

## Supporting Information

Electrochemical oxidation of low concentration methane on Pt/Pt and Pt/CP  
under ambient conditions

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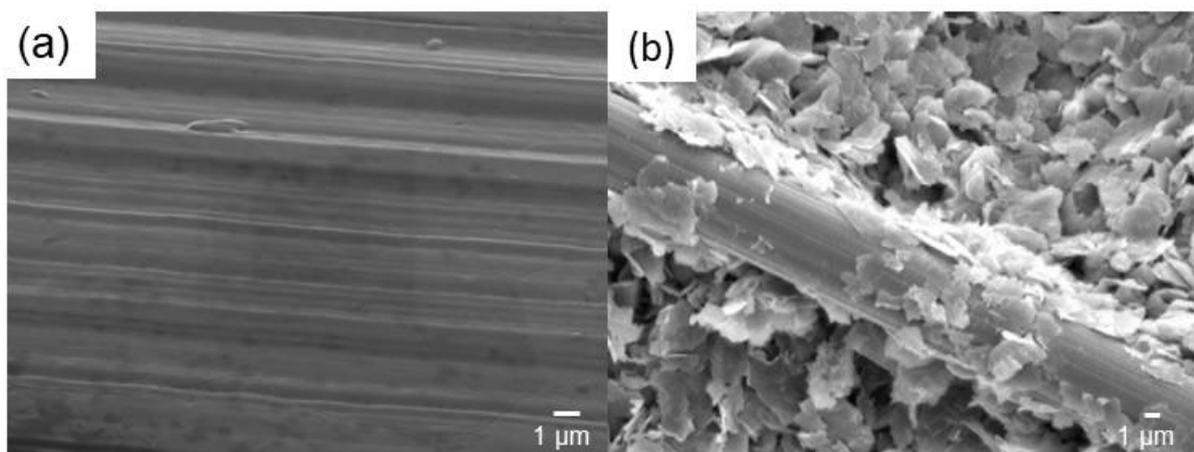
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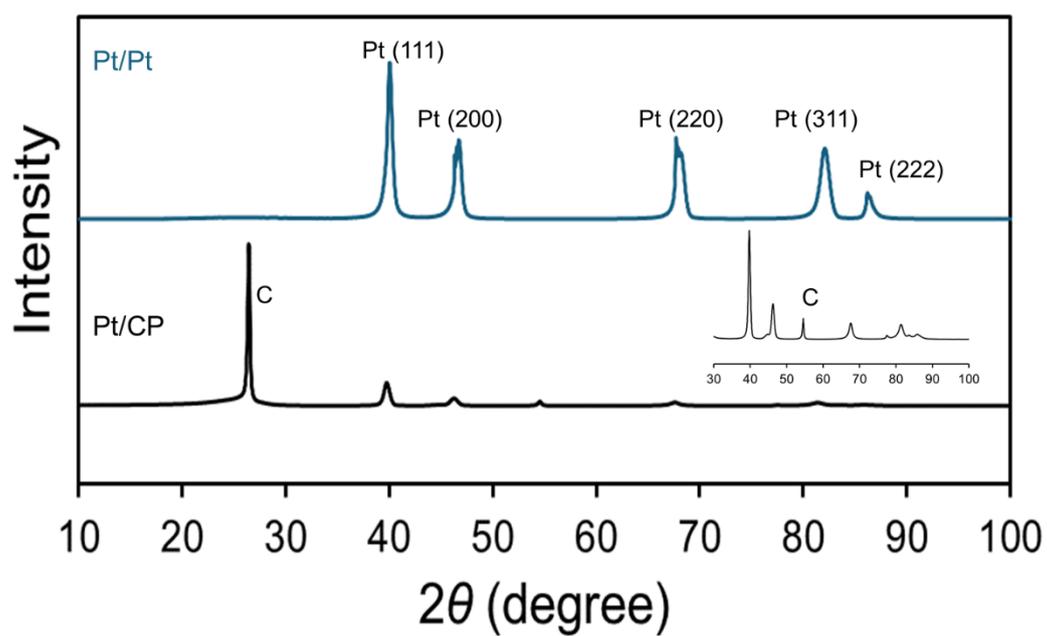
