

Electronic Supplementary Information (ESI) for RSC Advances

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Xylene sensing performance of WO₃ decorated anatase TiO₂ nanoparticles as a sensing material for gas sensor

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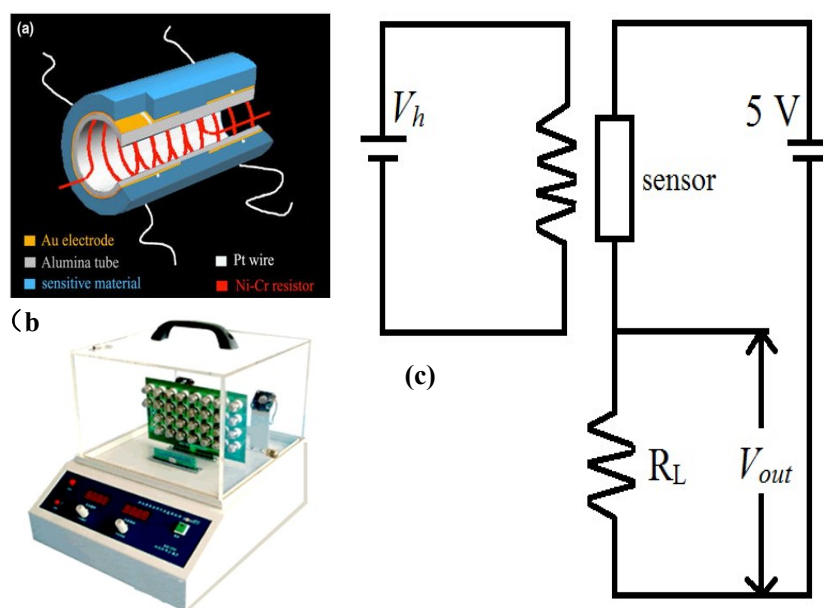


Figure S1 (a) sketch of the structure of the gas sensor, (b) The WS-30A system (Weisheng Instruments Co., Zhengzhou, China), and (c) basic working principle of gas sensor test.

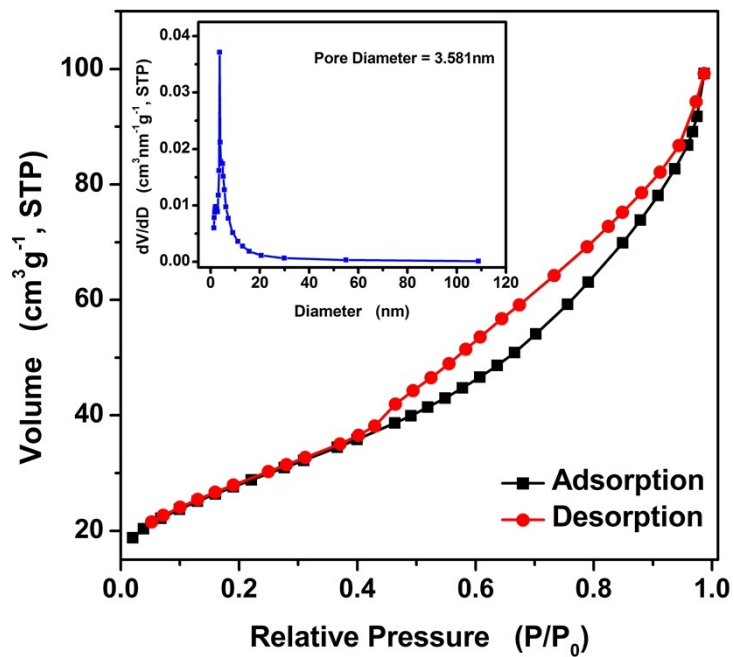


Figure S2 Nitrogen adsorption-desorption isotherms of as-synthesized 7.5 mol% WO₃ decorated TiO₂ nanoparticles, and the inset is the corresponding pore size distributions.

