Supplementary Information

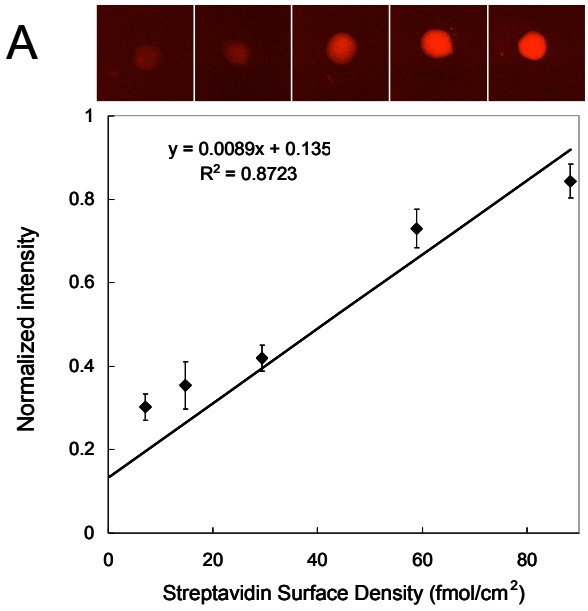
Specific Adsorption of Histidine-Tagged Proteins on Silica Surfaces Modified with Ni^{2+}:NTA-Derivatized Poly(Ethylene Glycol)

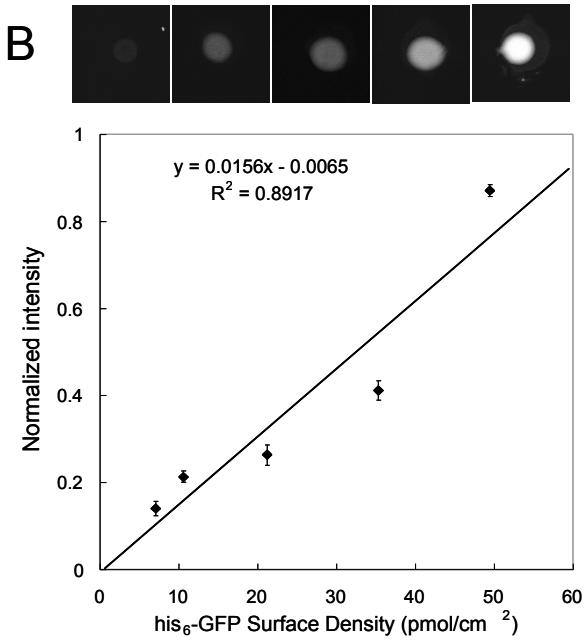
Eunah Kang[1], Jin-won Park[2], Scott McClellan[2], Jong-Mok Kim[4], David Holland[4], Gil U. Lee[2*], Elias Franses[2*], Kinam Park[1,3*] and David H. Thompson[4*]

[1]School of Biomedical Engineering, [2]School of Chemical Engineering, [3]Department of Pharmaceutics, and [4]Department of Chemistry
Purdue University
West Lafayette, IN 47907

Calibration Curves

Calibration curve of normalized fluorescence intensity as a function of SA-AF surface density (A) and as a function of his_6-GFP surface density (B). The fluorescence intensities observed within ten different 300 μm diameter spotted zones at each concentration (spot volume = 50 nL) were measured by laser confocal scanning microscopy using the same photomultiplier gain, iris and laser excitation energy and then averaged.





QCM Evidence of Specific NTA:Ni^{2+}:his_6-GFP Binding

QCM measurement of his_6-GFP adsorption onto NTA-PEG3400-$Si(OMe)_3$-modified surfaces in the presence (A) and absence (B) of chelated Ni^{2+}.