

Electronic Supplementary Information for
Synergistic Integration of Thermocatalysis and
Photocatalysis on Black Defective (BiO)₂CO₃ Microspheres

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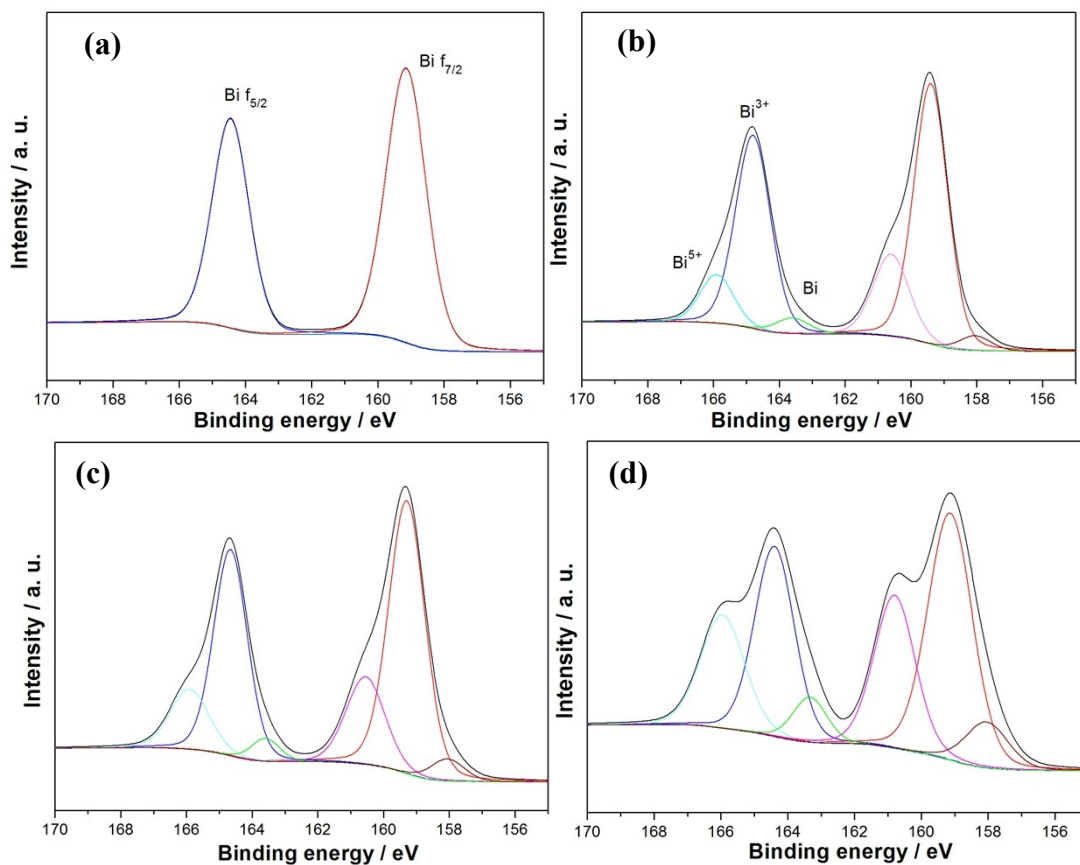


Fig. S1 XPS spectra (Bi_{4f}) of the BOC (a), BOC-250 (b), BOC-275 (c) and BOC-300 (d).

