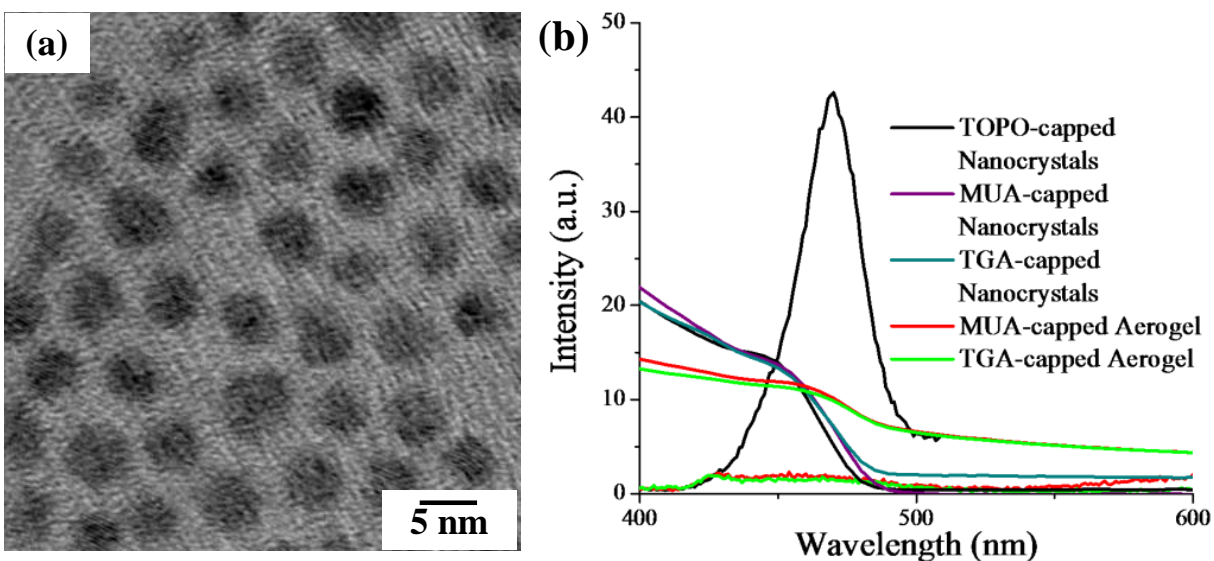


Electronic Supplemental Information (ESI) for

CdS Aerogels as Efficient Photocatalysts for Degradation of Organic Dyes under Visible Light Irradiation

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Fig. S1. (a) High-resolution TEM image of TOPO-capped CdS NCs and (b) UV–vis and PL spectra of TOPO-capped, MUA-capped and thioglycolic acid (TGA)-capped CdS NCs and aerogels assembled from MUA and TGA-capped CdS NCs.

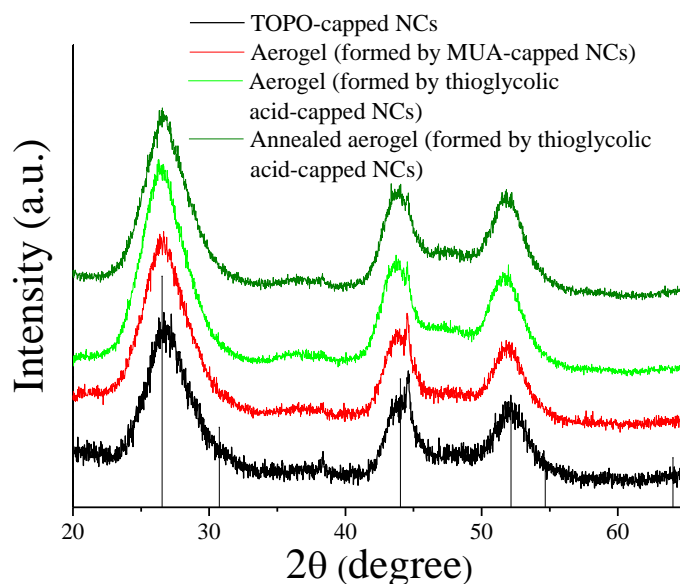


Fig. S2 PXRD patterns of TOPO-Capped CdS NCs, and aerogels synthesized by MUA- and thioglycolic acid-capped NCs. The line diagram corresponds to bulk cubic CdS (from ISCD pattern PDF # 80-0019).

