Electronic Supplementary Material (ESI) for CrystEngComm.

SUPPORTING INFORMATION

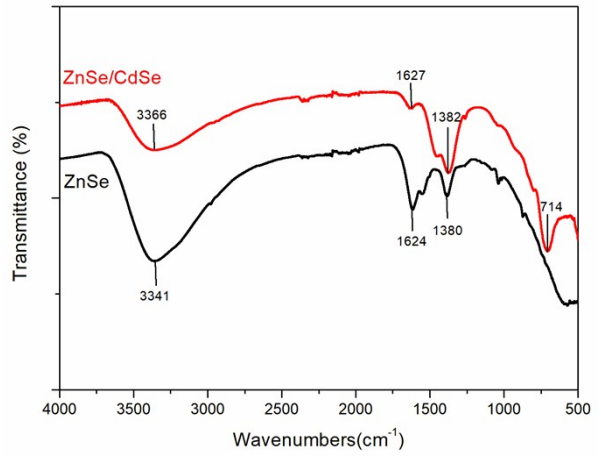

Fig. S1 FTIR spectra of ZnSe and ZnSe/CdSe samples.

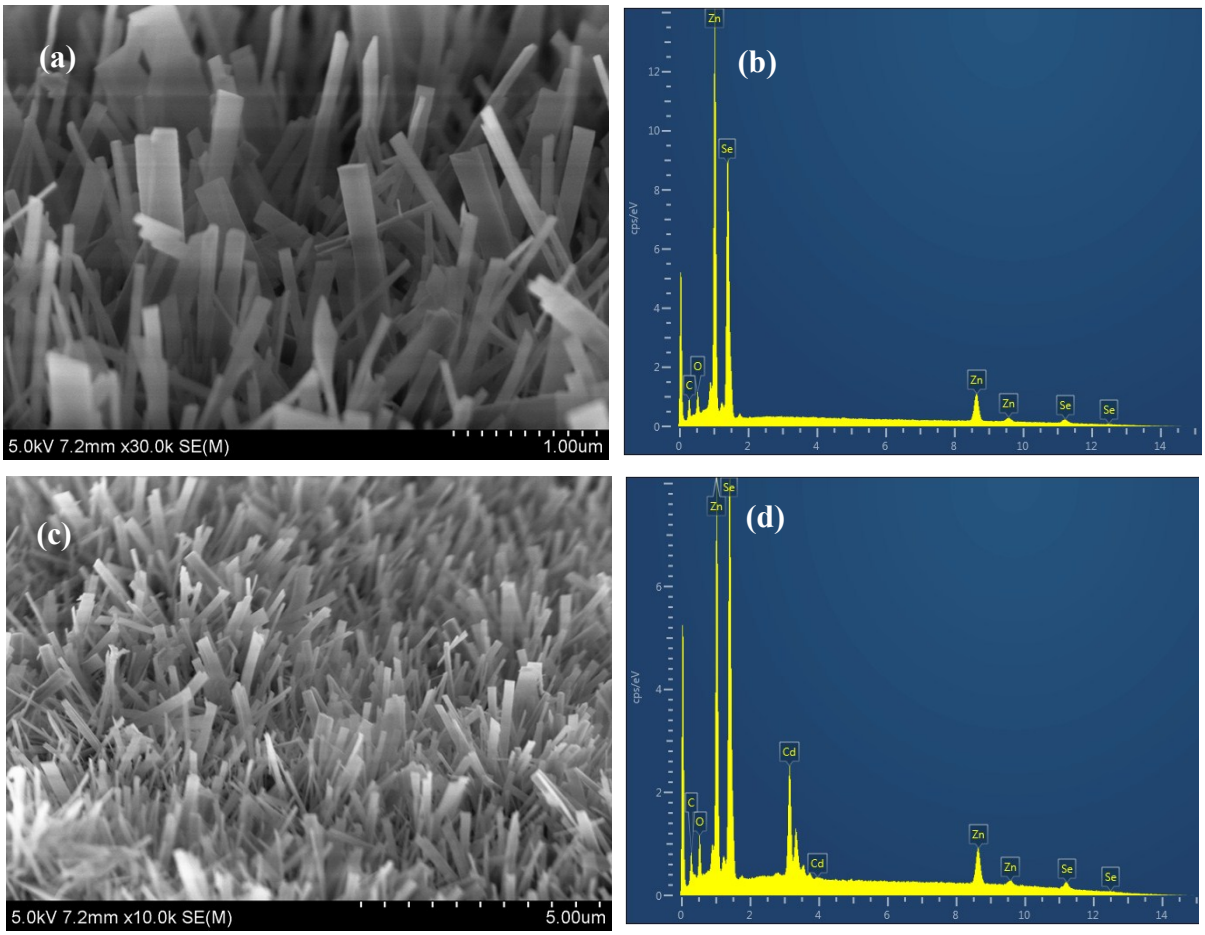

Fig. S2 Lateral-view SEM images and EDS spectra of ZnSe (a and b) and ZnSe/CdSe NRAs (c and d).

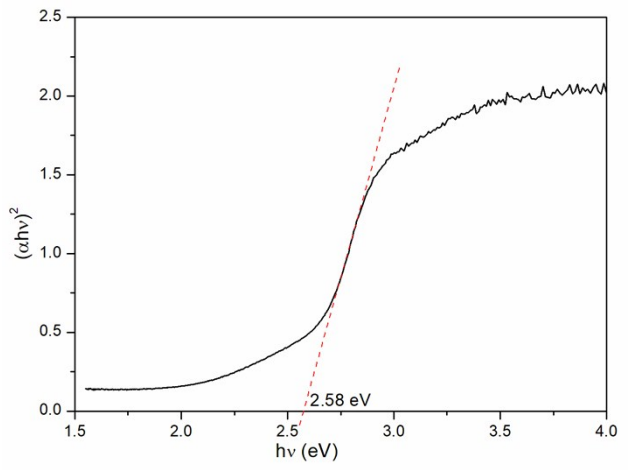

Fig. S3 $(\alpha h\nu)^2 \sim h\nu$ plot of ZnSe NRAs.

