Supporting Information

Facile synthesis of self-healing hydrogels toward flexible quantum dots-based luminescent solar concentrators and white LEDs

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Supplementary Figures



Fig. S1 Transmittance spectra of the poly(AM-co-MAH-β-CD-co-DMAPS) hydrogels.



Fig. S2 (a) Tensile stress and (b) elongation of the poly(AM-*co*-MAH-β-CD-*co*-DMAPS) hydrogels under different humidity.



Fig. S3 TEM image of CdSe@ZnS QDs distributed in the glue.



Fig. S4 PL intensity of the LSC before and after bending.



Fig. S5 Time-lapse (a) PL intensity and (b) mass variation of hydrogel LSC under different solar irradiation.



Fig. S6 Color coordinate (black point) of the as-prepared LED in CIE diagram under different content of CdTe@ZnS QDs (0.01, 0.02 and 0.03 wt%).



Fig. S7 Stress-strain curves of the orignal and healed CdTe@ZnS QDs-hydrogel composite.



Fig. S8 Stress-strain curve of CdTe@ZnS QDs-hydrogel composite after 50 times tensile test. Insert demonstrating fatigue strain-stress experiment for 50 times, where the tensile stress was determined at 90% strain.



Fig. S9 PL intensity of CdTe@ZnS QDs-hydrogel composite when swollen in water.