

Electronic Supplementary Information for

Preparation of small-sized tungsten carbide nanorods for loading Pt with promoted electrocatalytic activity and stable antipoisoning performance

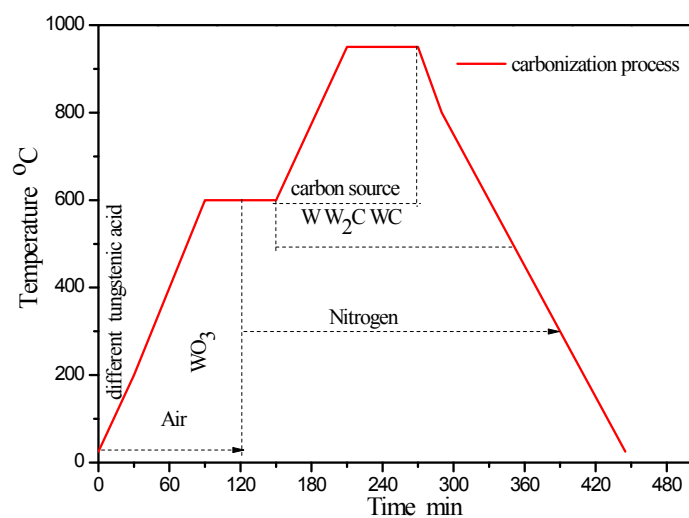
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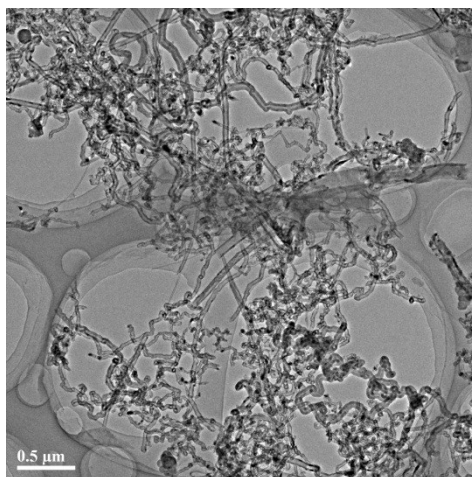
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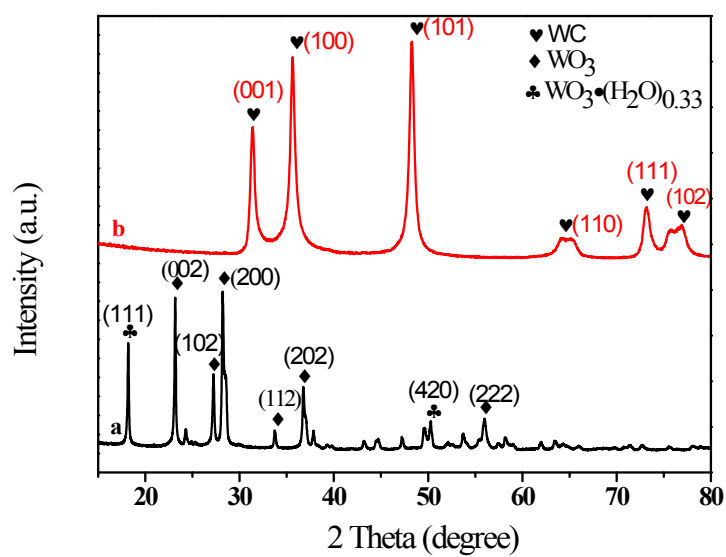
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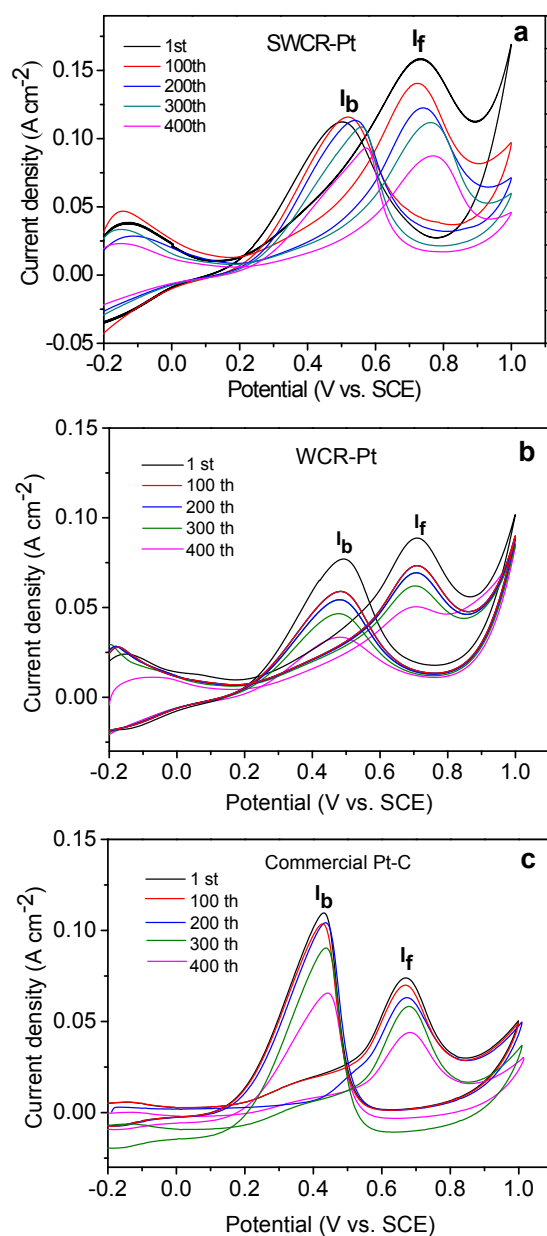
ESI Fig. S1 Carbonization process of the different tungstic acid nanorods



