

Supporting Information

Mg-Al Hydrotalcite Supported Pd Catalyst for Low-temperature CO Oxidation: Effect of Pdⁿ⁺ Species and Surface Hydroxyl Groups

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Figure S1

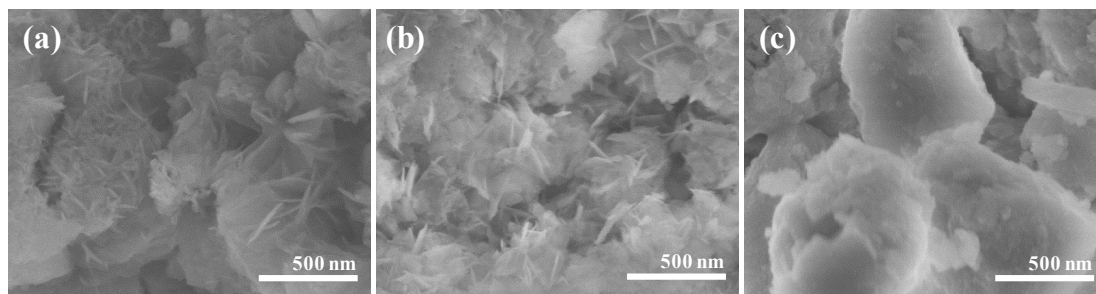


Figure S1 SEM images of the supported Pd catalysts: (a) Pd/MgAl-HT, (b) Pd/Mg(OH)₂, and (c) Pd/Al(OH)₃.

Figure S2

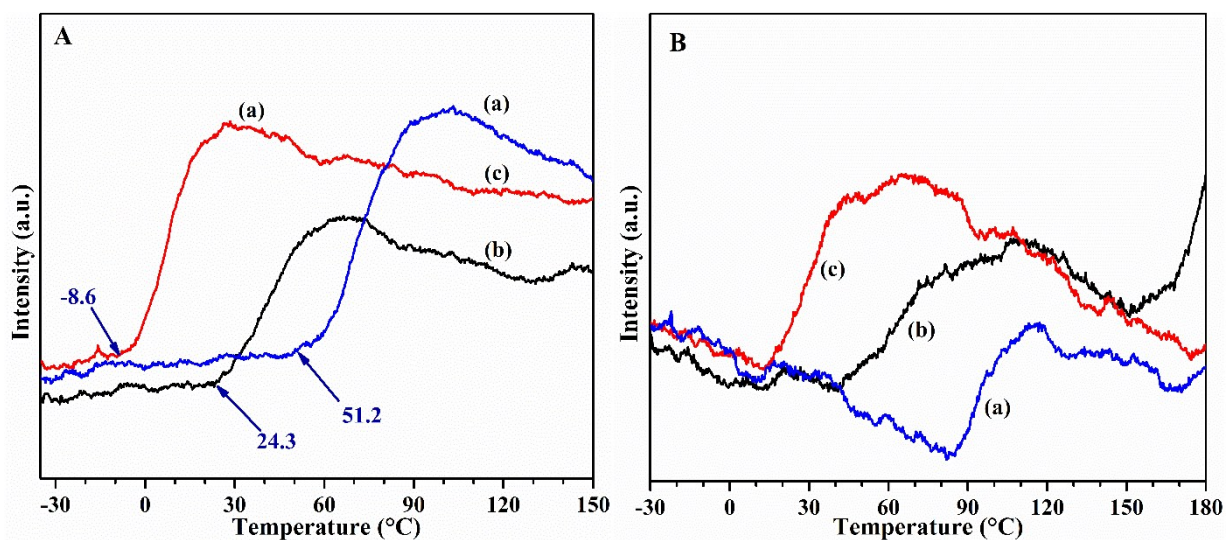


Figure S2 (A) O₂-TPO profiles after H₂-TPR measurement and (B) H₂-TPR profiles after TPR-TPO experiment of the supported Pd catalysts: (a) Pd/MgAl-HT, (b) Pd/Mg(OH)₂, and (c) Pd/Al(OH)₃.

Figure S3

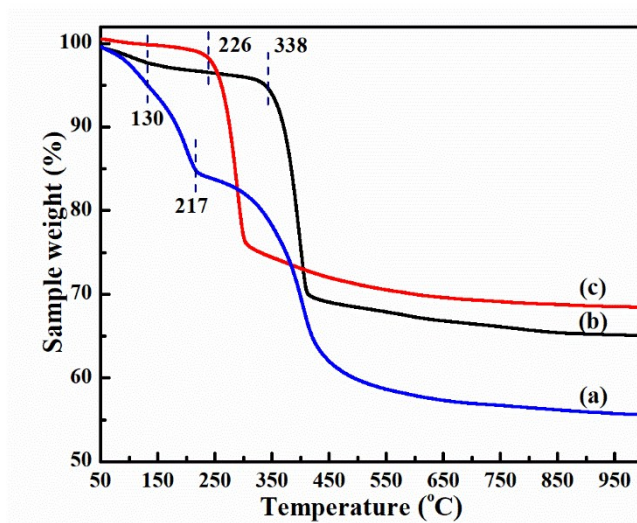


Figure S3 TG profiles of the supported Pd catalysts: (a) Pd/MgAl-HT, (b) Pd/Mg(OH)₂, and (c) Pd/Al(OH)₃.