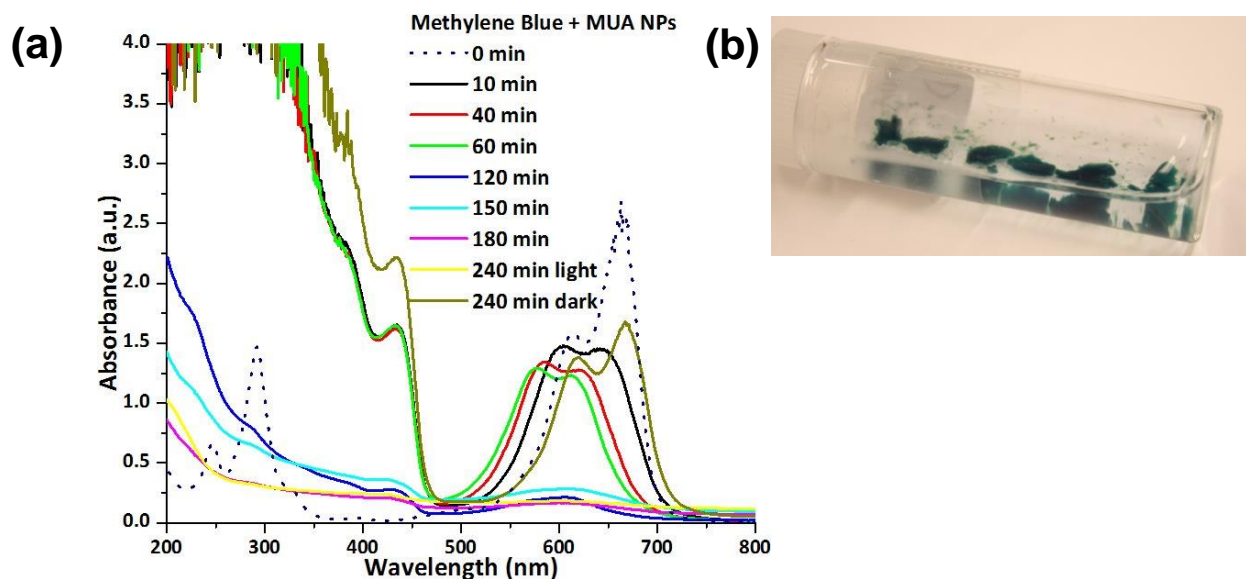


Fig. S3. (a) UV/vis spectra as a function of time for photocatalysis of MB dye by MUA-capped CdS nanoparticles; (b) photograph of MUA-capped CdS nanoparticle + MB dye after the

experiment. The photocatalytic reaction results in corrosion of the nanoparticles, leading to aggregation. Dye absorption by the resulting wet gels is a significant contributor to the decolorization process.

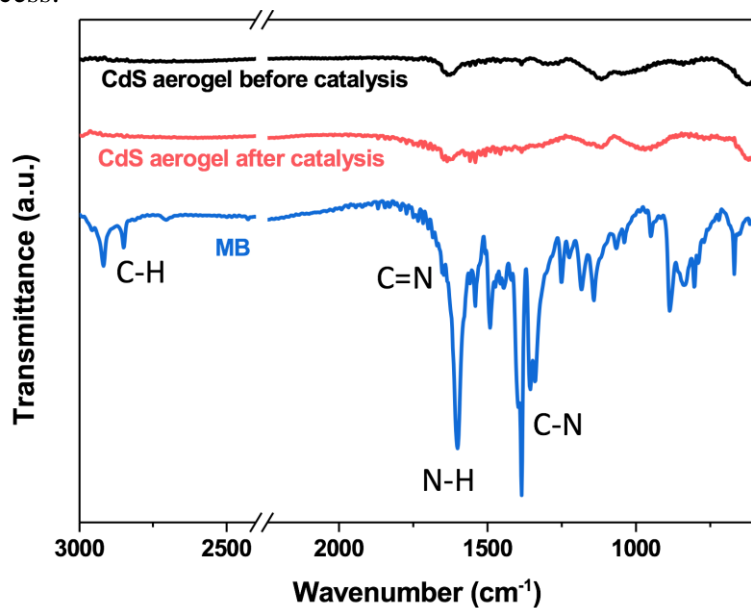


Fig. S4. FT-IR spectra of MB dye and the TGA-capped CdS aerogels (annealed) before and after catalysis.

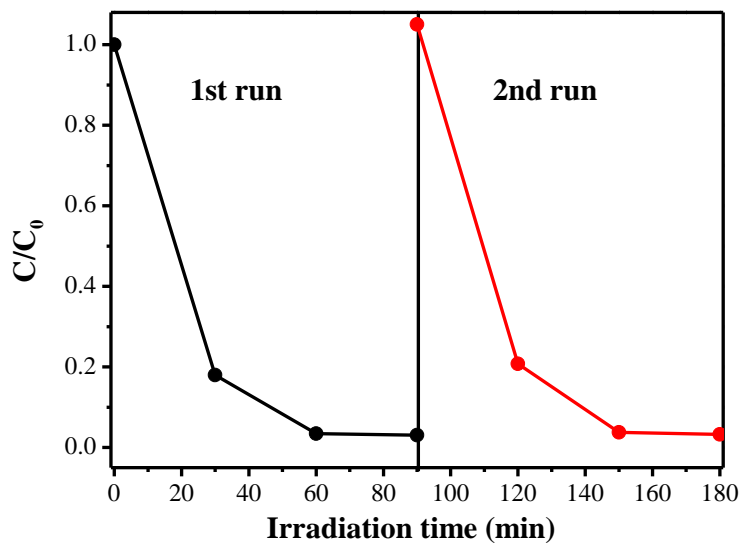


Fig. S5. Recycling test for the photodegradation of MB using the TGA-capped CdS aerogels (annealed).