Supporting Information

Surface modification of polymers for tissue engineering applications: Arginine acts as a sticky protein equivalent for viable cell accommodation

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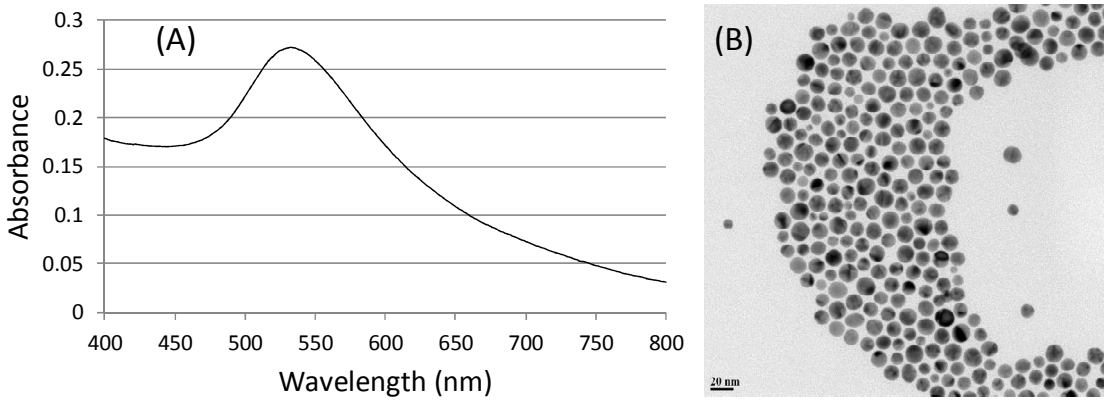


Figure S1. UV-Vis trace for citrate stabilized gold nanoparticles A. TEM image of the same B. Scale bar 20 nm.

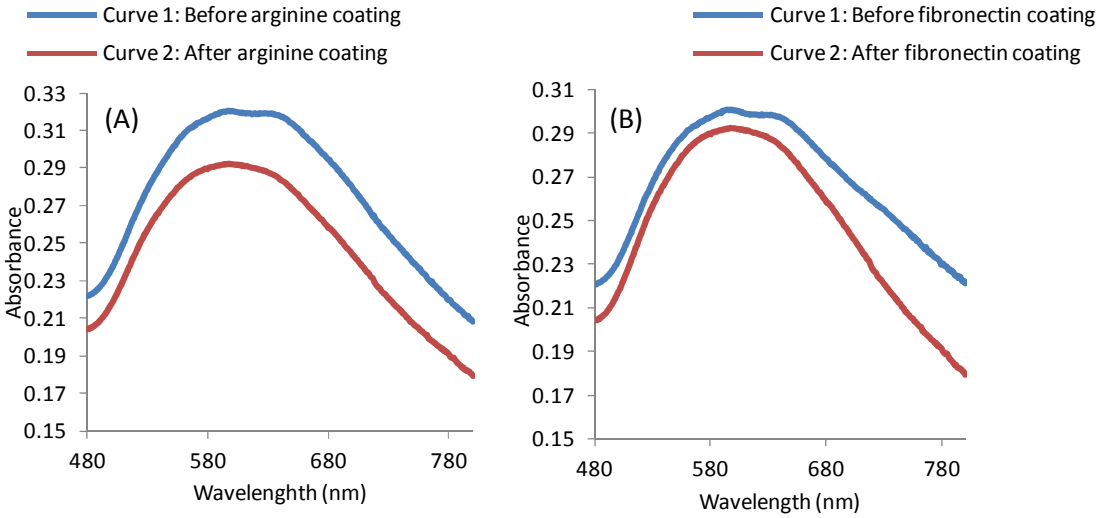


Figure S2. Solid state UV traces of A. arginine and B. fibronectin-coated PEI films

