



Supporting Information

for

Influence of dielectric layer thickness and roughness on topographic effects in magnetic force microscopy

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Beilstein J. Nanotechnol. **2019**, *10*, 1056–1064. doi:10.3762/bjnano.10.106

Additional experimental details

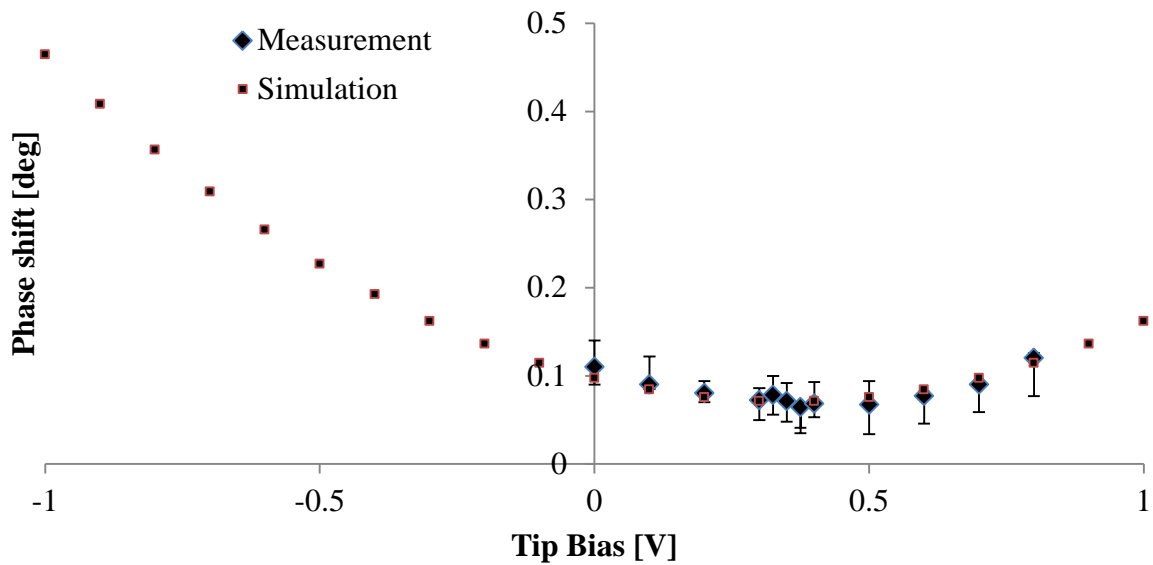


Figure S1: Measured and simulated EFM curve for silicon substrate with ASYMFM-HM tip taken at 20 nm lift height. The contact potential difference between the tip and the substrate is determined to be 0.35 ± 0.05 V.

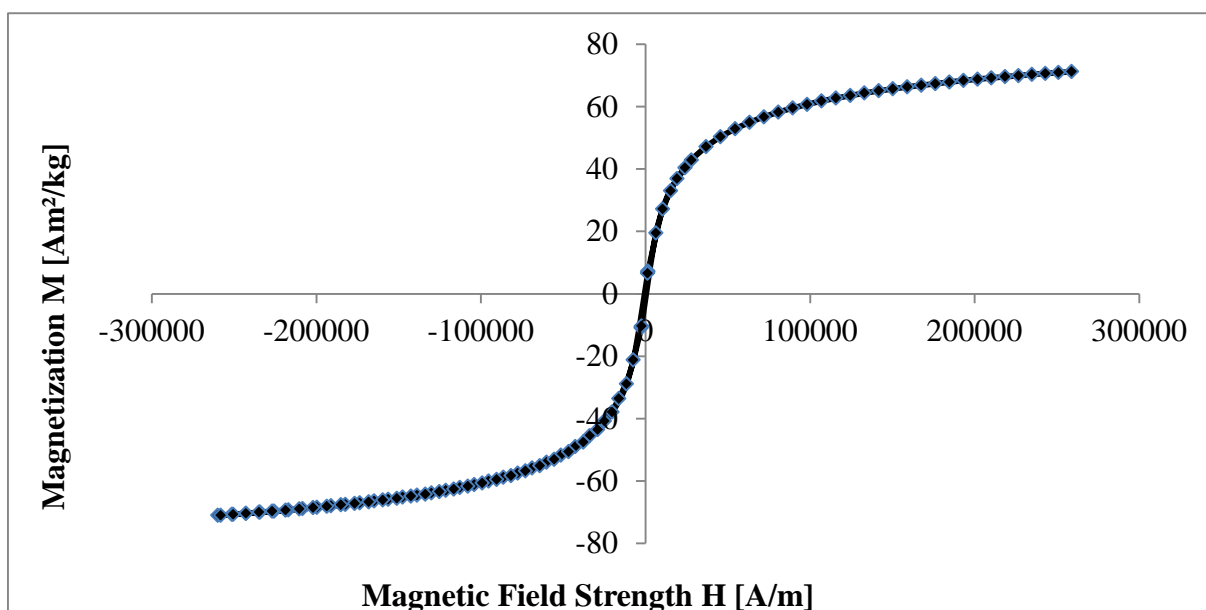


Figure S2: Vibrating sample magnetometer (VSM) measurement of superparamagnetic iron oxide nanoparticles (SPIONs) with 10 nm diameter.

Table S1: Layer thickness for resist with different degree of dilutions at 3000 rpm rotation speed.

dilution resist/thinner	layer thickness [nm]
1:1	380 ± 12
6:7	300 ± 10
5:7	245 ± 8
4:7	200 ± 5
3:7	165 ± 3
2:7	90 ± 2
1:7	25 ± 1