Electronic supplementary information

A facile approach to fabrication of well-dispersed NiO-ZnO composite hollow microspheres

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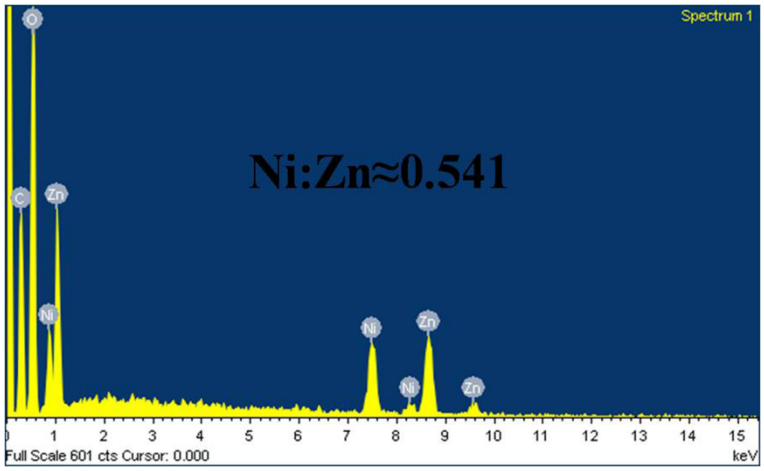

Fig. S1. EDS spectrum of the zinc-nickel citrate hollow microspheres obtained from the nickel nitrate solution aged at room temperature for 6 h.