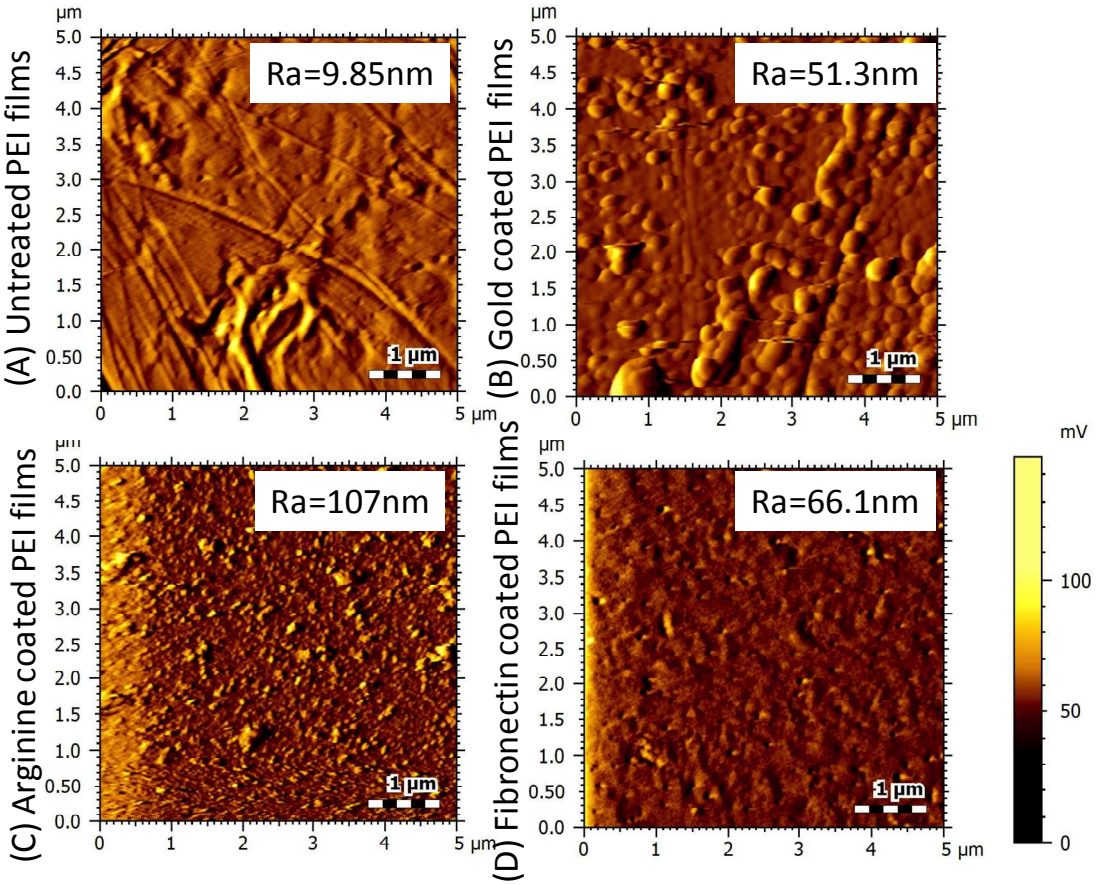


Figure S3. AFM images (contact mode) showing topography of surface coated films along with control A, gold B, arginine C, and fibronectin D dipped films. Surface roughness parameters are provided with each individual images.

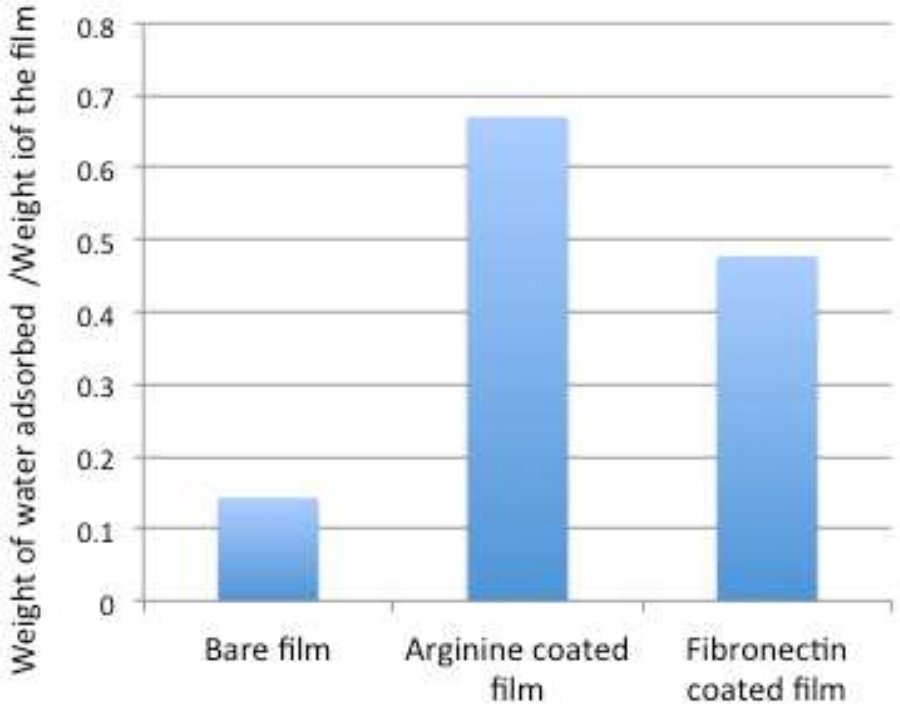


Figure S4. Water absorbed on each film is indicated by a plot of weight of water absorbed per unit weight of the film.

