



Fig. S1 Water contact angle variation before and after irradiation for various samples:
(a) WO_3 . (b) $\text{WO}_3\text{-ZnO-1}$. (c) $\text{WO}_3\text{-ZnO-2}$. (d) $\text{WO}_3\text{-ZnO-3}$. (e) $\text{WO}_3\text{-ZnO-4}$.

Table S1. Comparative table of photodegradation ability of various composites towards RhB dyes

Material	Synthesis method	RhB Concentration	Light source	Degradation time (min)	Degradation degree (%)
WO ₃ -ZnO	Hydrothermal + Sputter	10 ⁻⁵ M	100W Xe sun light	70	86
MoS ₂ -α-Fe ₂ O ₃ -ZnO [1]	Hydrothermal	15 mgL ⁻¹	500W Xe sun light	240	91
ZnO-S-doped g-C ₃ N ₄ [2]	sol-gel calcination	10 ppm	40W LED sun light	80	91
ZnO-Gr [3]	Electrochemical exfoliation	10 ppm	16W UV light	240	89
ZnO-RGO [4]	Hydrothermal	10 ppm	300W Xe UV light	120	97

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