Figure S4

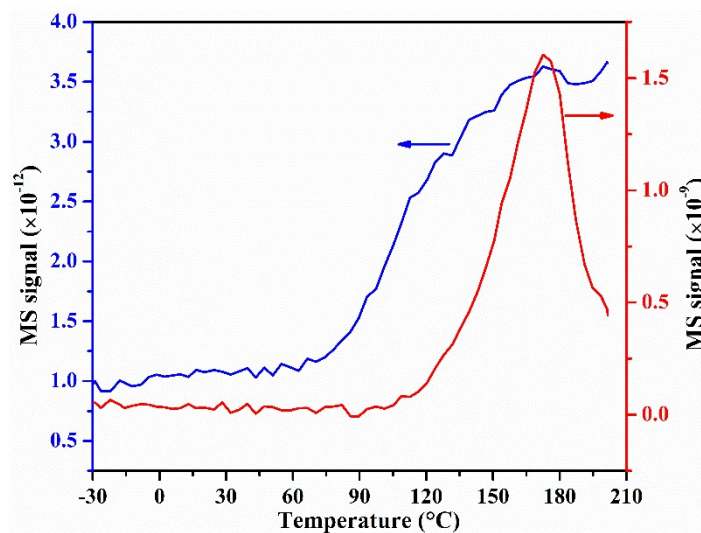


Figure S4 MS signals of Pd/MgAl-HT in the CO-TPR measurement.

Figure S5

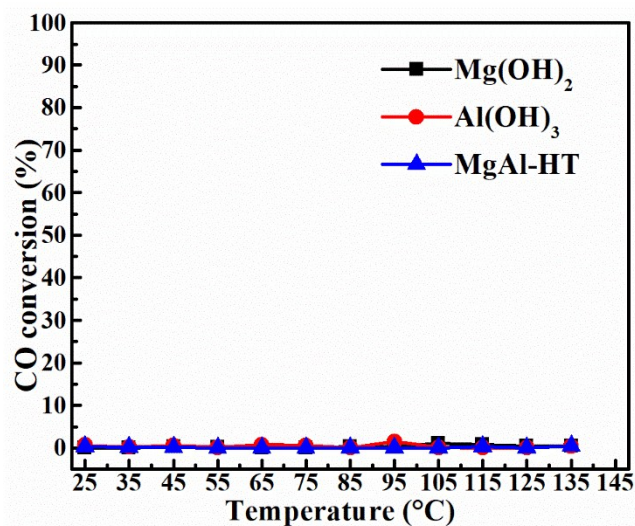


Figure S5 Catalytic performance of the MgAl-HT, Mg(OH)₂ and Al(OH)₃ supports for CO oxidation.

Figure S6

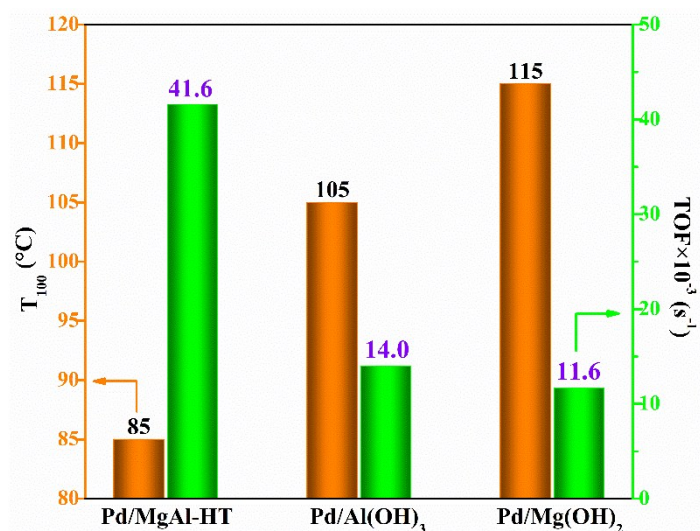


Figure S6 T₁₀₀ (Temperature for 100 % CO conversion) and TOF at 50°C of the MgAl-HT, Pd/Mg(OH)₂ and Pd/Al(OH)₃ catalysts for CO oxidation.