Supporting Information for

Synthesis and Metal-Support Interaction of Subnanometer Copper-Palladium Bimetallic Oxide Clusters for Catalytic Oxidation of Carbon Monoxide

Pei-Pei Du[a], Xiu-Cui Hu[b], Xu Wang[a], Chao Ma[c,], Meng Du[a,d], Jie Zeng[c], Chun-Jiang Jia[b,]*, Yu-Ying Huang[a], Rui Si[a,]**

[a] Shanghai Synchrotron Radiation Facility, Shanghai Institute of Applied Physics, Chinese Academy of Sciences, Shanghai 201204, China

[b] Key Laboratory for Colloid and Interface Chemistry, Key Laboratory of Special Aggregated Materials, School of Chemistry and Chemical Engineering, Shandong University, Jinan 250100, China

[c] Hefei National Laboratory for Physical Sciences at the Microscale, University of Science and Technology of China, Hefei, Anhui 230026, China

[d] Department of Chemistry, College of Science, Shanghai University, Shanghai 200444, China

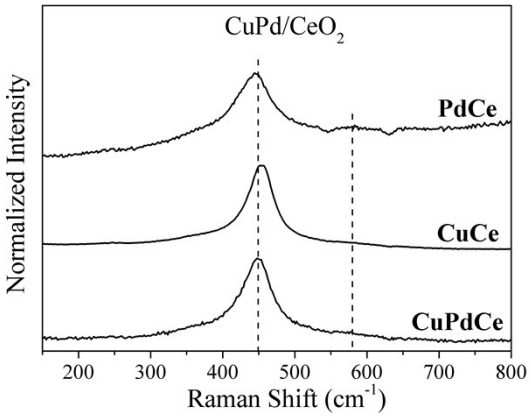

Fig. S1 Raman spectra of ceria-supported copper-palladium oxides.

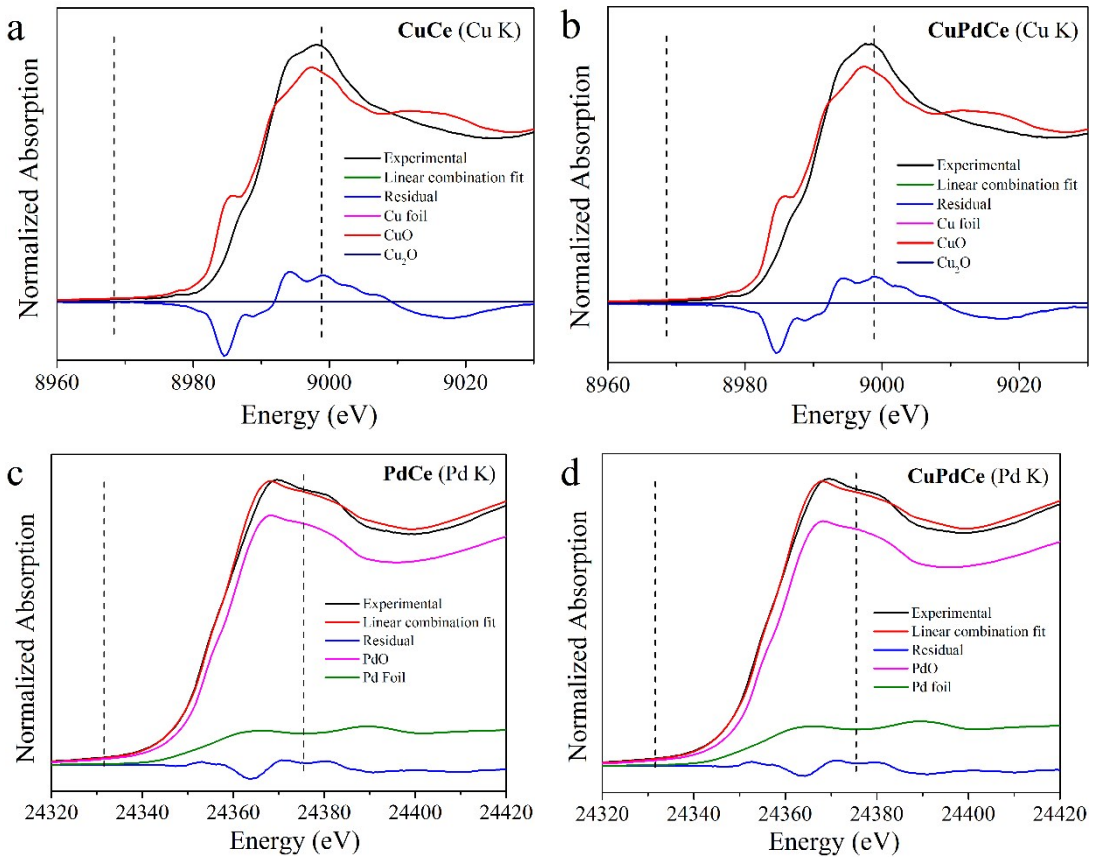

Fig. S2 Linear combination fit results on XANES profiles of ceria-supported copper-palladium oxides: (a) **CuCe**, Cu K edge; (b) **CuPdCe**, Cu K edge; (c) **PdCe**, Pd K edge; (d) **CuPdCe**, Pd K edge.

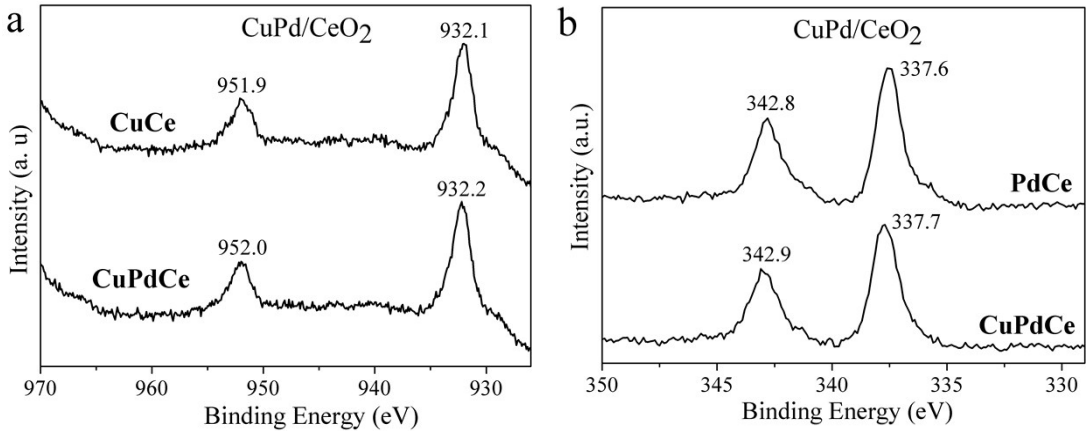

Fig. S3 XPS spectra of ceria-supported copper-palladium oxides: (a) Cu 2p; (b) Pd 3d.