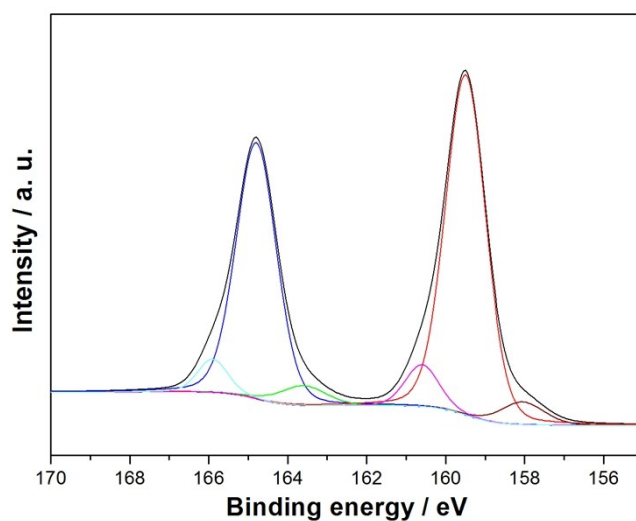


Fig. S2 XPS spectra (Bi_{4f}) of the BOC-300-after after reaction.

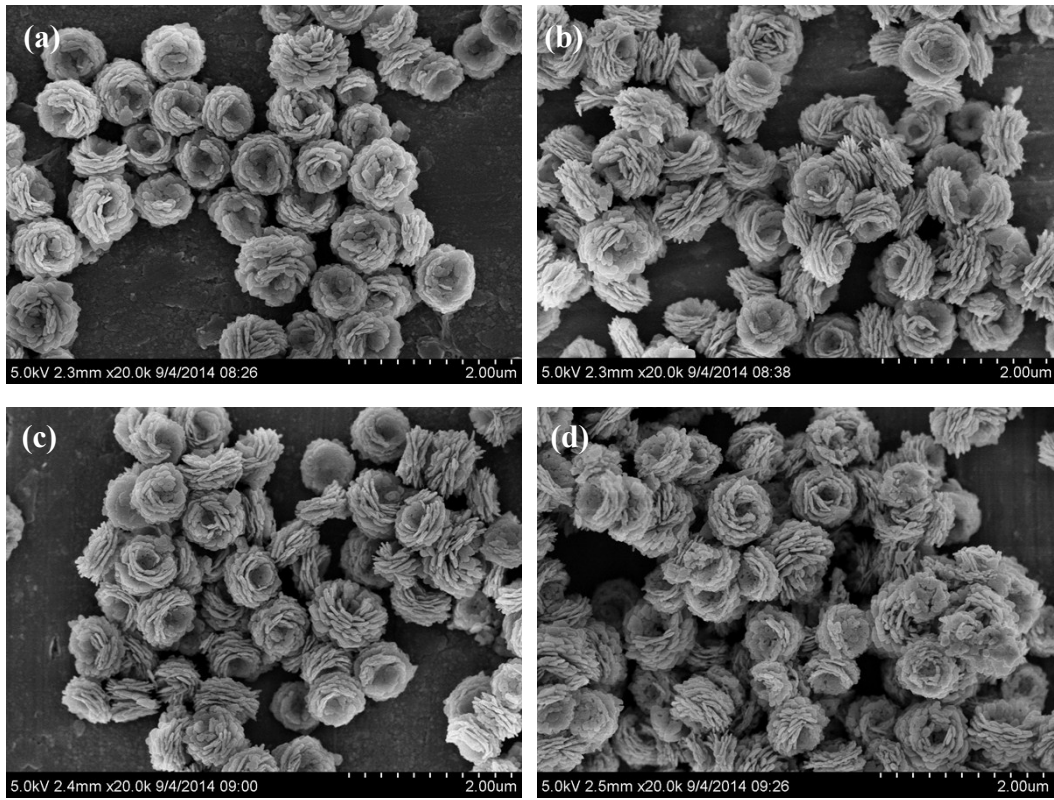


Fig. S3 SEM images of the BOC (a), BOC-250 (b), BOC-275 (c) and BOC-300 (d).

