

Supporting Information

Photofabrication of Fullerene-Shelled Quantum Dots Supramolecular Nanoparticles for Solar Energy Harvesting

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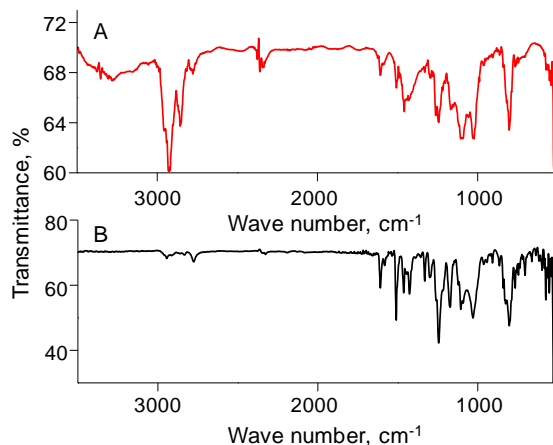


Figure S1. FT-IR spectra of (A) SNPs and (B) C₆₀-thiol. Additional CH stretching bands $\sim 2900\text{ cm}^{-1}$ in A is due to the presence of trioctylphosphine ligands on QDs. The broad band $\sim 1050\text{ cm}^{-1}$ is indicative of C₆₀-C₆₀ linkage.⁴⁵

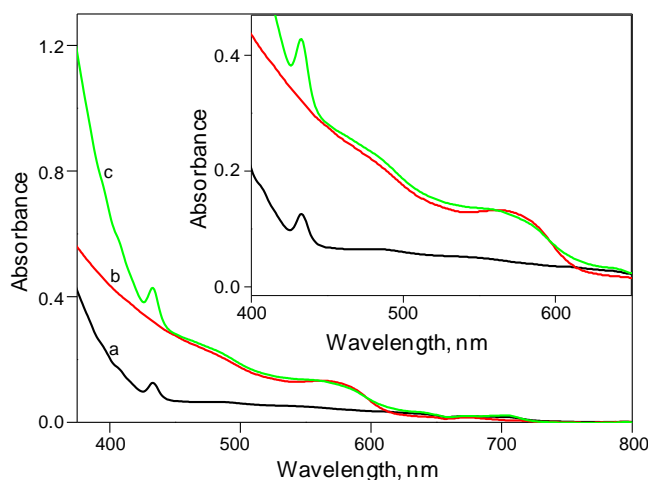


Figure S2. The UV-Vis absorption spectra of (a) C₆₀-thiol, (b) QD and (c) SNPs. Expanded view is shown in the inset.

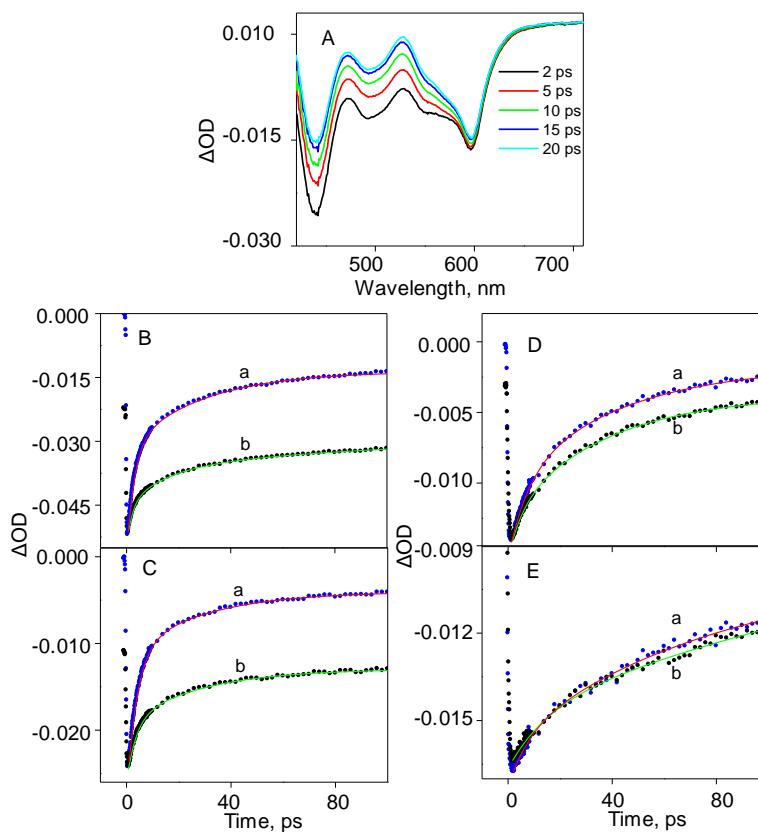


Figure S3. Bleach recovery of QDs (A), and the kinetics of bleach recovery of SNP (B,D) and QDs (C,E). The traces (a) and (b) in B and C represent the kinetics at 490 and 431 nm, respectively, and the traces (a) and (b) in D and E represent the kinetics at 550 and 590 nm, respectively.

