

Supporting Information

High Efficient Hybrid Solar Cells with Tunable Dipole at the Donor/Acceptor Interface

Weifei Fu,^{a,‡} Ling Wang,^{a,‡} Jun Ling,^a Hanying Li,^a Minmin Shi,^{a,} Jiangeng Xue,^{b,*} Hongzheng Chen^{a,*}*

^aState Key Laboratory of Silicon Materials, MOE Key Laboratory of Macromolecular Synthesis and Functionalization, Department of Polymer Science and Engineering, Zhejiang University, Hangzhou 310027, P. R. China, ^bDepartment of Materials Science and Engineering, University of Florida, Gainesville, Florida 32611-6400, United States

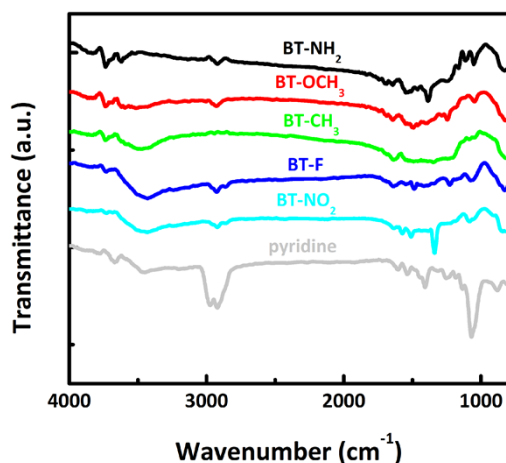


Figure S1. Typical Fourier transform infrared spectra of CdSe QD films with various ligands. After ligand exchange with benzenethiols, the intensities of the peaks which can be attributed to C-H (at 2924, 2857 cm^{-1}) and C-P (at 1260 cm^{-1}) stretching vibrations dramatically decreased, demonstrating the removal of surfactants of TOPO and oleic acid existed on the outer surface of the OA/pyridine capped CdSe QDs.

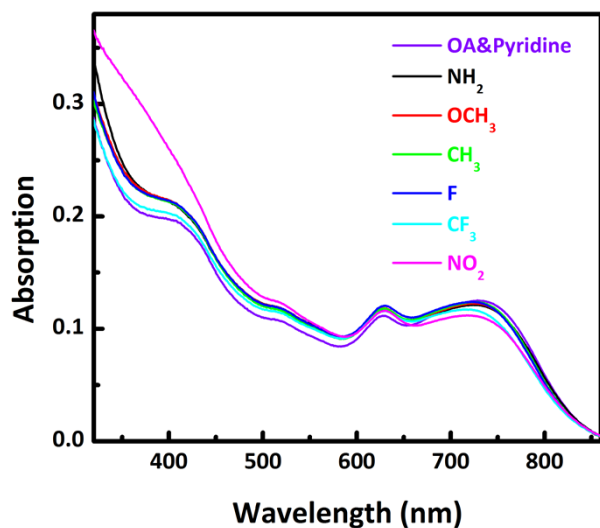


Figure S2. UV-Vis absorption spectra of the PCPDTBT/CdSe QDs blend films with different treatments. The absorption of the hybrid films almost remains the same after post-deposition ligand exchange.

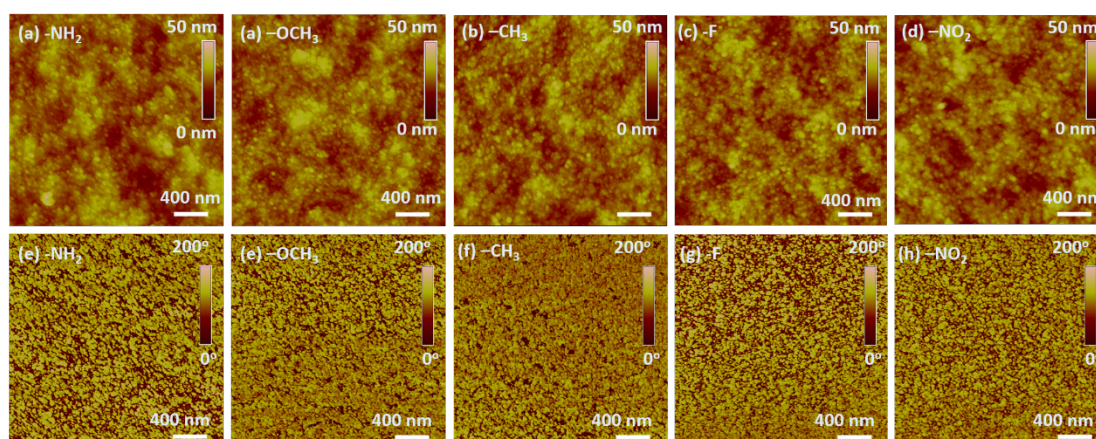


Figure S3. Typical atomic force microscope (AFM) images of PCPDTBT:CdSe QDs hybrid films treated by different benzenethiols.