

Supplementary information

Small surface nanotopography encourages fibroblast and osteoblast cell adhesion

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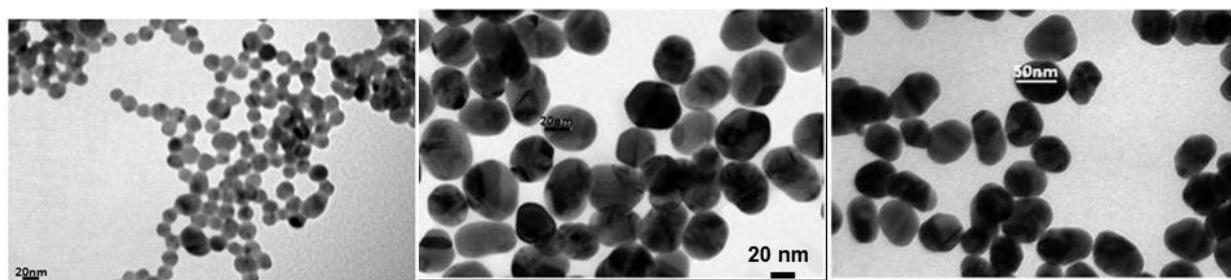


Figure S1. TEM Imaged of the three nanoparticles sizes used for generation of number density gradients of nanoparticles.

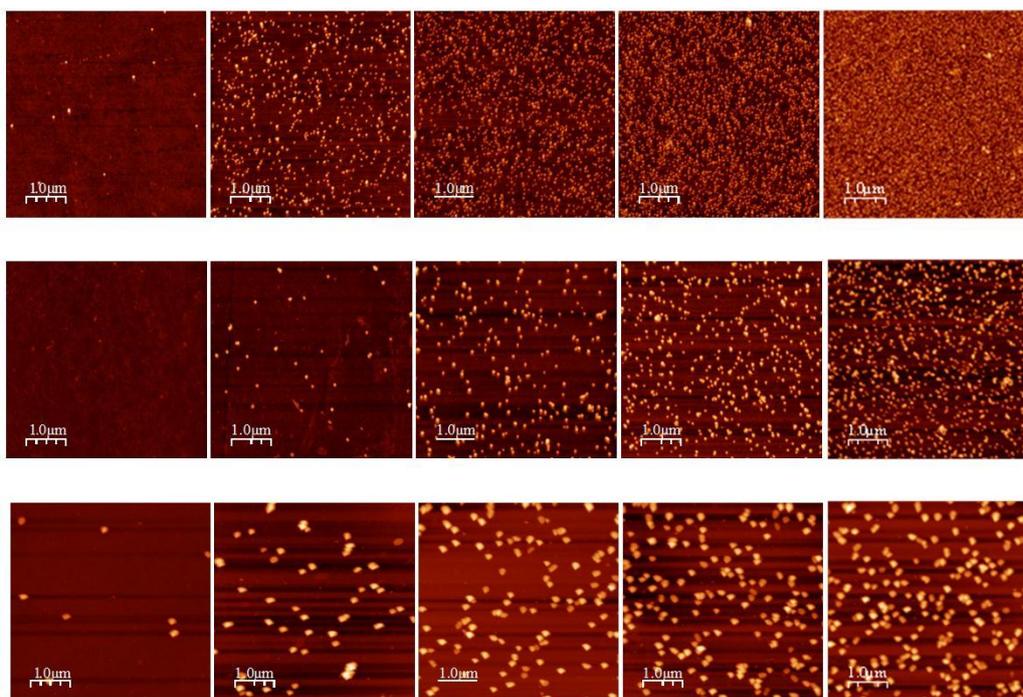


Figure S2. AFM images across the gradients of nanoparticles used for cell culture studies. Top – 16 nm, middle – 38 nm and bottom 68 nm.