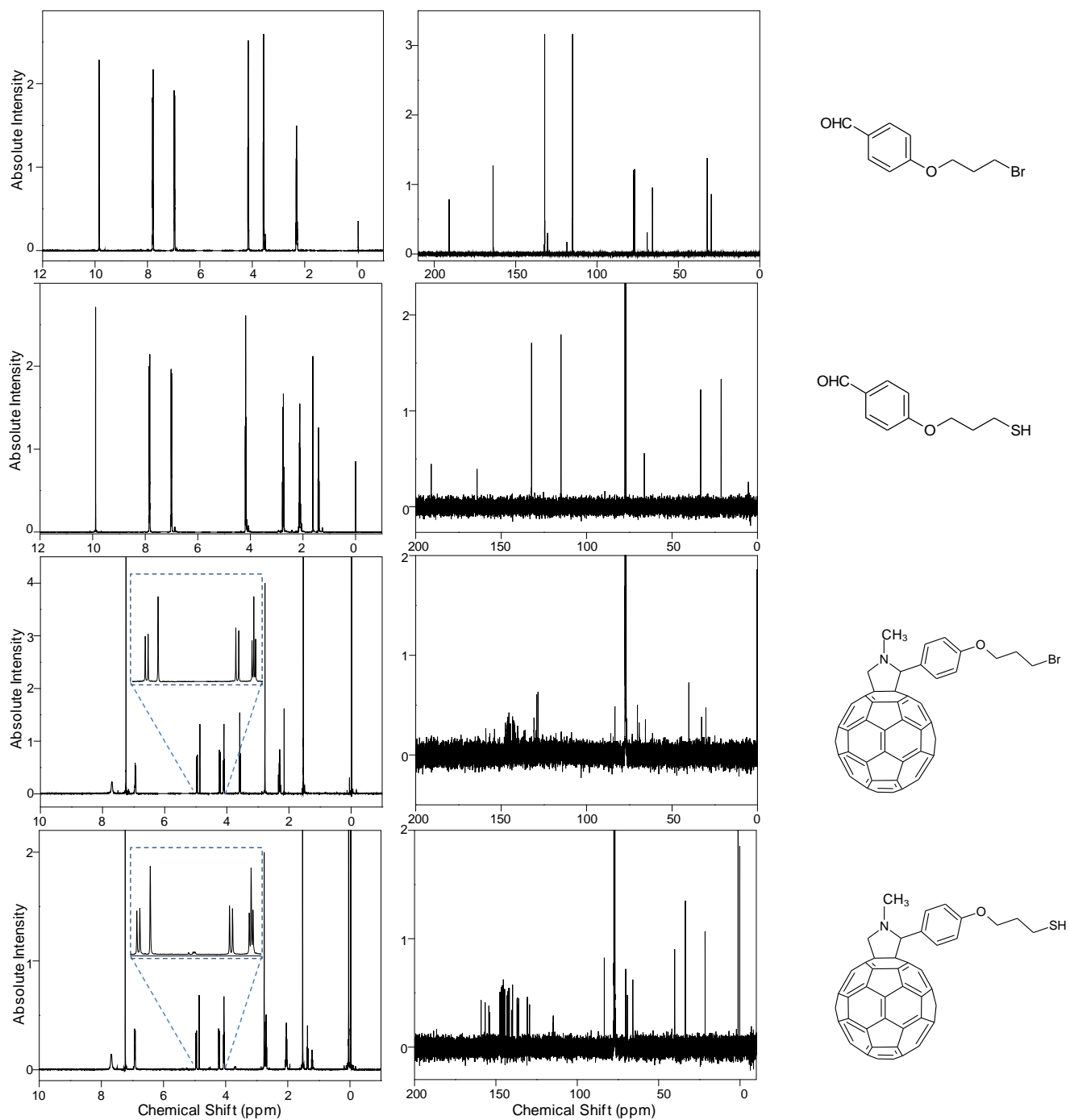


Figure S4. Left and middle panel show the ^1H and ^{13}C NMR spectra of compounds 1-4. The chemical structure of corresponding compounds are shown in the right panel.