

# Preparation, Characterization and Application of Epitaxial Grown BiOBr (110) Film on ZnFe<sub>2</sub>O<sub>4</sub> Surface with Enhanced Photocatalytic Fenton Oxidation Properties

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**Table S1.** Atomic ratio of each element in EDS spectrum.

Element	Atomic %
O	2.59
Fe	14.64
Zn	20.41
Bi	30.99
Br	31.37

**Table S2.** Comparison of recent work with reported studies on TC degradation.

Catalyst	Reaction Conditions	Result	References
BOB/ZFO-10	TC= 50 mg/L, Catalyst= 1 g/L, under 300 W Xe lamp	180 min, 99.2%TC degradation	This work
Black phosphorus/BiOBr	TC= 50 mg/L, Catalyst= 1 g/L, under 300 W Xe lamp	90 min, 85% TC degradation	[40]
BimOnBrz	TC= 25 mg/L, Catalyst= 1 g/L, under 400 W halogen lamp	120 min, 98.9% TC degradation	[41]
SDS/BiOBr-MB	TC= 20 mg/L, Catalyst= 0.5 g/L, under 300 W Xe lamp	120 min, 85% TC degradation	[42]
BiOI	TC= 10 mg/L, Catalyst= 1 g/L, under 500 W Xe lamp	240 min, 97% TC degradation	[43]
Bi <sub>2</sub> O <sub>2</sub> CO <sub>3</sub> /BiOBr	TC= 10 mg/L, Catalyst= 0.17 g/L, under 350 W Xe lamp	120 min, 94.8% TC degradation	[44]
CuBi <sub>2</sub> O <sub>4</sub> /BiOBr	TC= 20 mg/L, Catalyst= 0.5g/L, under LED 690lm	150 min, 64% TC degradation	[45]
g-C <sub>3</sub> N <sub>4</sub> /BiOBr/CdS	TC= 20 mg/L, Catalyst= 5g/L, under 150 W tungsten lamp	70 min, 99.4% TC degradation	[46]
ZnS/BiOBr	TC= 20 mg/L, Catalyst= 1g/L, under 500 W Xe lamp	25 min, 82% TC degradation	[47]