

Electronic Supplementary Information

**Graphene Nanosheets-Tailored PtPd Concave Nanocubes with Enhanced
Electrocatalytic Activity and Durability for Methanol Oxidation**

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Supplementary Results

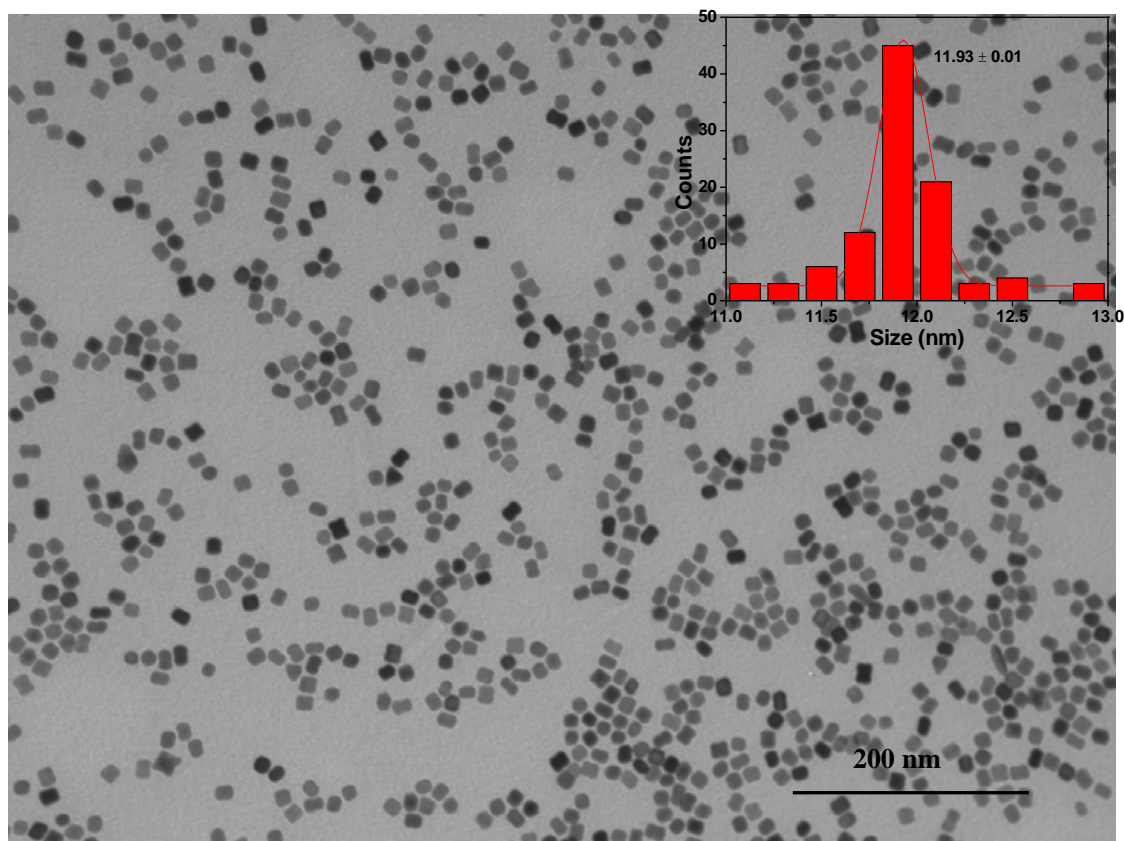


Fig. S1 Representative TEM image of the unsupported PtPd alloy nanocubes synthesized in the absence of GO. The inset shows the particle size distribution histogram.

