

Supporting Information

Template-Stripped Multifunctional Wedge and Pyramid Arrays for Magnetic Nanofocusing and Optical Sensing

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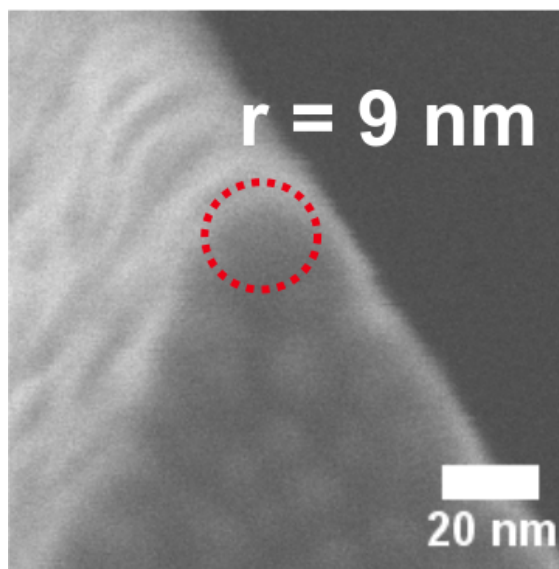


Figure S1: SEM image showing sharp tip of a wedge fabricated with deposited gold thickness 10 nm and nickel thickness 125 nm.

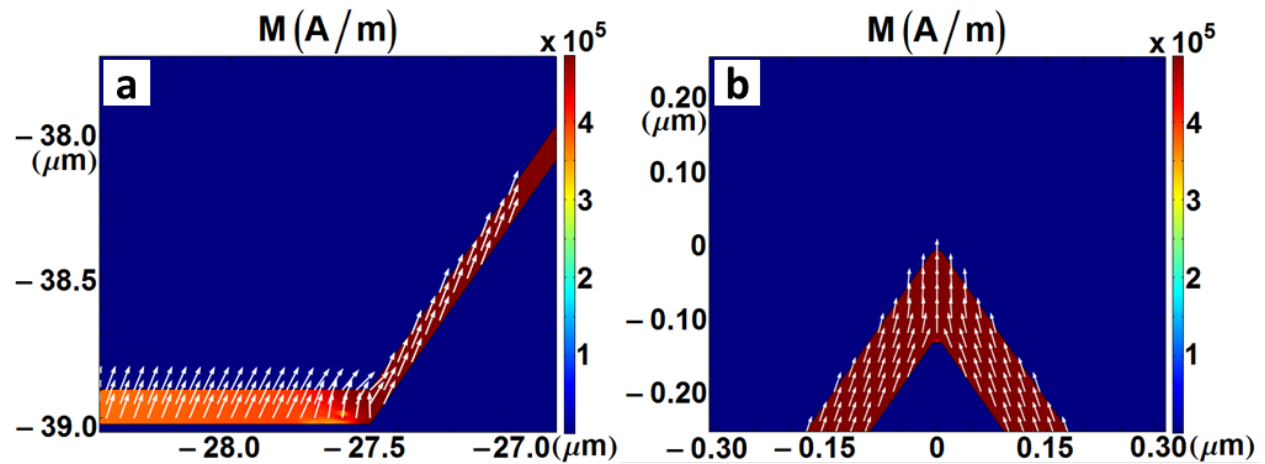


Figure S2: The magnetization of the nickel wedge (a) near the base and (b) near the tip. The saturation value of 4.83×10^5 A/m was reached in the wedge region, although the direction of the magnetization is still somewhat in-plane due to shape anisotropy effects.