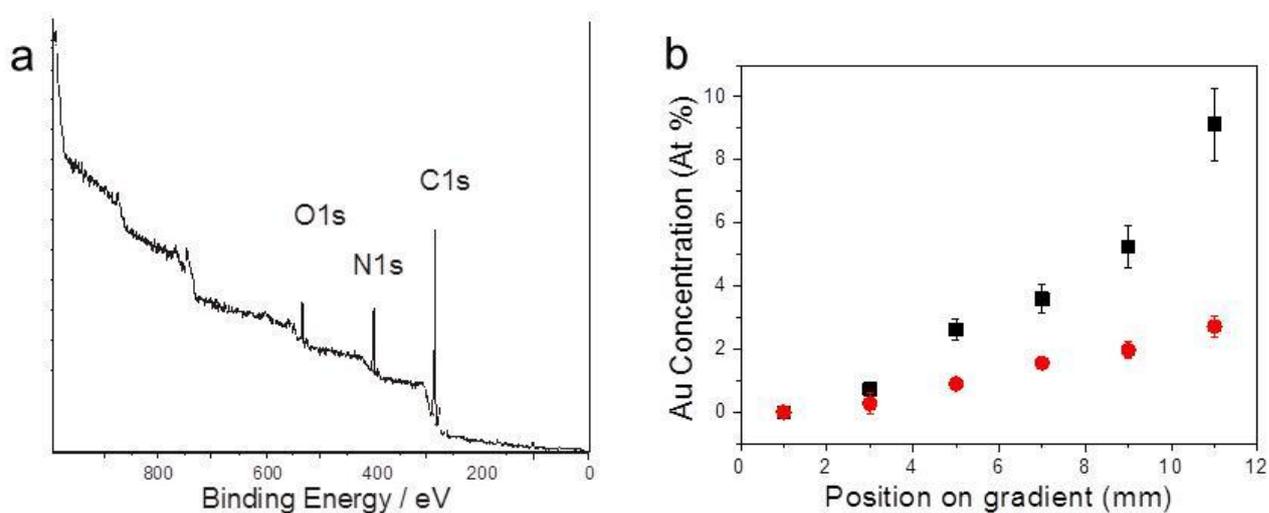


Figure S3. a) Typical XPS survey spectrum of allylamine plasma polymer film. The chemical composition of the films is: 76 At% carbon, 14 At% nitrogen and 10 At% oxygen. b) Atomic percentage of gold across the gradient before and after deposition of a plasma polymer overlayer. The decreased At% of gold is due to the plasma polymer overlayer.

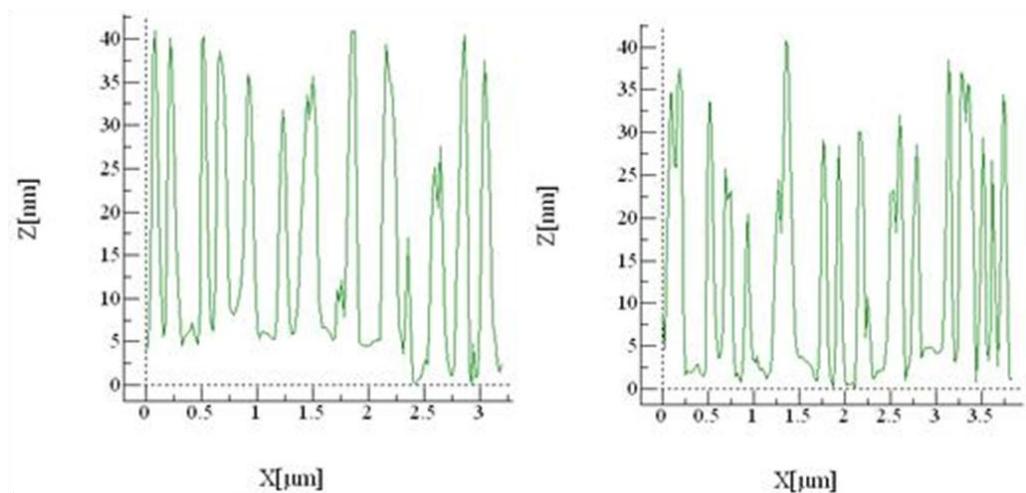


Figure S4. Cross sections of surface immobilised gold nanoparticles of 38 nm without (left) and with (right) an additional plasma polymer overlayer. The gold nanoparticles diameters is ~38nm.