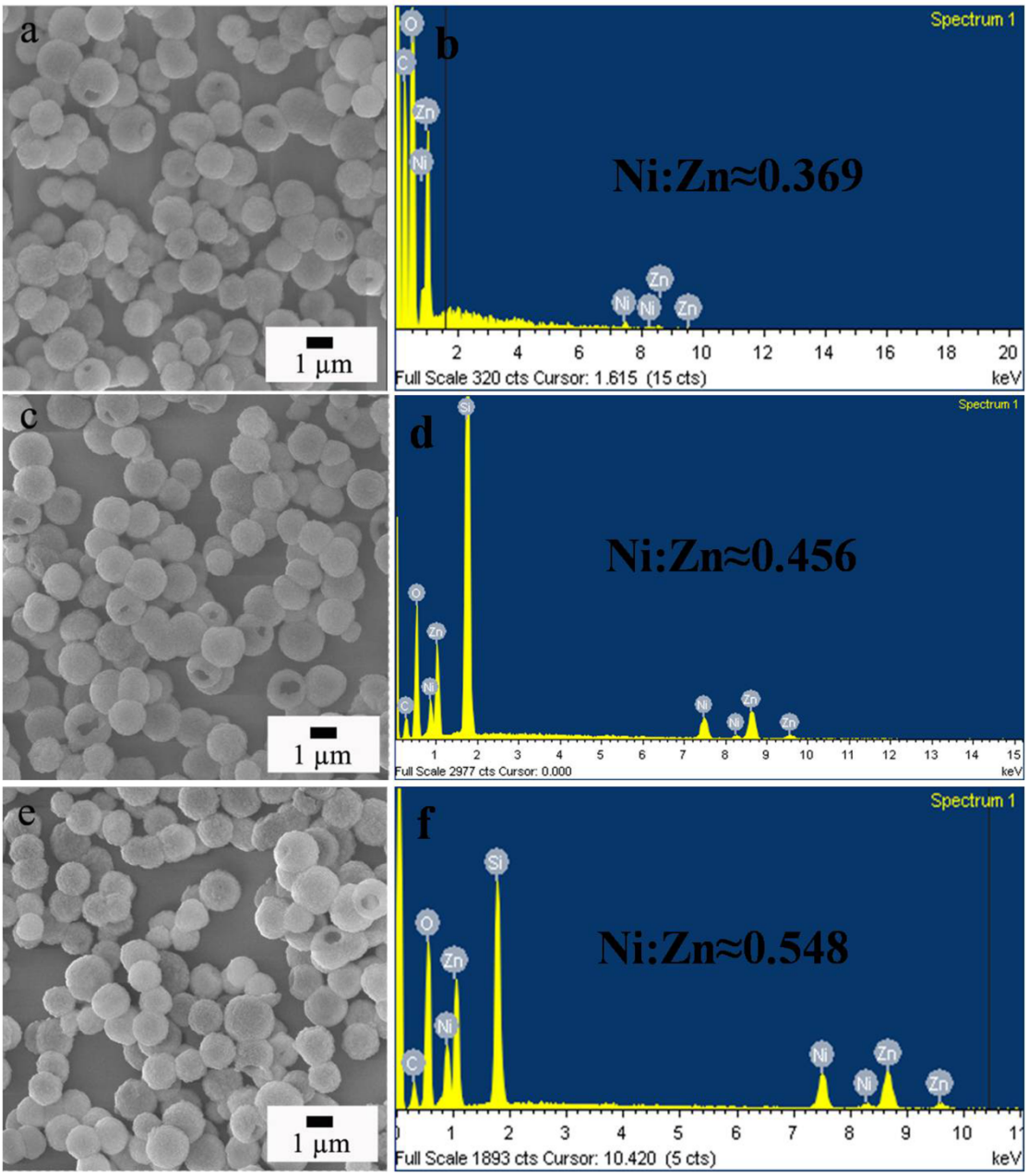

Fig. S2. The SEM images and EDS spectra of the zinc-nickel citrate hollow microspheres obtained with different ageing times: (a and b) 1 h, (c and d) 3 h, and (e and f) 8h. The Si signals are from substrates.

