

Facile synthesis of three-dimensionally ordered macroporous silicon-doped $\text{La}_{0.8}\text{K}_{0.2}\text{CoO}_3$ perovskite catalysts for soot combustion

Nengjie Feng, Chong Chen, Jie Meng, Yang Wu, Geng Liu, Lei Wang, Hui Wan*, 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, telephone: +86-25-83587198. E-mail: wanhui@njtech.edu.cn;
guangf@njtech.edu.cn

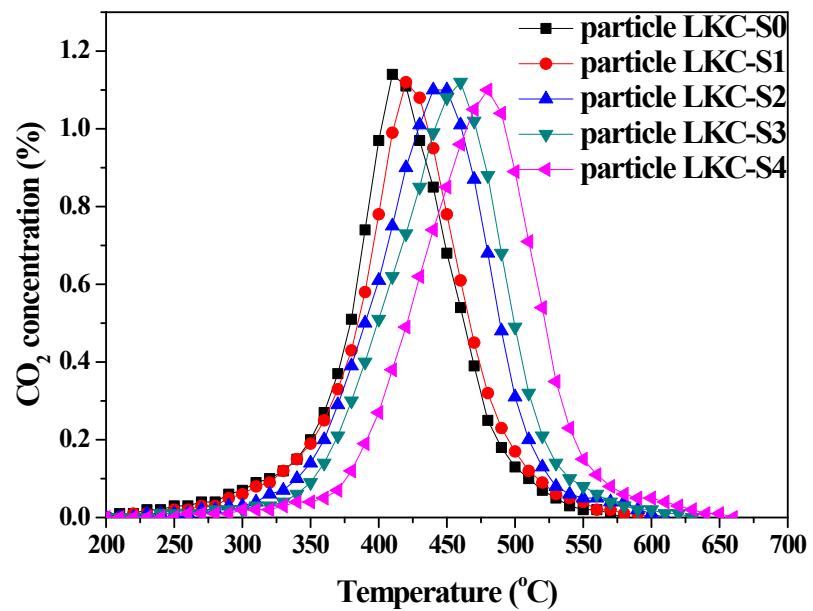


Figure S1. CO₂ concentration profiles of soot oxidation over particle catalysts under loose contact conditions.

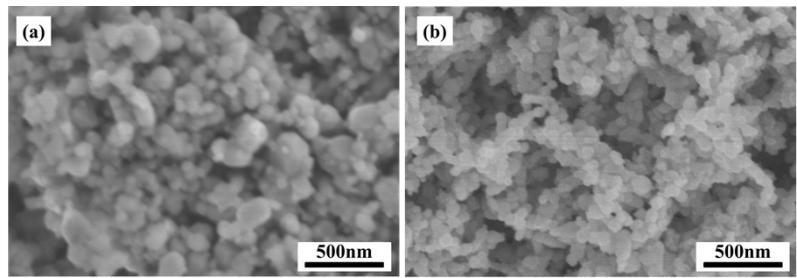


Figure S2. FESEM images of particle LKC-S2 (a) and 3DOM LKC/S2 (b).

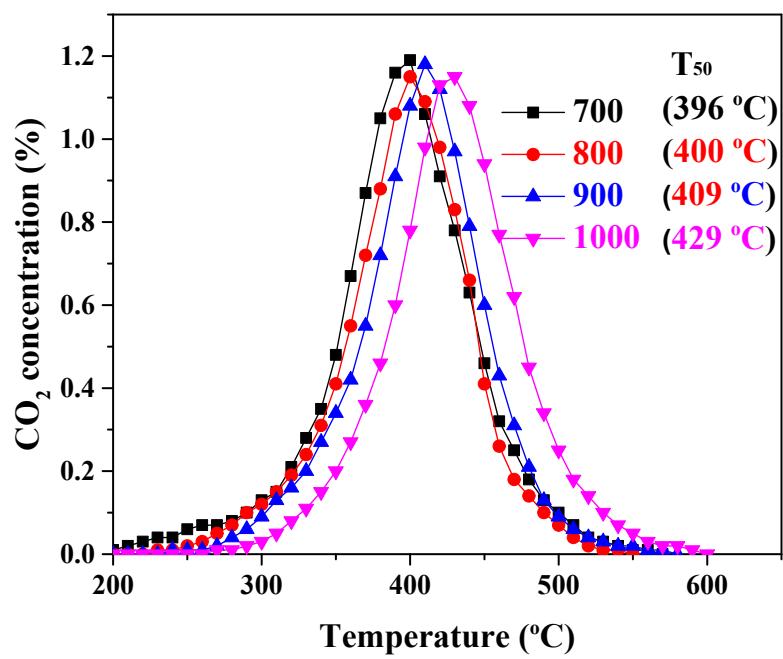


Figure S3. Thermal stability test of the 3DOM LKC-S2 perovskite.

