

Supporting Information

Effect of Hierarchical Meso-macroporous Structure on The Catalytic Performance of Silica Supported Cobalt Catalysts for Fischer-Tropsch Synthesis

Hansheng Li ^{a,b}, Bo Hou ^a, Jungang Wang ^{a*}, Xin Huang ^a, Congbiao Chen ^a, Zhongyi Ma ^a, Jinglei Cui ^a, Litao Jia ^a, Dekui Sun ^a and Debao Li ^{a*} *E-mail: wangjg@sxicc.ac.cn*

^a State Key Laboratory of Coal Conversion, Institute of Coal Chemistry, Chinese Academy of Sciences, Taiyuan 030001, Shanxi, PR China

^b University of Chinese Academy of Sciences, Beijing 100049, PR China

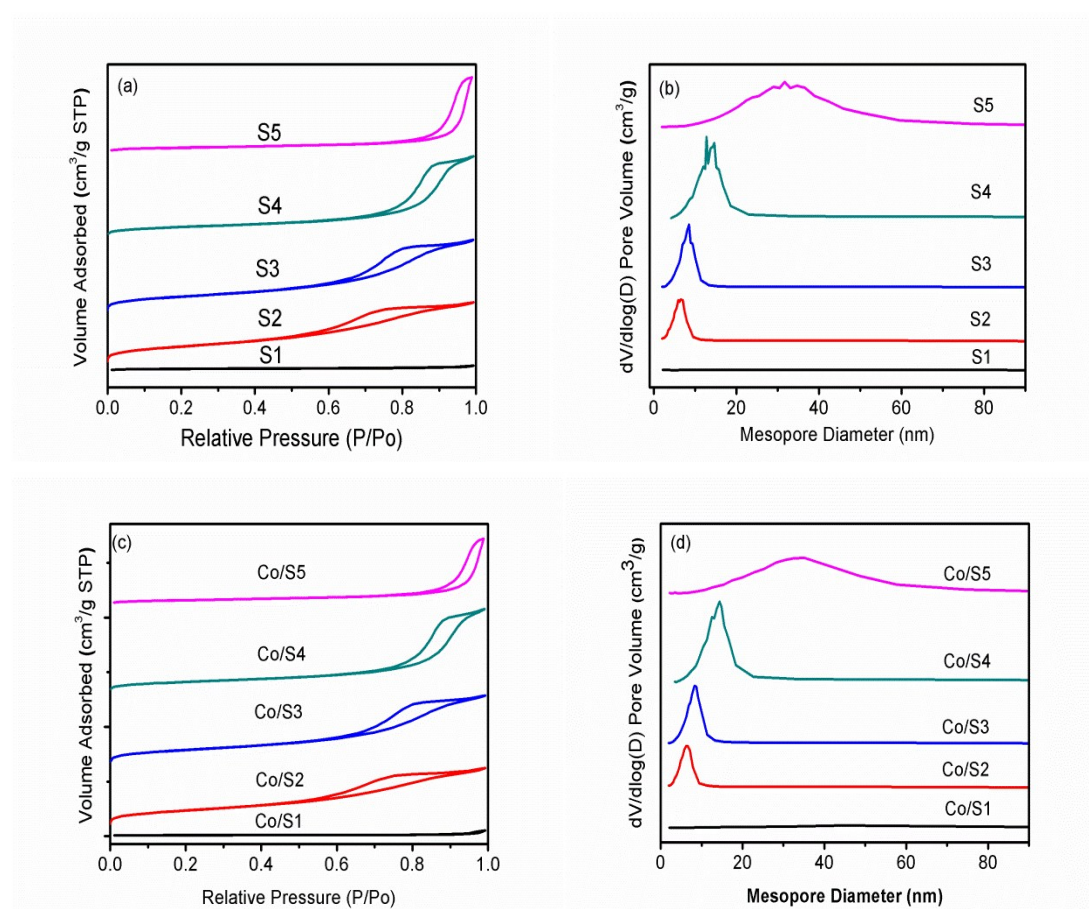


Fig. S1 N₂-sorption isotherms and pore size distribution of supports and corresponding catalysts

