Nanocrystalline diamond AFM tips for chemical force spectroscopy: fabrication and photochemical functionalization

Supporting Information

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Fig. S1 SEM images of a H-NCD film deposited on a Si wafer. (a) Top view; structure is due to the random nanocrystalline grain orientation. (b) Cross-sectional view of a fractured NCD surface.



Fig. S2 Topographic AFM image of H-NCD deposited on Si wafer.



Fig. S3 Bright field and fluorescence optical microscope images of AFM cantilevers after fluorescent labeling. (a) Bright field and (b) fluorescence images of H-NCD cantilevers. (c) Bright field and (d) fluorescence images of UA-NCD cantilevers. (e) Fluorescence image of a UA-NCD cantilever focusing on the plane of the cantilever. (f) Fluorescence image of a UA-NCD cantilever focusing on the tip apex part slightly above the plane of the cantilever. Scale bars are 100 μ m for (a)–(d), 20 μ m for (e), and 10 μ m for (f).