



## Supplementary Materials

# Microwave Synthesized 2D WO<sub>3</sub> Nanosheets for VOCs Gas Sensors

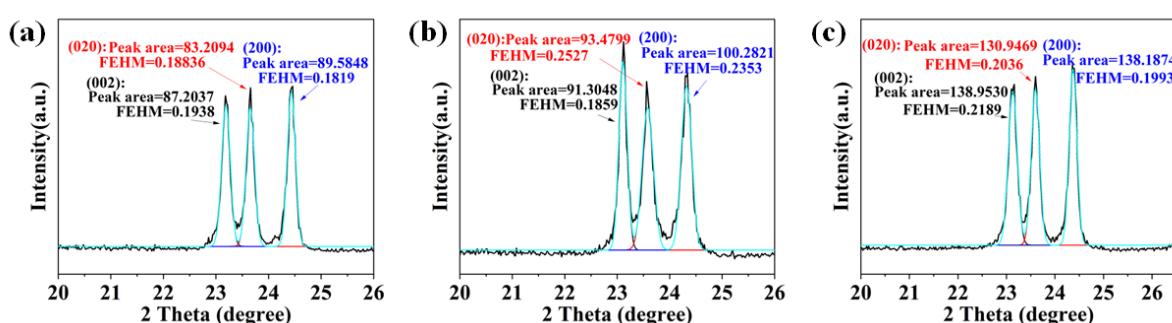
He Liu <sup>1</sup>, Lingyao Duan <sup>1</sup>, Kedong Xia <sup>1</sup>, Yang Chen <sup>2,3</sup>, Yunling Li <sup>1</sup>, Shaoxin Deng <sup>1</sup>, Jiaqiang Xu <sup>3</sup> and Zhenyu Hou <sup>1,\*</sup>

<sup>1</sup> School of Chemistry and Chemical Engineering, Henan Institute of Science and Technology, Xinxiang 453003, China; heliu8043@163.com (H.L.); ddlingyao@163.com (L.D.); kdongxia@163.com (K.X.); liyl271@126.com (Y.L.); dengshaoxin123@126.com (S.D.)

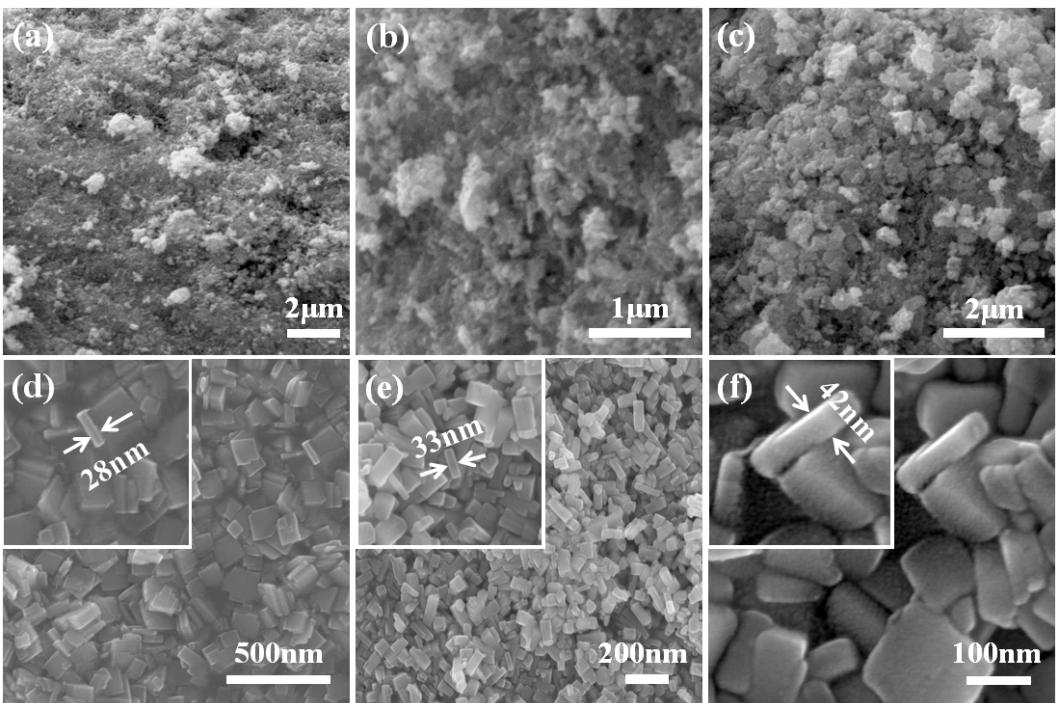
<sup>2</sup> Shanghai Yaolu Instrument & Equipment Co., Ltd., Shanghai 200444, China; shucy@shu.edu.cn

