Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information

Integration of Nanosized ZIF-8 Particles onto Mesoporous TiO_2 Nanobeads for Enhanced Photocatalytic Activity

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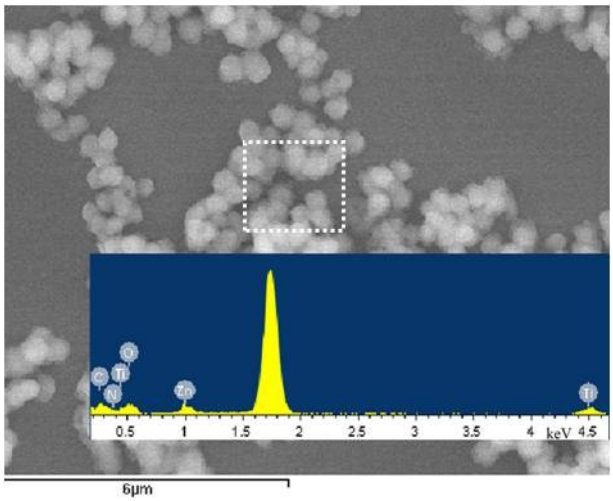

Element	Weight %	Atom %
C K	8.20	12.67
N K	10.63	14.08
O K	55.14	63.97
Ti K	18.21	7.06
Zn L	7.83	2.22
Total	100.00	

Fig.S1 EDS results of TiO_2/ZIF-8 hybrid

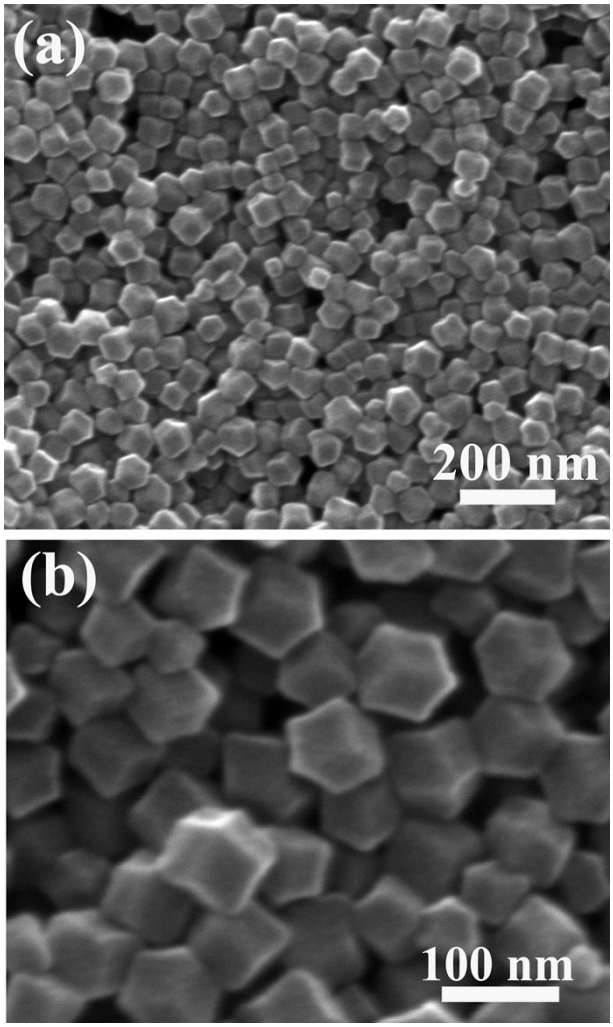

Fig.S2 SEM images of ZIF-8 nanoparticles at different magnifications.

