

# Preparation of Novel Mesoporous LaFeO<sub>3</sub>-SBA-15-CTA Support for Syngas Formation of Dry Reforming

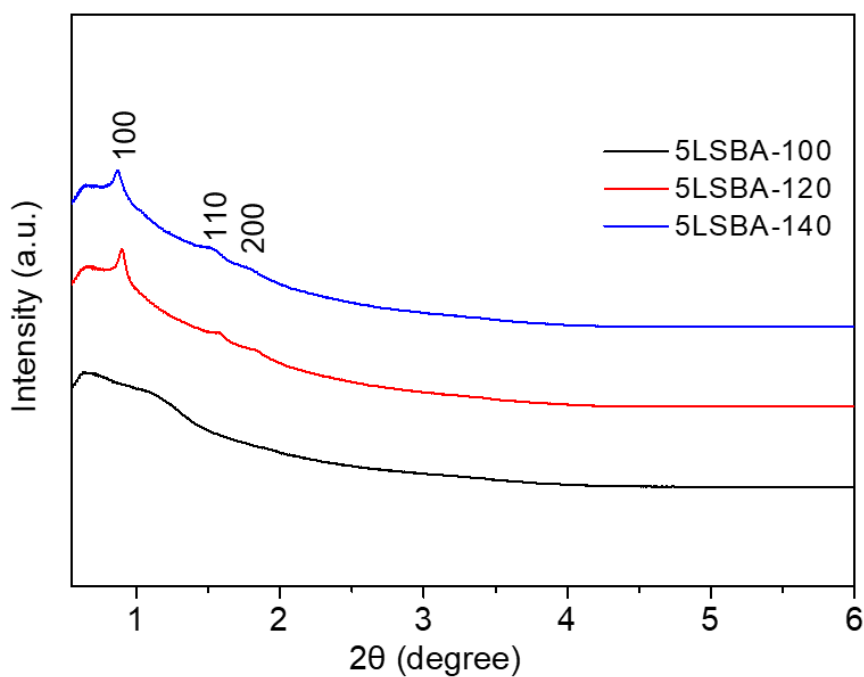
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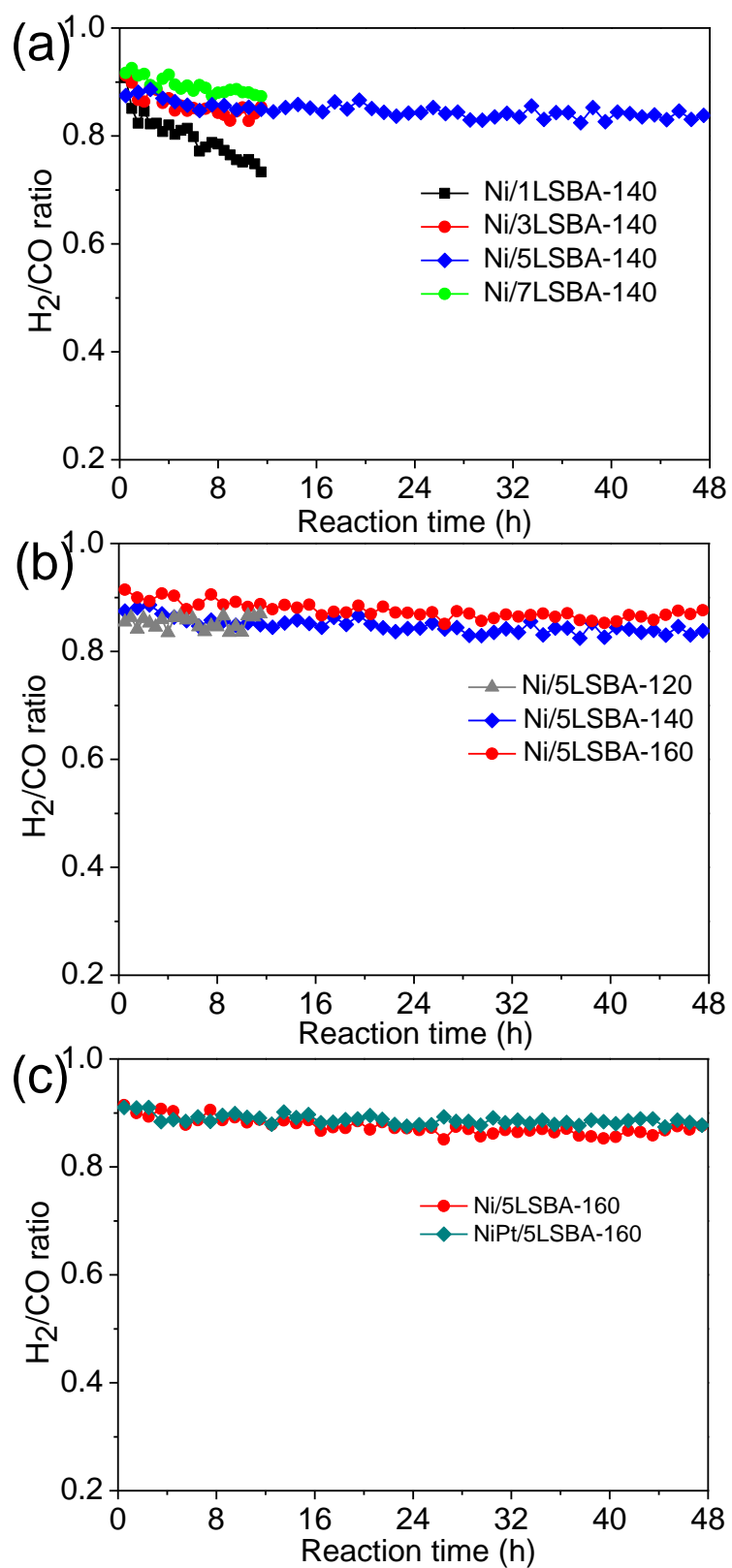
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**Figure S1.** Small-angle XRD patterns of the LaFeO<sub>3</sub>-SBA-15-CTA supports.



**Figure S2.** The enhanced catalytic performance on Ni(Pt)/yLSBA-T catalysts by adjusting the  $LaFeO_3$  loading (a) and hydrothermal temperature (b) as well as the Pt modification (c). (GHSV=20,000  $mL \cdot g_{cat}^{-1} \cdot h^{-1}$ ).

**Table S1.** Preparation conditions and grain sizes of the synthesized catalysts.

<b>Sample name.</b>	<b>LaFeO<sub>3</sub> content (wt.%)</b>	<b>Hydrothermal temperature (°C)</b>	<b>Particle size of NiO (nm)</b>
NiO/3LSBA-140	30	140	18.2
NiO/5LSBA-140	50	140	14.3
NiO/7LSBA-140	70	140	12.8
NiO/5LSBA-120	50	120	15.3
NiO/5LSBA-160	50	160	13.2
NiOPtO <sub>x</sub> /5LSBA-160	50	160	13.0