

Electronic supplementary information for

**Facile synthesis of three-dimensional ordered macroporous  
 $\text{Sr}_{1-x}\text{K}_x\text{TiO}_3$  perovskites with enhanced catalytic activity  
for soot combustion**

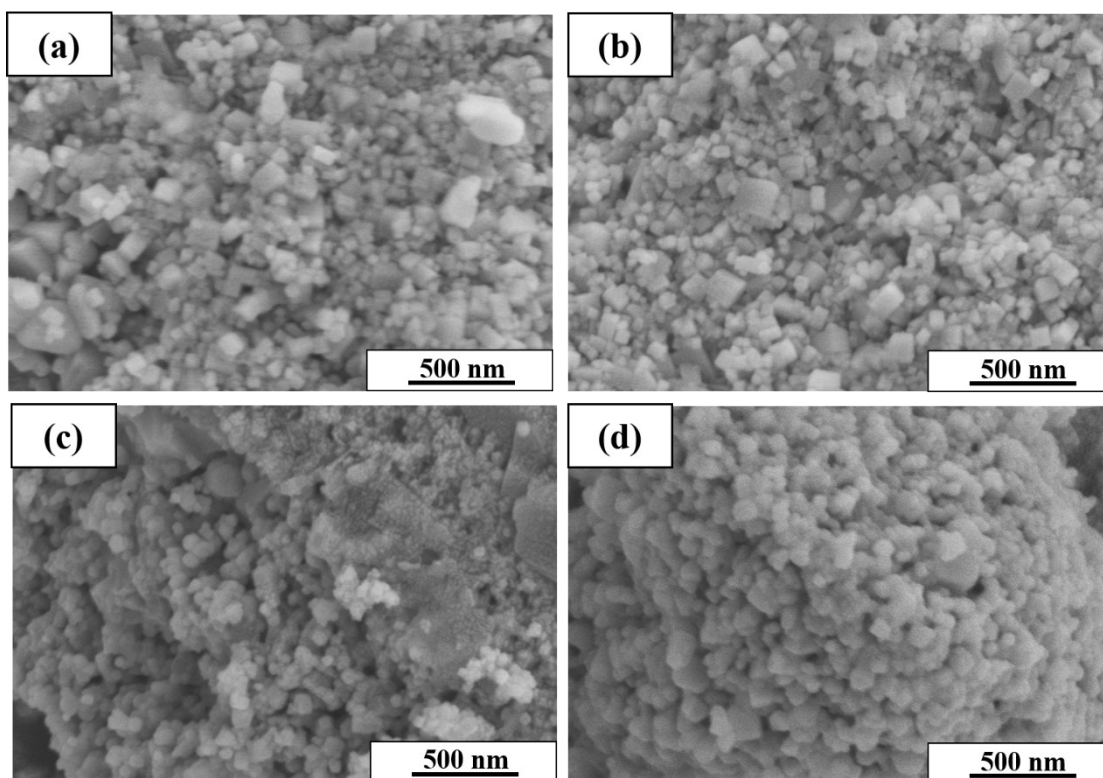
Peng Zhao, Nengjie Feng\*, Fan Fang, Geng Liu, Li Chen, Jie Meng, Chong Chen, Lei Wang, Hui Wan and Guofeng Guan\*

*State Key Laboratory of Materials-Oriented Chemical Engineering, College of Chemical Engineering, Jiangsu National Synergetic Innovation Center for Advanced Materials, Nanjing Tech University, Nanjing 210009, P. R. China.*

