

Supporting Information

for

“Microfluidic-based Controllable Synthesis of Pt Nanocatalysts Supported on Carbon for Fuel Cells”

Guangjun Ran, Qiang Fu, and Weilin Xu*

State Key Laboratory of Electroanalytical Chemistry, & Jilin Province Key Laboratory of Low Carbon Chemical Power, Changchun Institute of Applied Chemistry, Chinese Academy of Science, 5625 Renmin Street, Changchun 130022, P.R. China.

*E-mail: weilinxu@ciac.ac.cn

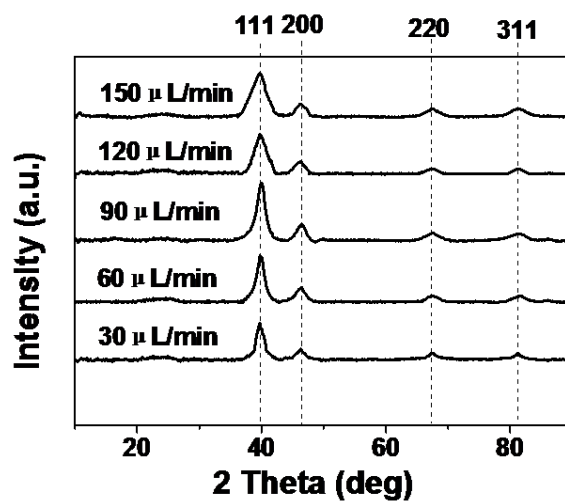


Figure S1. X-ray diffraction patterns of Pt/C catalysts obtained with different flow rates.

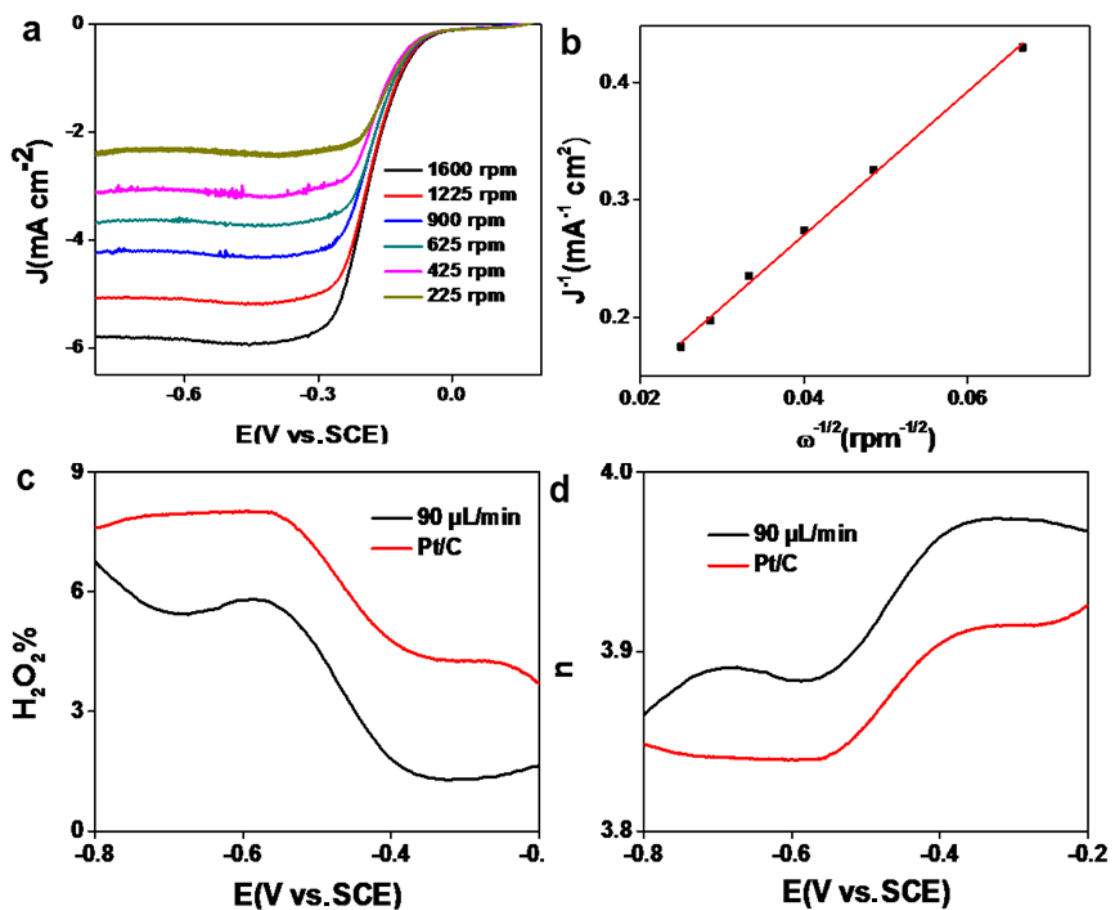


Figure S2. The ORR mechanism study. (a) Rotating disk electrode linear sweep voltammograms of catalyst of 90 $\mu\text{L}/\text{min}$ in O_2 -saturated 0.1 M KOH with various rotation rates at a scan rate of 5 mV s^{-1} . (b) Koutecky-Levich plots of catalyst of 90 $\mu\text{L}/\text{min}$ at 0.6 V (vs. SCE). (c) The H_2O_2 yield during the ORR process on 90 $\mu\text{L}/\text{min}$ catalyst obtained from RRDE electrode. (d) The number of electrons transferred for each O_2 during the ORR process on 90 $\mu\text{L}/\text{min}$ catalyst.