Electronic Supplementary Material (ESI) for Journal of Materials Chemistry A.

Full-Spectrum-Activated Z-scheme Photocatalysts based on $NaYF_4$: Yb^{3+}/Er^{3+}, TiO_2 and $Ag_6Si_2O_7$

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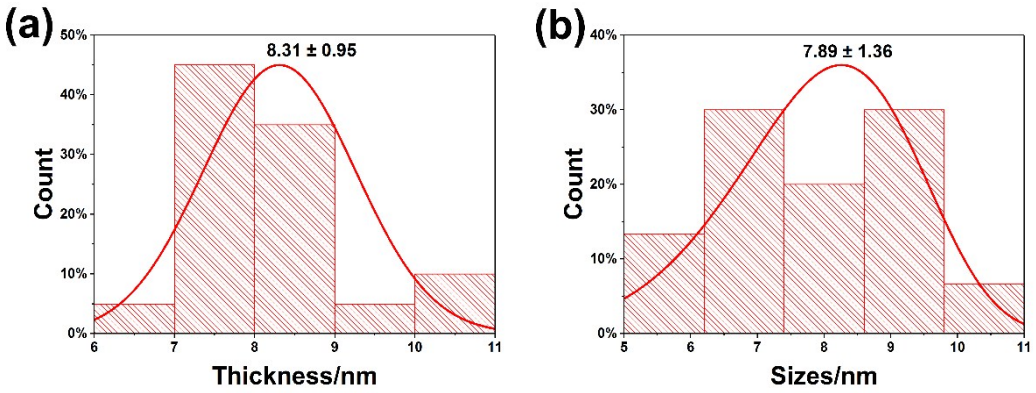

Figure S1 The corresponding histogram of (a) thickness of TiO_2 NSs, (b) sizes of ASO NPs decorated on $NaYF_4$@T (S10).

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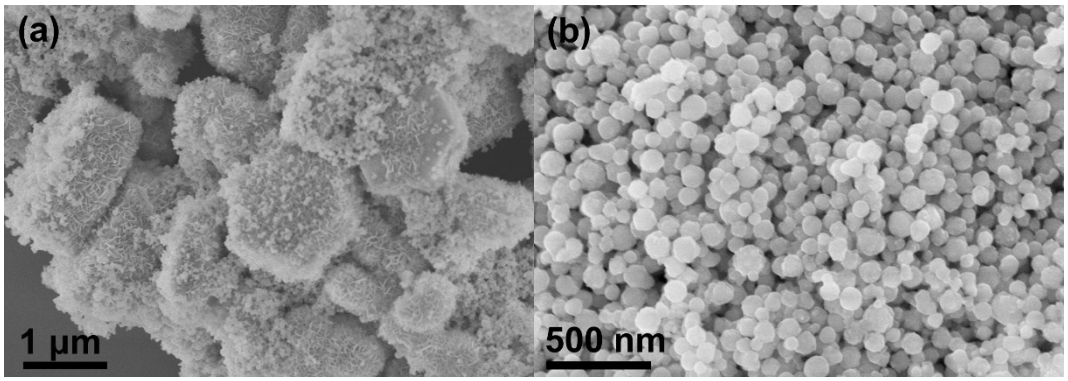

Figure S2 The SEM image of (a) $NaYF_4$@T-ASO without surface amination and (b) pure ASO NPs.

