

Electronic Supplementary Information

A titanium-based oxysulfide photocatalyst: $\text{La}_5\text{Ti}_2\text{MS}_5\text{O}_7$ (M = Ag, Cu) for water reduction and oxidation

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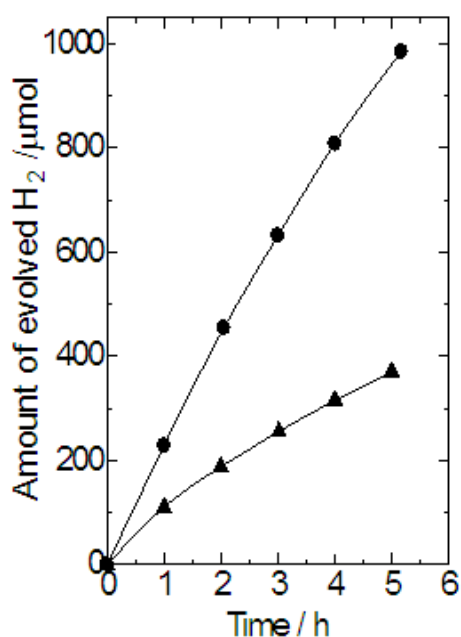


Fig. S1 Time courses of H₂ evolution over Pt-loaded La₅Ti₂MS₅O₇ in 0.01 M Na₂S - 0.01 M Na₂SO₃ aqueous solution under visible light irradiation ($\lambda > 420$ nm) (circle: M = Ag, Pt (0.5 wt%)-loaded, triangle: M = Cu, Pt (0.3 wt%)-loaded).

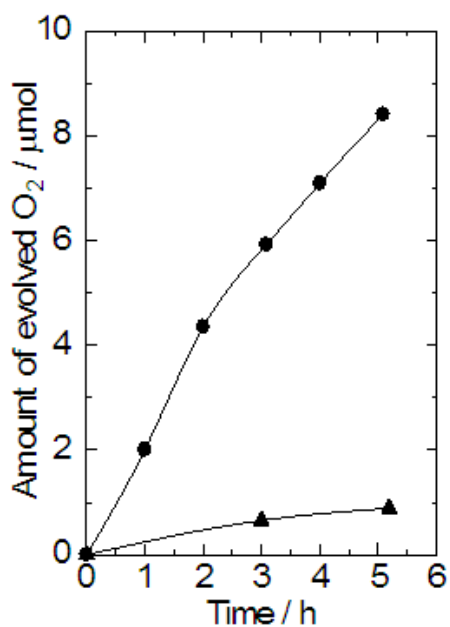


Fig. S2 Time courses of O₂ evolution over IrO₂-loaded La₅Ti₂MS₅O₇ in 0.01 M AgNO₃ aqueous solution under visible light irradiation ($\lambda > 420$ nm) (circle: M = Ag, IrO₂ (2 wt%)-loaded, triangle: M = Cu, IrO₂ (5 wt%)-loaded).