Supporting information

Polymer-Based Photocoupling Agent for the Efficient Immobilization of Nanomaterials and Small Molecules

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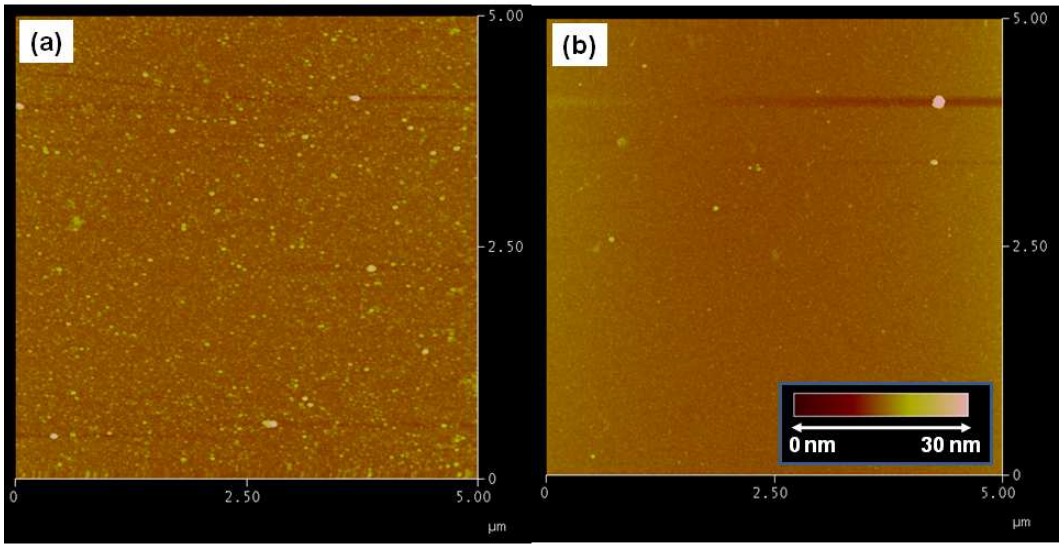

Figure S1. AFM images of PAAm-PFPA-modified surfaces. The samples were prepared by treating the epoxy-functionalized wafers with (a) PAAm-PFPA (PAAm 15,000, 1:4 mole ratio of PFPA-NHS/AAm) containing potassium carbonate in ethanol/water, and (b) PAAm-PFPA (PAAm 70,000, 1:1 mole ratio of PFPA-NHS/AAm) in water/pyridine.