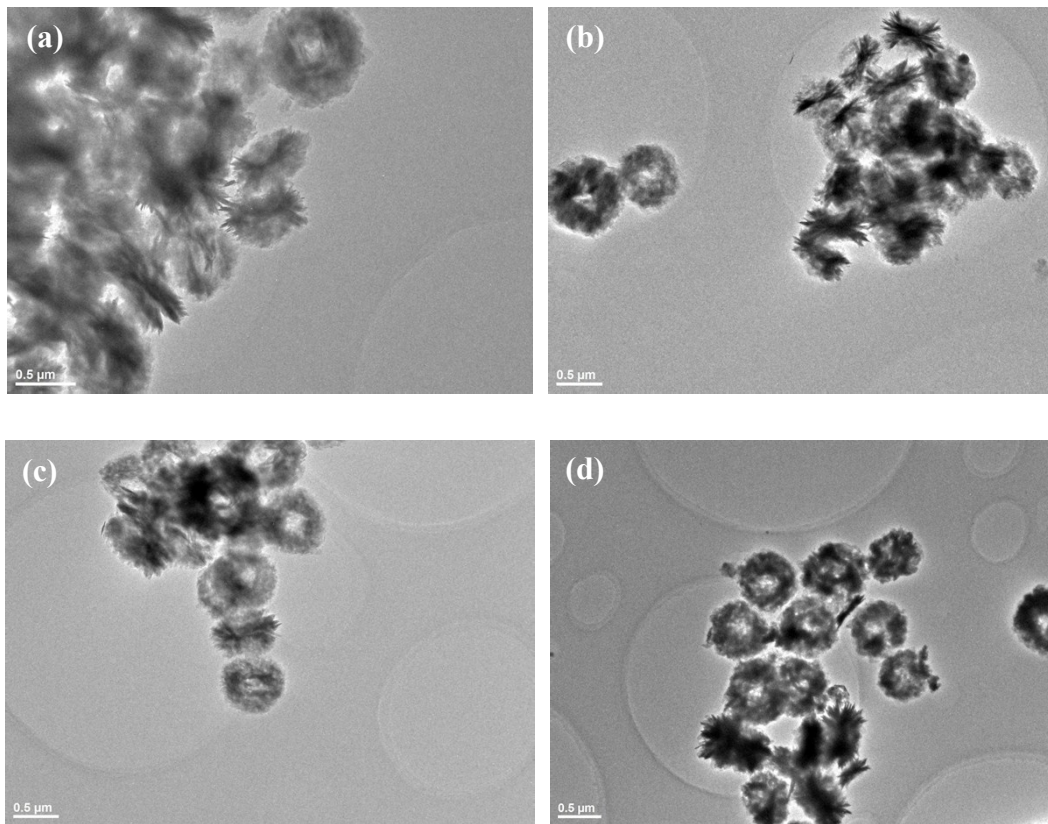


Fig. S4 TEM images of the BOC (a), BOC-250 (b), BOC-275 (c) and BOC-300 (d).

