

Supporting Information

Single-crystalline MoO₃ nanoplates: topochemical synthesis and the enhanced ethanol-sensing performance

Deliang Chen,^{,a,b} Minna Liu,^a Li Yin,^a Tao Li,^a Zhen Yang,^{a,§} Xinjian Li,^b Bingbing Fan,^a Hailong Wang,^a Rui Zhang,^{a,c} Zhengxin Li,^{a,d} Hongxia Lu,^a Hongliang Xu,^a Daoyuan Yang,^a Jing Sun,^e Lian Gao^e*

^a School of Materials Science and Engineering, Zhengzhou University, 100 Science Road, Zhengzhou 450001, P. R. China.

^b School of Physics and Engineering, Zhengzhou University, 100 Science Road, Zhengzhou 450001, P. R. China

^c Laboratory of Aeronautical Composites, Zhengzhou Institutes of Aeronautical Industry Management, University Centre, Zhengdong New District, Zhengzhou 450046, P. R. China

^d School of Materials Science and Engineering, Henan University of Technology, 195 Zhongyuan West Road, Zhengzhou 450007, P. R. China

^e The State Key Laboratory of High Performance Ceramics and Superfine Microstructure, Shanghai Institute of Ceramics, Chinese Academy of Sciences, 1295 Dingxi Road, Shanghai 200050, P. R. China

[§] Present address: Institute of Metal Research, Chinese Academy of Sciences, 72 Wenhua Road, Shenyang 110016, P.R. China

*Corresponding author: dlchen@zzu.edu.cn (D. L. Chen)

Table s1. Comparison of $I_{(0\bar{1}0)} / I_{(111)}$ values of the as-obtained α -MoO₃ nanocrystals and the literature data (JCPDS card No. 05-0508) on the basis of XRD results.

Sample	$I_{(020)} / I_{(111)}$	$I_{(040)} / I_{(111)}$	$I_{(060)} / I_{(111)}$
This work	1.465	2.641	1.631
JCPDS No. 05-0508	0.971	1.743	0.886

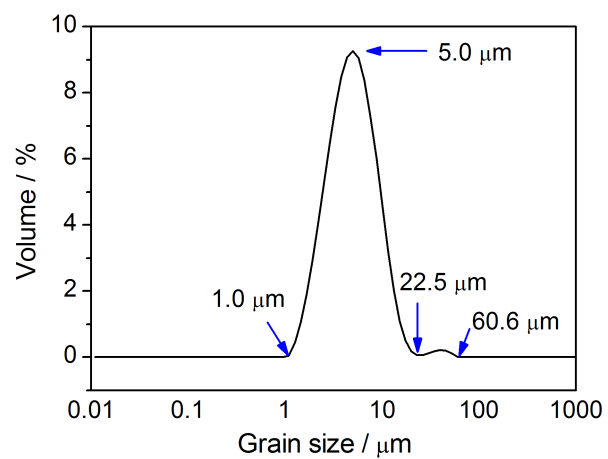


Fig. S1. The laser diffraction size-distribution curve of the as-obtained α - MoO_3 nanoplates.