

Electronic Supplementary Information for

Noble Metal-Free Bi Nanoparticles Supported TiO₂ with Plasmon-Enhanced Visible Light Photocatalytic Air Purification

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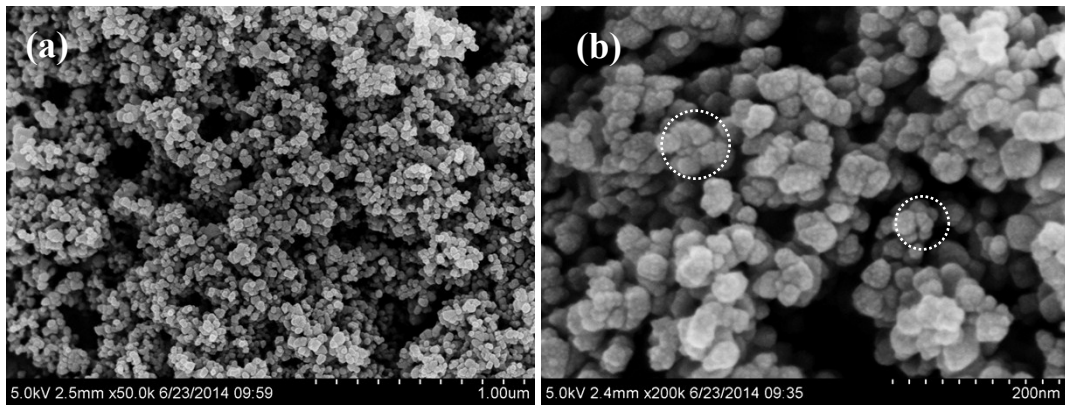


Fig. S1 SEM images (a) and the enlarged view (b) of Bi-Ti-10 sample.

