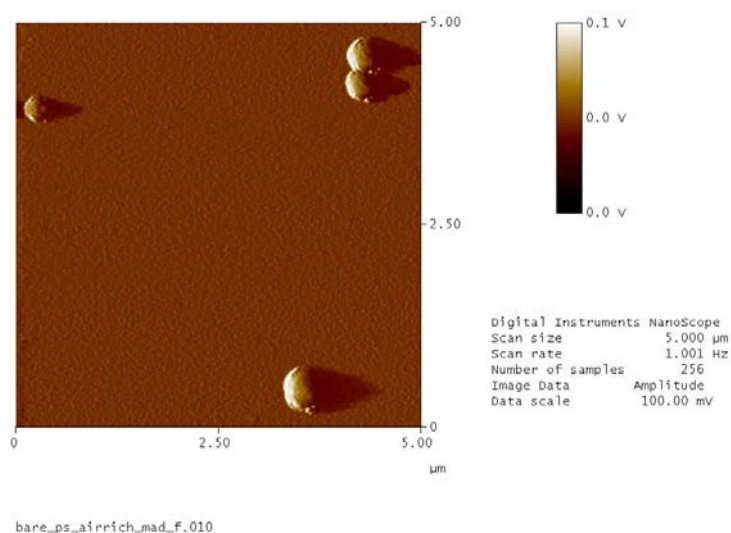


## Supporting Information

Supplemental Fig 1. AFM image of nanoparticles on a gold-coated crystal. The particle concentration of the solution was 10 times higher than that in the paper for better images.



Supplemental Fig 2. Variation of the resonant frequency with time during experiments in which larger polystyrene particles (1.1  $\mu\text{m}$ ) were adsorbed onto a gold-coated quartz crystal in air-rich water.

