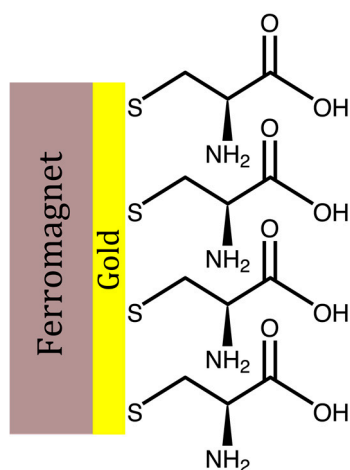
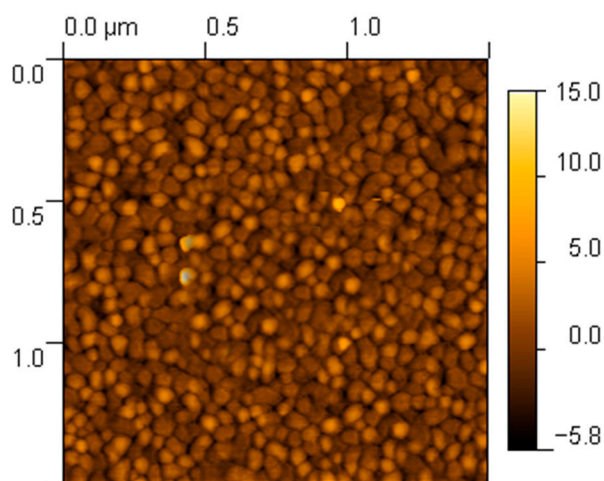


## Supplementary



**Figure S1.** Scheme showing metal cysteine thiol gold interaction.



**Figure S2.** AFM image showing the uniform monolayer of dsDNA, grown by drop electrochemistry on gold surface, where average thickness is around 8-9nm which is close agreement with 40bp dsDNA theoretical length.