Supporting Information

Elucidating the Promotional Effects of Niobia on SnO_2 for CO Oxidation: Developing XRD Extrapolation Method to Measure the Lattice Capacity of Solid Solutions

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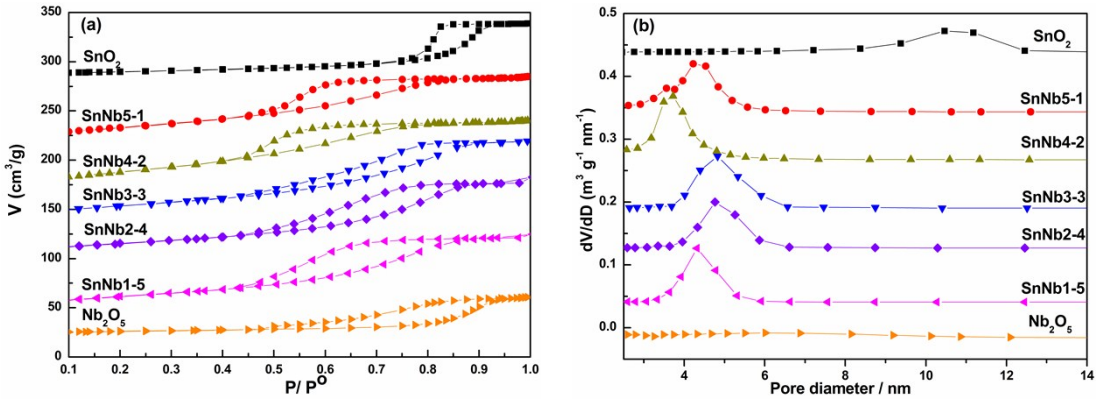

Fig. S1 N_2 Adsorption-desorption measurements of the catalysts with different Sn/Nb molar ratios. (a) isotherms, (b) pore diameter distribution.

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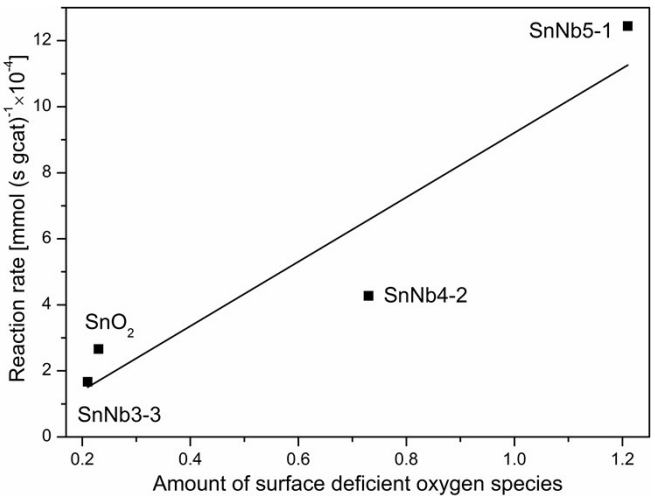

Fig. S2 The relationship between the differential rates and the surface deficient oxygen amount.

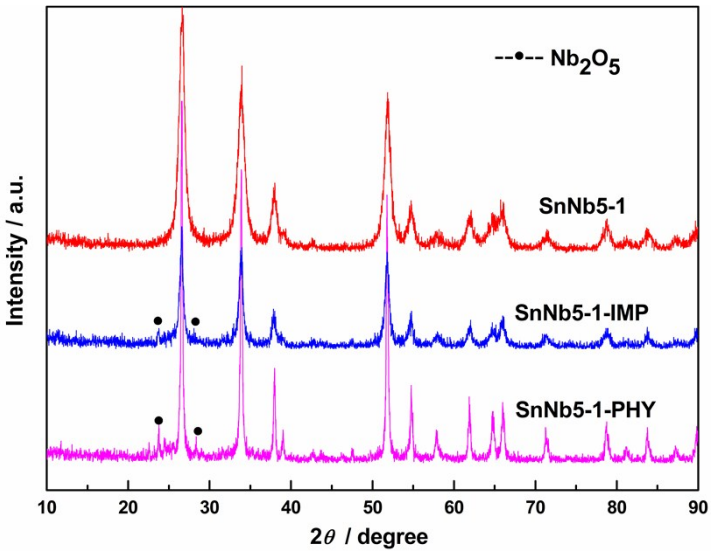

Fig. S3 XRD Patterns of the catalysts with a Sn/Nb molar ratio of 5/1 and prepared by different methods.