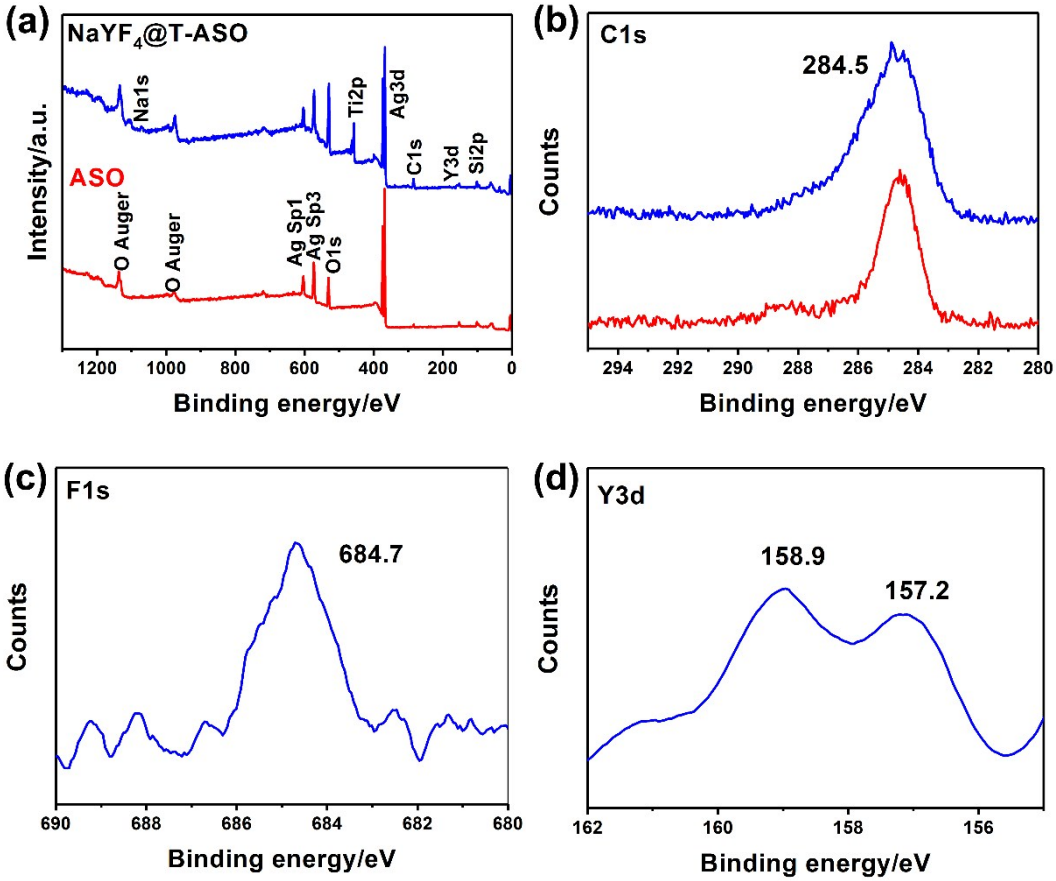

Figure S3 (a) Survey XPS spectra of $NaYF_4$@T-ASO (S10) and pure ASO NPs. High-resolution of (b) C 1s, (c) F 1s and (d) Y 3d.

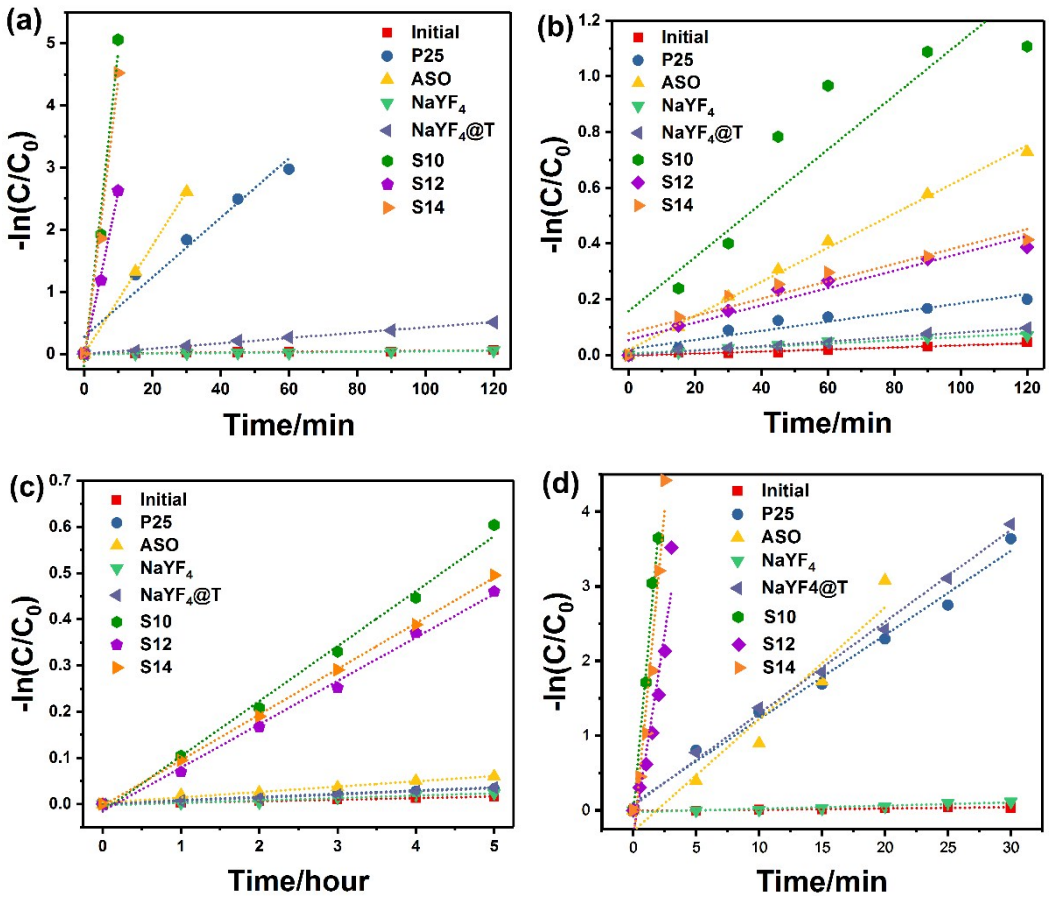

Figure S4 The degradation rate of the samples under different light source.

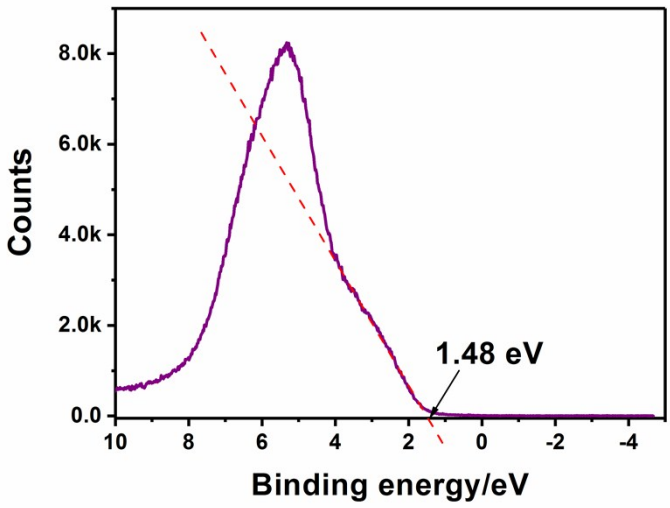

Figure S5 The XPS valence spectrum of pure ASO NPs.