Supporting Information

An examination of dimethyl oxalate hydrogenation to methyl glycolate on silica supported Ni-Co alloy catalysts

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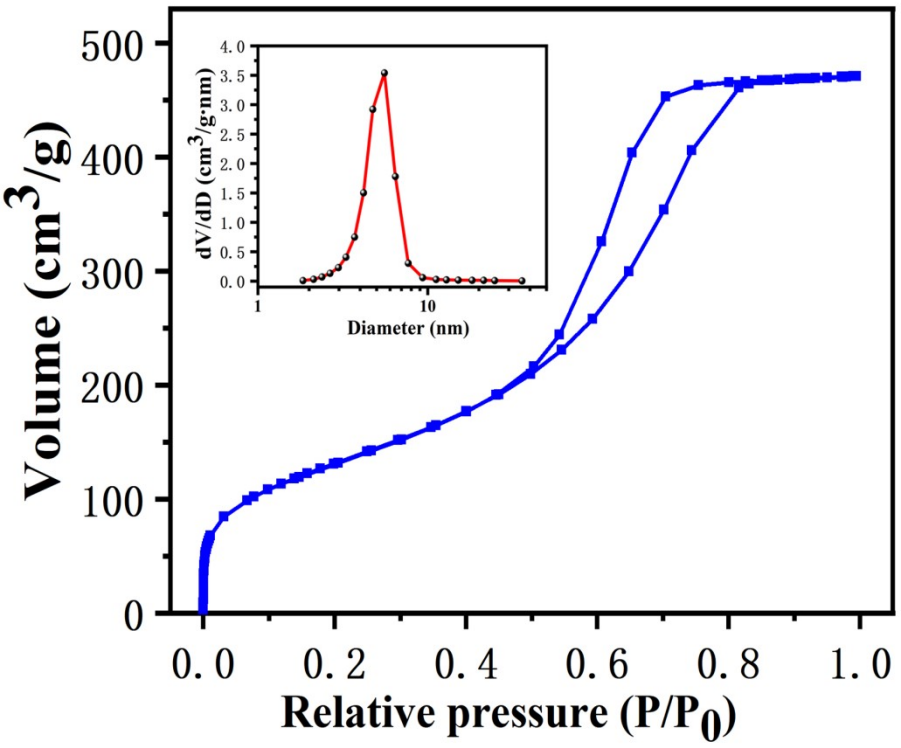

Fig. S1 Low-temperature N_2 adsorption desorption isotherms and pore size distributions of SiO_2 carrier.

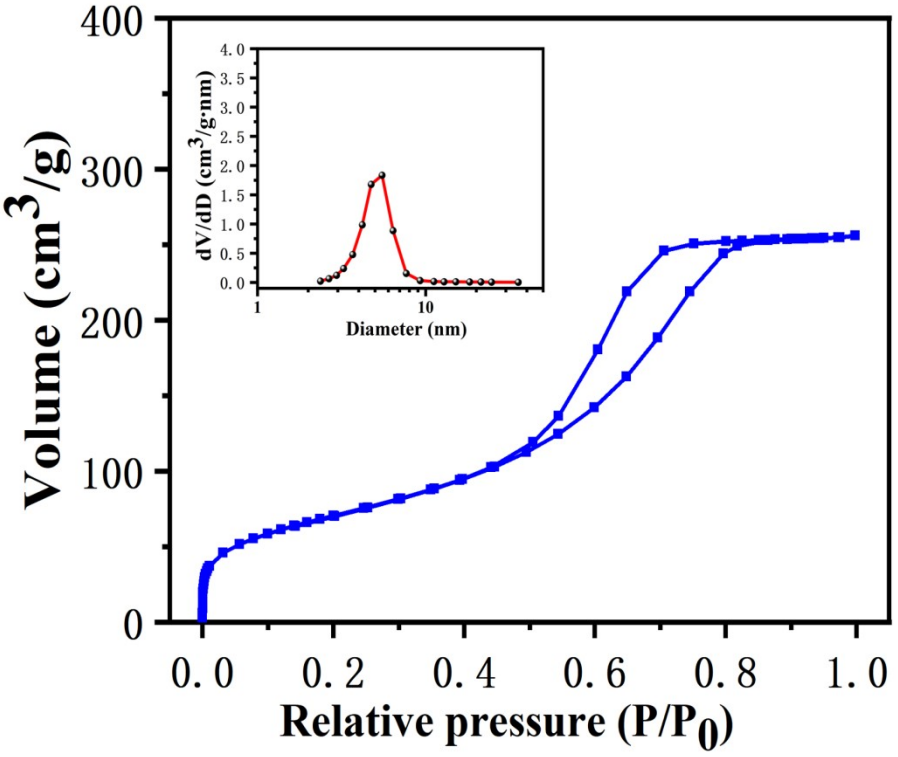

Fig. S2 Low-temperature N_2 adsorption desorption isotherms and pore size distributions of 15Ni/SiO_2 catalysts.

