

Support Information

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3 Praseodymium Hydroxide Precursor Supported Gold: New 4 Strategy for Preparing a Stable and Active Catalyst for the 5 Water Gas Shift Reaction

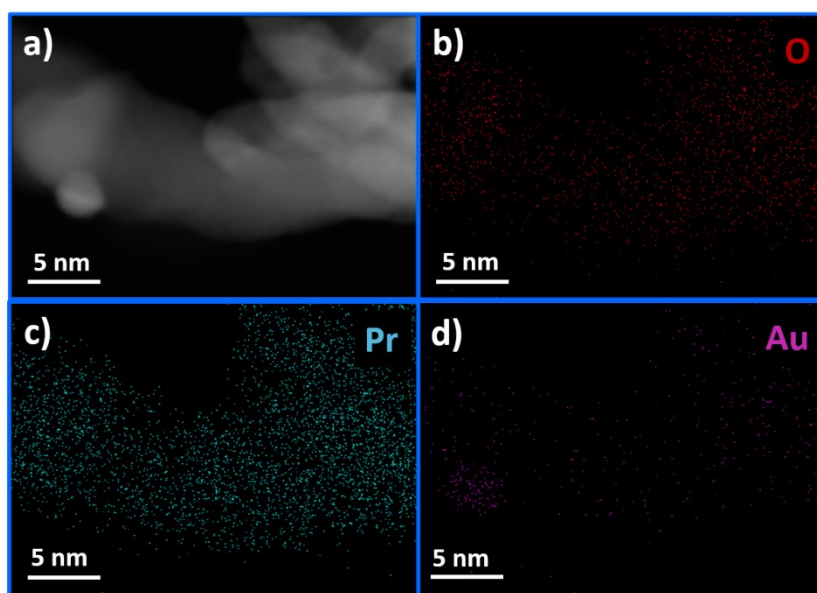
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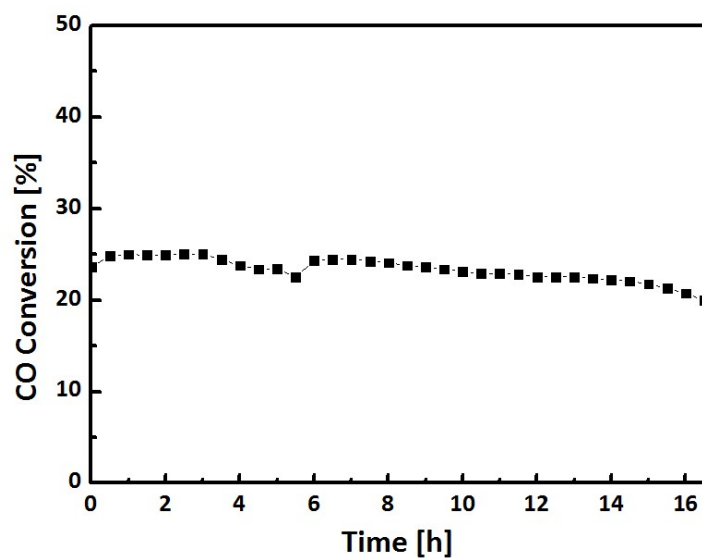


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16 Figure S1. (a) HAADF-STEM image of Au/PrO_x-M; (b, c, d) Elemental composition distributions
17 maps. O (in red), Pr (in blue), Au (in pink).

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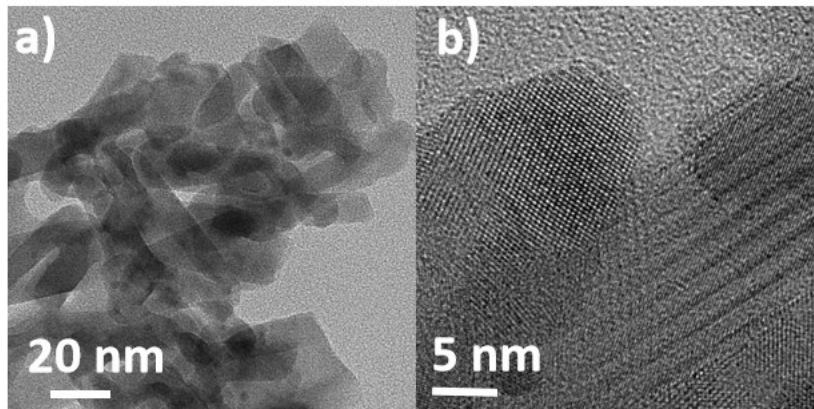
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21 Figure S2. WGS stability tests over $\text{Au/Pr(OH)}_x\text{-MDP}$ at 300°C (2 vol% CO + 10 vol% H_2O , N_2
22 balance, $m_{\text{catalyst}} = 50$ mg, total flow rate 45 ml/min).

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25 Figure S3. TEM and HRTEM micrographs of Au/Pr(OH)_x (a, b). Sample were used for WGS for more
26 than 15 h from 150°C to 400°C (feed-gas mixture: 2 vol% CO, 10 vol% H_2O , N_2 as carrier gas; total
27 gas flow 45 mL min^{-1}).

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