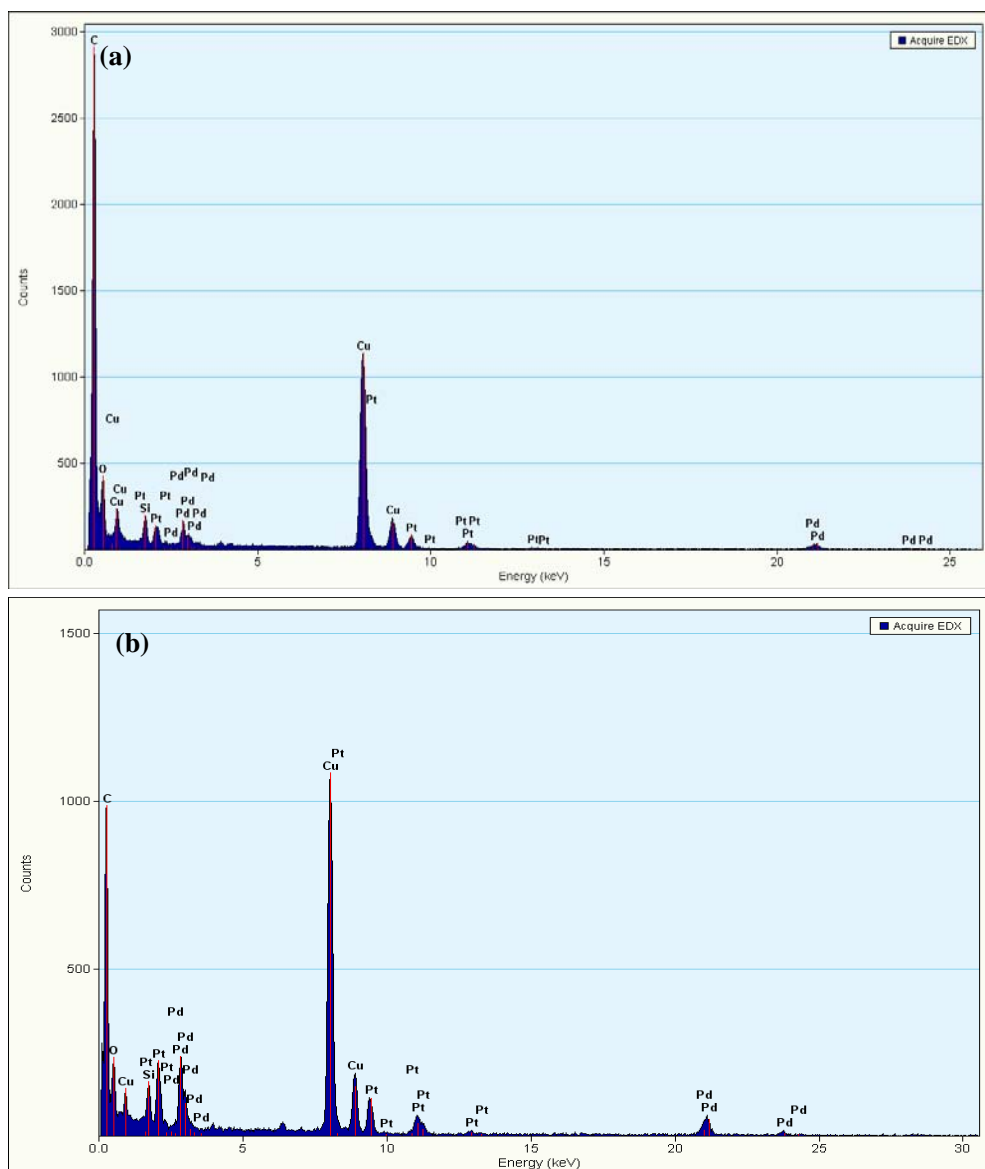


Fig. S2 Energy-dispersive X-ray analysis (EDX) of the C-PtPd/RGO (a) and unsupported PtPd alloy nanocubes (b). (The carbon and Cu peaks come from the carbon film and Cu grid, respectively, for TEM measurements).

