# Surface Heterostructure Nanomechanical Actuators with Atomic Scale Resolution

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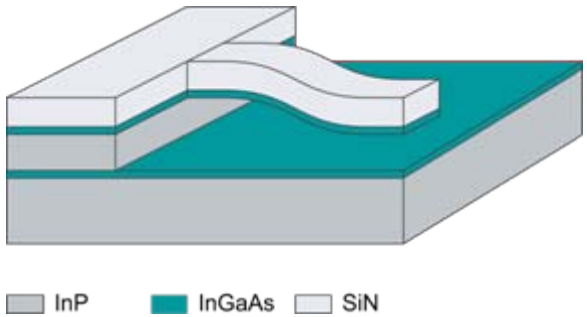
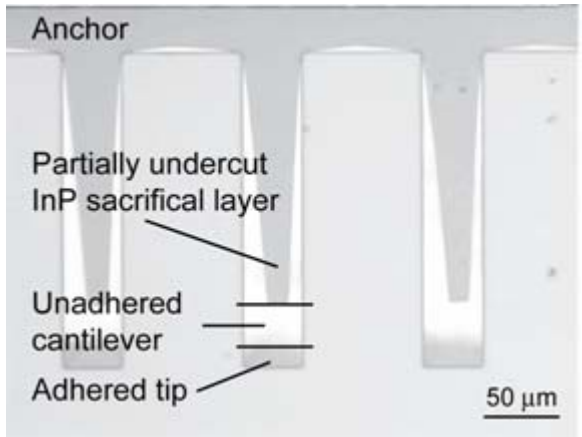
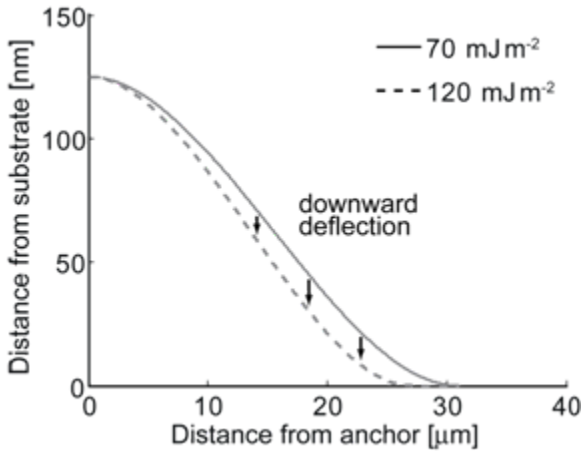


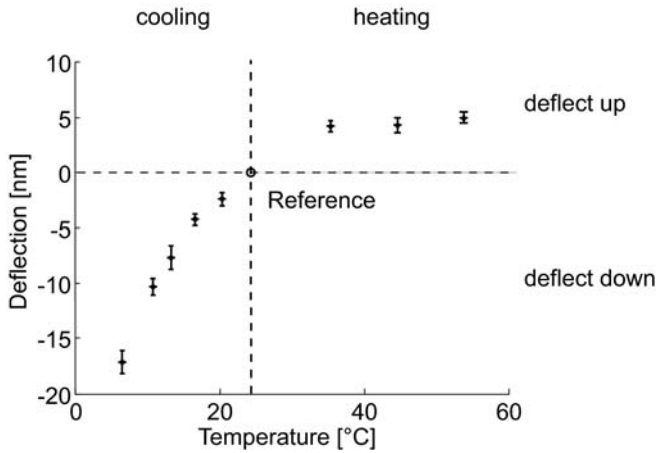

Illustration of the heterostructure used in the project. Surface forces cause the cantilever to collapse over an 125 nm thick air gap.




A micrograph of the actual actuators




- Decrease in temperature increases the surface forces
- Length of unadhered part decreases
- Every Point on the cantilever undergoes vertical translation




Maximum translation along the cantilever as a function of temperature