## **Supporting Information**

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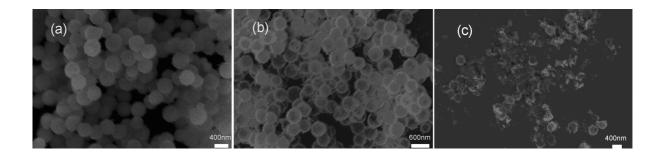


Figure S1. The low-magnification SEM image of the as-prepared sample after the hydrothermal process of 15 h(a); the hollow spheres obtained after the acid erosion(b); the crushed particles generated by the hollow sphere after strongly stirring (c)

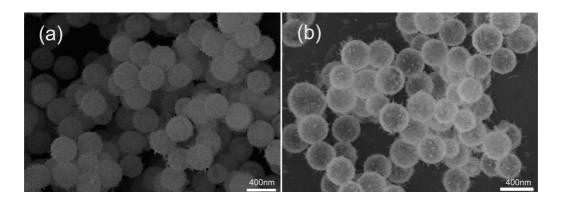


Figure S2. The as-prepared YPO<sub>4</sub> samples that obtained after the hydrothermal process of 120 h (a); the hollow sphere of the YPO<sub>4</sub> of the sample after the acid erosion (b)