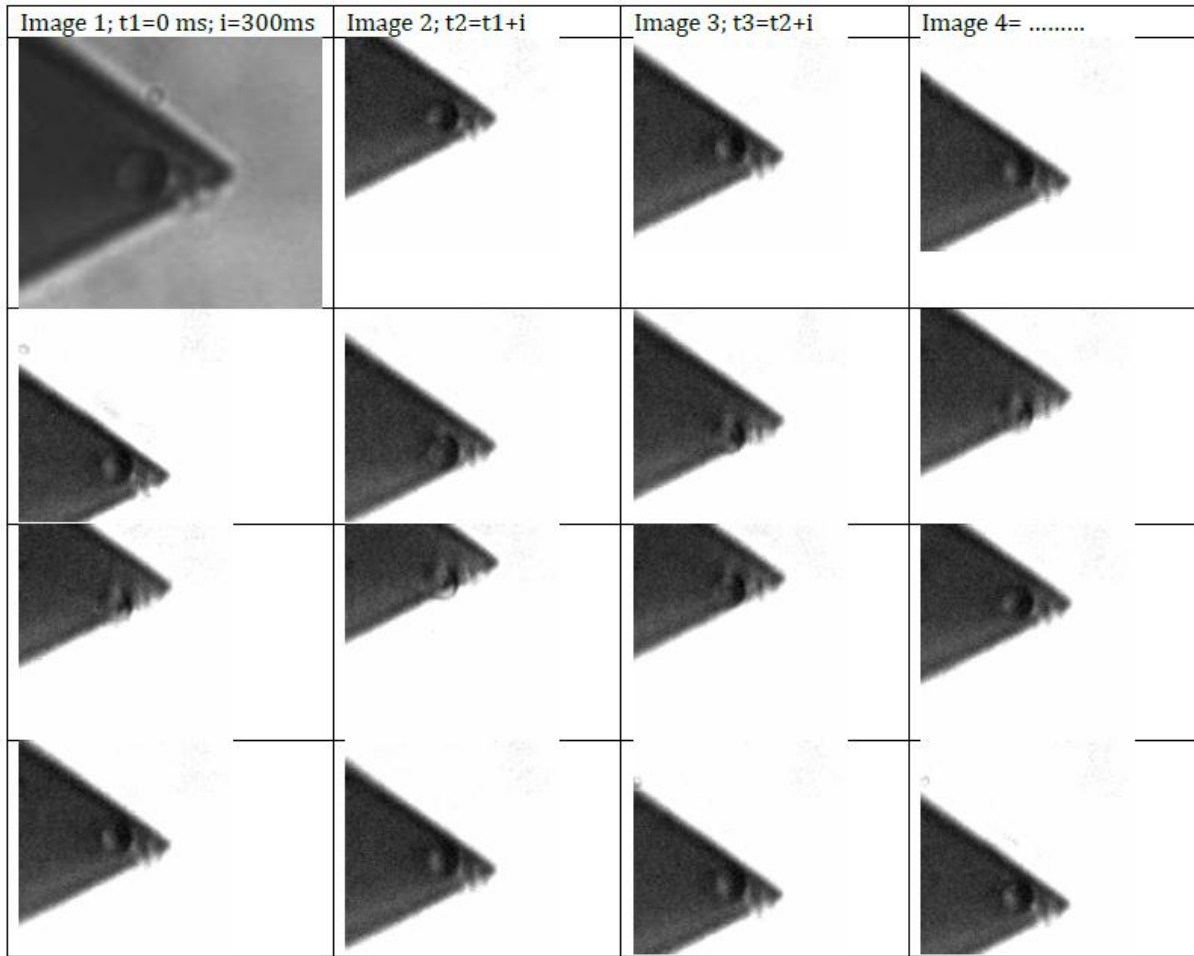


Supplementary figures



Suppl. Figure 1: Evaluation of the surface modification thickness from the vertical deflection versus the tip-sample separation in nm; thickness evaluated between 20 – 25 nm.



Suppl. Figure 2: Different instances of the AFM-tip during scan (tipless cantilever: nanoSensor): the tips were functionalized with APTES and a biotin-PEG-NHS crosslinker. The long crosslinker results to a drift of the MPs with respect to the tip during measurements, thus an alternative measurement scheme was used.