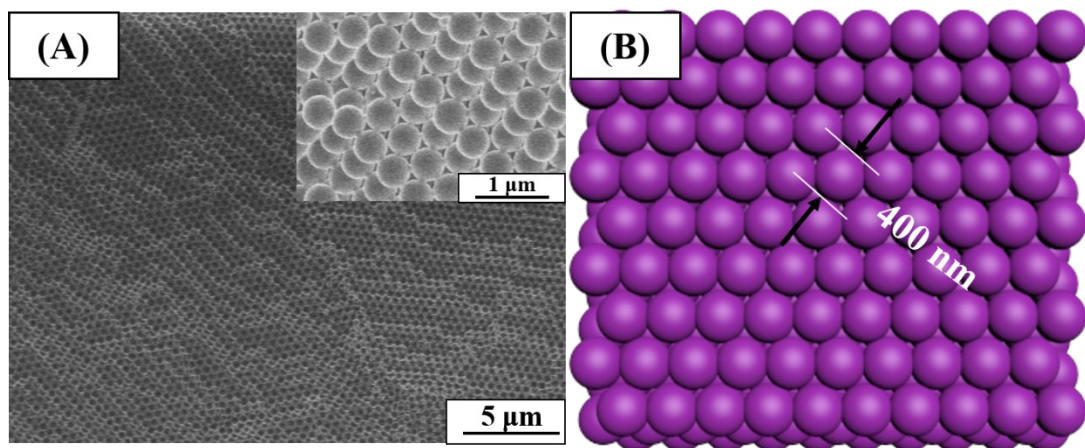
*\*Corresponding author:*

*Nengjie Feng, E-mail address: fengnengjie@njtech.edu.cn Tel: +86 25 83587198*

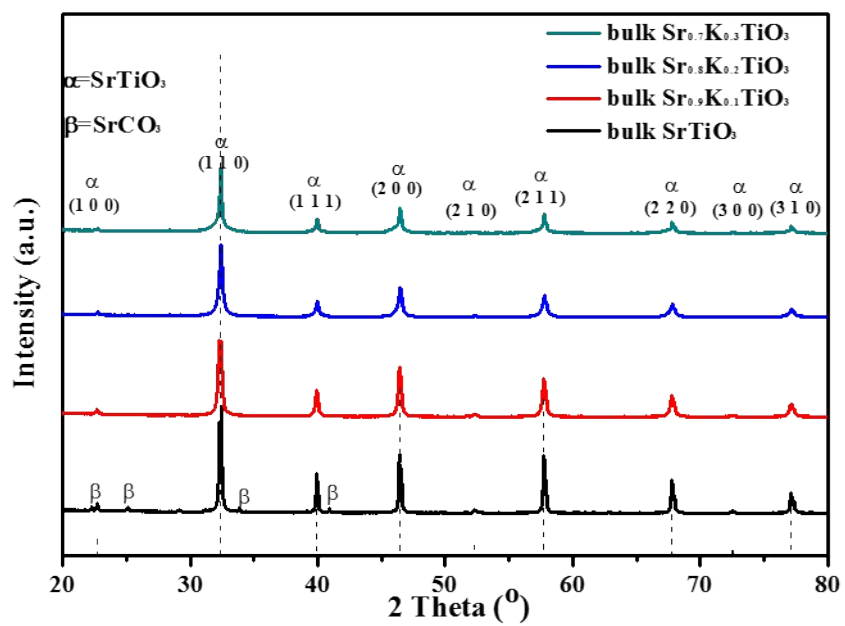
*Guofeng Guan, E-mail address: guangf@njtech.edu.cn Tel: +86 25 83587198*



