

Supporting Information

Electrochemical nucleation and growth of Pt nanoflower particles on reduced graphite oxide for electrooxidation of glucose

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Figure S1 A. Plot of charge versus time obtained from i-t curves

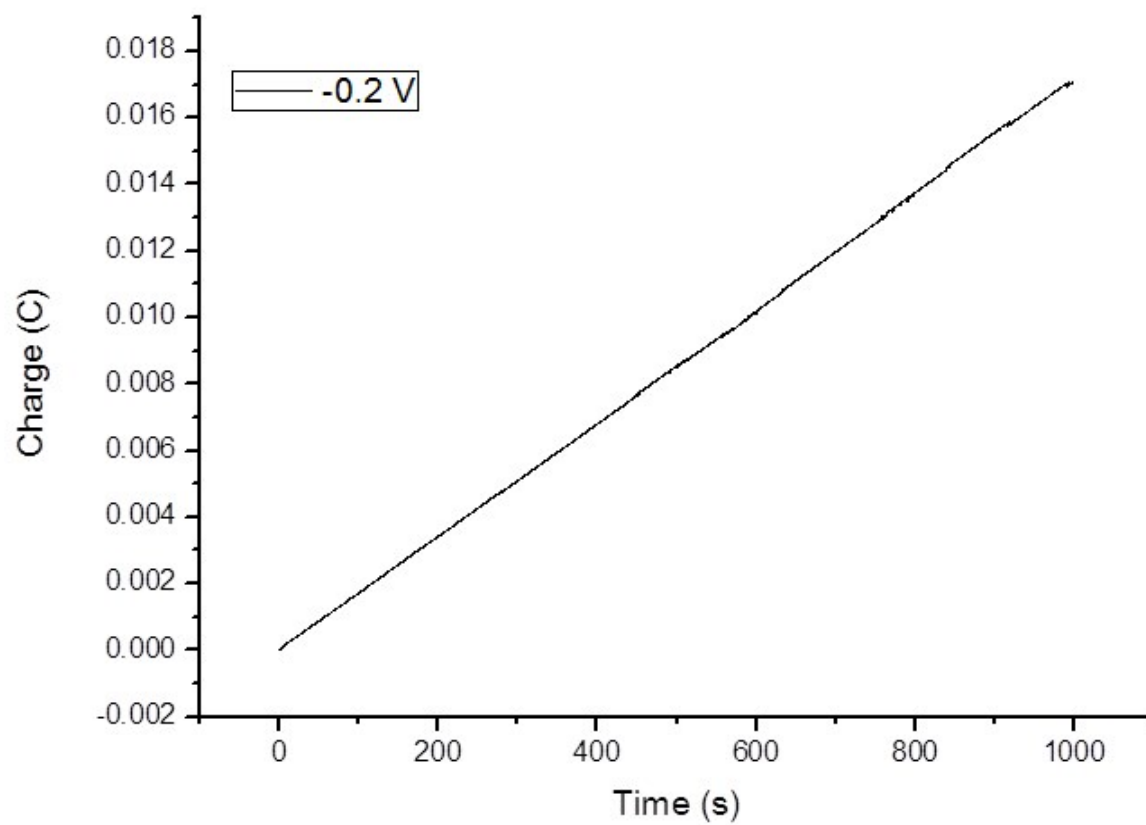


Figure S1 B. Plot of charge versus time obtained from i-t curves

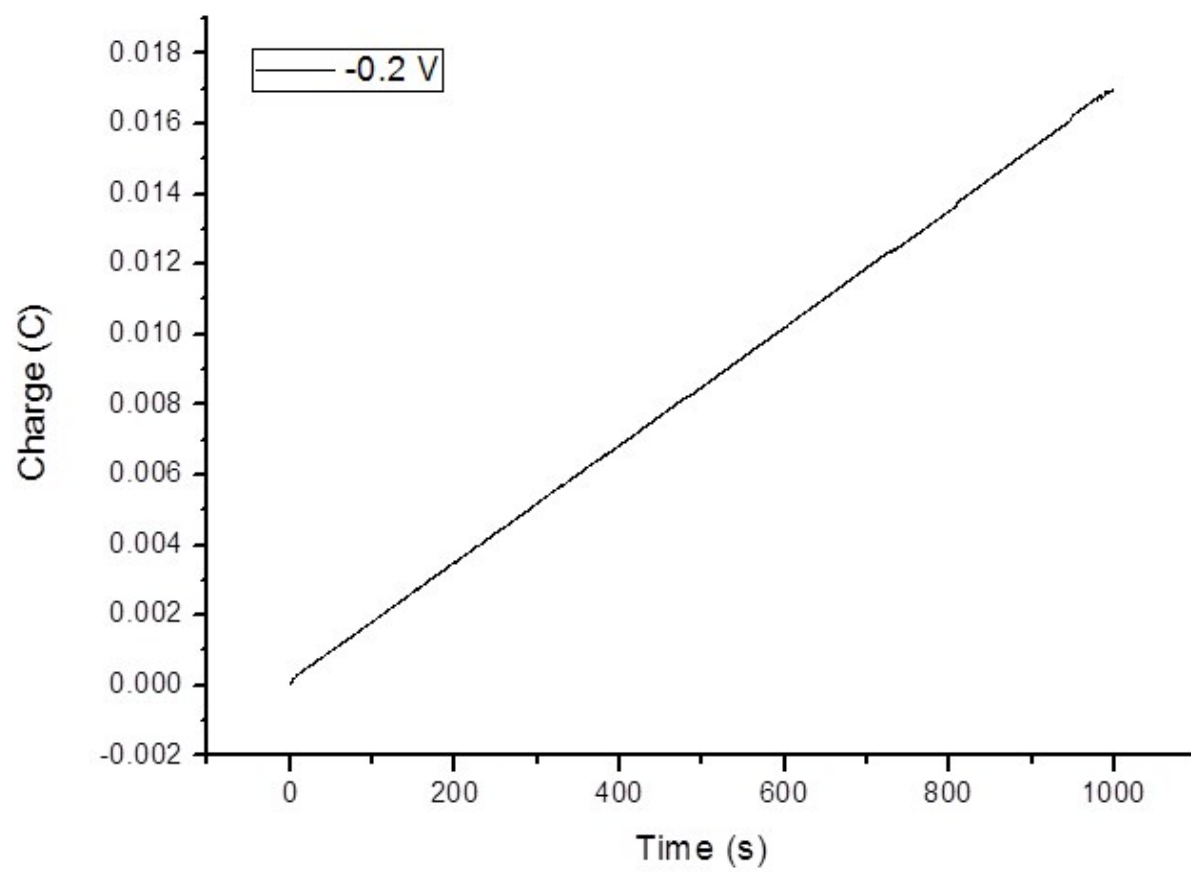


Figure S1 C. Plot of charge versus time obtained from i-t curves

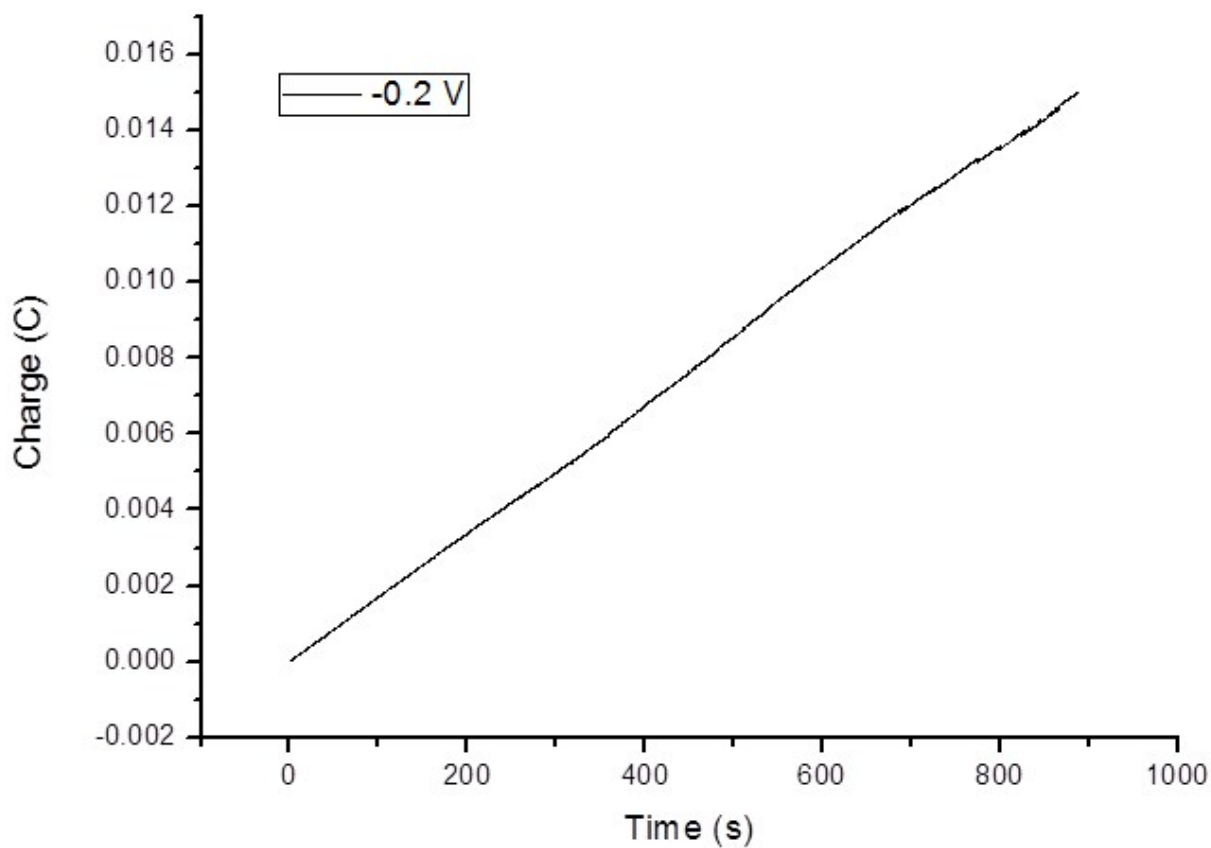