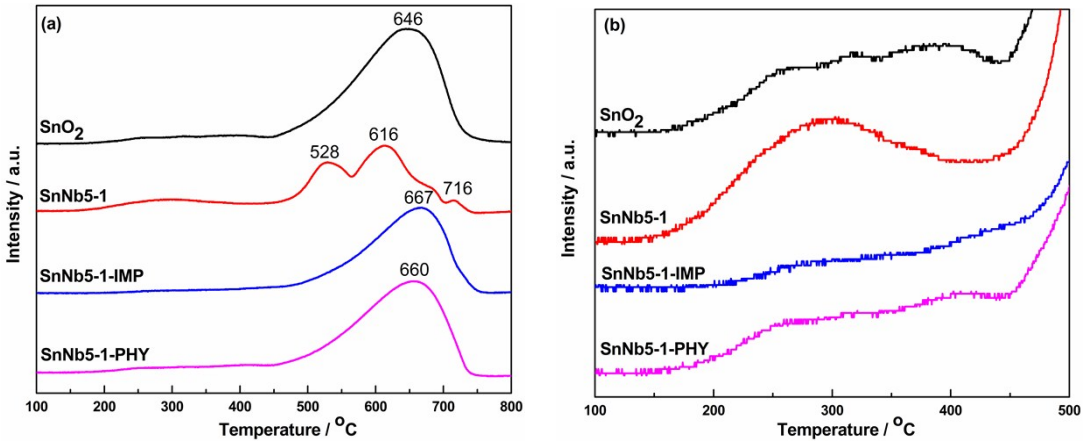

Fig. S4 H_2-TPR profiles of the catalysts with a Sn/Nb molar ratio of 5/1 and prepared by different methods.

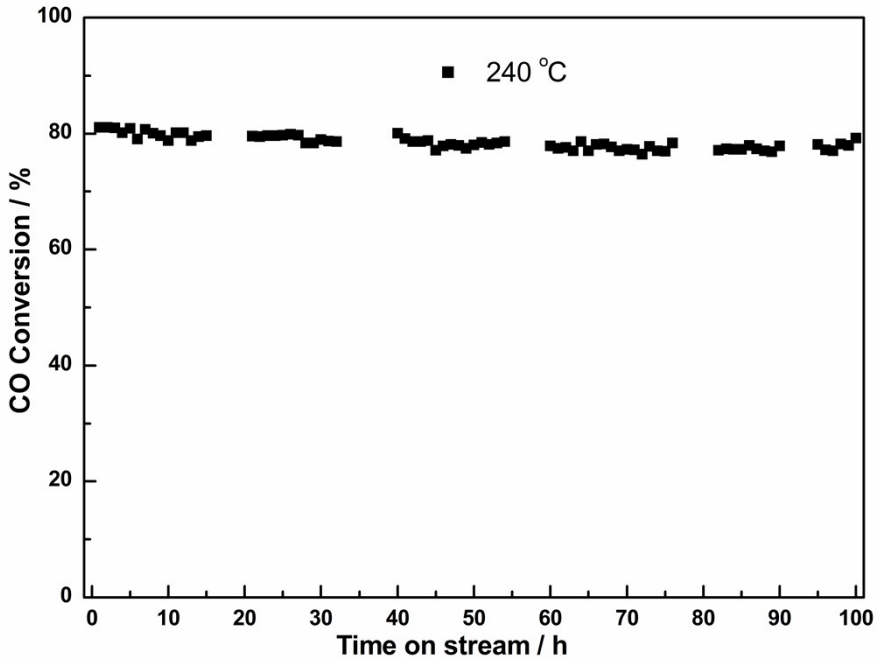

Fig. S5. Long-term stability test of SnNb5-1 catalyst prepared by co-precipitation method.

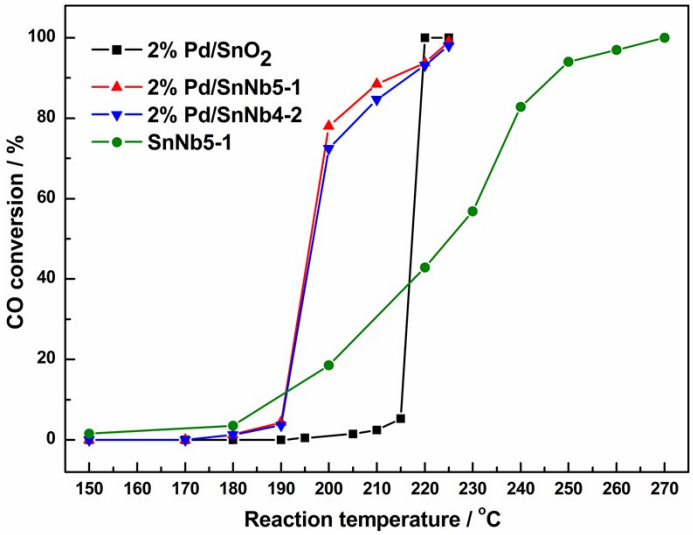

Fig. S6. CO oxidation over 2% Pd/SnO_2, 2% Pd/ SnNb5-1, 2% Pd/ SnNb4-2 and SnNb5-1.