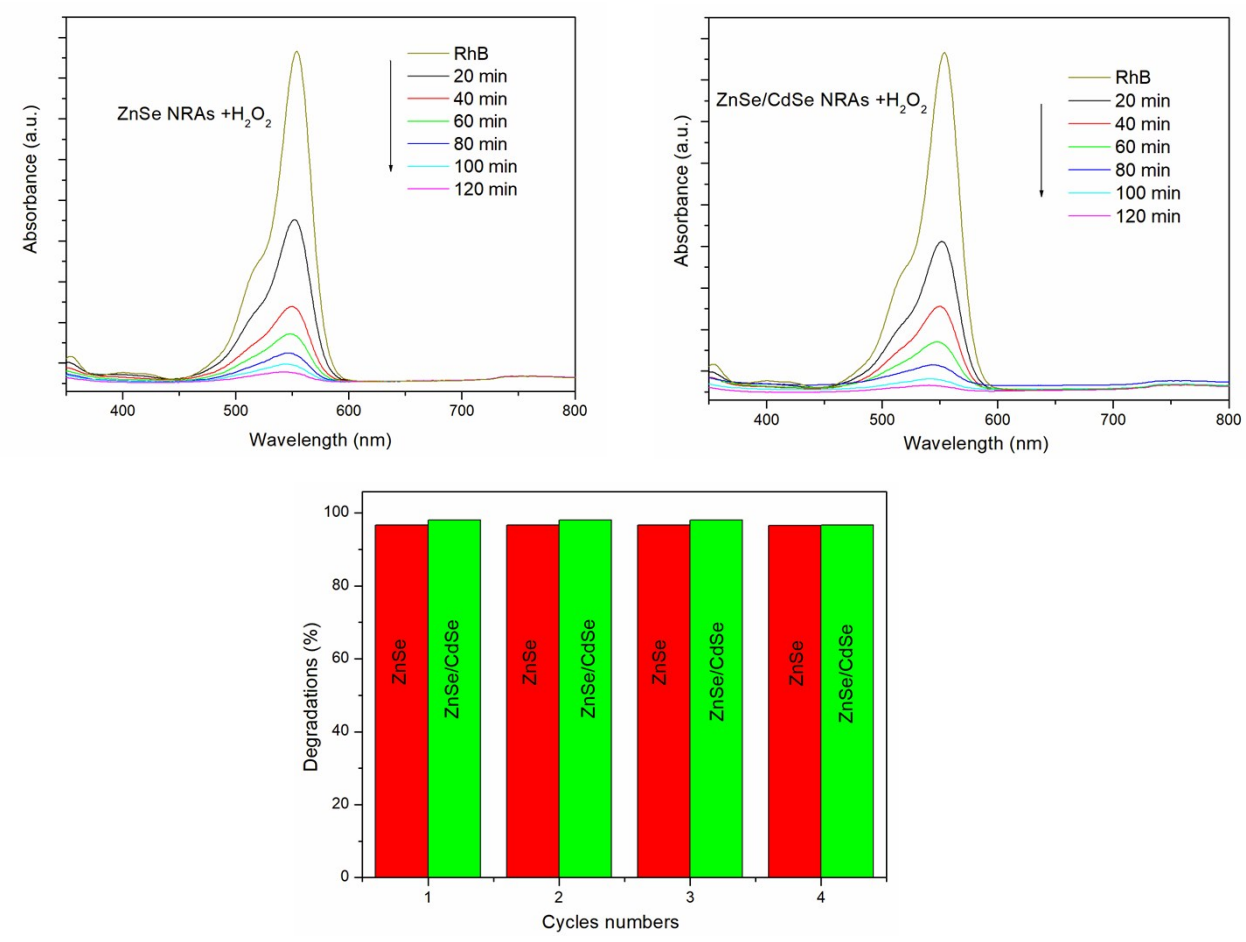

Fig. S4 Time-dependent absorption spectra of RhB solution in the presence of H_2O_2 and (a) ZnSe NRAs and (b) ZnSe/CdSe NRAs; (c) profile of four cyclic catalytic tests in the degradation of RhB over ZnSe and ZnSe/CdSe NRAs with H_2O_2.