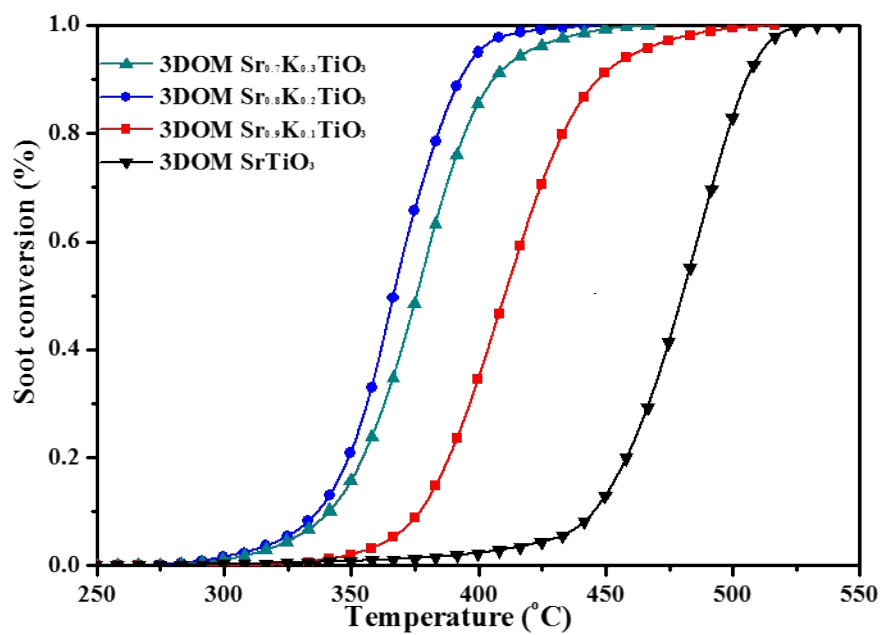
**Fig. S1** FESEM images of bulk catalysts: (a) SrTiO<sub>3</sub>; (b) Sr<sub>0.9</sub>K<sub>0.1</sub>TiO<sub>3</sub>; (c) Sr<sub>0.8</sub>K<sub>0.2</sub>TiO<sub>3</sub>; (d) Sr<sub>0.7</sub>K<sub>0.3</sub>TiO<sub>3</sub>.



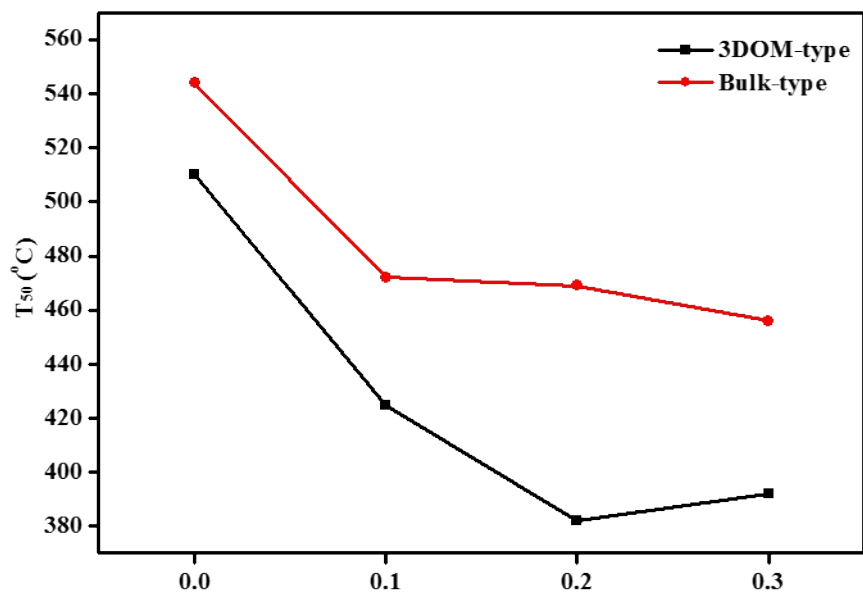
**Fig. S2** FESEM image of PMMA (A); Schematic model of PMMA (B).



**Fig. S3** XRD patterns of bulk Sr<sub>1-x</sub>K<sub>x</sub>TiO<sub>3</sub> (x=0-0.3) catalysts.



**Fig. S4** Conversion profiles of soot combustion under 500 ppm NO and 20%O<sub>2</sub>.



**Fig. S5** T<sub>50</sub> of 3DOM and bulk type Sr<sub>1-x</sub>K<sub>x</sub>TiO<sub>3</sub> (x=0-0.3) for soot combustion.