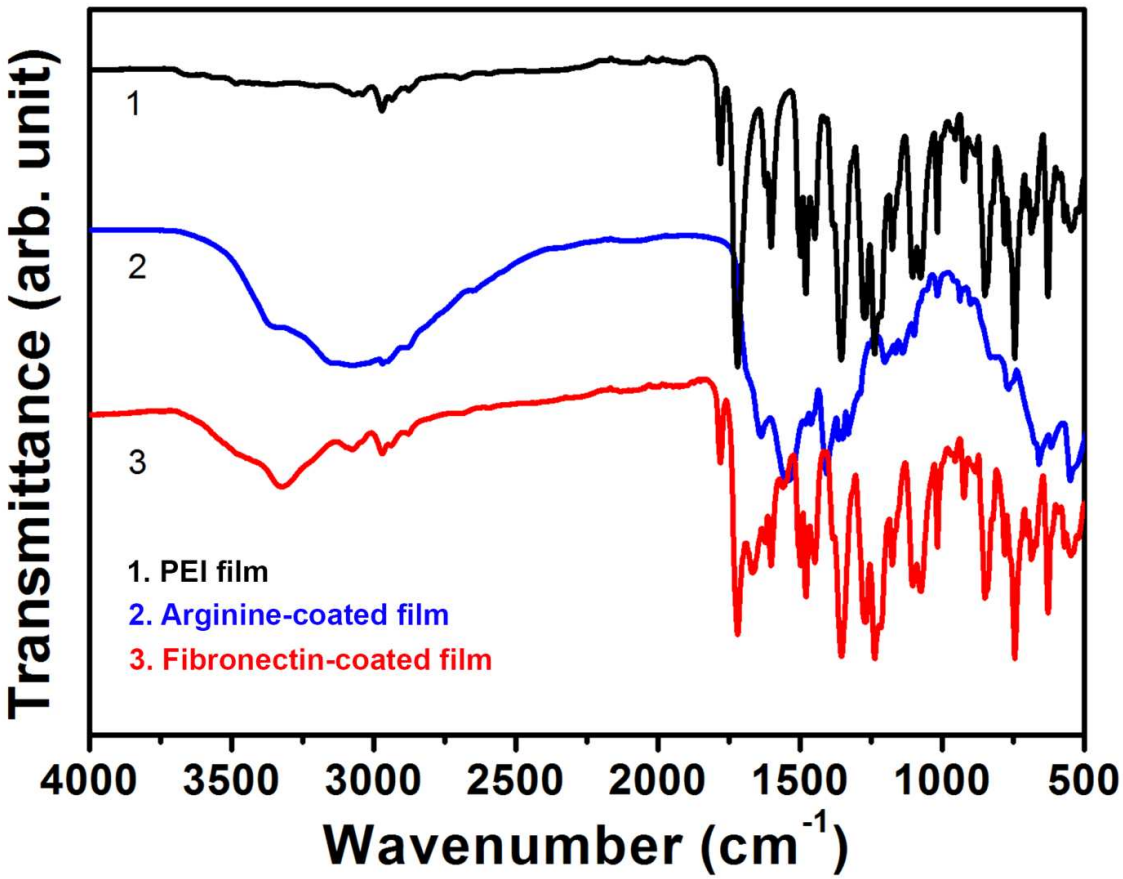
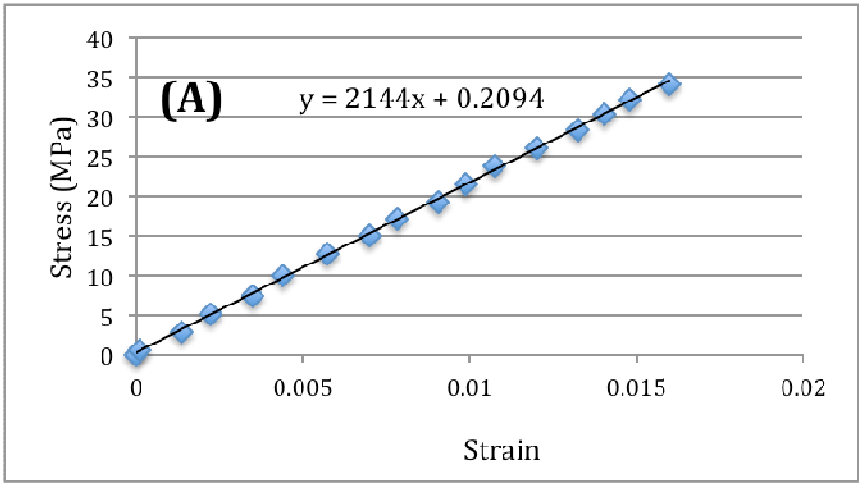
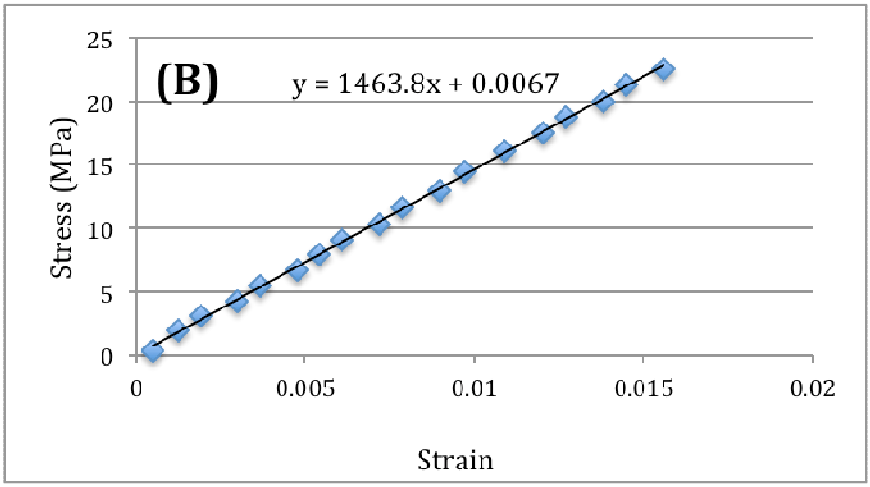


