

Fig. S1 XRD patterns (a) and SEM (b) image of the spent t-Se NRs after photocatalytic in the visible-Se NRs- $H_2O_2$  systems

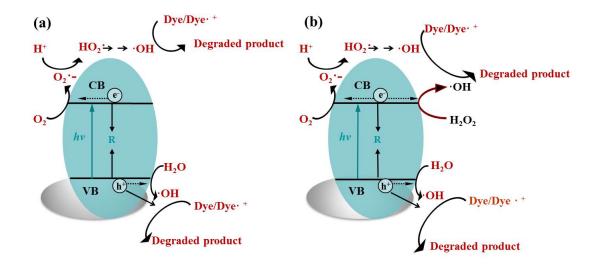


Fig. S2 Proposed mechanisms of t-Se NRs in the visible-SeNRs-HCl (a) and visible-SeNRs- $H_2O_2$  (b) degradation of MO.