

Supporting Information

Controlled synthesis of Pt and Co_3O_4 dual-functionalized In_2O_3 nanoassemblies for room temperature detection of carbon monoxide

Kuan-Wei Chen, Jen-Pu Liu, Yu-Shan Hsu, Chao-Heng Liu, Ying-Hao Pai,
and Chun-Hua Chen*

Department of Materials Science and Engineering, National Chiao Tung University
1001 Ta-Hsueh Road, Hsin-Chu, Taiwan, 30010, ROC.

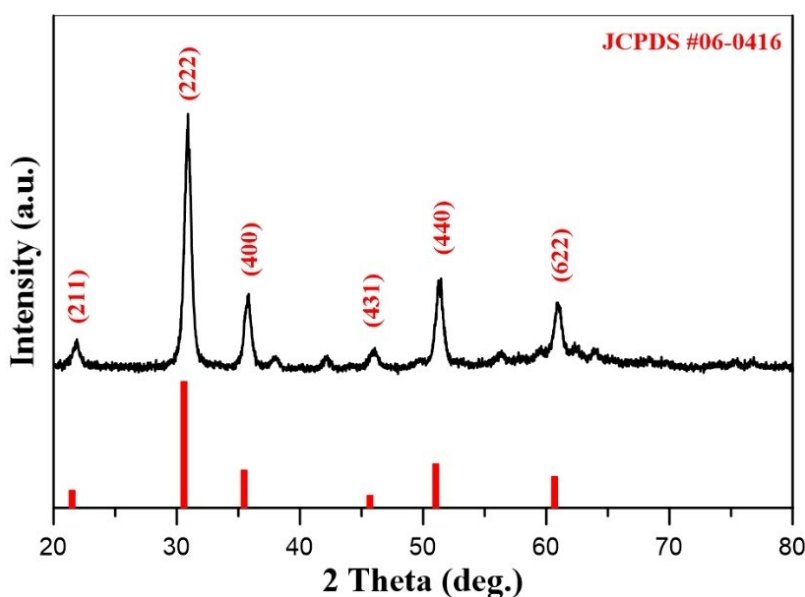


Figure S1. XRD pattern of the prepared In_2O_3 nanocomposites.