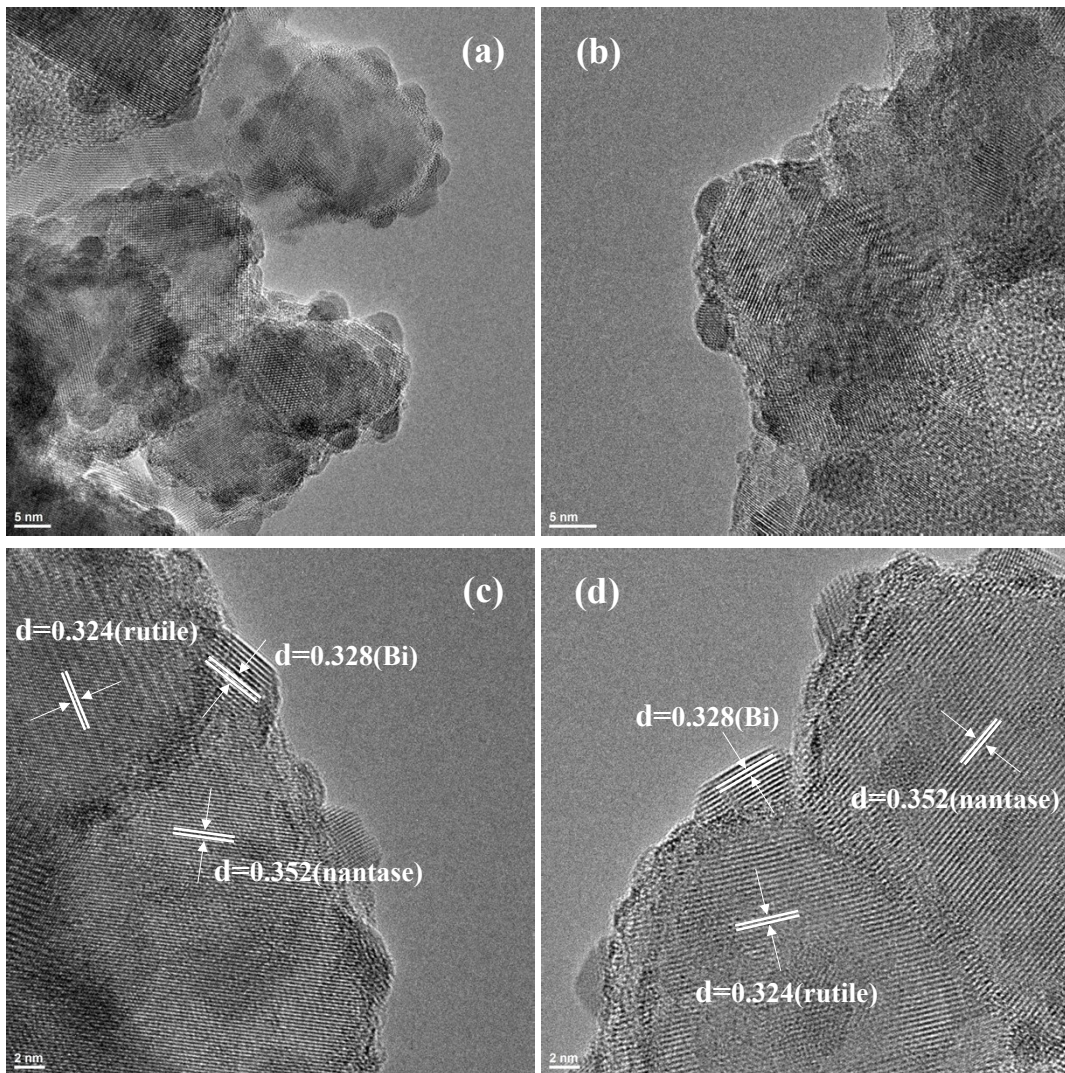


Fig. S2 TEM images (a, b) and HRTEM images (c, d) of the Bi-Ti-200 sample.

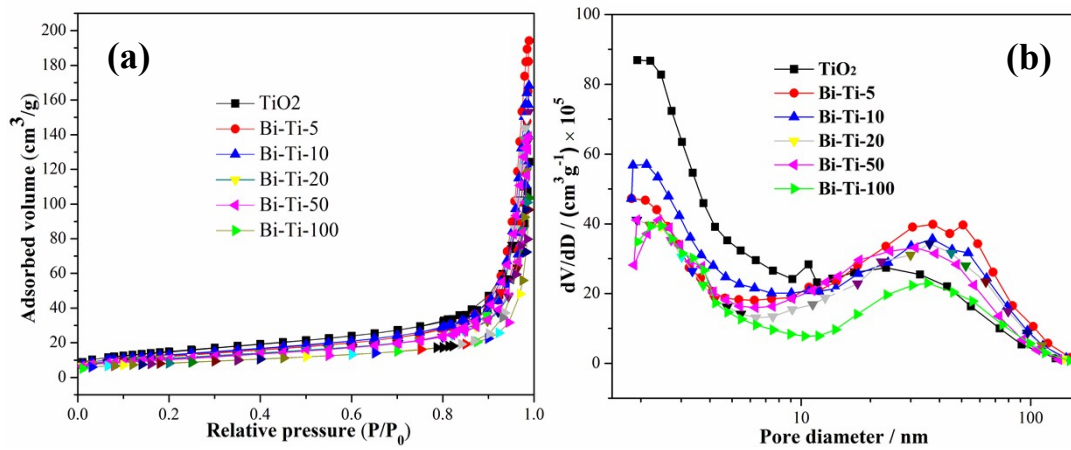


Fig. S3 N₂ adsorption-desorption isotherms (a) and pore-size distribution curves (b) for pure Bi, TiO₂ and the BiNPs/TiO₂ nanocomposites.

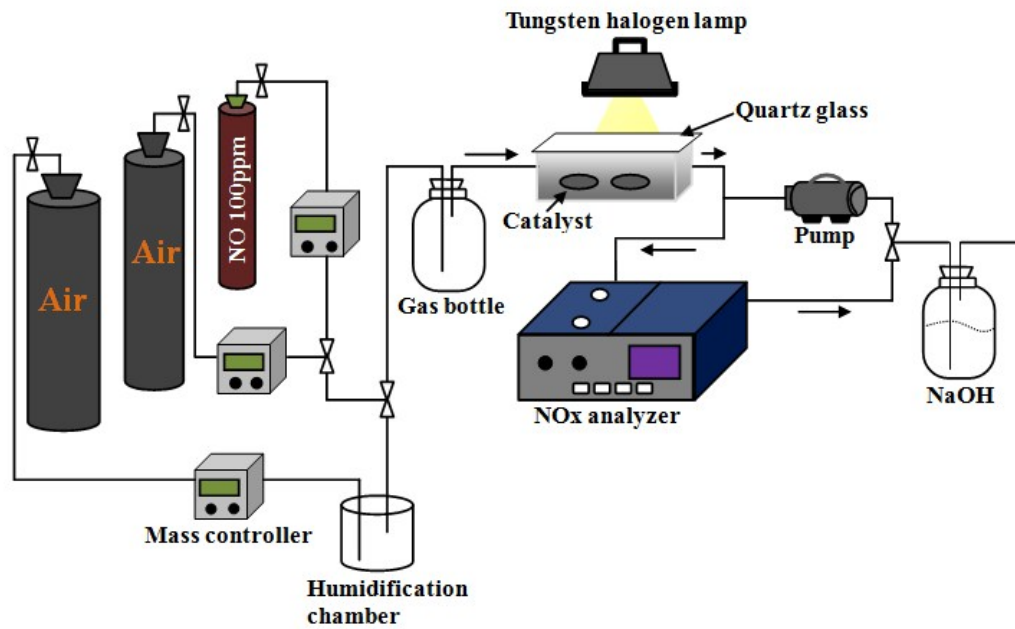


Fig. S4 The diagrams of equipment for NO removal.