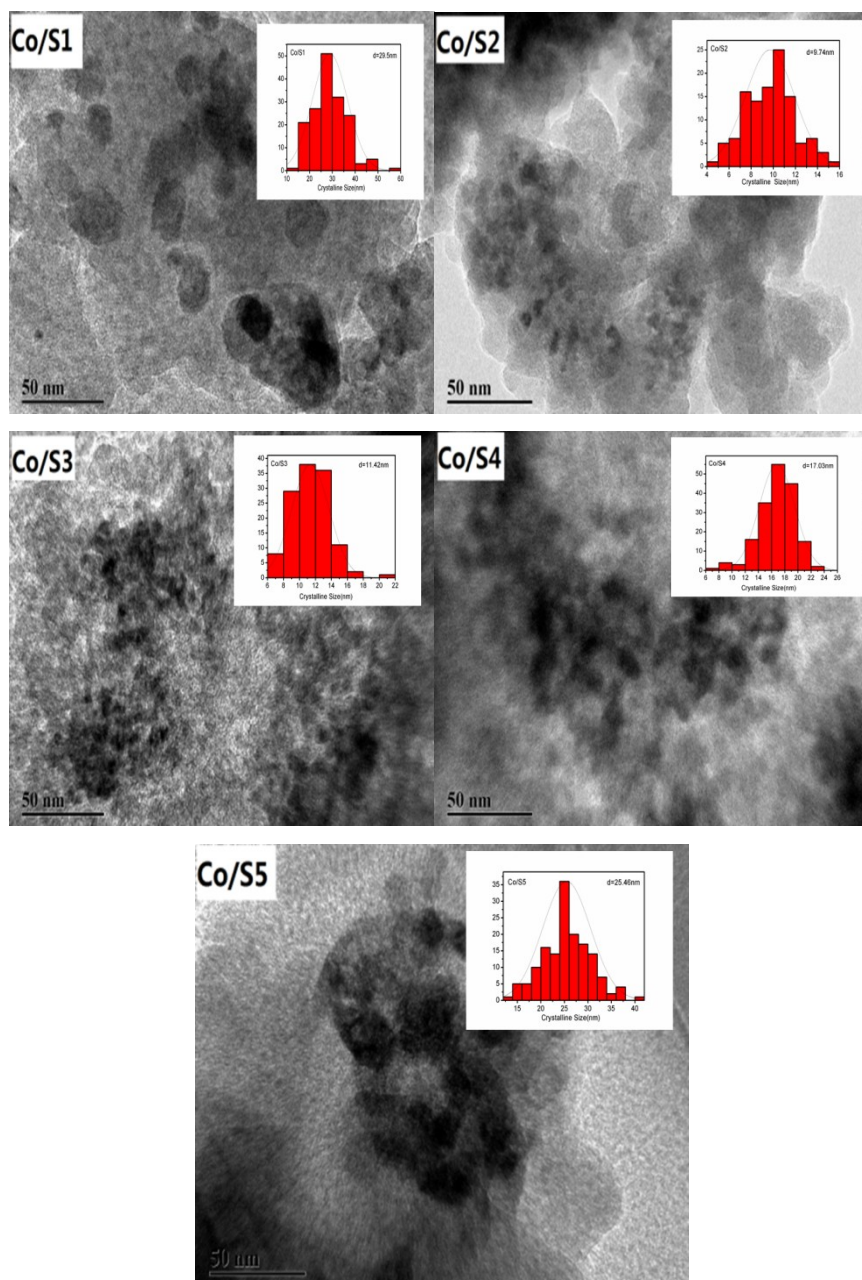
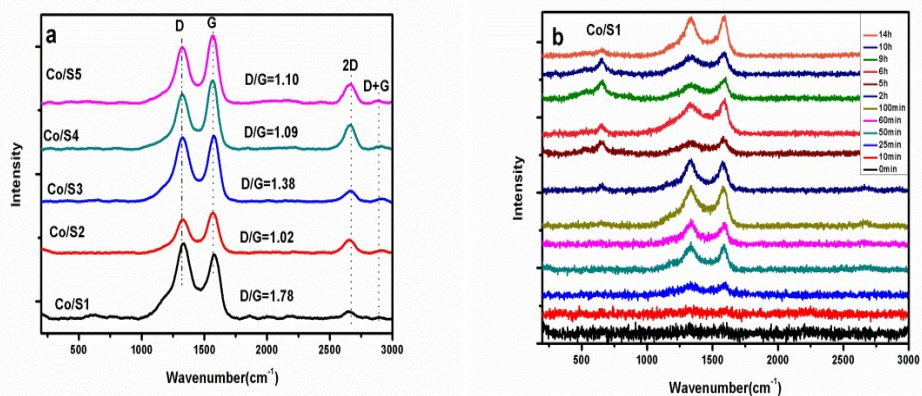


