Electronic Supplementary Information

Three-Dimensional (3D) Porous Graphene-Based Composite Materials: Electrochemical Synthesis and Application

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Figure S1. The optical image of ERGO@platinum foil.

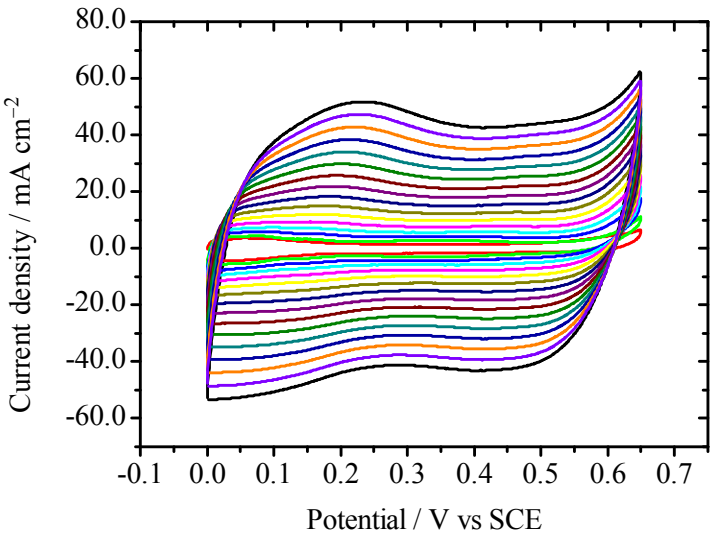

Figure S2. Cyclic voltammogram of 0.5 M aniline in an aqueous solution containing 0.6 M H_2SO_4 with ERGO as working electrode at a scan rate of 50 mV s^{-1}. The curve was shown every ten cycles.

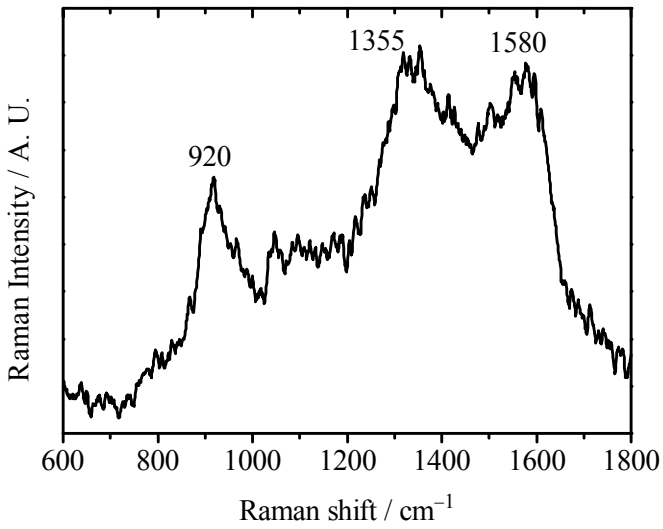

Figure S3. Raman spectrum of ERGO/PPy composite.

The Raman intensity is weak due to high roughness of the ERGO/PPy surface and low PPy content. However, three characterized Raman bands of PPy can be distinguished. The 1580 cm^{-1} band is assigned to the C=C stretching mode of PPy backbones, and the bands around 1383 cm^{-1} are associated with the ring stretching of PPy. Bands at 933 cm^{-1} is assigned to the ring deformation related to polarons.