AFM Adhesion Force Measurements on Wood: Influence of Surface Roughness and Tip Geometry

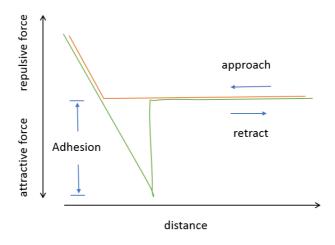


Figure S1 Illustration of adhesion force calculation

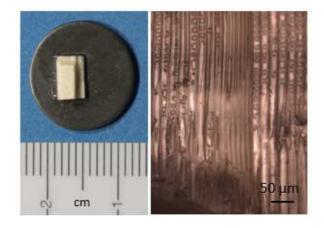


Figure S2 Optical images of the wood substrate.

	Standard tip	Colloidal tip
Deflection sensitivity (nm/V)	140	151
Force Constant (N/m)	0.27	0.36

Table S1 Cantilever calibration information of the AFM tips used for the presented adhesion measurements

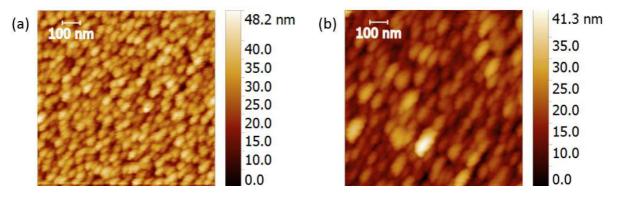


Figure S3 AFM images of a tip characterization sample. The sample consists of an extremely wear-resistant thin film which has a granular, sharply peaked nanostructure. The images show that the tip is worn (a) or blunt (b) after repeated measurements.

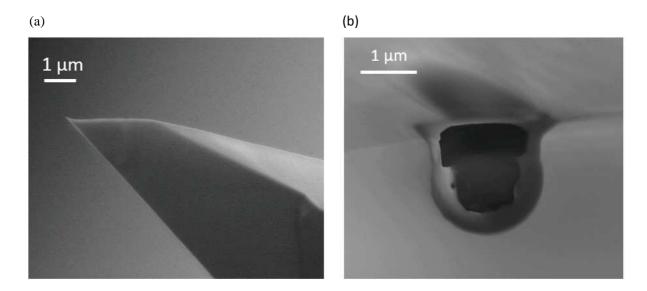


Figure S4 SEM image of a new standard tip (a) and a new spherical tip (b) used in this experiment

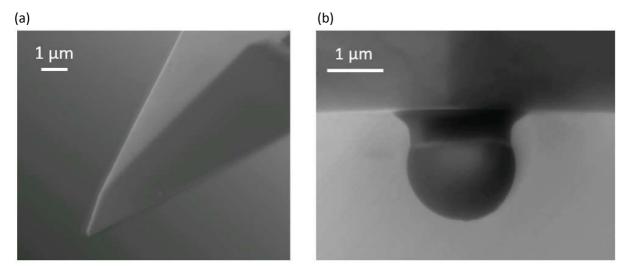


Figure S5 SEM images of AFM tips after repeated measurement. (a) a standard tip (b) a spherical tip