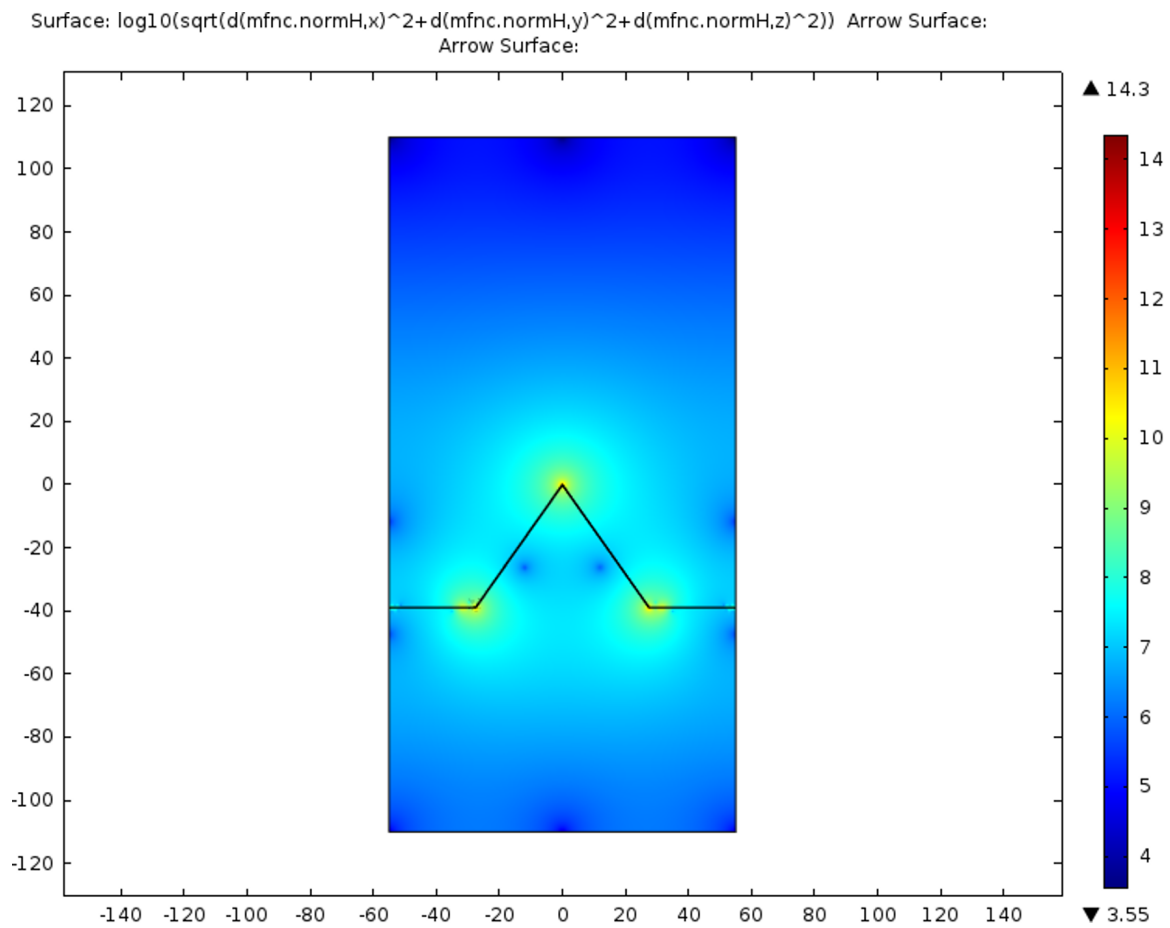


Figure S3: Order of magnitude plot of ∇H for a wedge with 10 nm tip radius showing the entire modeled area.

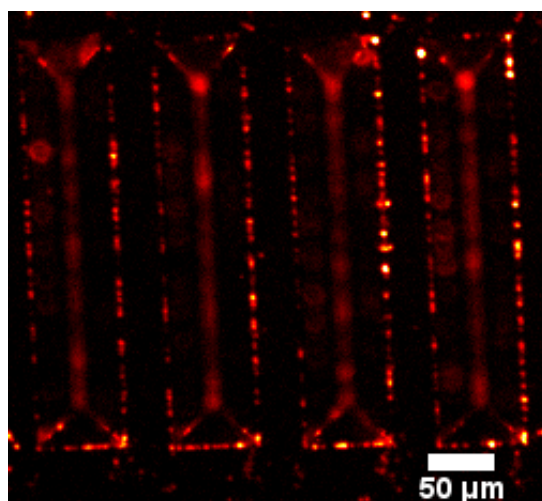


Figure S4: Fluorescence image showing 350 nm magnetic nanoparticles trapped along the sharp bases of magnetic wedges.