Br-doped $Bi_2O_2CO_3$ exposed (001) crystal facets with enhanced photocatalytic activity

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Fig. S1 The XRD patterns of obtained Bi₂O₂CO₃ and its Standard Card using different concentrations of CTAB as surfactant.



Fig. S2 FE-SEM images of $Bi_2O_2CO_3$ obtained with different CTAB concentrations, (a) BOC, (b) BOC-0.1 g, (c) BOC-0.3 g, (d) BOC-0.5 g and (e) BOC-1.0 g.





Fig. S4 High-resolution Bi 4f the obtained Bi₂O₂CO₃ samples.



Fig. S5 Active species trapping experiment during the photocatalytic degradation to MO dye under solar light irradiation using BOC-Br as photocatalyst.