

Electronic supplementary information:

Single Crystal α -Fe₂O₃ with Exposed {104} Facets for High Performance Gas Sensor Applications

Xianghong Liu,¹ Jun Zhang,¹ Shihua,¹ Dongjiang Yang,² Porun Liu,² Haimin Zhang,² Wu Shurong Wang,^{1,*} Xiangdong Yao,³ Guangshan Zhu,³ and Huijun Zhao^{2,*}

¹ Department of Chemistry, TKL of Metal- and Molecule-Based Material Chemistry and Key Laboratory of Advanced Energy Materials Chemistry (MOE), Nankai University, Tianjin 300071, P. R. China

² Centre for Clean Environment and Energy, and Griffith School of Environment Gold Coast Campus, Griffith University, QLD 4222, Australia

³ Queensland Micro and Nanotechnology Centre, Nathan campus, Griffith University, QLD 4111, Australia

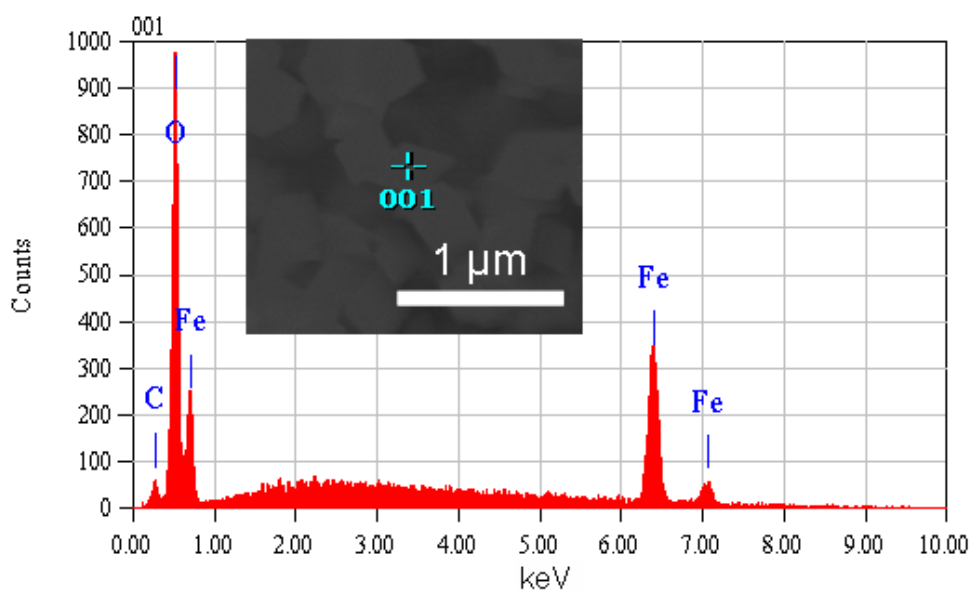


Fig. S1. EDS analysis of an individual rhombohedral α -Fe₂O₃ crystal.

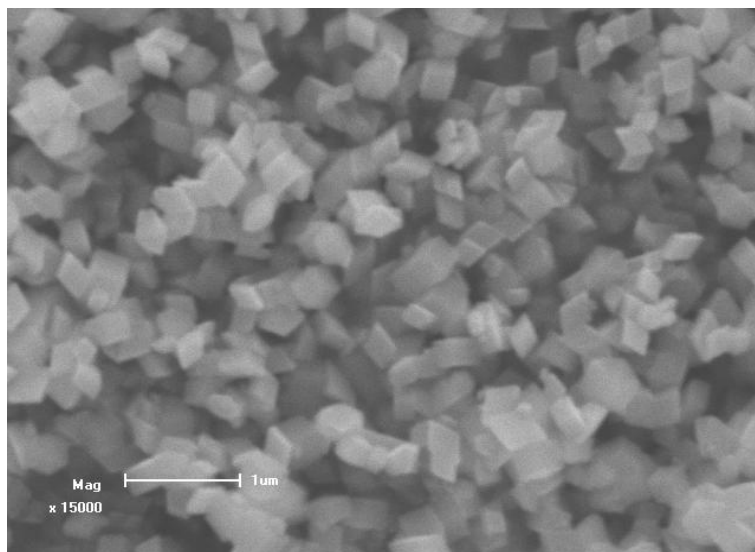


Fig. S2. SEM image of the α -Fe₂O₃ products prepared with 3.2 g formamide, showing that all the particles have a uniform rhombohedral morphology.

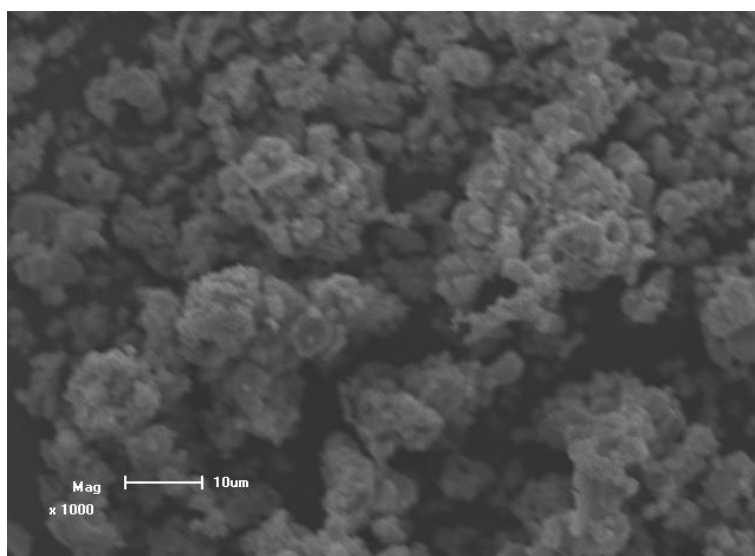


Fig. S3. SEM image of the commercial α -Fe₂O₃ powder.