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Comparative studies in redox behaviors of Pt-Co/SiO_2 and Au-Co/SiO_2 catalysts and their activities in CO oxidation

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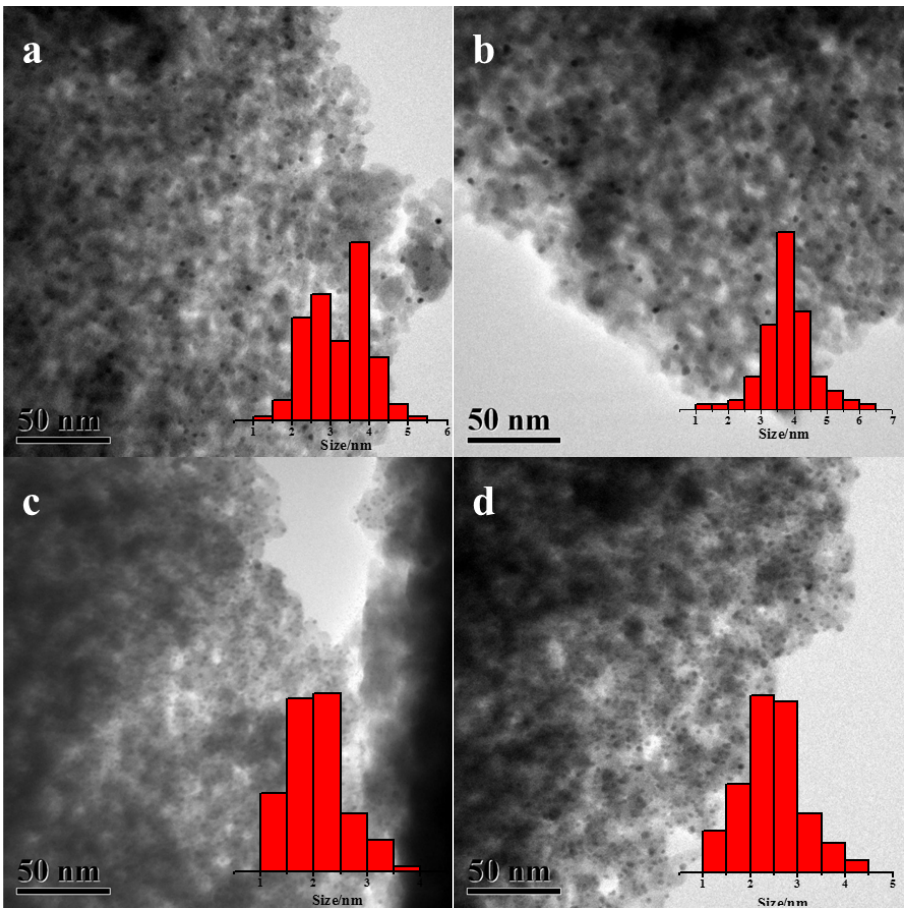
Sample	Nominal loading of NM (%)	Nominal loading of TM (%)	Actrual loading of NM (%)	Actrual loading of TM (%)	Atomic Ratio of NM/TM
Au/SiO_2	4	--	4.6	--	--
Pt/SiO_2	4	--	4.5	--	--
$AuCo/SiO_2$	4	1.2	4.6	1.3	1.09/1
$PtCo/SiO_2$	4	1.2	4.5	1.3	1.07/1
Co/SiO_2	--	4	--	3.7	--

Table S1 The metal loading and atomic composition of Au-Co/SiO_2 and Pt-Co/SiO_2 catalysts



Fugure S1 TEM images of a) as-prepared Pt/SiO_2; b) as-prepared $PtCo/SiO_2$; c) as-prepared Au/SiO_2;d) as-prepared $Au\text{-}Co/SiO_2$.The size distributions of the NPs are shown in the inset graphs.