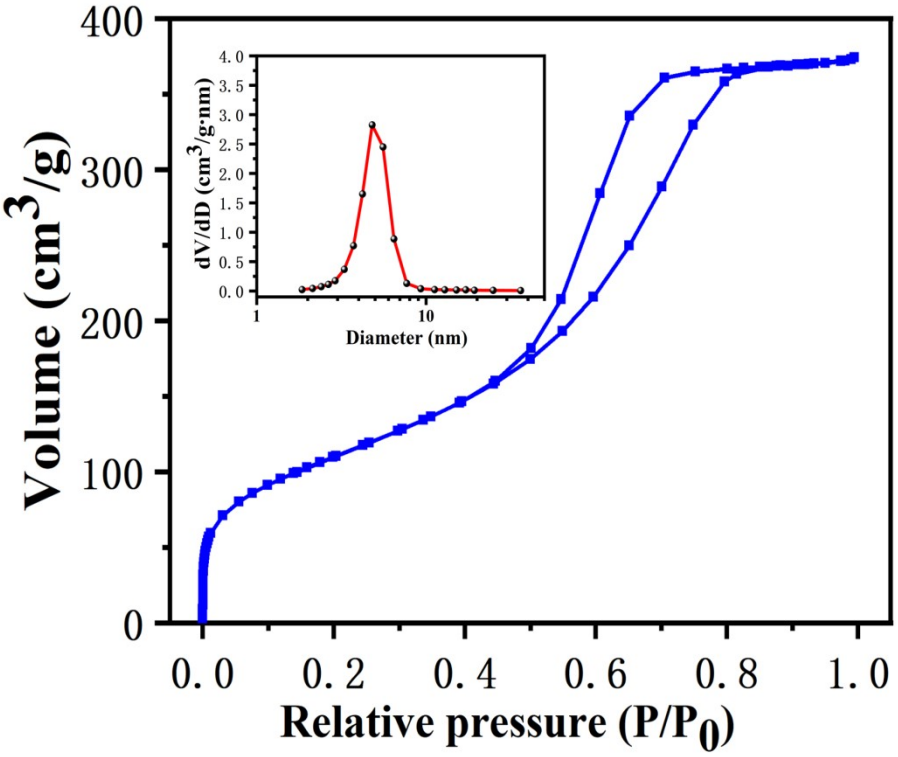

Fig. S3 Low-temperature N_2 adsorption desorption isotherms and pore size distributions of 15Ni-3Co/SiO_2 catalysts.

