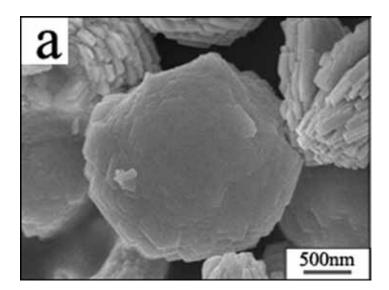
Supporting Information:





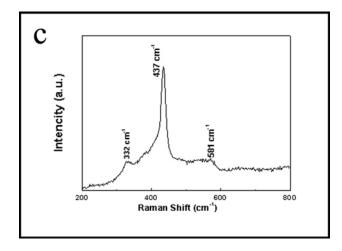


Figure a and b show the detail information of the doughnut-shaped microparticles: a) the FESEM images of the flat side of the microparticles, b) the TEM image of microparticles, the ED patterns recorded from the edge of the microparticles can be indexed to hexagonal ZnO viewed from [0001] direction. Figure c is the Raman spectrum of the ZnO powders. Three peaks of Raman shifts of 332 cm⁻¹, 437 cm⁻¹ and 581 cm⁻¹ are marked in the spectrum.