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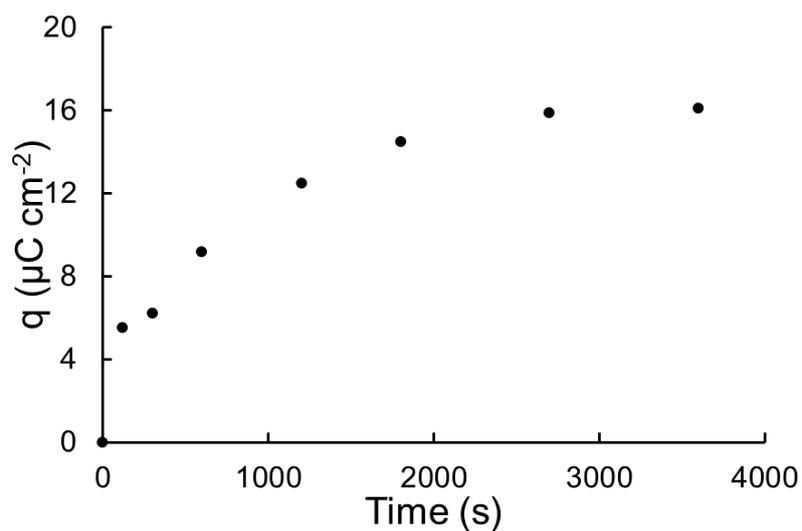
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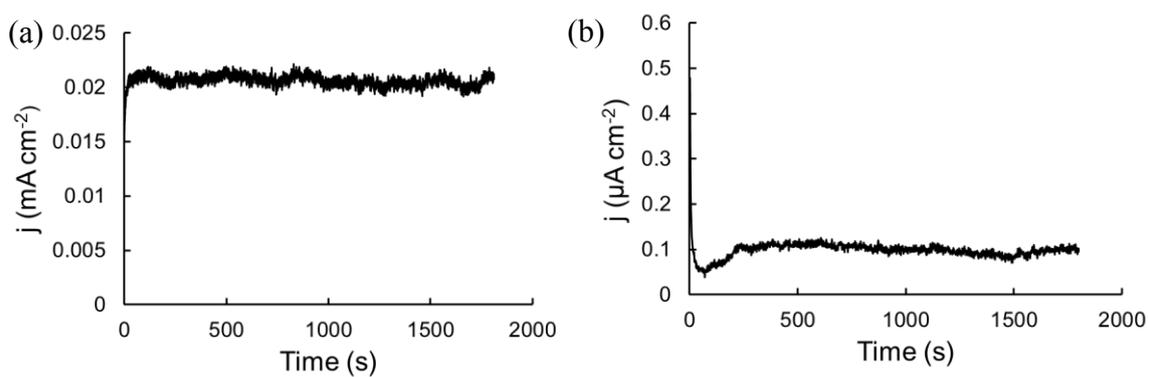
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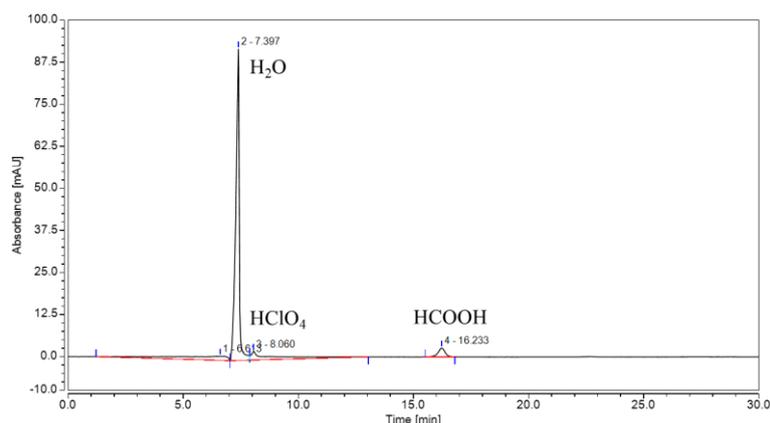
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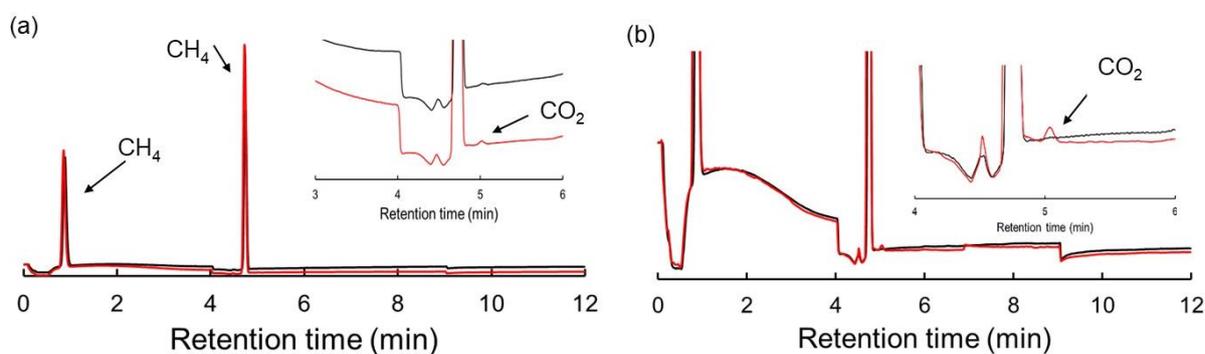