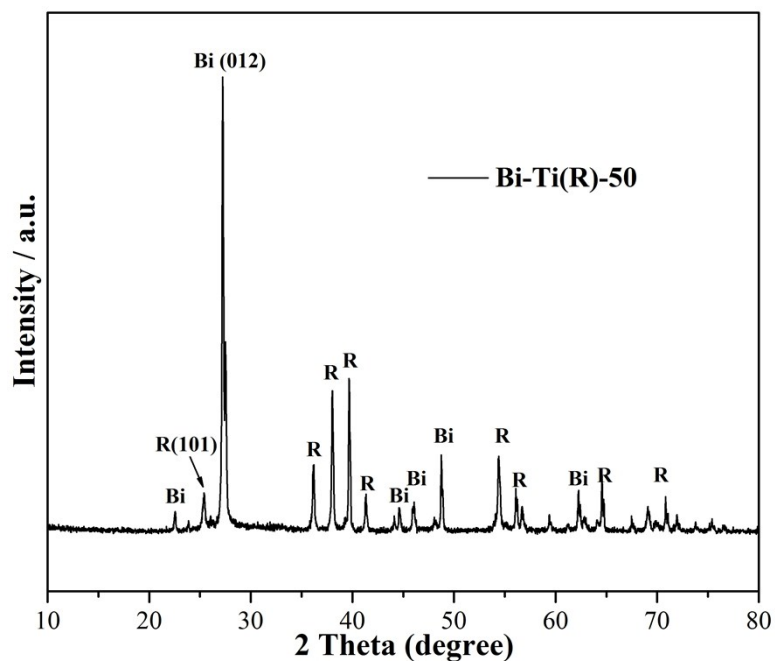


Fig. S5 The XRD of the Bi-Ti(R)-50 (R stands for rutile)

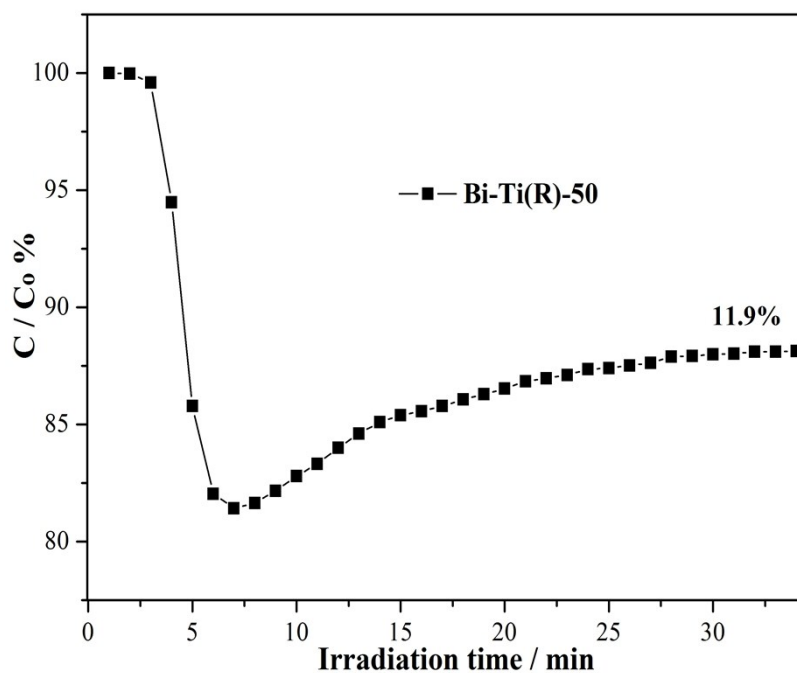


Fig. S6 The photocatalytic activities of compared Bi-Ti(R)-50 (R stands for the pure phase of TiO₂ which is obtained for pre-treatment of P25 at 700 °C, the results demonstrates that the Bi-Ti(R)-50 show negligible photocatalytic performance (11.9%), compared with the optimized Bi-Ti-50, 48.2%)