

Figure 1 - Left: Transmission electron microscopy (TEM) measurements of a general view of a citrate-capped nanoparticle solution directly obtained from the synthesis (and hence containing also citrate, other synthesis by-products, and nanoparticle aggregates). Right: Nanoparticles obtained from the same synthesis after substitution of the citrate capping of the nanoparticles by insulin, which allowed rinsing, filtering and concentration procedures (and containing only highly concentrated nanoparticles with no aggregates). The average particle size of this batch was 3.5 ± 0.6 nm.

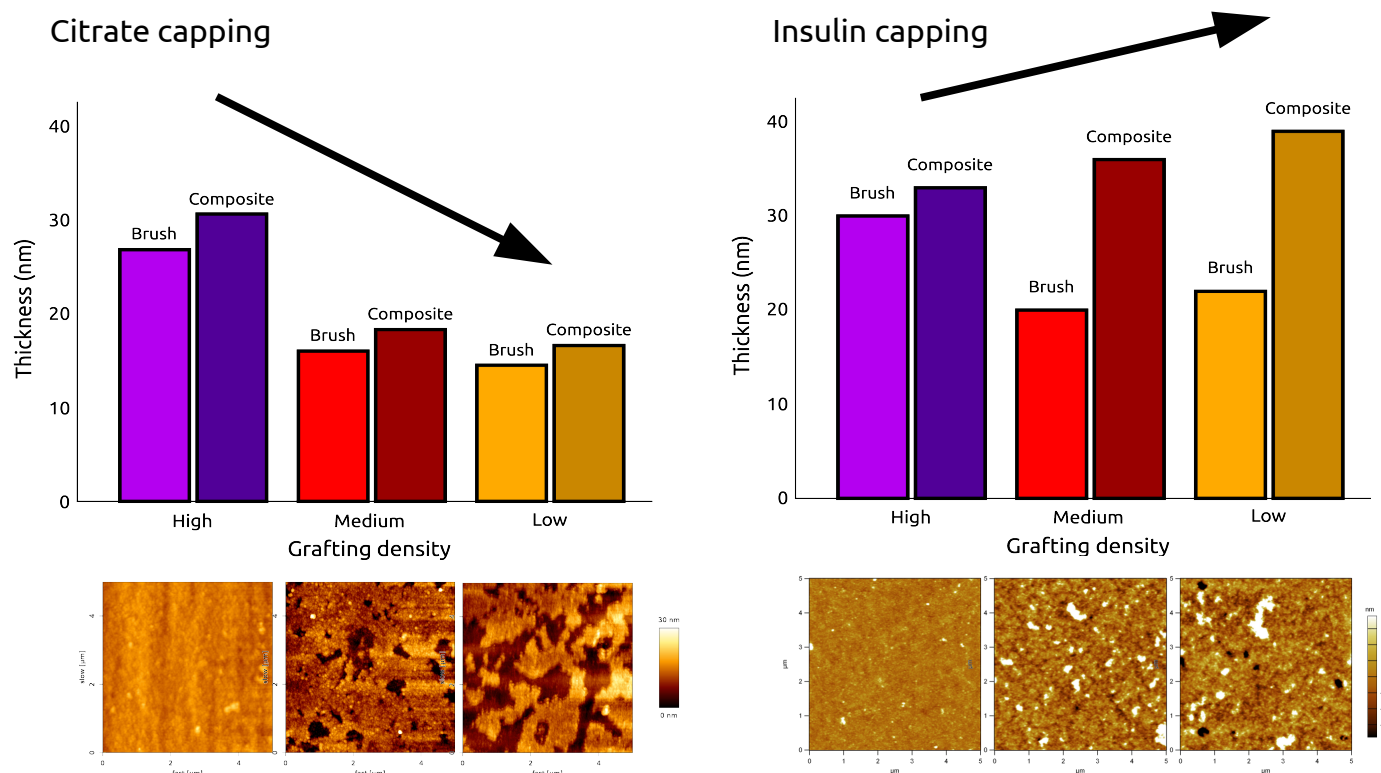


Figure 2 - Above: Thickness measurements of two batches of polymer brushes with different grafting densities and their corresponding composites, obtained from small gold nanoparticle (~ 5 nm) solutions capped with citrate (left) and insuline (right). Both kinds of composites have an opposite behaviour, those obtained with citrate-capped nanoparticles decrease their thickness with density, while those obtained with insulin-capped nanoparticles increase it. Below: Transmission electron microscopy (TEM) measurements of the composite surfaces. Domains are formed in composites obtained from citrate-capped nanoparticles.