

## 以类水滑石为前驱体的 Cu / ZnO / Al<sub>2</sub>O<sub>3</sub> 催化剂用于 CO<sub>x</sub> 加氢合成甲醇：CO 在反应混合物中的作用

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## Methanol Synthesis by CO<sub>x</sub> Hydrogenation over Cu/ZnO/Al<sub>2</sub>O<sub>3</sub> Catalyst via Hydrotalcite-like Precursors: The Role of CO in the Reactant Mixture

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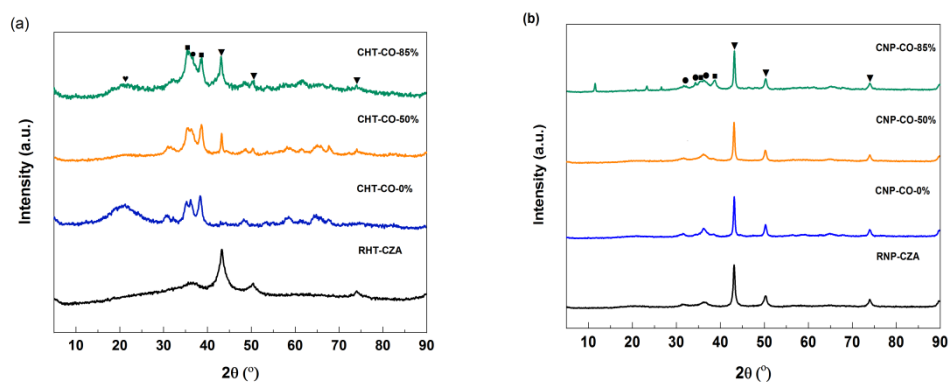
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**Table S1 Premix gas compositions.**

Sample	Volume fraction (%)				
	H/C	H <sub>2</sub>	CO <sub>2</sub>	CO	N <sub>2</sub>
Premix 1	3	72.5	24.5	0	3.0
Premix 2	3	72.5	18.4	6.1	3.0
Premix 3	3	72.5	12.3	12.2	3.0
Premix 4	3	72.5	7.4	17.1	3.0
Premix 5	3	72.5	3.7	20.8	3.0

**Fig. S1 XRD pattern of the two types Cu/ZnO/Al<sub>2</sub>O<sub>3</sub> catalyst after reaction in different CO component.**

(a) CHT-CZA (b) CNP-CZA catalysts. (■) CuO; (▼) Cu. (●) ZnO (♥) SiO<sub>2</sub>. Note: The intensity of metallic Cu peaks of spend CHT-CZA was much weaker and wider than that of CNP-CZA, which indicated there was a well-dispersion of metallic Cu on the former.