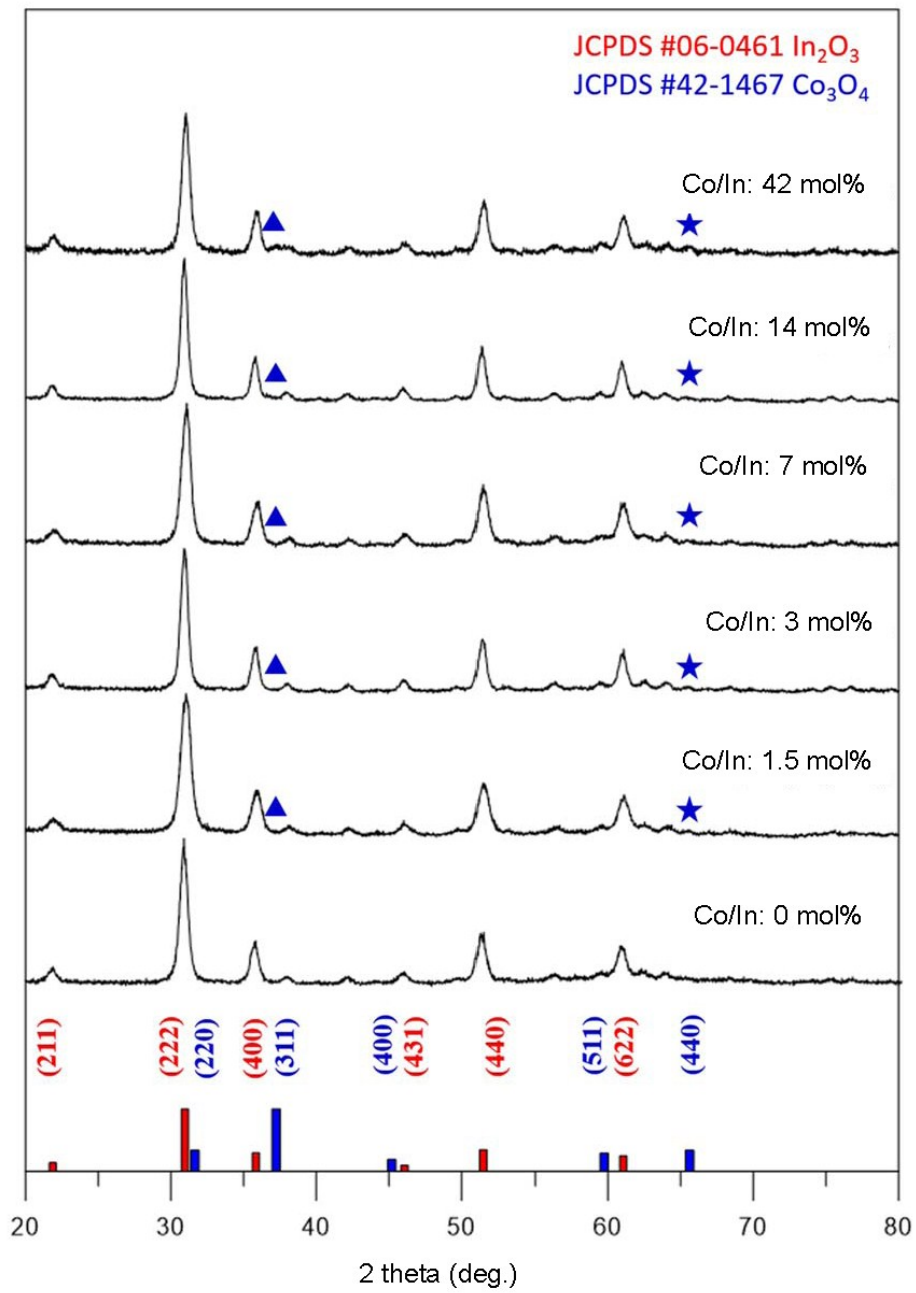


Fig. S2 XRD patterns of pristine In_2O_3 nanostructures and $\text{Co}_3\text{O}_4/\text{In}_2\text{O}_3$ nanostructures with various mole fraction of Co/In.