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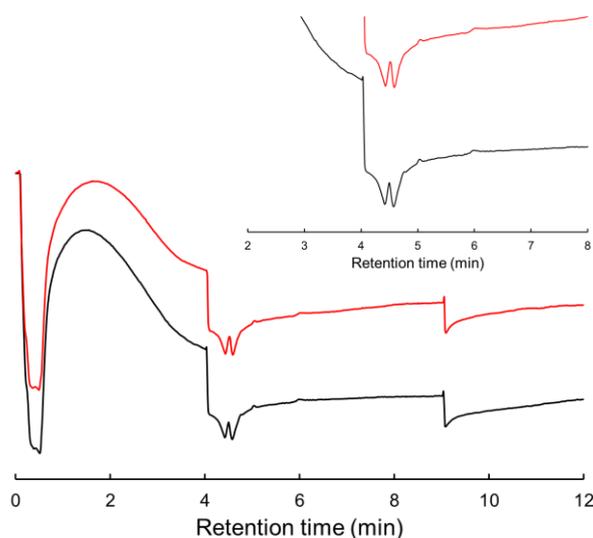
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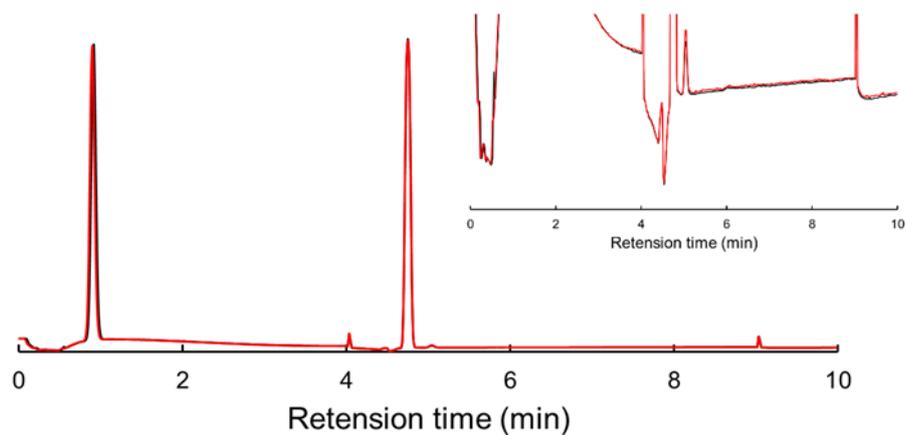
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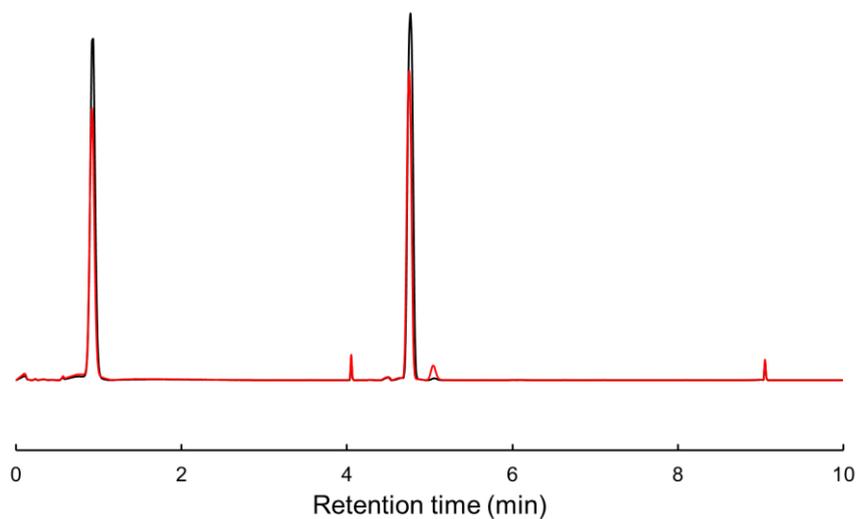
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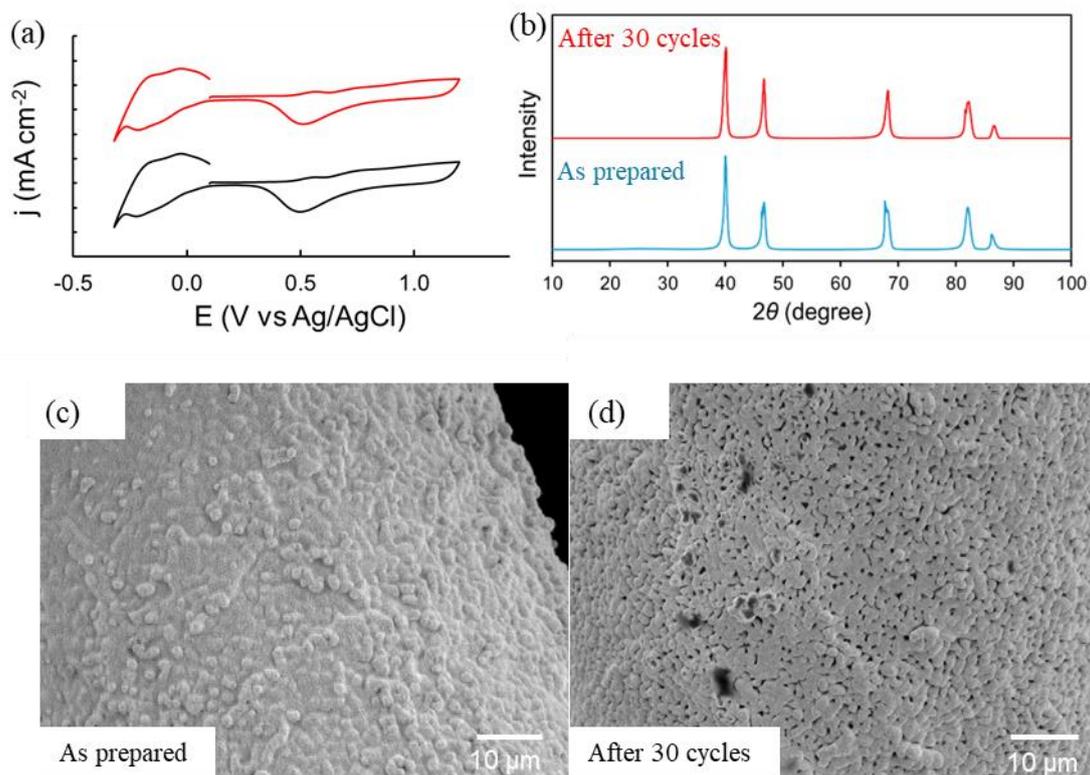
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**Figure S9.** GC results before CH<sub>4</sub> oxidation (black line) and after (red line) 30 cycles of CH<sub>4</sub> oxidation using 0.5% CH<sub>4</sub> in N<sub>2</sub> with  $E_{app} = 0.3$  V for 30 min CA and two CV scans during each cycle on Pt/CP.



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