

WM0.1Au-SS – Technical Specifications

WM0.1Au probes are used for high resolution imaging in photothermal off-resonance tapping (WaveMode). The combination of high resonance frequency and low spring constant makes them suitable for a wide range of applications in air and liquids. The reflex side of the cantilever is coated with a gold layer optimized for efficient photothermal excitation. The coating is highly reflective for standard optical beam deflection AFMs. The paddle shape design helps to minimize reflective interference from sample and to maximize the sum signal.

Cantilever Specifications			
Shape	Rectangular with paddle		
Material	Silicon Nitride		
Coating (Top side)	Reflective gold coating		
	Min.	Typical	Max.
Length (µm)	30	40	50
Width (µm)	10	12	14
Resonance frequency in air (kHz)	80	120	200
Spring constant (N/m)	0.05	0.1	0.3

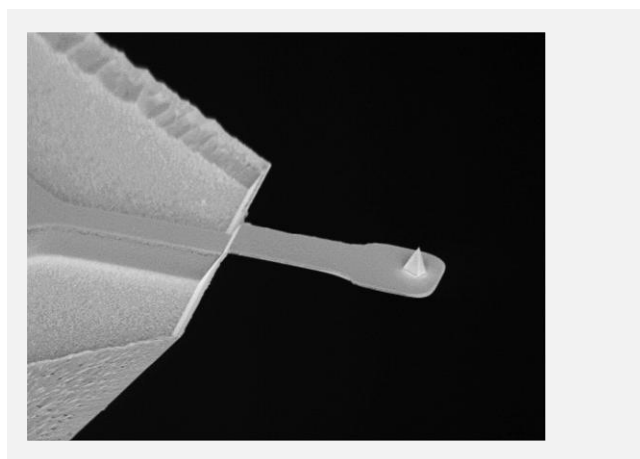


Figure 1: SEM image of a WM0.1Au-SS AFM probe.

Tip Specifications	
Shape	Pyramidal
Height (µm)	4 - 8
Tip radius (nm)	< 10, typical 2
Material	Silicon
Coating	None

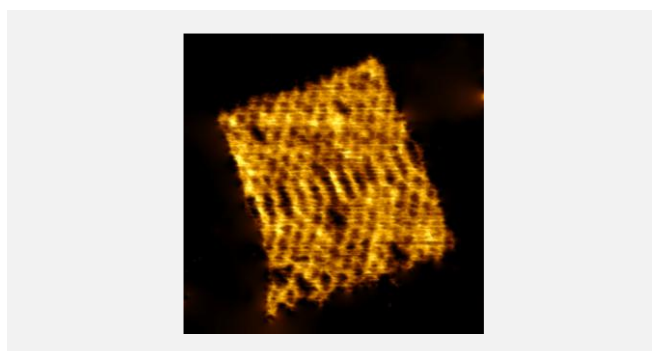


Figure 2: AFM topography image of DNA Origami measured with WM0.1AuSS and DriveAFM in WaveMode.

Contact information

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