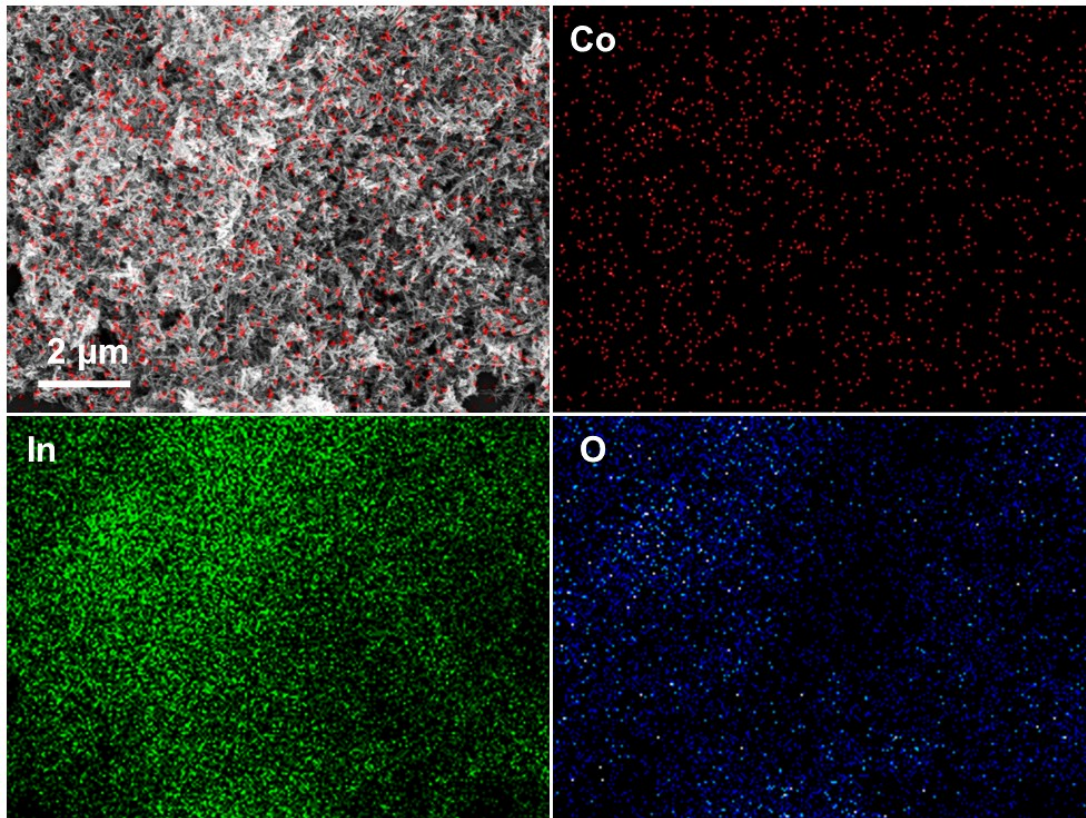


Figure S3. SEM-EDX mapping of the prepared $\text{Co}_3\text{O}_4\text{-In}_2\text{O}_3$ nanocomposites. The measured atomic ratio of Co/In is 1.7 % (for the specimen of 3 mol%).

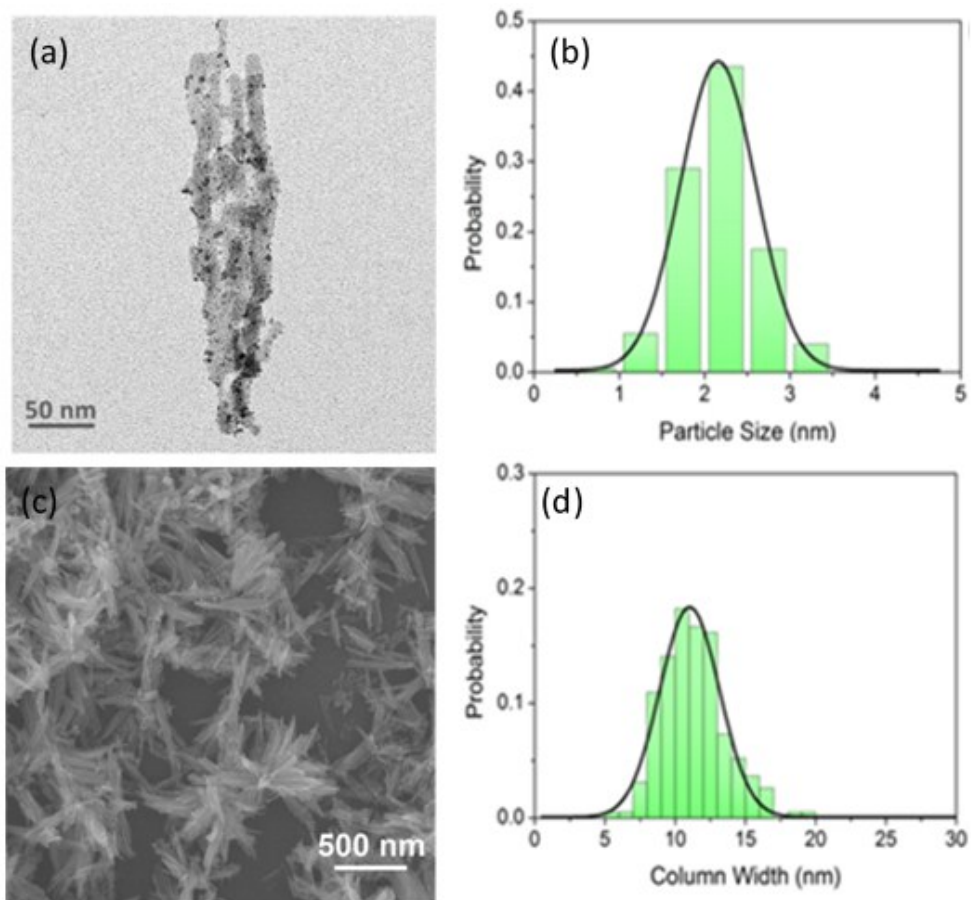


Figure. S4 The size distributions of (a),(b) the Pt nanoparticles, and (c),(d) the In₂O₃ nanobundles. The averaged particles size and column width is 2.2 nm and 10.6 nm respectively for Pt nanoparticles and In₂O₃ nanobundles.