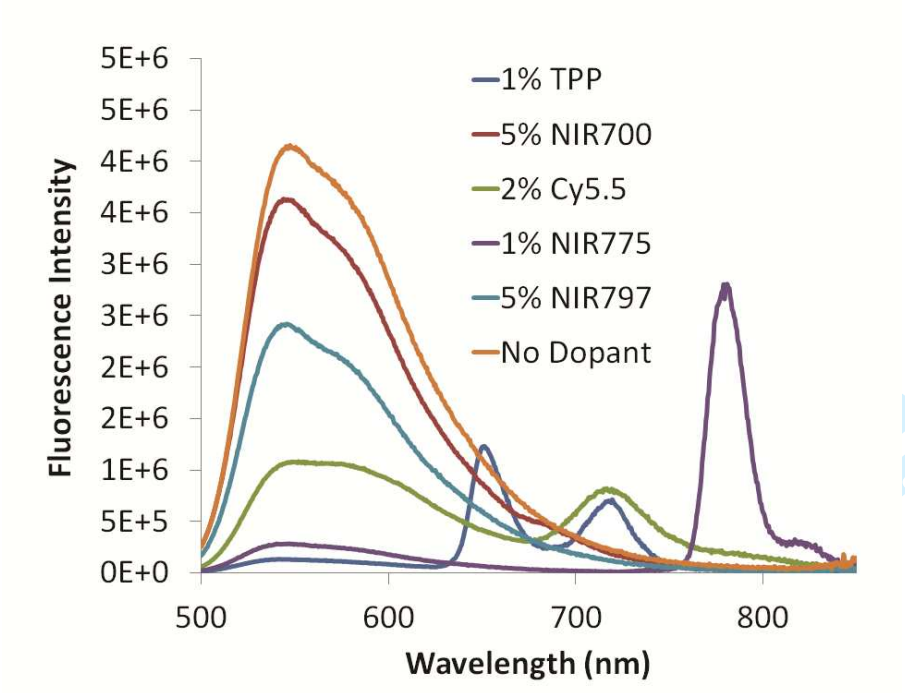
Supporting Information

Near Infrared Fluorescent Dye-Doped Semiconducting-Polymer Dots

*Yuhui Jin, Fangmao Ye, Maxwell Zeigler, Changfeng Wu, Daniel T. Chiu**

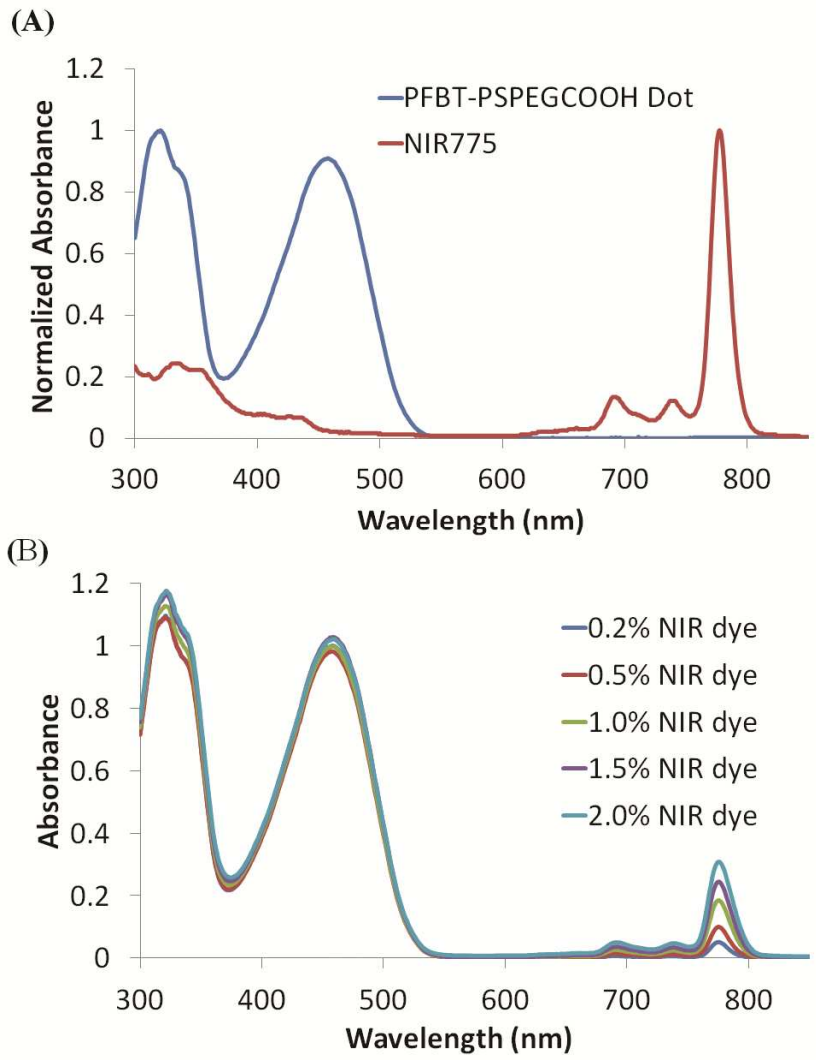
Department of Chemistry, University of Washington, Seattle, WA,USA 98195

Email: chiu@chem.washington.edu



S-Figure 1. Normalized fluorescence spectra of PFBT Pdots doped with different NIR dyes. The amount of dopant was represented by weight percentage: No dopant (Orange curve); 1% of Tetraphenyl porphyrin (TPP, Dark blue curve); 5% of silicon phthalocyanine dichloride (NIR700, Dark red curve); 2% of Cy5.5 (Green curve); 1% of silicon 2,3-naphthalocyanine bis(trihexylsilyloxide) (NIR775, Purple

curve); 5% of 1,1′-Bis(4-sulfobutyl)-11-(4-isothiocyanatophenylthio)-3,3,3′,3′-tetramethyl-10,12-trimethyleneindotricarbocyanine monosodium salt (NIR797, Light blue curve). NIR700, Cy5.5 and NIR797 were not efficient quenchers or energy receivers to PFBT. Pdots doped with NIR700 and NIR797 did not show significant fluorescence emissions in NIR region. TPP, Cy5.5 and NIR775 fluoresced in the NIR region inside the Pdot matrix. Among these three dyes, NIR775 exhibited the strongest NIR emission and longest emission wavelength (777nm).



S-Figure 2. Absorption spectra of PFBT Pdots and NIR775 dye. (A) Normalized absorption spectra of PFBT-PS-PEG-COOH Pdots in water and free NIR775 dye in THF. (B) PFBT-PS-PEG-COOH Pdots with various amounts of NIR775 dye doping.