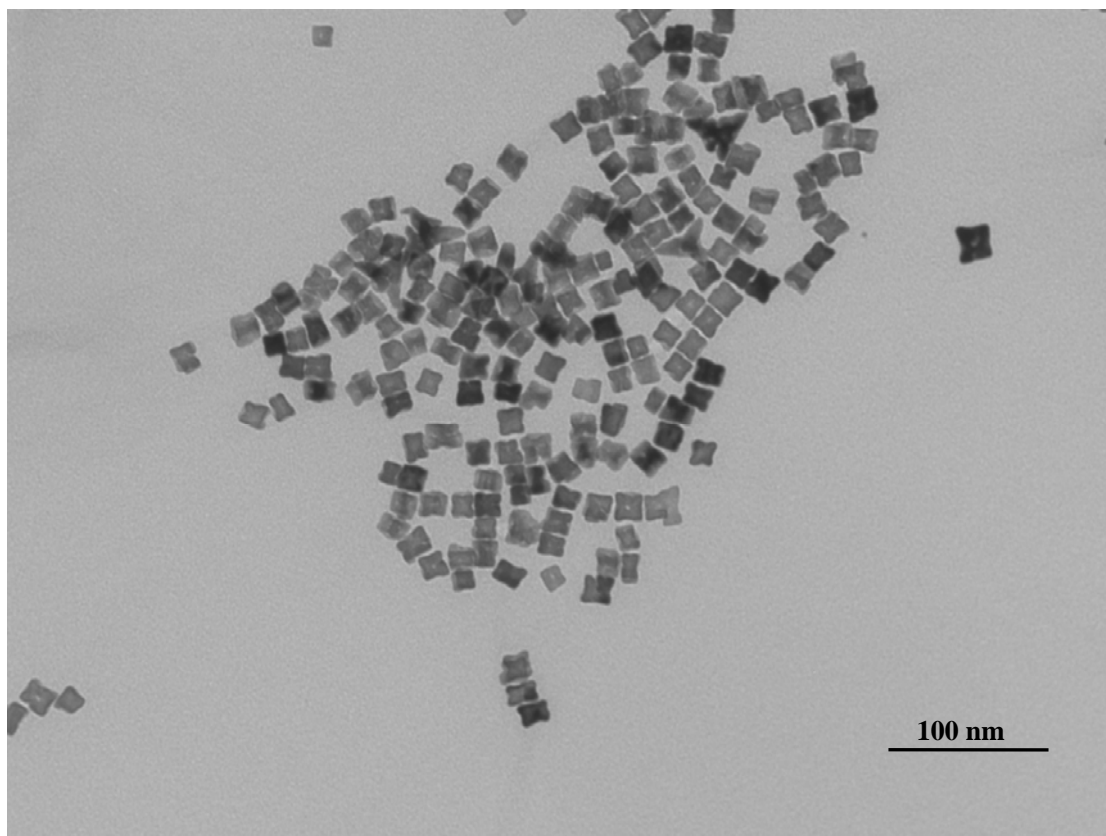


Fig. S3 TEM image of PtPd concave alloy nanocubes collected at the reaction time of 8 h.