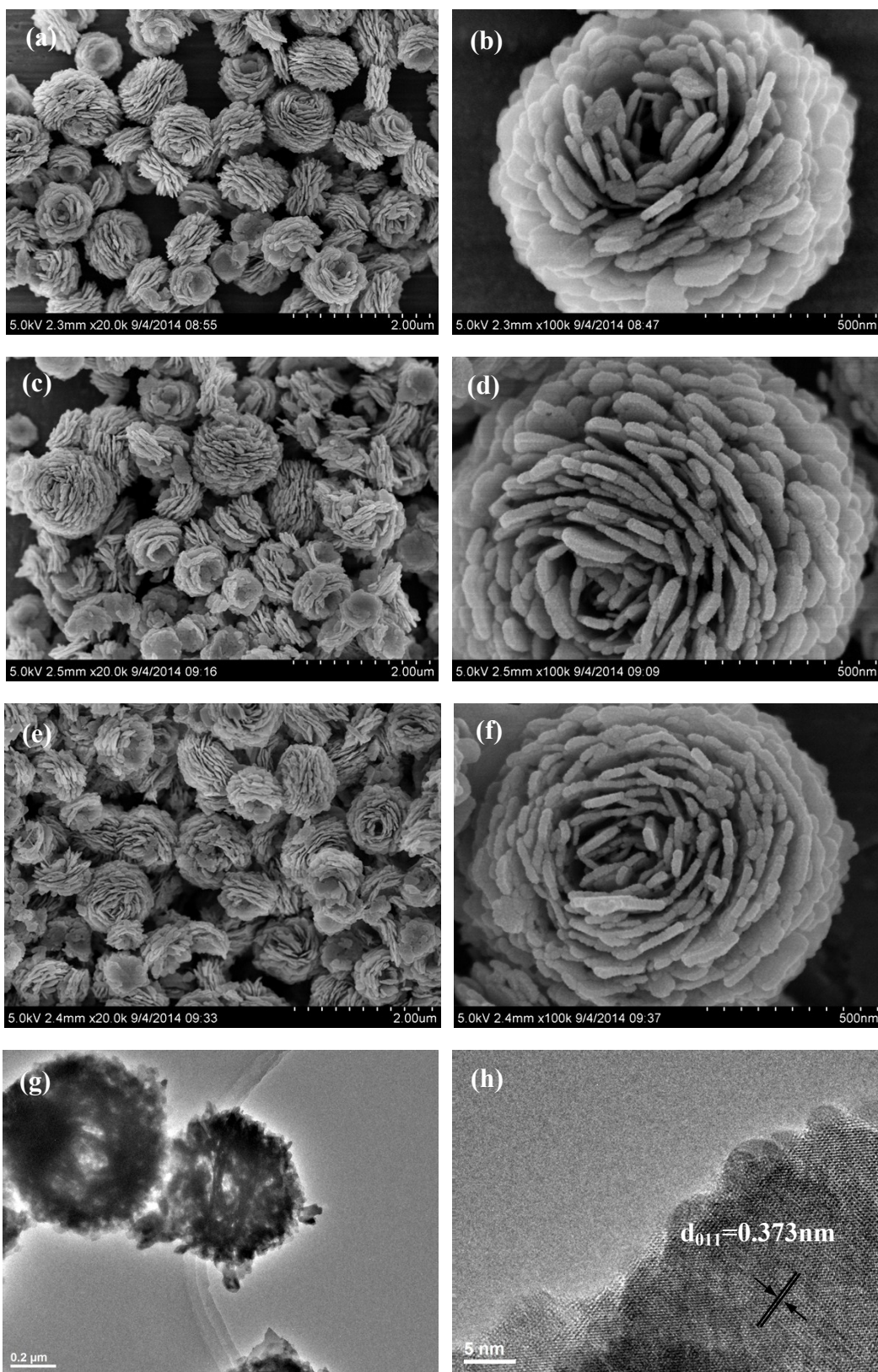


Fig. S5 SEM images of the BOC-250-after (a, b), BOC-275-after (c, d), BOC-300-after (e, f) and TEM images of BOC-300-after (g, h).

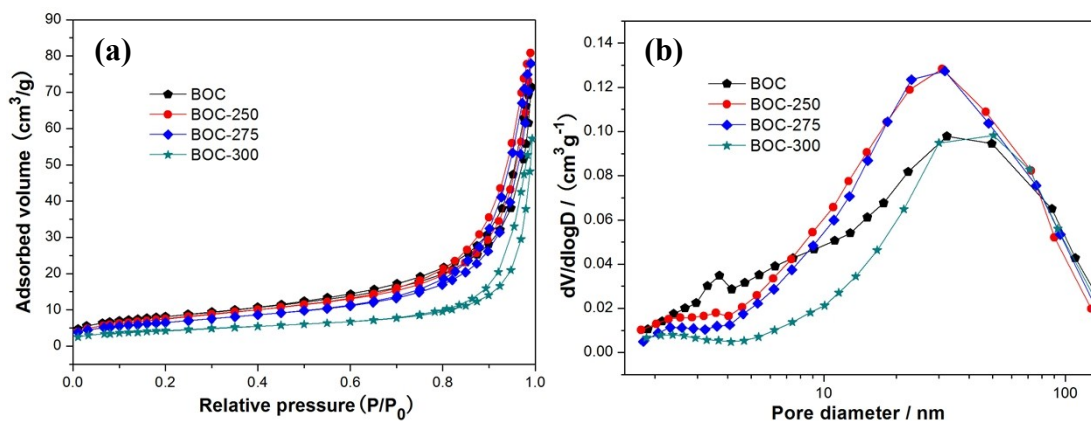


Fig. S6 N_2 adsorption-desorption isotherm (a) and the corresponding pore diameter distributions (b) of as-obtained samples.

