

Figure S1 The schematic picture of the polymer synthesis procedure. The chemical formulas of polymers are also shown .

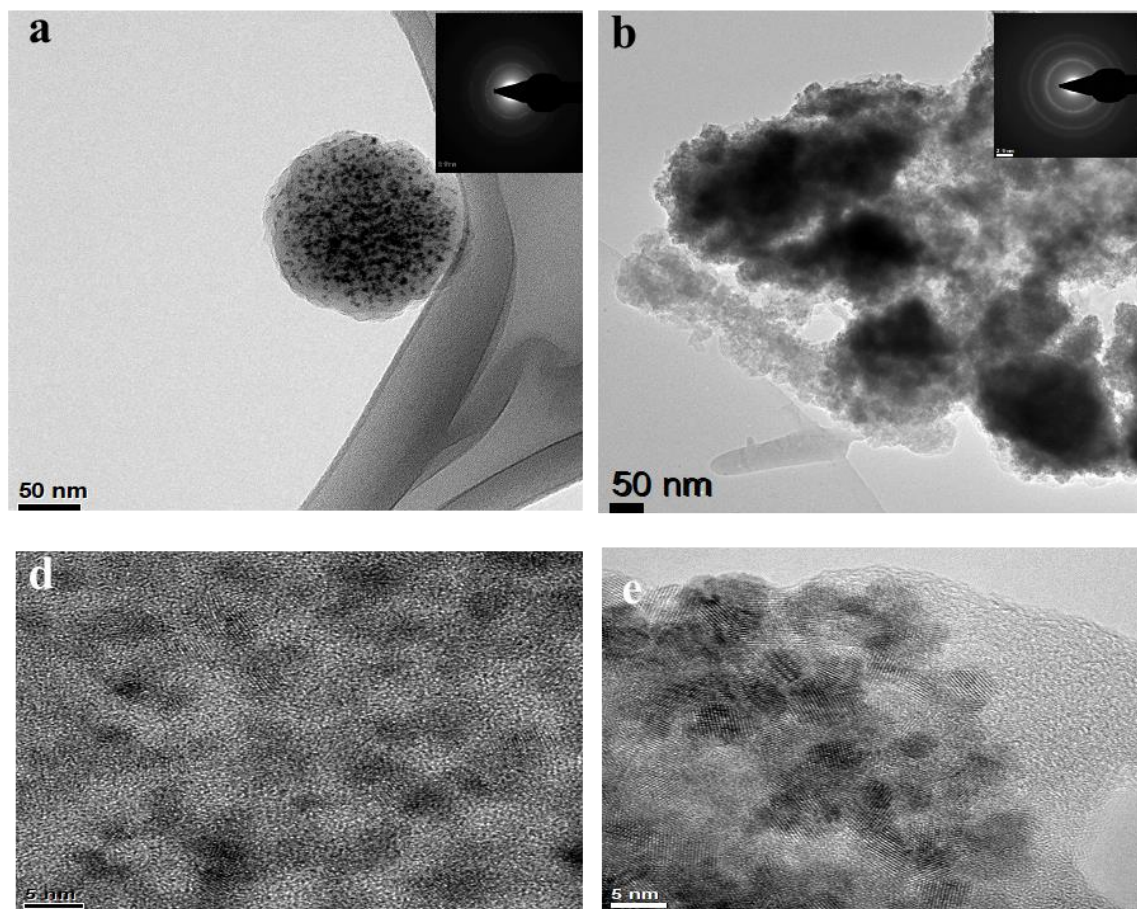


Figure S2 TEM investigation of polymer composite with different amount of CeO₂, (a) bright image of composite with 20wt% CeO₂, (b) bright image of composite with 50wt% CeO₂, (c) HRTEM of composite with 20wt% CeO₂, (d) HRTEM of composite with 50wt% CeO₂. The insert figures were corresponding diffraction patterns. Aggregation of nanoparticles was observed in composite with 50wt% CeO₂.