Figure S5. IR of differently surface modified films under ATR mode. The relevant region is expanded in main text Figure no. 2.





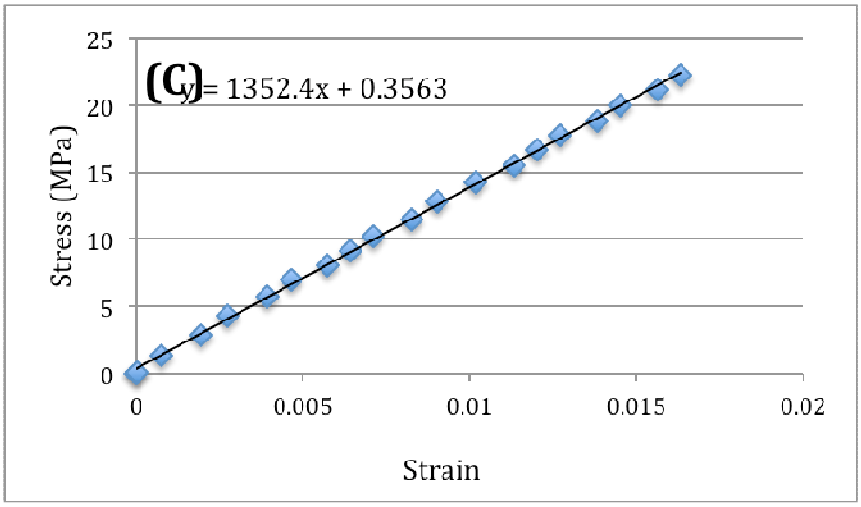


Figure S6. Mechanical stability profiles of bare film (A), arginine coated film (B), fibronectin coated film (C)