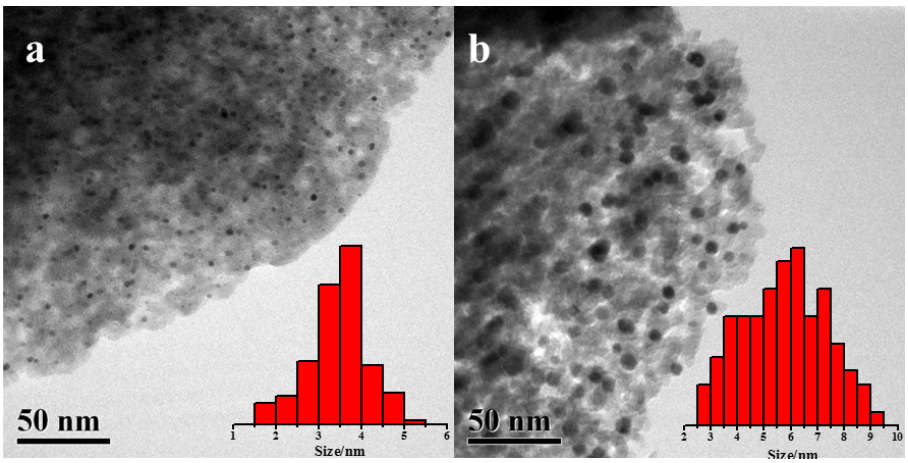


Figure S2 TEM images of a) Pt/SiO_2 reduced at 600 °C; b) Au/SiO_2 reduced at 600 °C. The size distributions of the NPs are shown in the inset graphs.

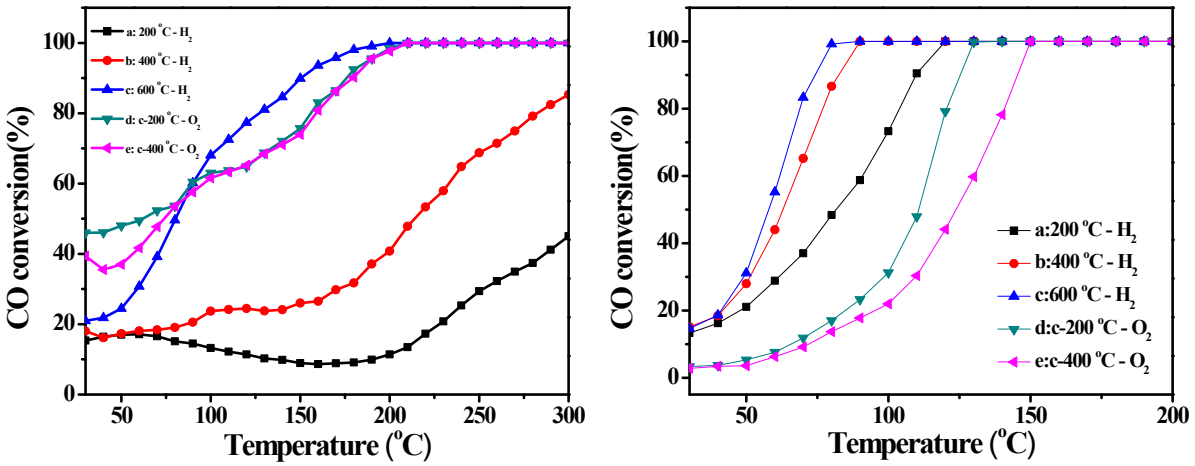


Figure S3 CO conversion light-off curve over the the as-calcined Pt-Co/SiO_2 (A) and Au-Co/SiO_2 (B) samples with different pretreatments. (Gas composotion: 1% CO, 0.5% O_2, He balance; GHSV: 75000 $mL.g^{-1}.h^{-1}$.)

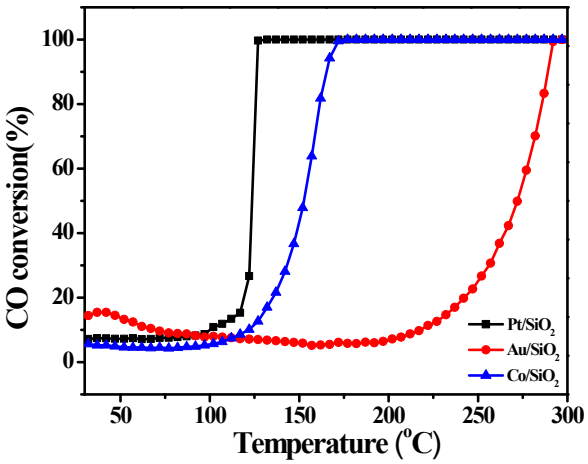


Figure S4 CO conversion light-off curve over the pure Pt/SiO_2, Au/SiO_2 and Co/SiO_2 catalysts reduced at 600 °C.(Gas composition: 1% CO, 20% O_2, He balance; GHSV: 75000 $mL.g^{-1}.h^{-1}$.)