Fig. S2 TEM images and the crystal size of the prepared catalysts



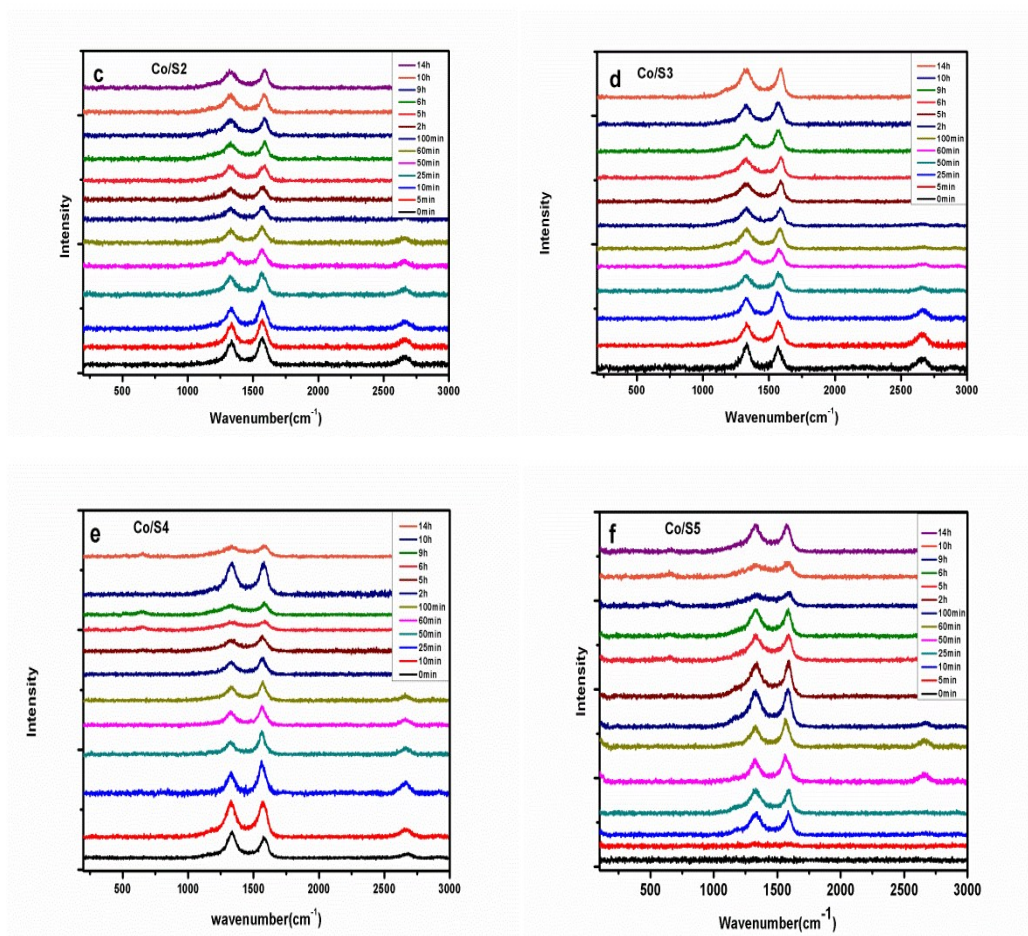


Fig. S3 Operando Raman spectroscopy of the catalysts during FTS at atmospheric pressure and 210 °C (a) Raman spectra of the catalysts during the first 60 min of FTS reaction (b-f) The Raman spectra as a function of time during the FTS reaction