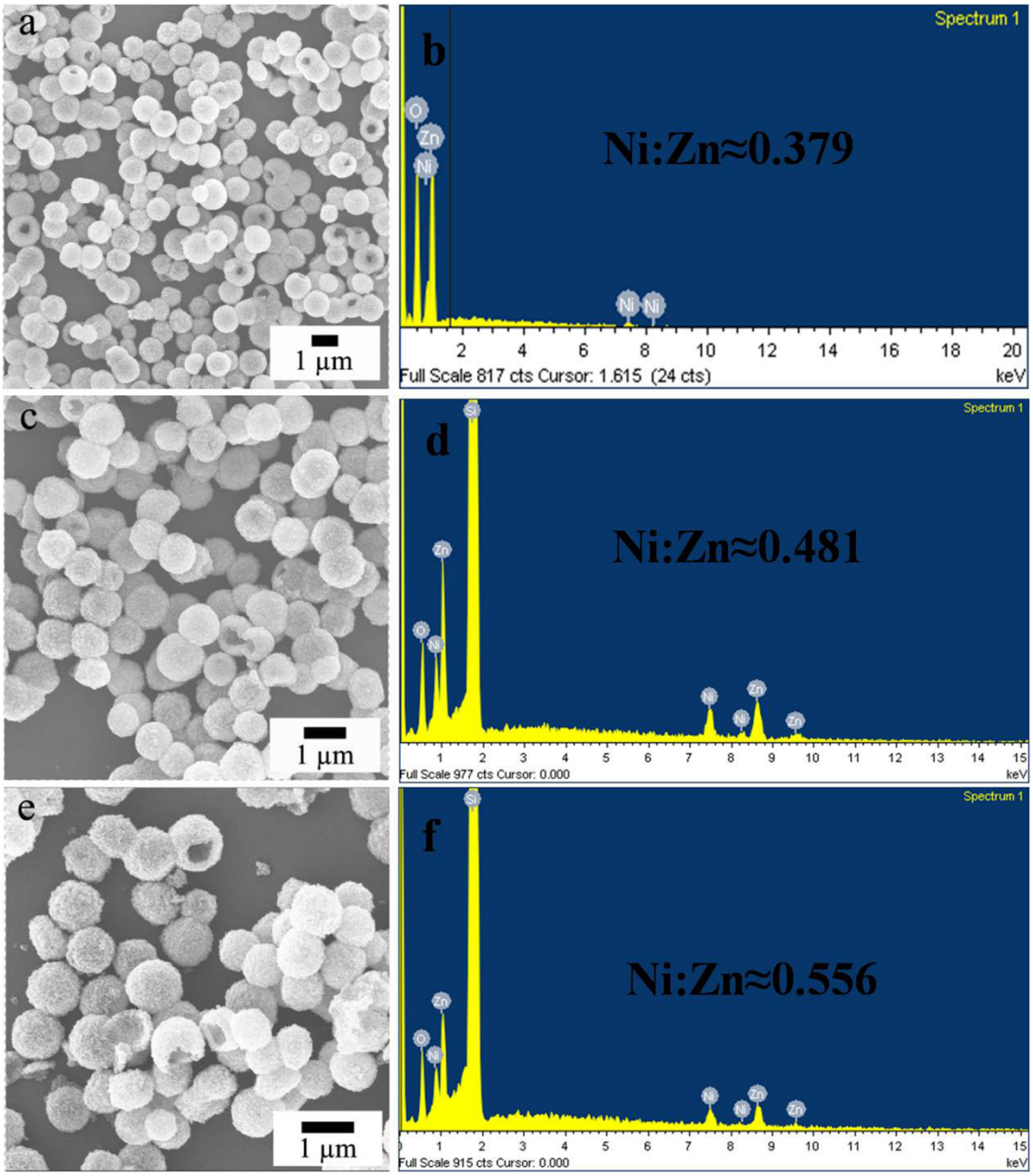

Fig. S3. The SEM images and EDS spectra of NZ1 (a and b), NZ3 (c and d) and NZ8 (e and f) hollow microspheres. The Si signals are from substrates.

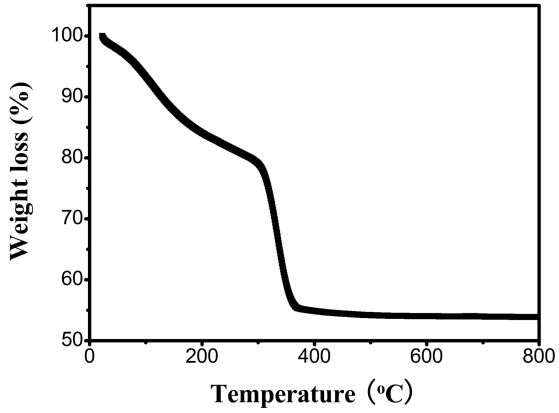

Fig. S4. TG curve for the zinc-nickel citrate hollow microspheres.

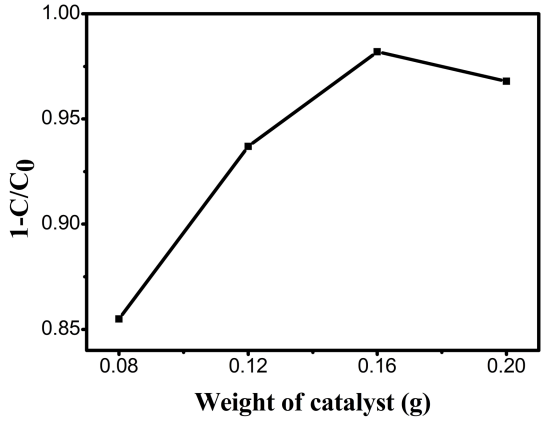

Fig. S5. Effect of photocatalyst dosage on the photocatalytic efficiency for the degradation of RhB under UV irradiation for 80 min.

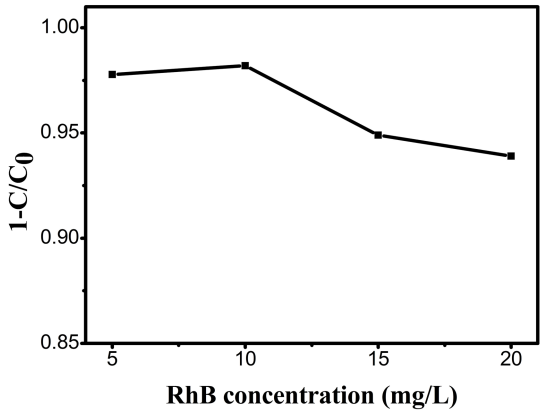

Fig. S6. Effect of initial dye concentration on the photocatalytic efficiency for the degradation of RhB under UV illumination for 80 min.