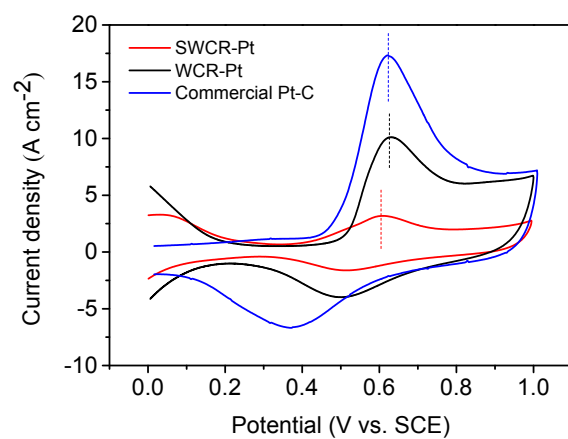
ESI Fig. S2 The multi-wall CNTs used in the study



ESI Fig. S3 XRD patterns of tungstic acid (a), after carbonized at 950 °C (b)



ESI Fig. S4 CV curves of the SWCR-Pt, WCR-Pt and commercial Pt-C catalyst after different cycles at a scanning rate of 100 mV s⁻¹ in 0.5 H₂SO₄/1.0 M CH₃OH solutions. Note: Pt loading on the working electrode was controlled to be 0.2 mg cm⁻²



ESI Fig. S5 CO stripping curves of SWCR-Pt, WCR-Pt and commercial Pt-C catalyst tested in 0.5 M H_2SO_4 solution at a scan rate of 100 mV s^{-1} at room temperature

ESI Table S1 The stability of the anti-poisoning properties of SWCR-Pt catalyst

Cycle	$I_f(\text{A cm}^{-2})$	$I_b(\text{A cm}^{-2})$	I_f/I_b
1st	0.16	0.11	1.45
100 th	0.14	0.12	1.16
200 th	0.12	0.11	1.09
300 th	0.11	0.10	1.1
400 th	0.089	0.09	0.98