Supporting information.

Thiol Treatment to Enhance Photoluminescence and Electroluminescence of CdSe/CdS Core-Shell Quantum Dots Prepared by Thermal Cycling of Single Source Precursors

Chih-Jung Chen, ab Ray-Kuang Chiang, a* Chun-Yuan Huang, c* Jiun-Yi Lien, d and Sue-Lein Wang b

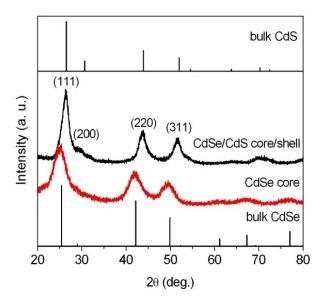


Figure S1. XRD patterns of CdSe core and CdSe/5CdS core-shell NCs.

^a Nanomaterials Laboratory, Far East University, Hsing-Shih, Tainan 74448, Taiwan

^b Department of Chemistry, National Tsing Hua University, Hsinchu 30013, Taiwan

^cDepartment of Applied Science, National Taitung University, Taitung 950, Taiwan

^d Department of Physics, National Cheng Kung University, Tainan 70101, Taiwan

^{*}Correspondence should be addressed to rkc.chem@msa.hinet.net and laputa@nttu.edu.tw

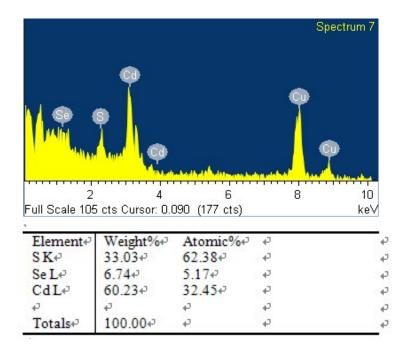


Figure S2. EDS spectrum of thiol-modified CdSe/CdS core-shell QDs (3 MLs).

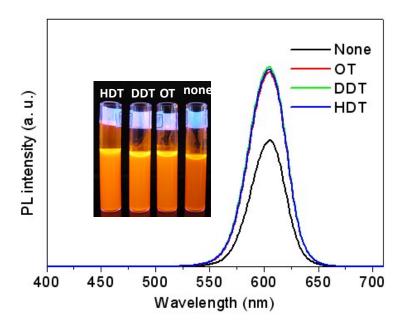


Figure S3. PL spectra of CdSe/CdS core-shell QDs following addition of thiol ligands with different chain lengths. (Note that the inset shows QDs with the addition of various ligands under UV irradiation.)

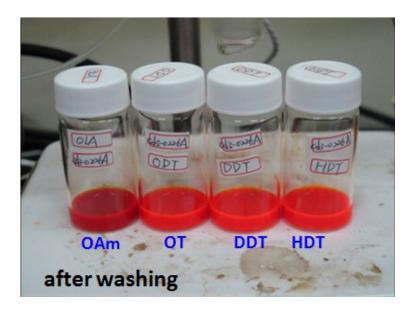


Figure S4. Photograph of purified QDs with various ligands dispersed in hexane solution under indoor light conditions.