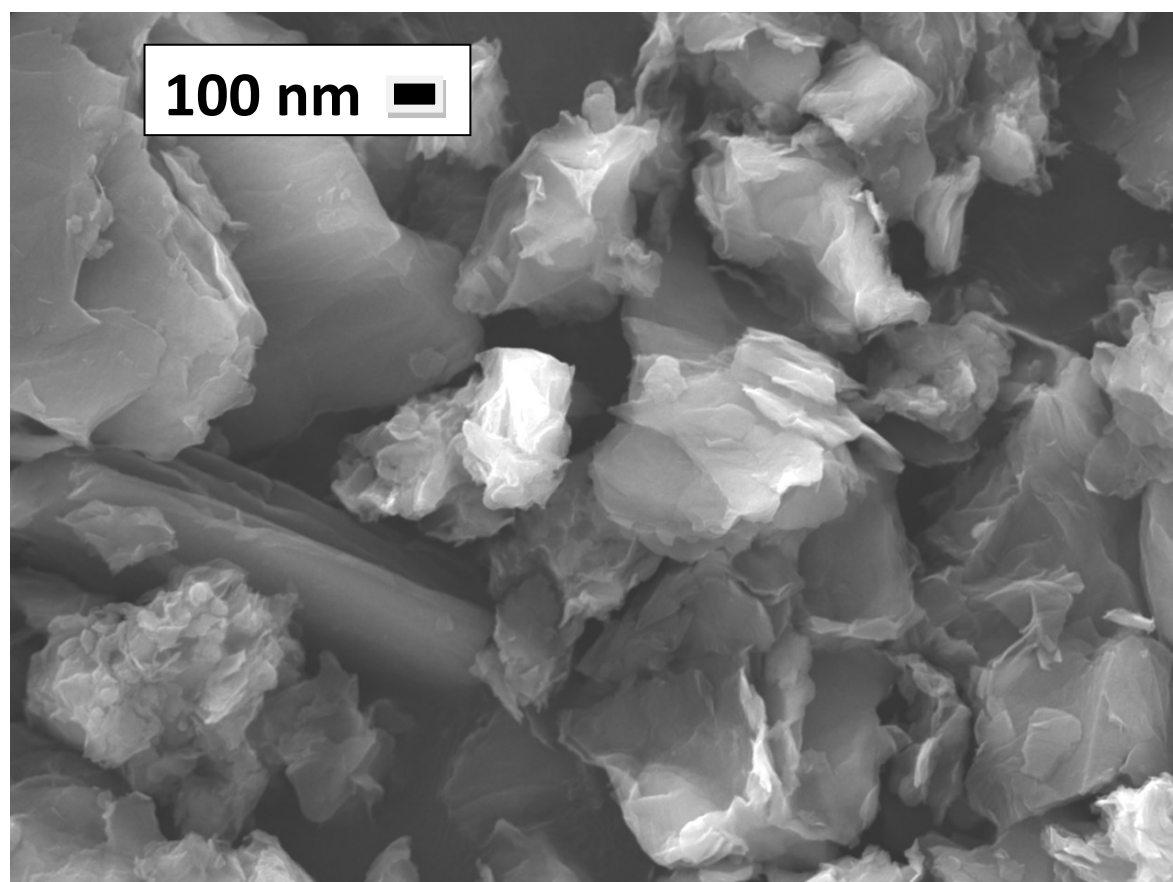
Figure S1 (A), B and (C). Presents Pt loading on ECRGO/GCE was determined by charge integrated during the Pt deposition. ^[1] The charge for the deposition of Pt was 0.0488 C corresponding to the Pt loading of 24.68 μg for 2890 s at -0.2 V