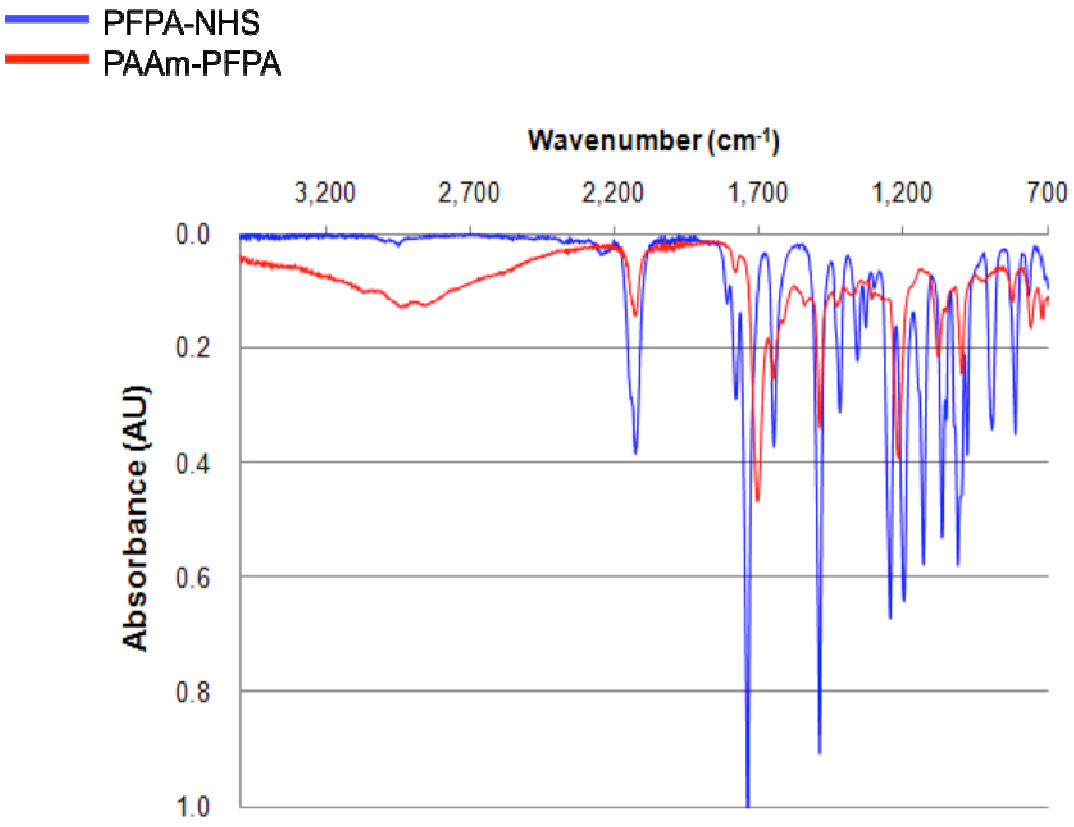

Figure S2. FTIR spectra of PFPA-NHS (blue) and PAAm-PFPA (red) synthesized from 1:1 mole ratio of PFPA-NHS/AAm.

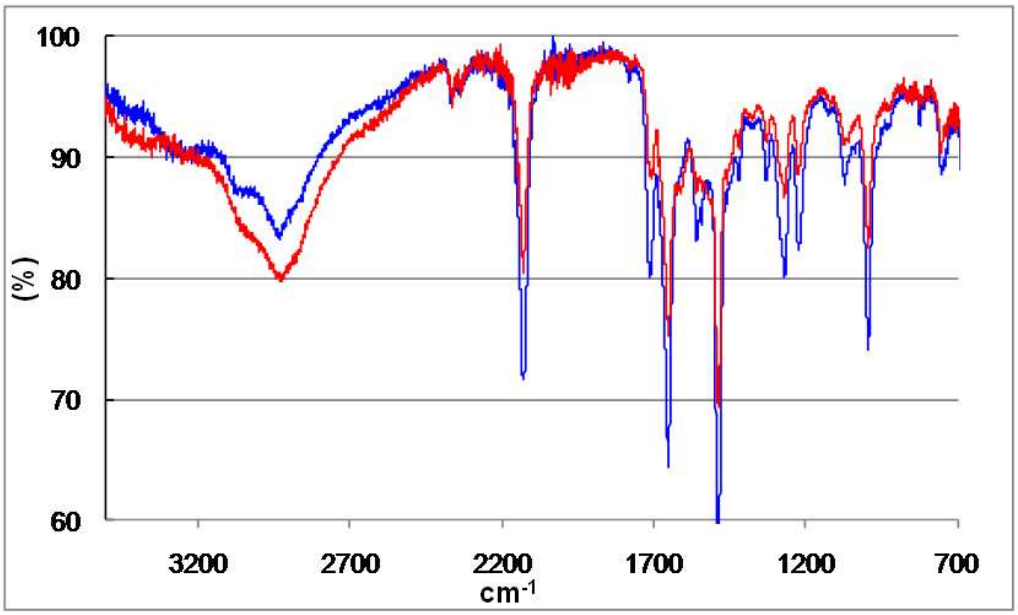

Figure S3. FTIR spectra of PAAm-PFPA synthesized from 1:4 (red) and 1:1 (blue) mole ratio of PFPA-NHS/AAm.