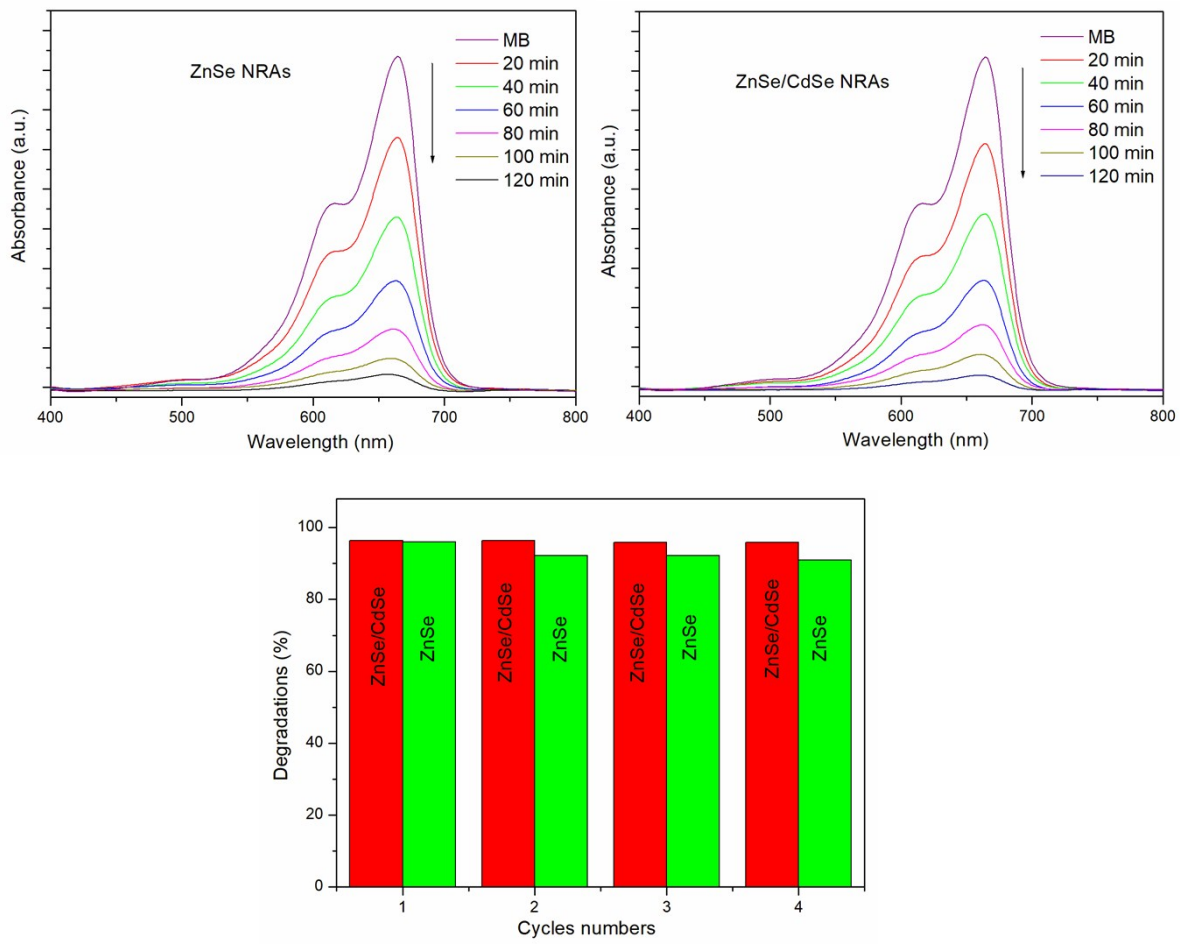

Fig. S5 Time-dependent absorption spectra of MB solution in the presence of (a) ZnSe NRAs and (b) ZnSe/CdSe NRAs; (c) profile of four cyclic catalytic tests in the degradation of MB over ZnSe and ZnSe/CdSe NRAs.