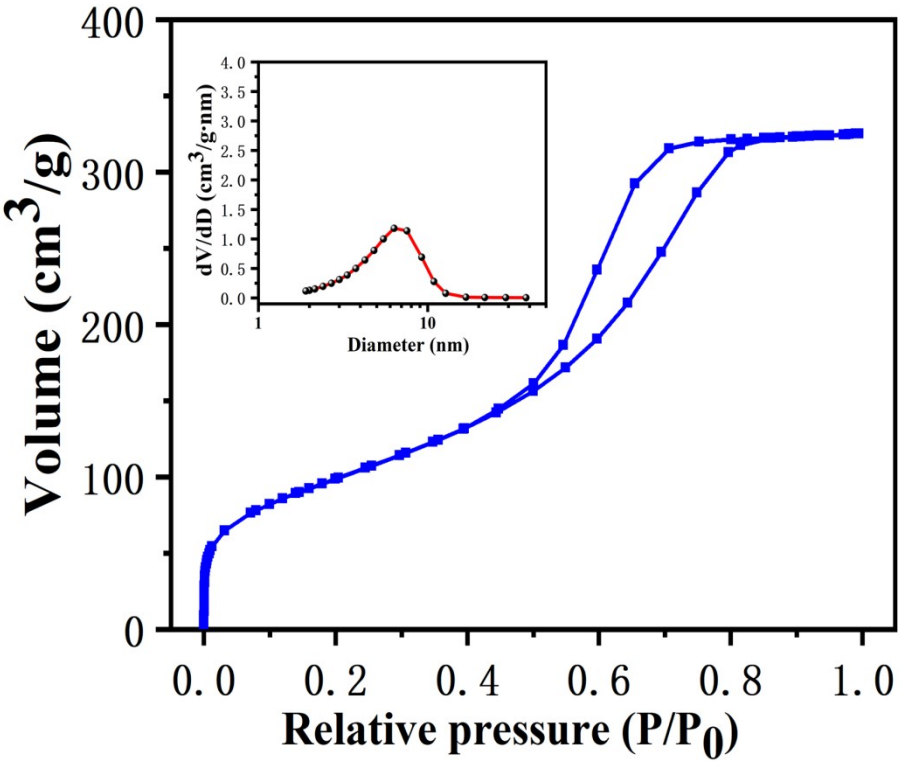

Fig. S4 Low-temperature N_2 adsorption desorption isotherms and pore size distributions of 15Ni-10Co/SiO_2 catalysts.

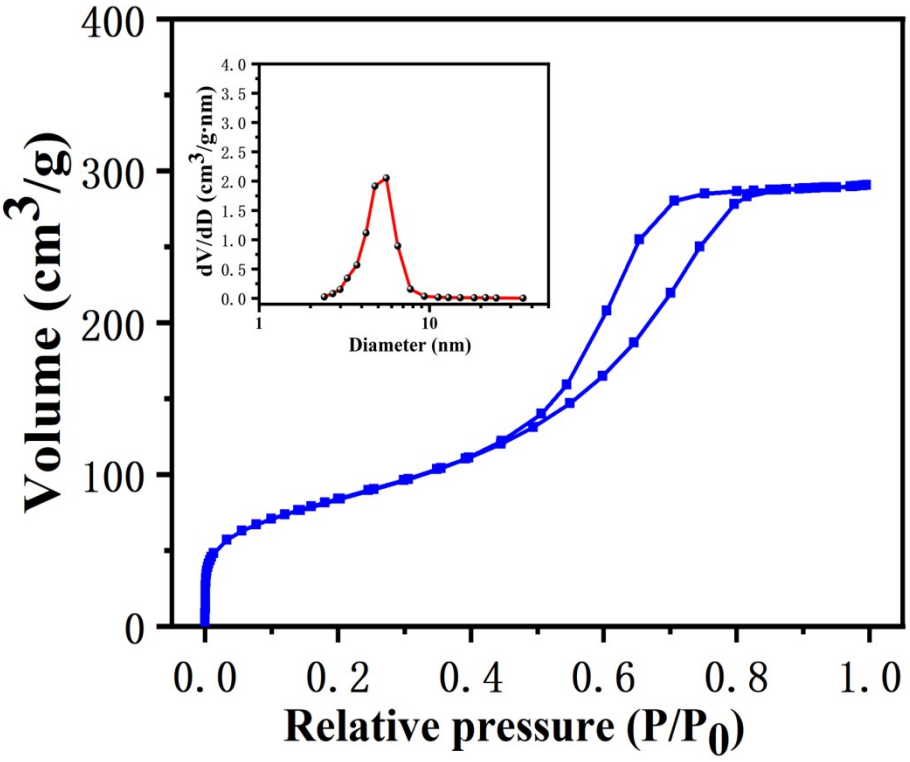

Fig. S5 Low-temperature N_2 adsorption desorption isotherms and pore size distributions of 15Ni-15Co/SiO_2 catalysts.

