Supporting Information

Photochemical synthesis of size-tailored hexagonal ZnS quantum dots

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Figure S1. Histograms for ZnS QDs population in Figures 1a-c.

Figure S2. XRD of a sample of ZnS QDs (after 3 cycles of centrifugation/rinsing) left overnight at 200 °C. Reference pattern 01-079-2204 ICDD database.
**Figure S3.** Curves for both the thermal gravimetric analysis and differential gravimetric analysis of a representative ZnS QDs sample. The temperature range was 25 – 600 °C, and the rate of increasing temperature 1 °C/min.

![Thermal Analysis Curves](image1)

**Figure S4.** Change in UV spectra with irradiation time of a sample containing thiourea (0.1 mM) and acetone (10 mM) in isopropanol.

![UV Spectra Change](image2)