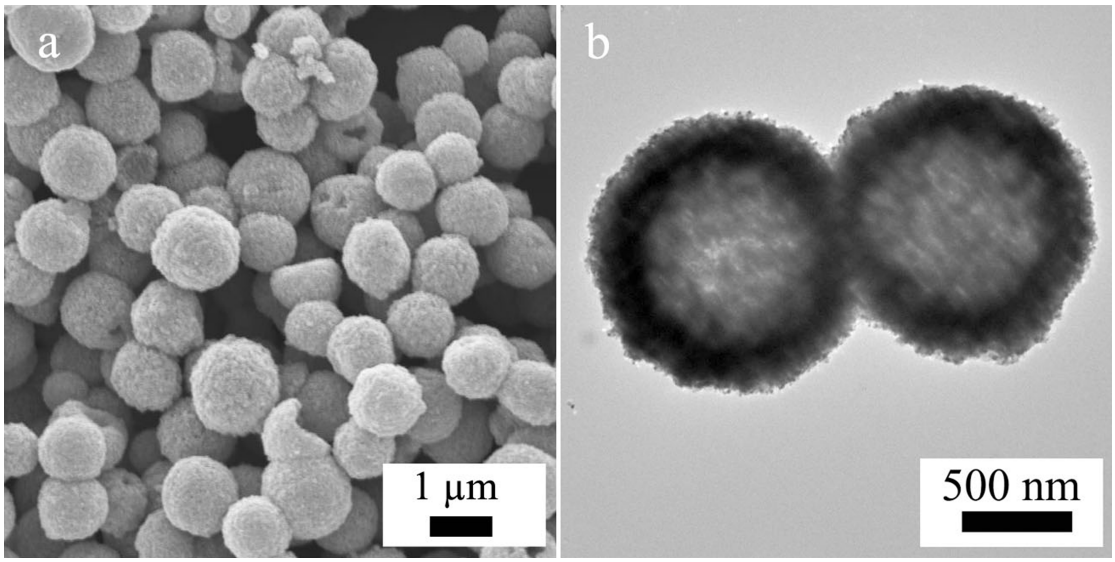

Fig. S7. The (a) SEM and (b) TEM images of NZ6 composite hollow microspheres after photocatalytic degradation of RhB for five cycles.

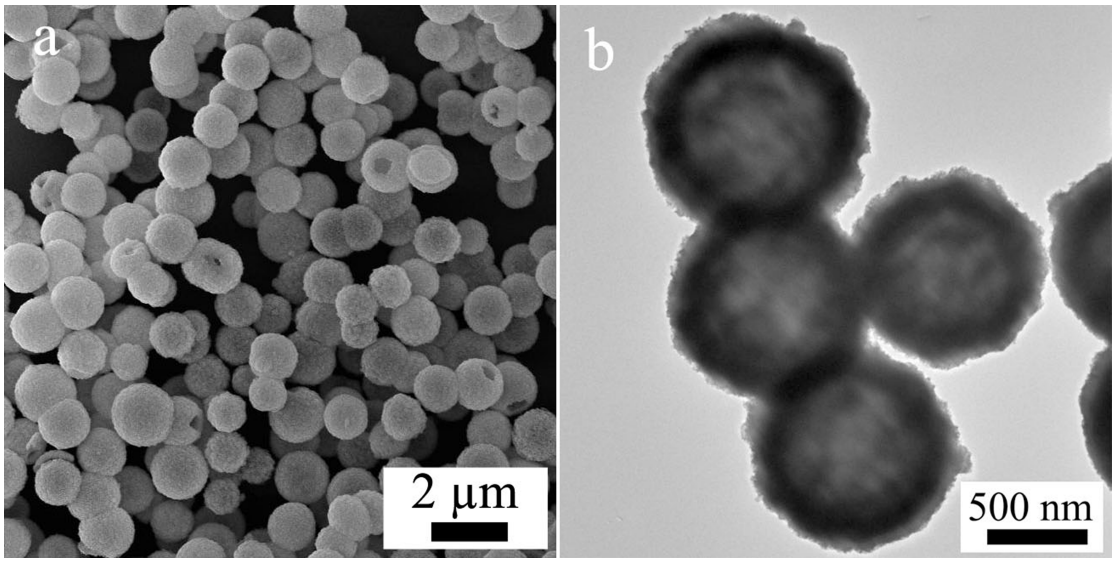

Fig. S8. The (a) SEM and (b) TEM images of CeO_2-ZnO composite hollow microspheres with the ageing time of 60 min.