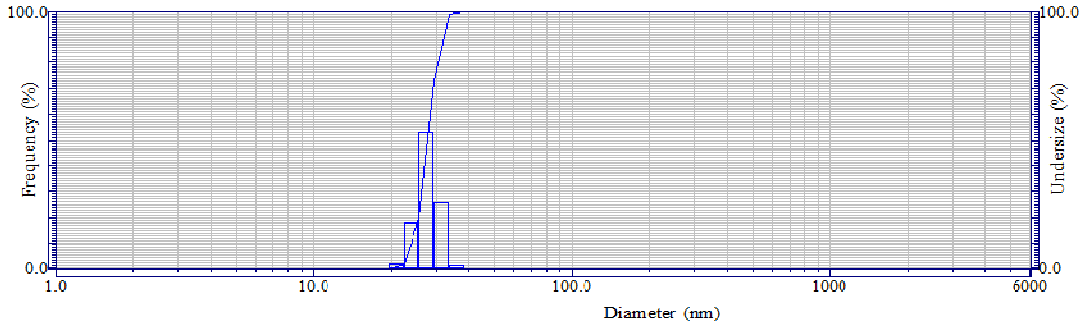

Figure S4. DLS of polystyrene nanoparticles, average diameter: 28 nm.

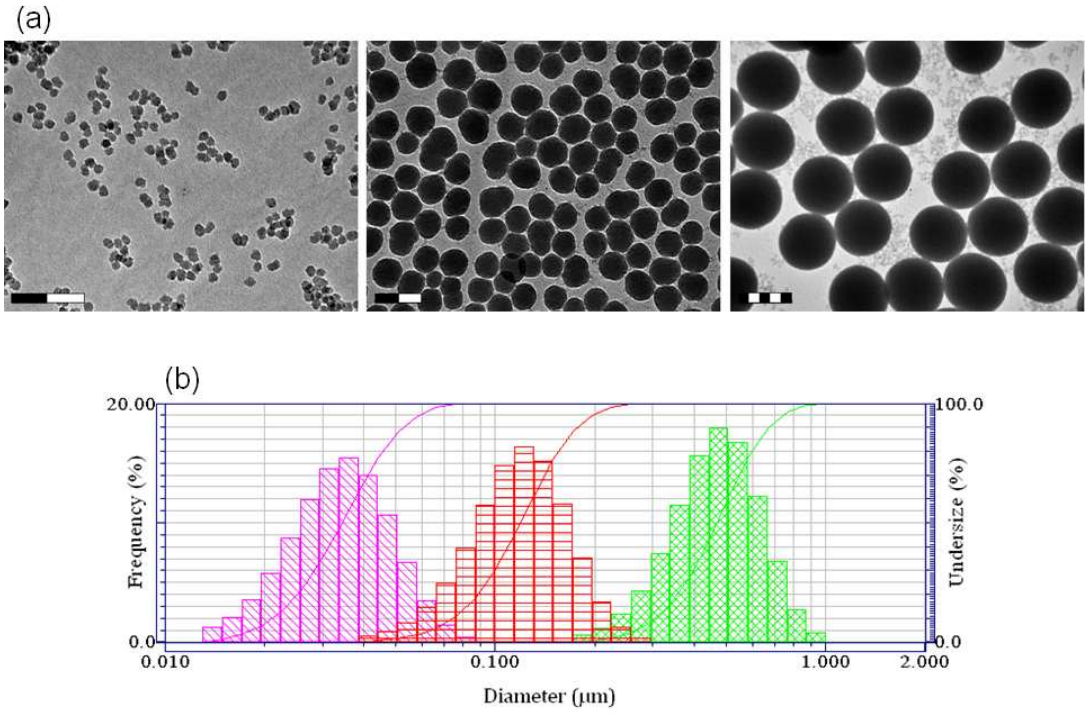

Figure S5. (a) TEM and (b) DLS of silica nanoparticles of diameters 35 nm, 120 nm, and 470 nm, respectively. The scale bars in the TEM images are 100 nm.