<sup>3</sup> NEST Lab, Department of Physics, Department of Chemistry, College of Sciences, Shanghai University, Shanghai 200444, China; xujiaqiang@shu.edu.cn

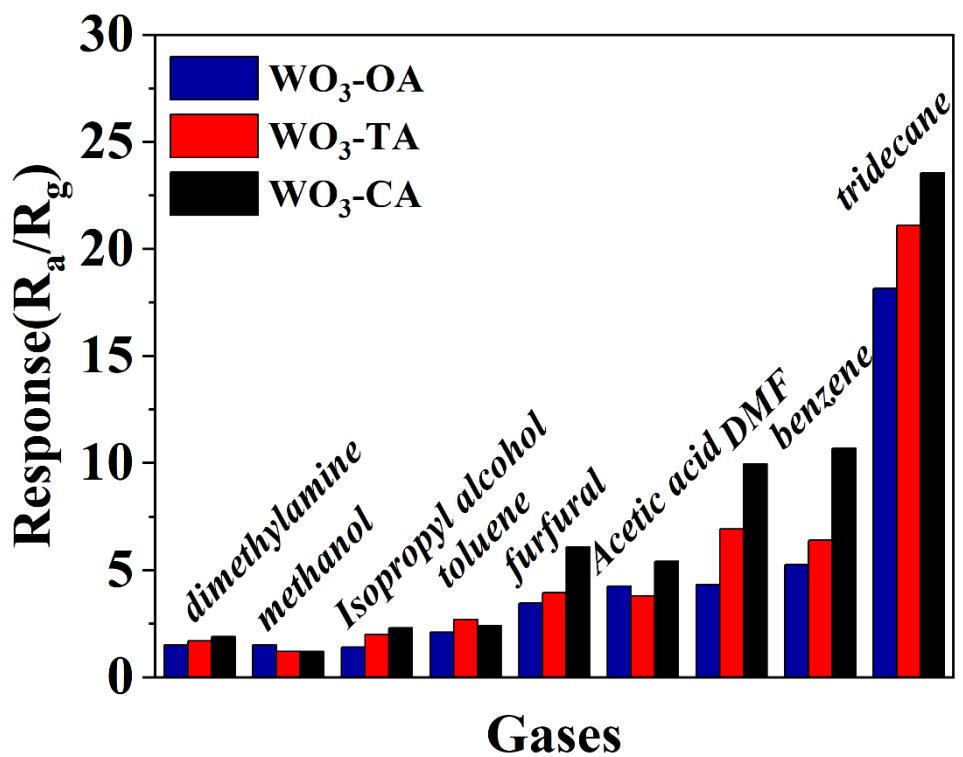
\* Correspondence: houzhy0373@163.com



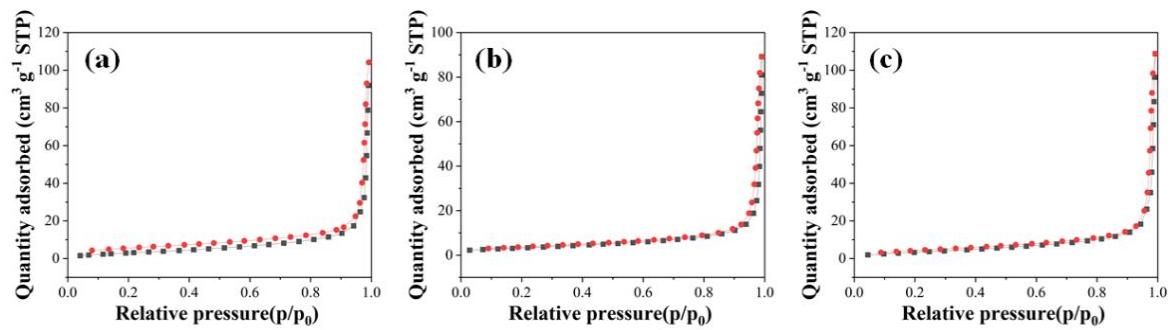
**Figure S1.** Peak area and Full-width at the half of the maximum (FEHM) after XRD integration; (a) WO<sub>3</sub>-OA, (b) WO<sub>3</sub>-TA, (c) WO<sub>3</sub>-CA.



**Figure S2.** SEM images of three samples without adjuvants, and sample thickness diagram; (a,d) WO<sub>3</sub>-OA, (b,e) WO<sub>3</sub>-TA, (c,f) WO<sub>3</sub>-CA.



**Figure S3.** Schematic diagram of three sensor selectivity with tridecane as control.



**Figure S4.** N<sub>2</sub> adsorption/desorption isotherms for (a) WO<sub>3</sub>-OA, (b) WO<sub>3</sub>-TA, (c) WO<sub>3</sub>-CA.