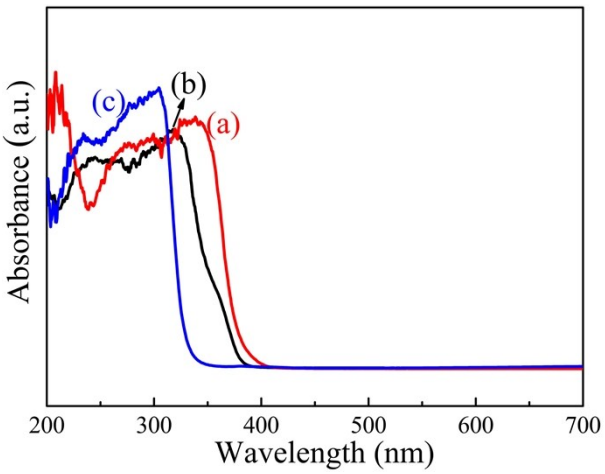

Fig.S3 UV-vis absorption spectra of (a) TiO_2, (b) TiO_2/ZIF-8, and (c) pure ZIF-8.

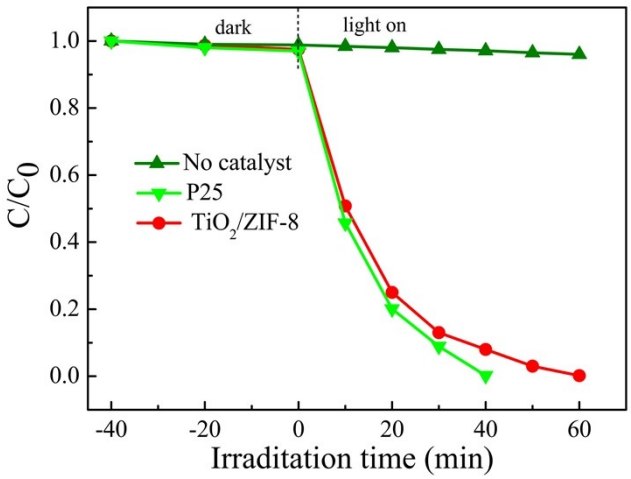

Fig.S4 Reduction profiles of photocatalytic reduction of Cr(VI) over P25 and TiO_2/ZIF-8 hybrid spheres. Reaction condition: 20 mg photocatalyst, 40 mL of 20 mg L^{-1} Cr(VI), pH = 7.

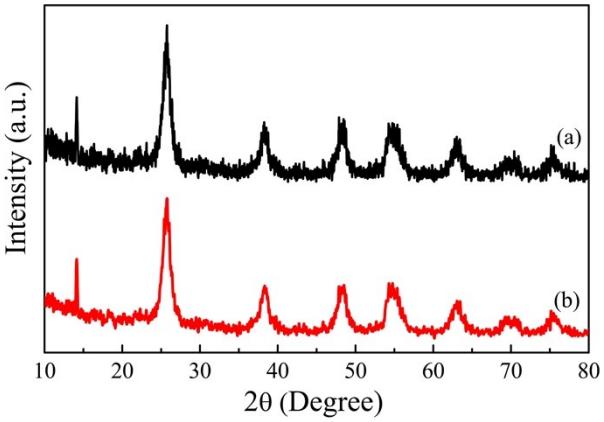

Fig.S5 Powder X-ray diffraction patterns of TiO_2/ZIF-8 hybrid spheres (a) before and (b) after the photocatalytic reaction.

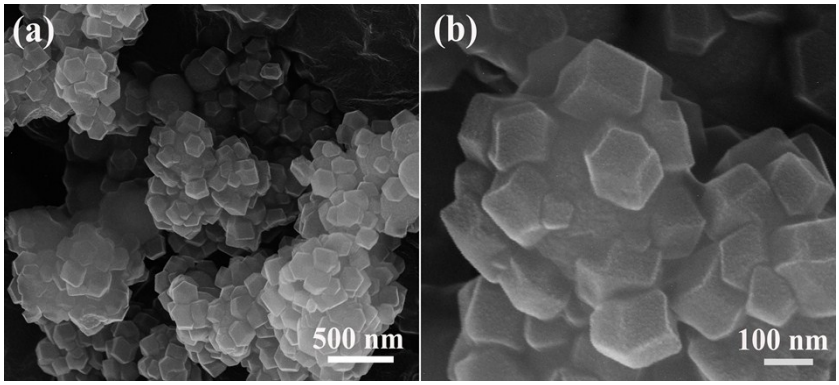

Fig.S6 SEM images of TiO_2/ZIF-8 hybrid spheres after the photocatalytic reaction.