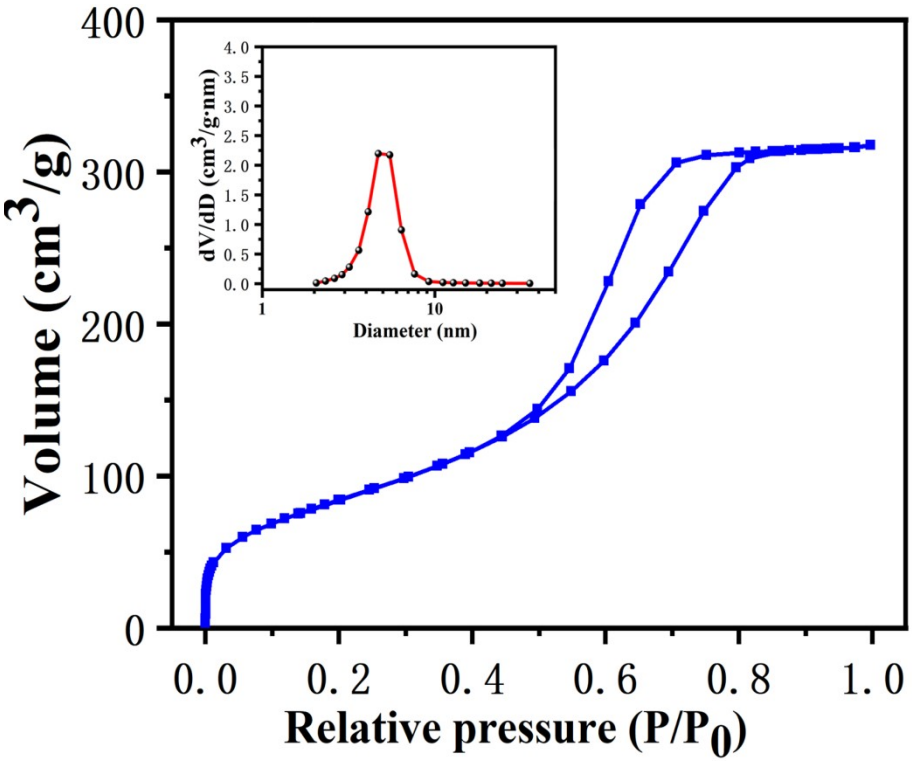

Fig. S6 Low-temperature N_2 adsorption desorption isotherms and pore size distributions of 15Co/SiO_2 catalysts.

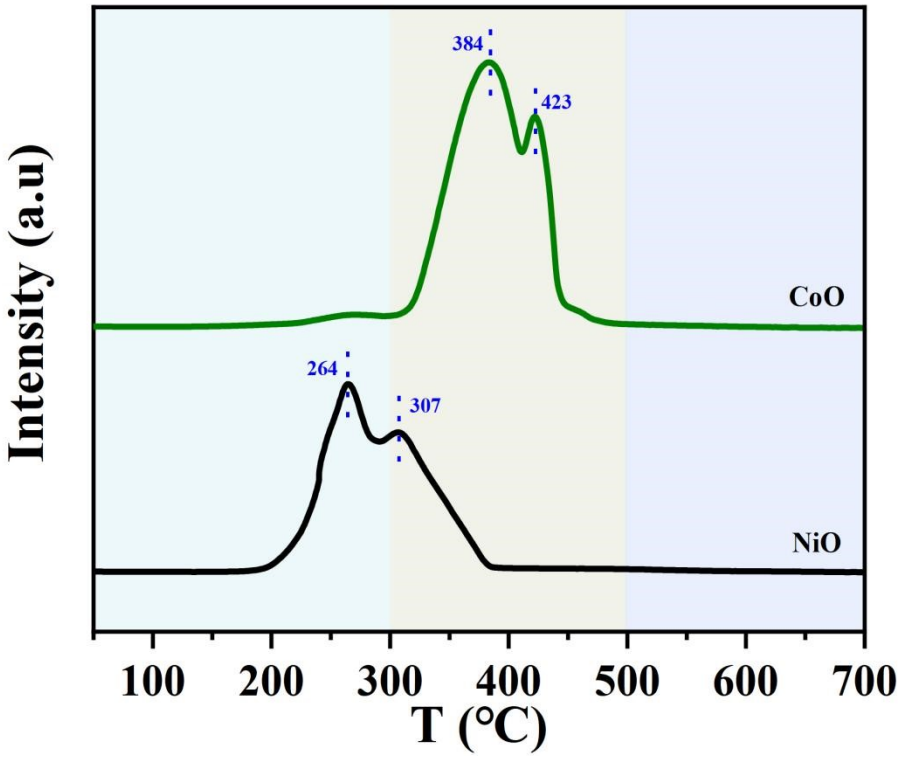

Fig. S7 H_2-TPR patterns of NiO and CoO.

Table S1. Acid site distribution on various catalysts

Catalyst	Weak acid sites	Medium and Strong acid sites	Total acid sites
	umol/g		
$15Ni/SiO_2$	5.9	1.9	7.7
$15Ni\text{-}3Co/SiO_2$	10.8	4.0	14.8
$15Ni\text{-}10Co/SiO_2$	6.6	2.6	9.2
$15Ni\text{-}15Co/SiO_2$	11.9	3.3	15.2
$15Co/SiO_2$	12.1	3.0	15.0
SiO_2	3.0	1.9	4.9