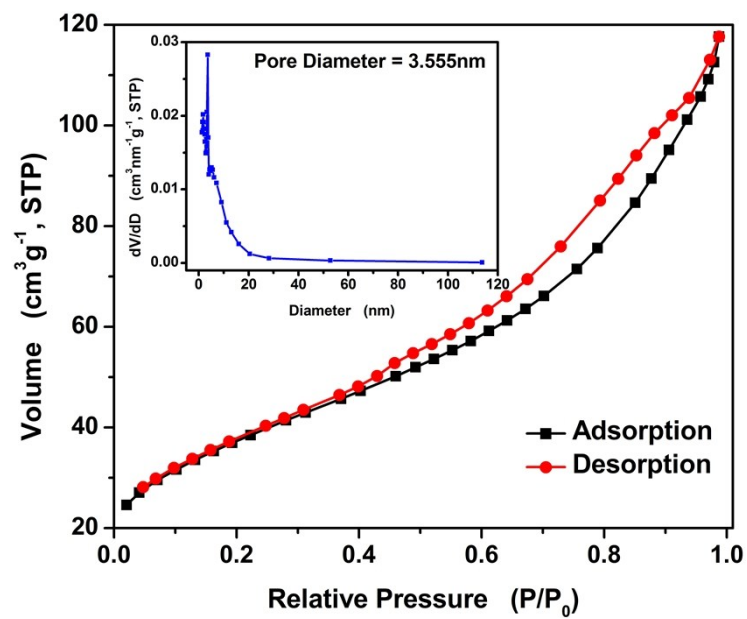


Figure S3 Nitrogen adsorption-desorption isotherms of as-synthesized 20.0 mol% WO_3 decorated TiO_2 nanoparticles, and the inset is the corresponding pore size distributions.

