**Supporting information** 

## Upconverting particles in near-infrared light-induced TiO<sub>2</sub> photocatalysis: towards the optimal architecture of upconverter/photocatalyst systems

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Figure S1. EDX spectra of (a) UCPs crystals, (b) UCPs mixed with P25, and (c) UCPs@TiO2 material.



Figure S2. The Tauc plots of the UCPs mixed with P25 (UCPs+P25) and UCPs coated with titania layer (UCPs@TiO<sub>2</sub>). The estimated bandgaps of TiO<sub>2</sub> are for UCPs+P25 and UCPs@TiO<sub>2</sub>, 3.23 eV and 3.34 eV respectively.