$$m = Q \times M/F \times Z$$

$$m = 0.0488 \times 195.08 / 96500 \times 4$$

$$m = 24.68 \mu\text{g of Pt}$$

Figure S2 (A)



A

Figure. S2 (A) SEM image of as-synthesized GO film.

Figure S2 B

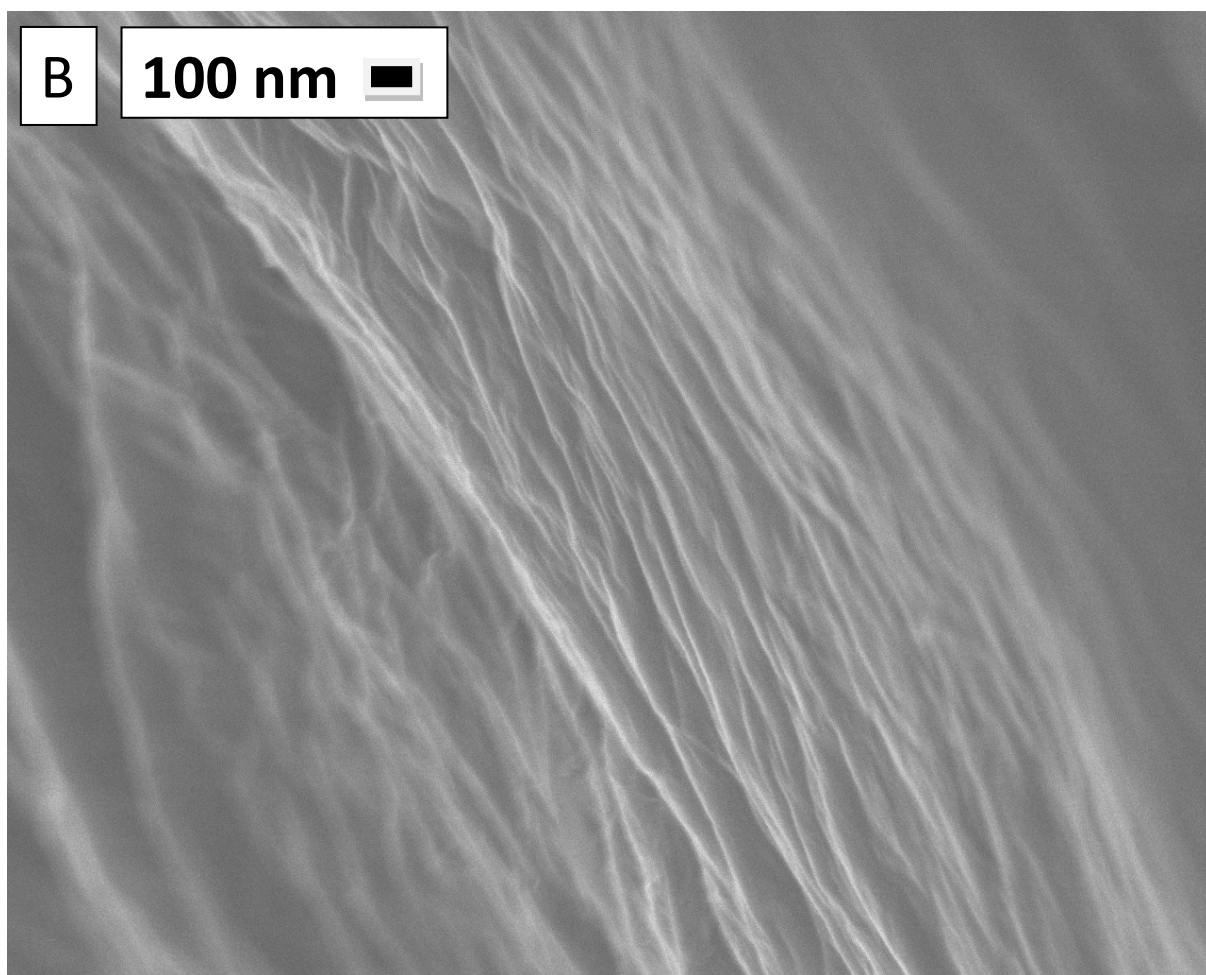


Figure. S2 (B) SEM image of electrochemically synthesized rGO

Figure S2 (C)