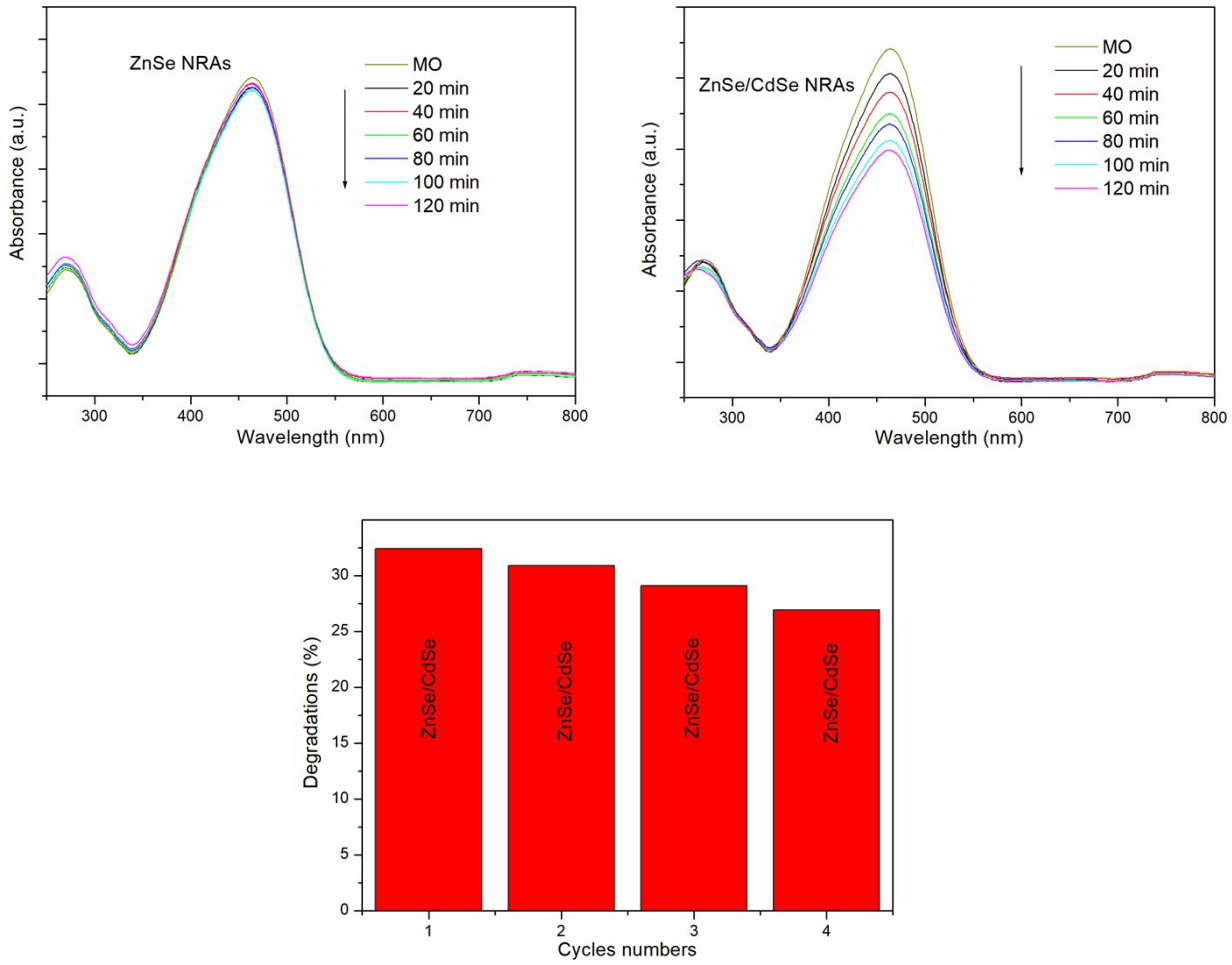

Fig. S6 Time-dependent absorption spectra of MO solution in the presence of (a) ZnSe NRAs and (b) ZnSe/CdSe NRAs; (c) profile of four cyclic catalytic tests in the degradation of MO over ZnSe/CdSe NRAs.

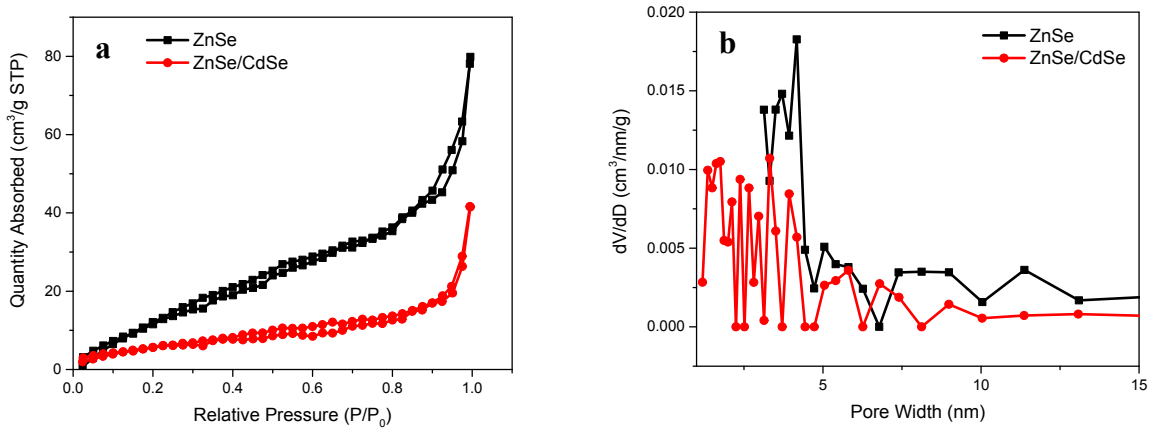

