

## Supporting Information

### Effects of preparation method and $\text{Sm}_2\text{O}_3$ promoter on CO methanation of mesoporous $\text{NiO-Sm}_2\text{O}_3/\text{Al}_2\text{O}_3$ catalyst

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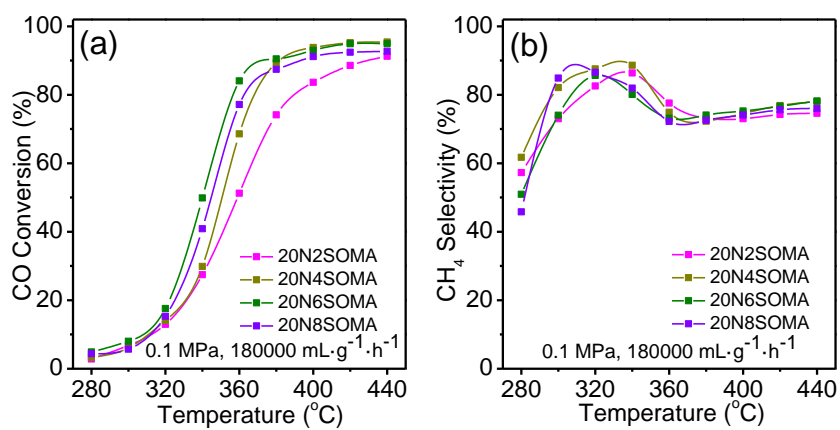
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**Fig. S1.** Catalytic properties of the catalysts at 0.1 MPa, 180000 mL g<sup>-1</sup> h<sup>-1</sup>: (a) CO conversion and (b) CH<sub>4</sub> selectivity.