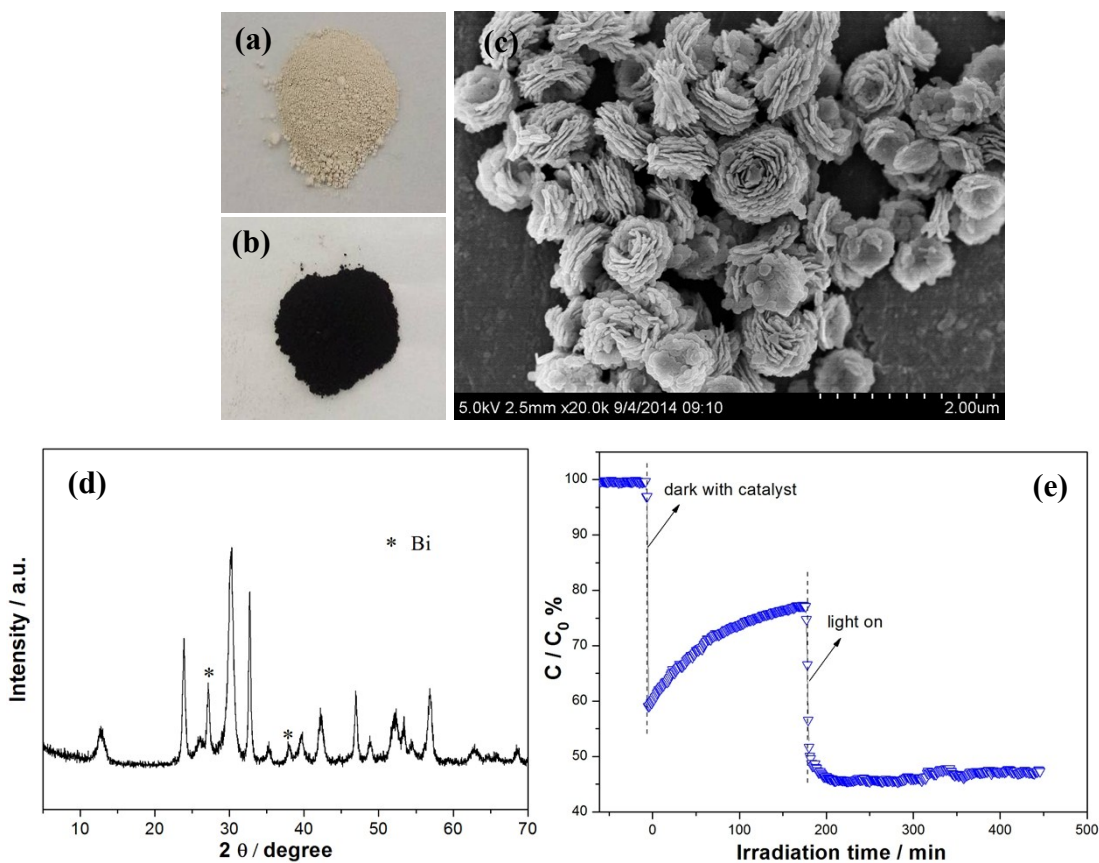


Fig. S7 The color of the BOC-275-after (after exposed to the air for half a year) before (a) and after (b) a second vacuum treat. SEM (c), XRD (d) and catalytic activity toward the removal of NO in the dark and under the visible light irradiation ($\lambda > 420$ nm) at room temperature (e) of the regenerated samples (BOC-275-after after a second vacuum treat).