Fig. S7 (a) N_2 adsorption-desorption isotherm and (b) pore size distribution of ZnSe NRs and ZnSe/CdSe core-shell NRs.

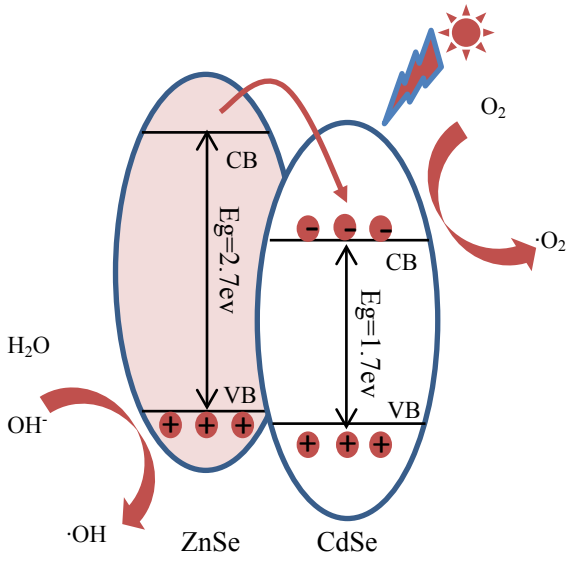

Fig. S8 Schematic illustration of possible transfer process of photo-induced carriers for inverted ZnSe/CdSe core-shell NR under visible light irradiation.