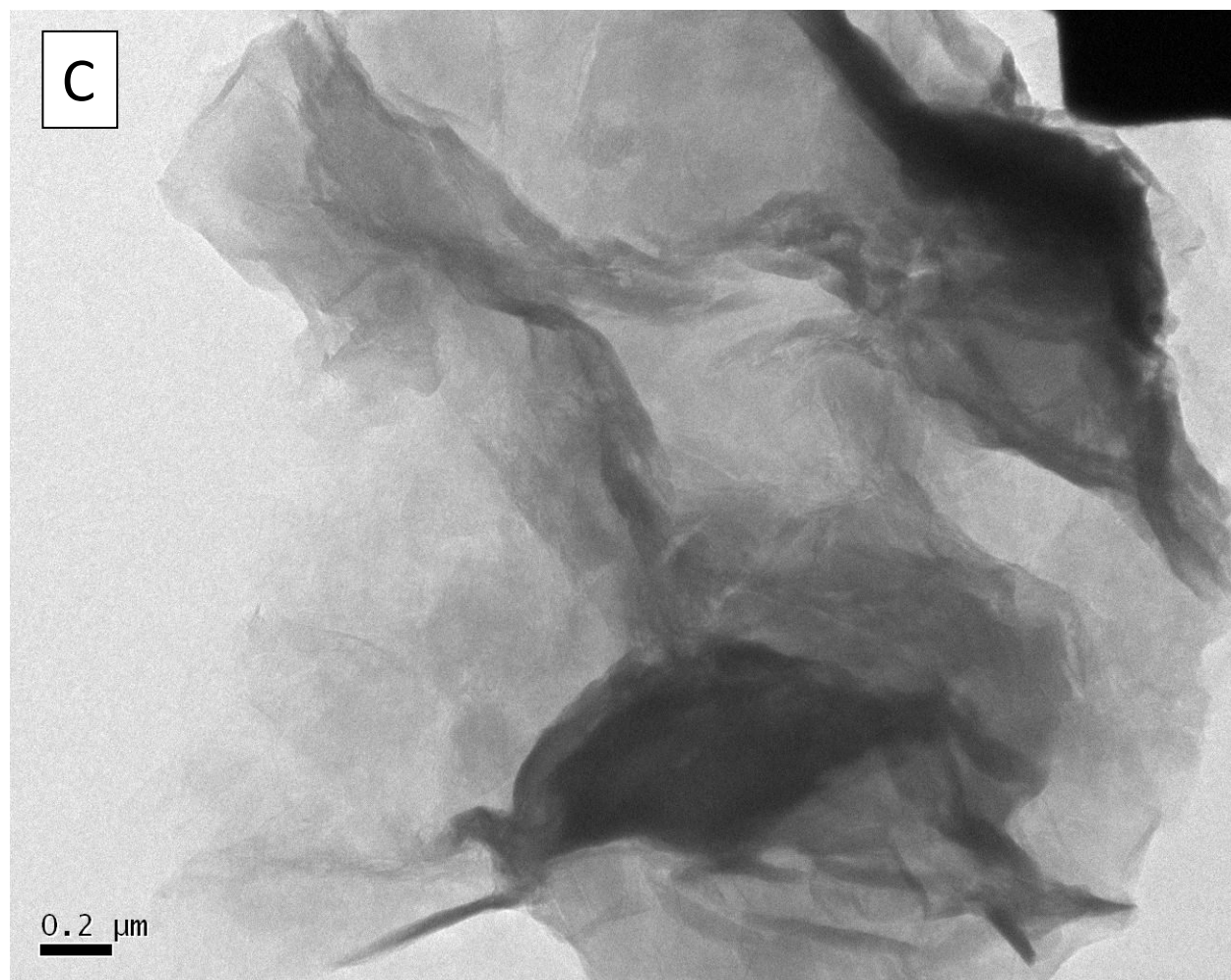


Figure. S2 (C) TEM image of electrochemically reduced GO to rGO sheet.

Figure S3.

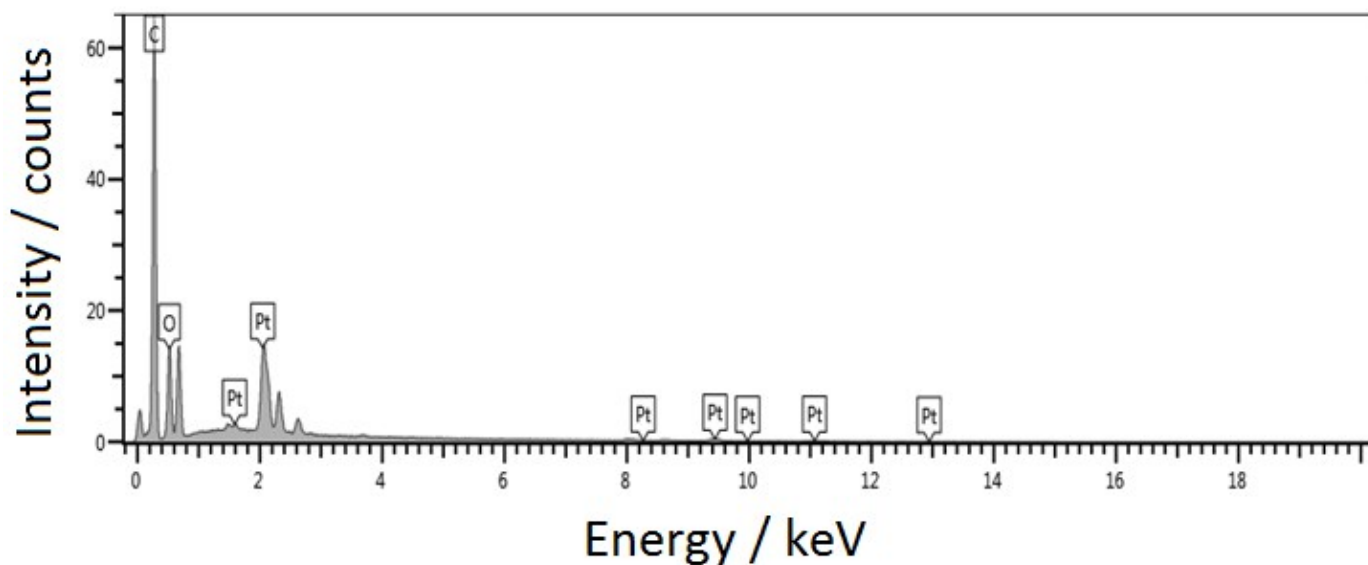


Figure S3. EDX spectra of electrodeposited PtNFPs at -0.2 V in 1.0 mM H_2PtCl_6 + 0.5M H_2SO_4 electrolyte solution.

Reference

1. Kuo, C-W.; Huang, L-M.; Wen, T-C.; Gopalan, A., Enhanced electrocatalytic performance for methanol oxidation of a novel Pt-dispersed poly(3,4-ethylenedioxythiophene)-poly (styrene sulfonic acid) electrode. *J. Power Sources* **2006**, *160*, 65-72.