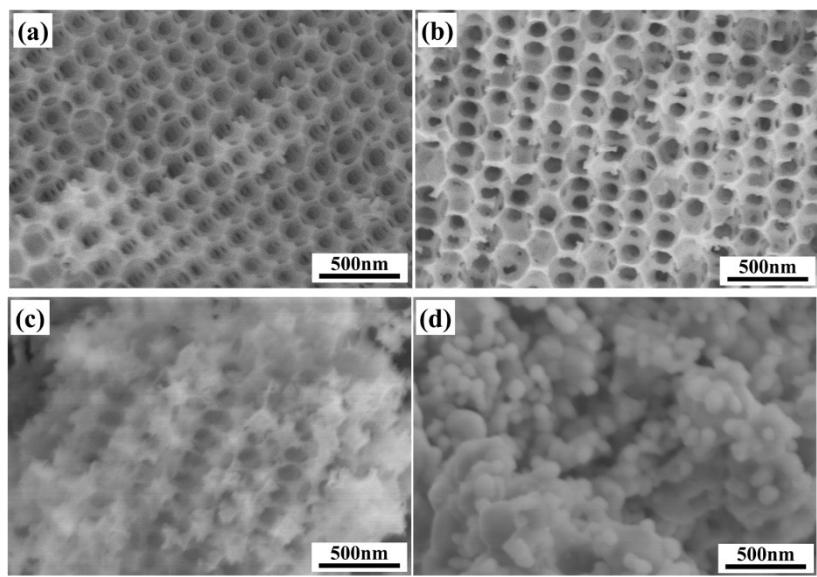


Figure S4. FESEM images of the 3DOM LKC-S2 perovskite calcined at different temperatures (a) 700 °C, (b) 800 °C, (c) 900 °C, (d) 1000 °C.

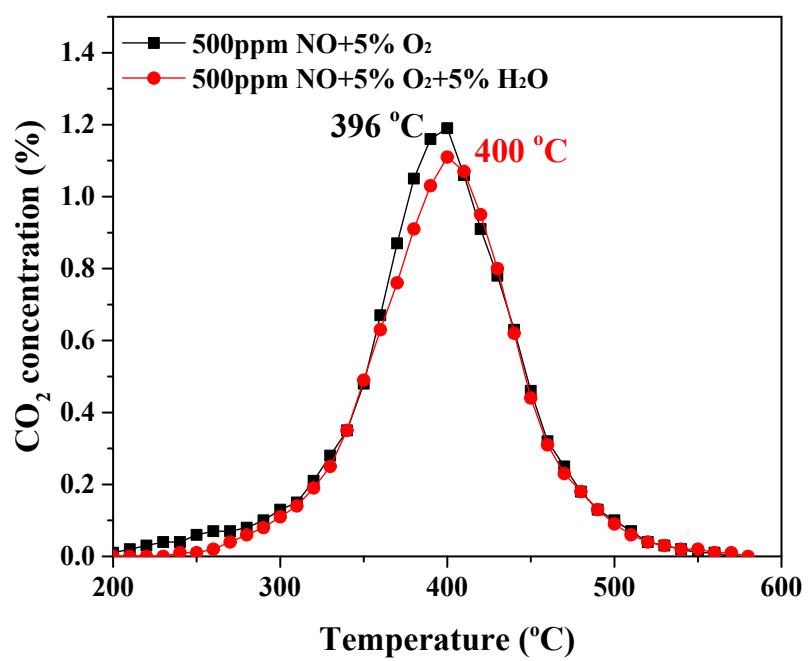


Figure S5. Water tolerance test of the 3DOM LKC-S2 perovskite.