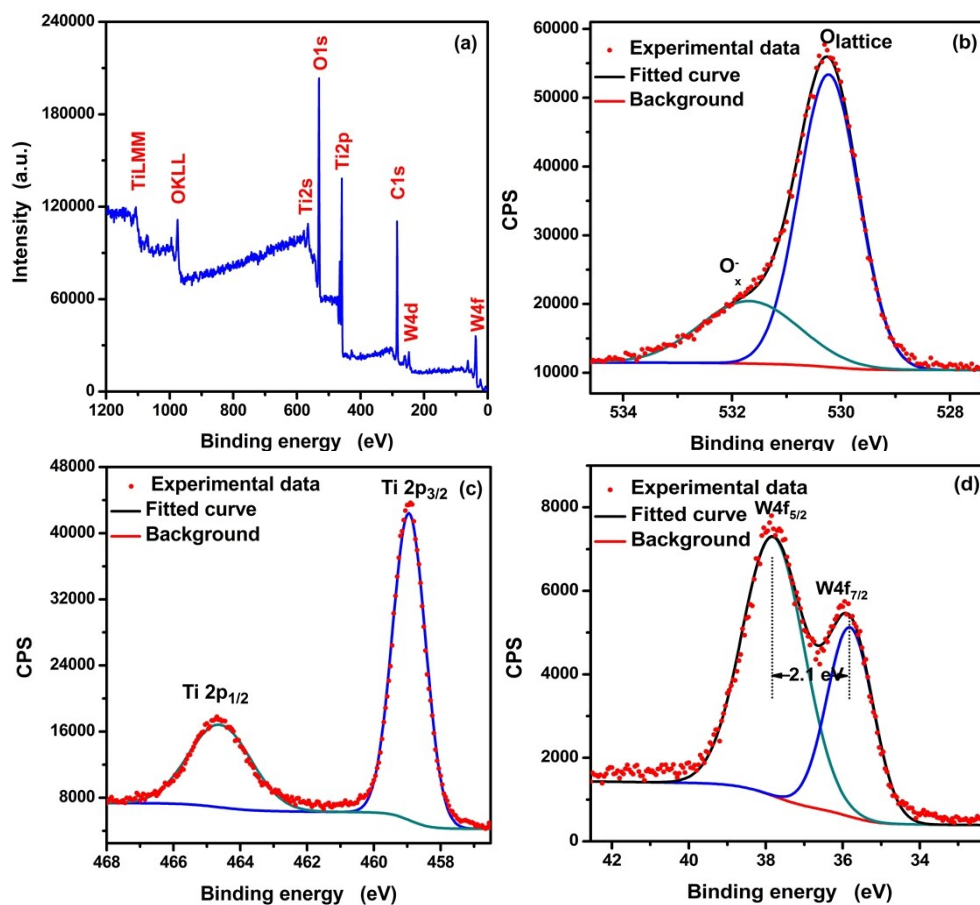


Figure S4 (a) XPS survey spectrum of the 7.5 mol% WO₃ decorated TiO₂ nanoparticles, (b) high-resolution XPS spectrum of O 1s, (c) Ti 2p, and (d) W 4f for 7.5 mol% WO₃ decorated TiO₂ nanoparticles.

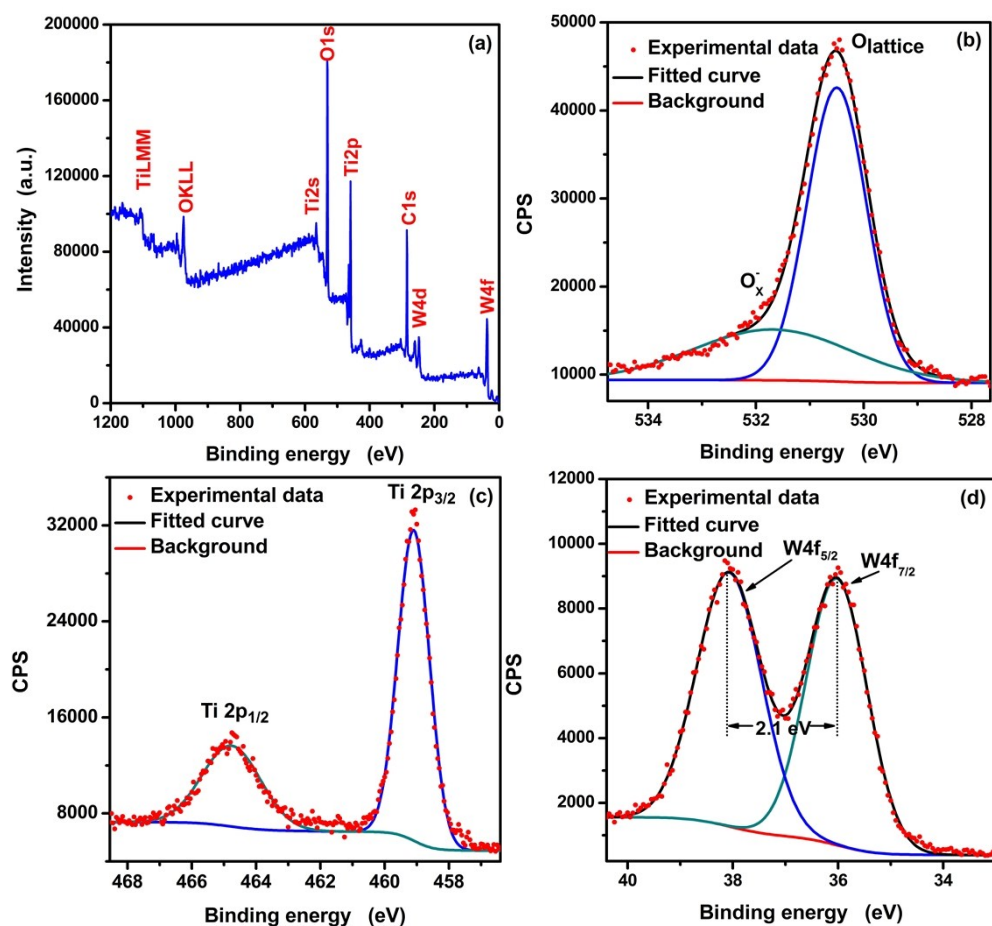


Figure S5 (a) XPS survey spectrum of the 20.0 mol% WO₃ decorated TiO₂ nanoparticles, (b) high-resolution XPS spectrum of O 1s, (c) Ti 2p, and (d) W 4f for 20.0 mol% WO₃ decorated TiO₂ nanoparticles.