

Ni-Co-O solid solution dispersed nanocrystalline Co_3O_4 as highly active catalyst for low-temperature propane combustion

Ting Cai^{a,b}, Jing Yuan^b, Lin Zhang^a, Ling Yang^b, Qin Tong^b, Meiyong Ge^b, Bei Xiao^a, Xiaolan Zhang^a, Kunfeng Zhao^{a,b,*}, Dannong He^{a,b,*}

^a School of Material Science and Engineering, Shanghai Jiao Tong University, No.800 Dongchuan Road, Shanghai 200240, PR China

^b National Engineering Research Center for Nanotechnology, No. 28 East Jiang Chuan Road, Shanghai 200241, PR China

*Corresponding authors: Tel: 86 21 34291286; Fax: 86 21 34291125

E-mail: hdn_nercn@163.com (Dannong He), zhaokunfeng-gl@163.com (Kunfeng Zhao)

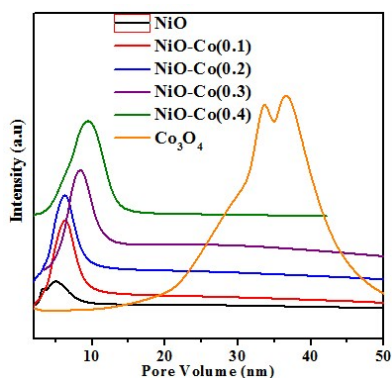


Fig. S1. The pore diameter distribution of NiO-Co(x) catalysts.

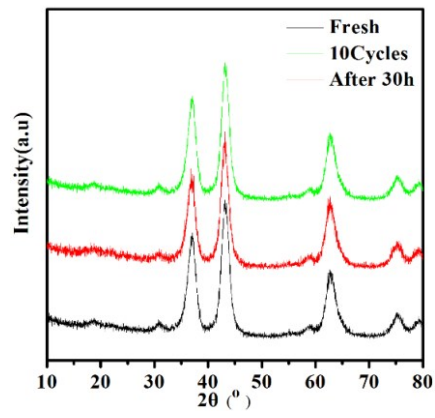


Fig. S2. XRD patterns of NiO-Co(0.3): Fresh, 10 cycles and long-time test after 30h.

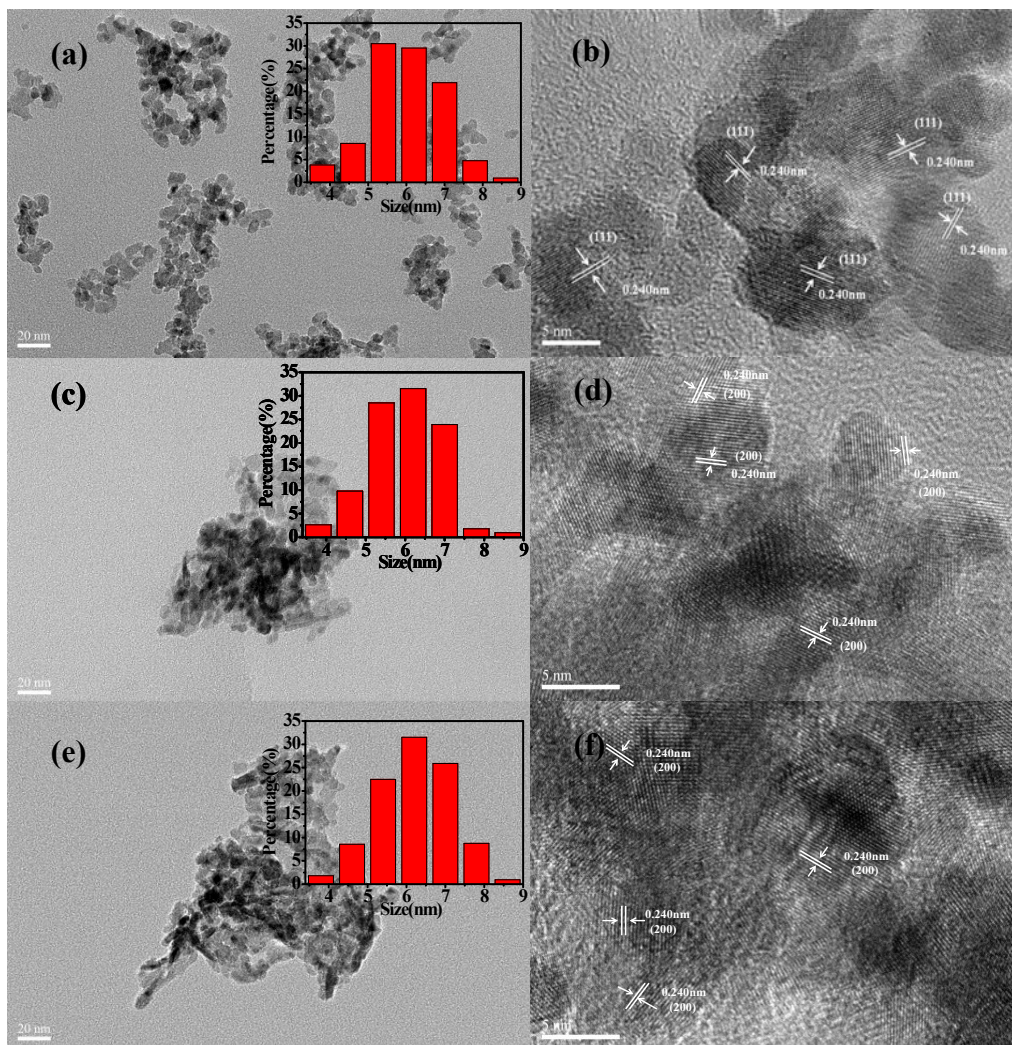


Fig. S3. TEM and HRTEM photos of NiO-Co(0.3): a, b-Fresh, c, d-10 cycles and e, f-long-time test after 30h.

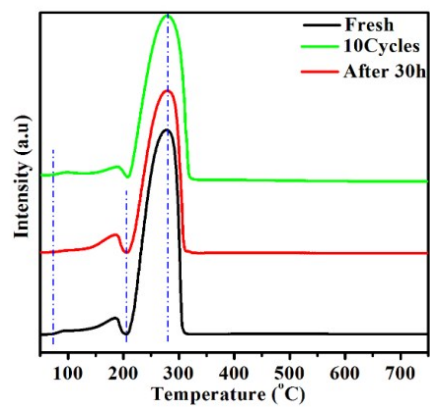


Fig. S4. H₂-TPR profiles of NiO-Co(0.3): Fresh, 10 cycles and long-time test after 30h.