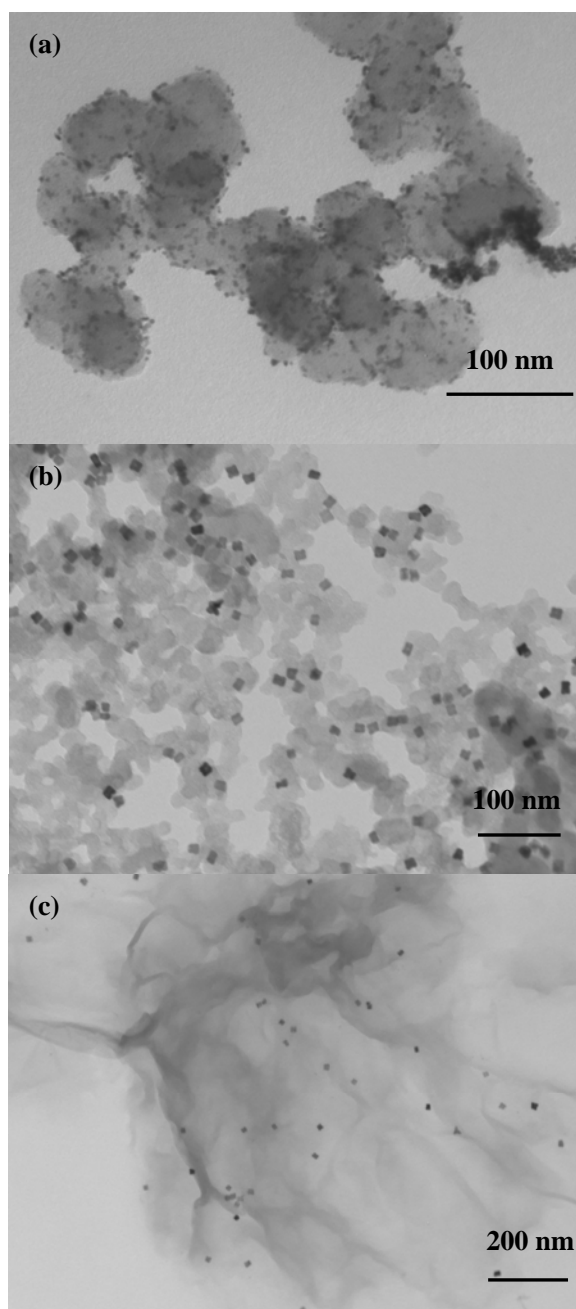


Fig. S4 TEM images of (a) commercial Pt/C, (b) PtPd alloy nanocubes supported on Vulcan XC-72 Carbon black (PtPd/C), and (c) PtPd alloy nanocubes supported on RGO surface (PtPd/RGO).

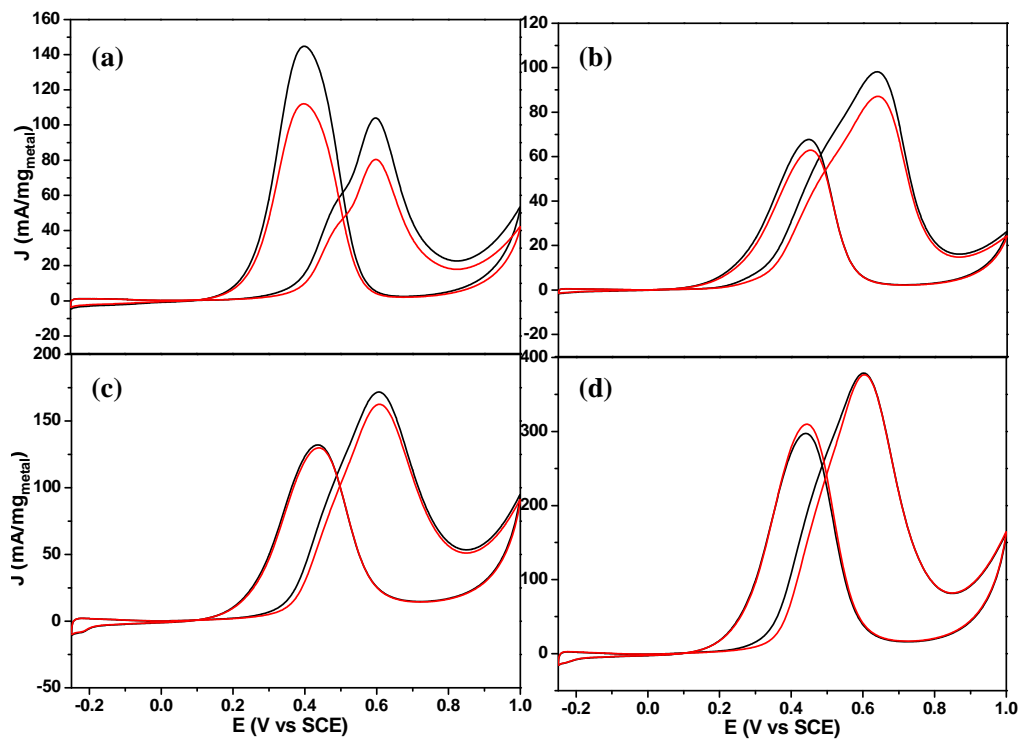


Fig. S5 The 1st (black curves) and 1000th (red curves) CV curves obtained on (a) commercial Pt/C, (b) PtPd/C, (c) PtPd/RGO, and (d) C-PtPd/RGO in 0.5 M H₂SO₄ + 0.5 M CH₃OH solution. Potential scan rate of 50 mV s⁻¹.