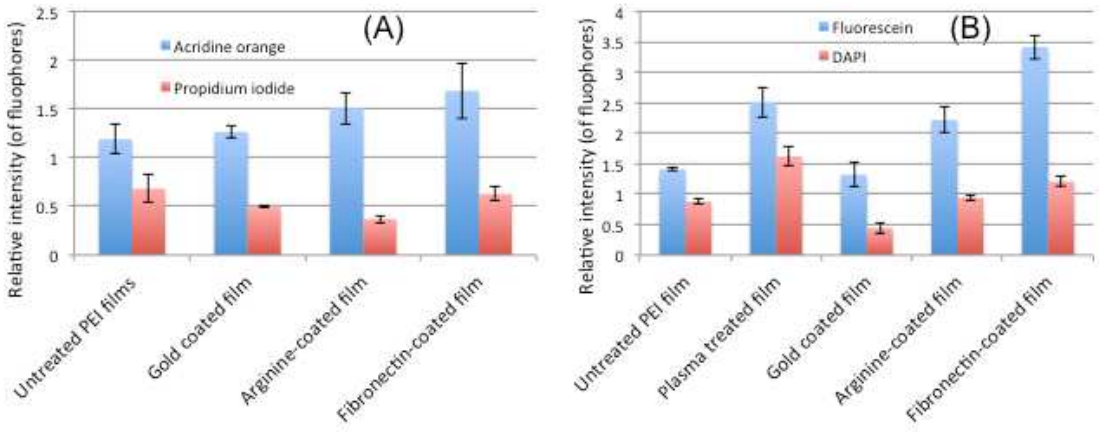


Figure S7. Quantification of fluorescent intensities from cells. (A) Acridine orange and propidium iodide from Figure 6. (B) Fluorescein and DAPI intensity from Figure 8.

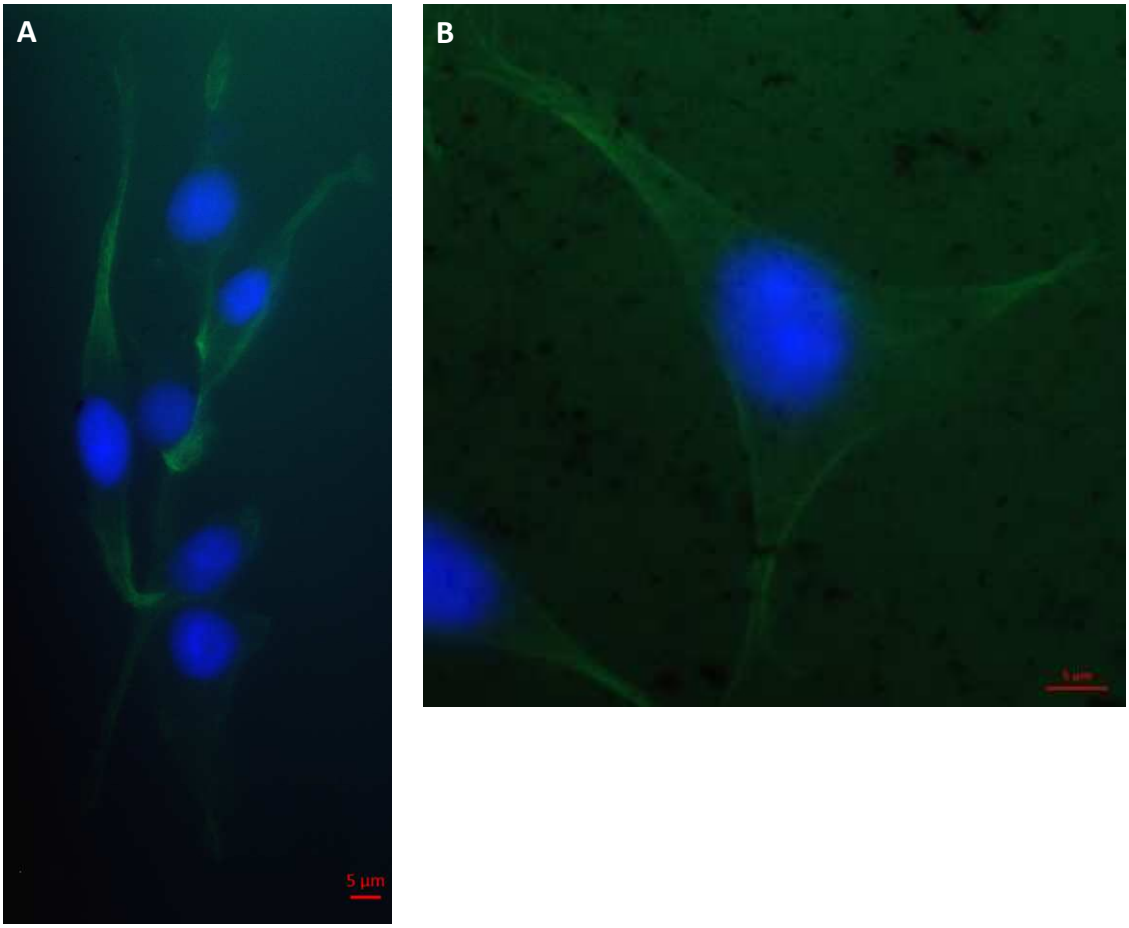


Figure S8. Actin cytoskeleton staining of arginine-coated (A) and fibronectin-coated (B) films. Scale bar 5 µm