

## Supporting Information

### Highly poison-resistant Pt nanocrystals on 3D graphene toward efficient methanol oxidation

Lian Ying Zhang<sup>a,b,c</sup>, Wenlin Zhang<sup>a,b</sup>, Zhiliang Zhao<sup>a</sup>, ZeLiu<sup>a</sup>, Zhiqin Zhou<sup>b</sup>, and Chang Ming Li<sup>a,c\*</sup>

<sup>a</sup> Institute for Clean Energy & Advanced Materials, Faculty of Materials and Energy, Southwest University, Chongqing 400715, P. R. China

<sup>b</sup> College of Horticulture and landscape Architecture, Southwest University, Chongqing, 400715, P. R. China

<sup>c</sup> Institute of Materials Science and Devices, Suzhou University of Science and Technology, Suzhou, 215011, P.R. China

<sup>d</sup> Key Laboratory of Low-grade Energy Utilization Technologies and Systems (Chongqing University), Ministry of Education of China, Chongqing University, Chongqing 400044, P. R. China

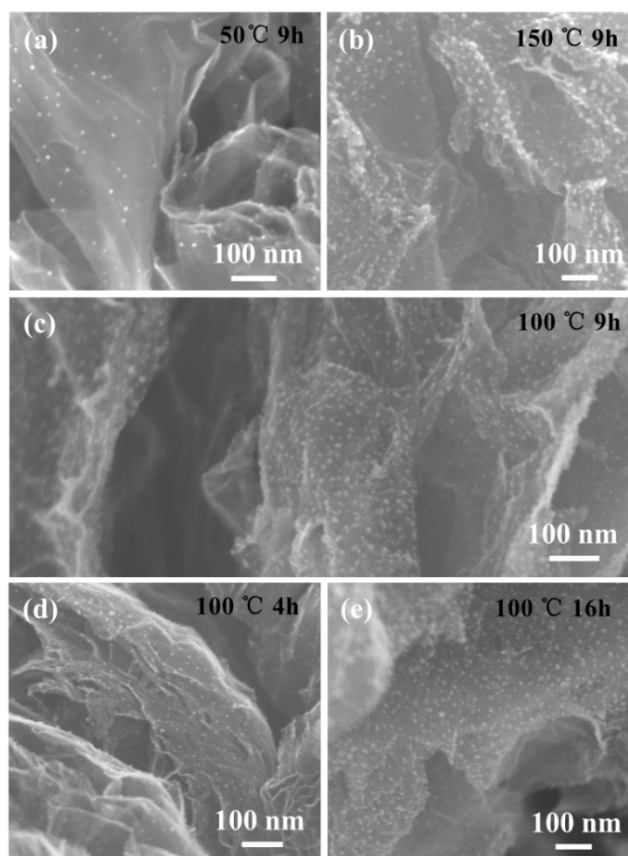


Figure S1. SEM images of obtained Pt@3DGraphene materials with the same synthesis process except the reaction temperature and times. (a) 50 °C 9h; (b) 150 °C 9h; (c) 100 °C 9h; (d) 100 °C 4h; (e) 100 °C 16h.

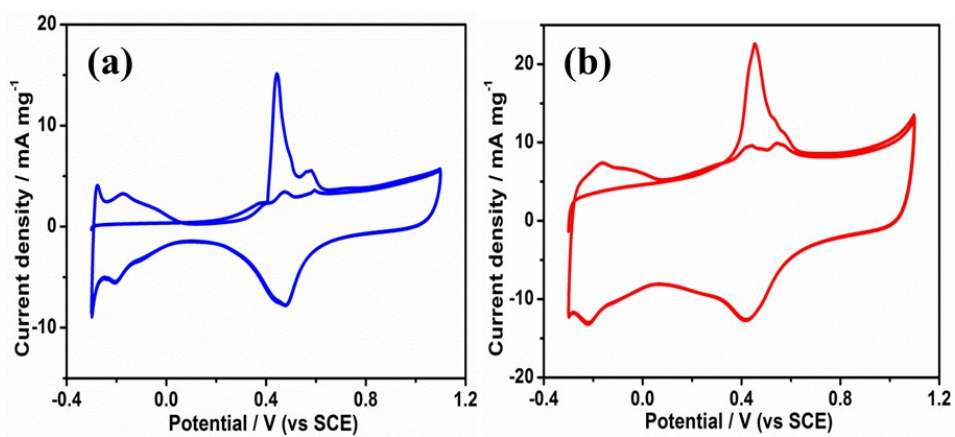


Figure S2. CO<sub>ad</sub> stripping voltammograms for (a) commercial Pt/C and (b) Pt@3DGraphene catalysts in 0.1 M HClO<sub>4</sub> solution at a scan rate of 50 mV s<sup>-1</sup>.