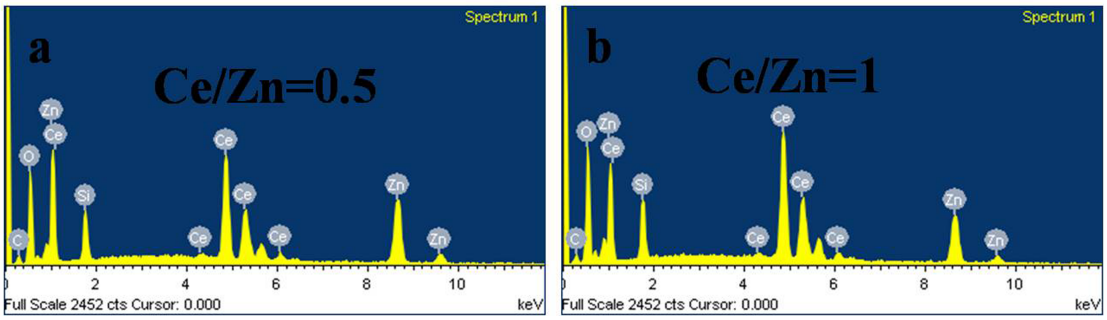

Fig. S9. EDS spectra of CeO_2-ZnO composite hollow microspheres with the ageing time of (a) 30 min and (b) 60 min.

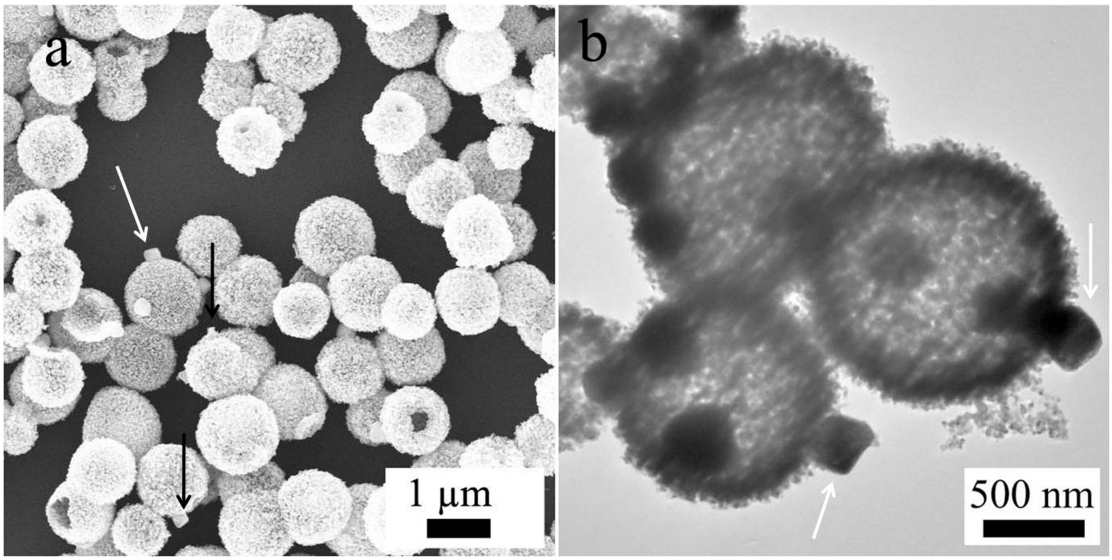

Fig. S10. The (a) SEM and (b) TEM images of CdO-ZnO composite hollow microspheres. Some CdO nanoparticles are indicated by arrows.