

Supporting Information

Synergistic Effect of Graphene and Multi-Walled Carbon Nanotubes Composite supported Pd Nanocubes on Enhancing Catalytic Activity for Electro-Oxidation of Formic Acid

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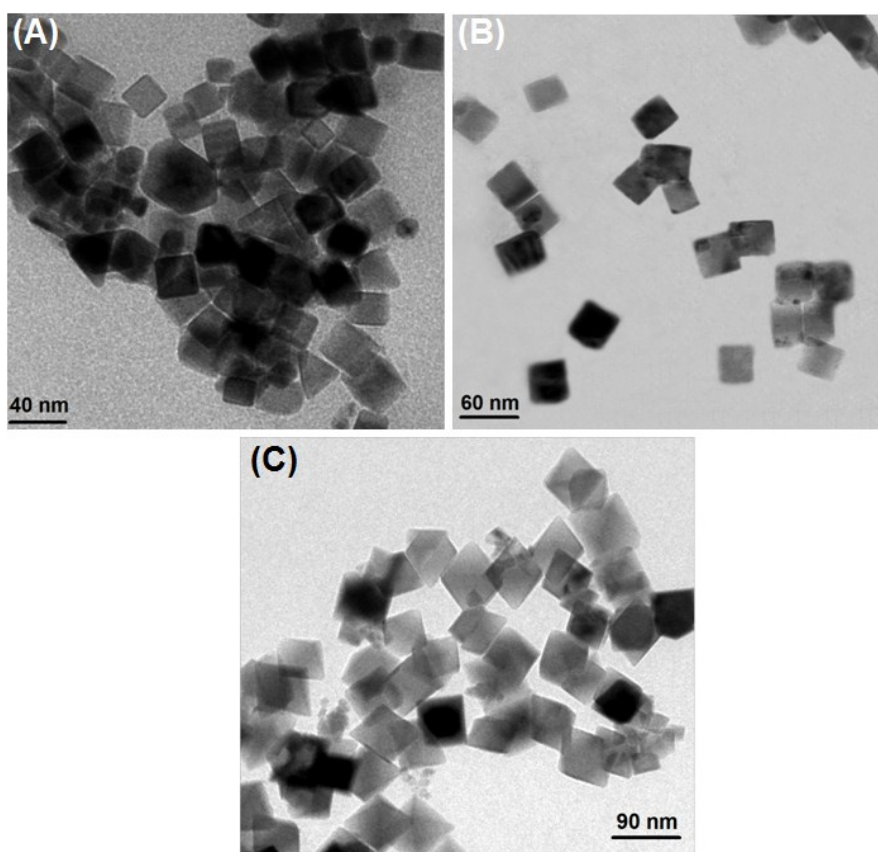


Fig. S1 Controlled growth of Pd along $\langle 100 \rangle$ direction (a) by using 0.625×10^{-2} molar $C_{16}TAB$, obtained twined structures along with Pd-NCs $\langle 100 \rangle$ (b) by using 1.25×10^{-2} molar $C_{16}TAB$, obtained pure Pd-NCs $\langle 100 \rangle$ and (c) by using 2.5×10^{-2} molar $C_{16}TAB$, obtained edge-truncated cubic feature $\langle 100 \rangle$, $\langle 110 \rangle$ & $\langle 111 \rangle$ directions.

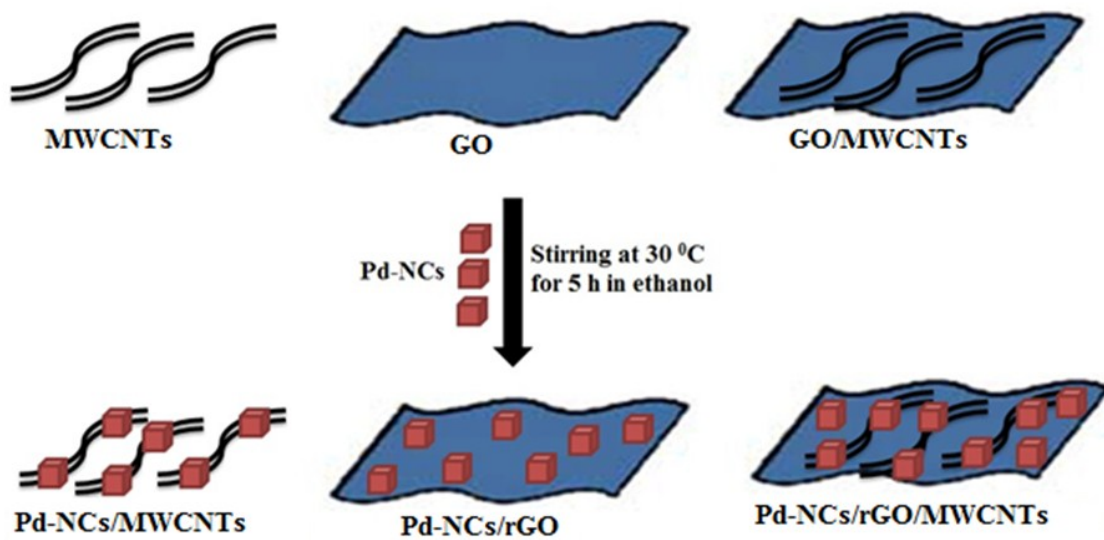


Fig. S2 Schematic representation for the synthesis of Pd nanocubes loaded on different support materials.

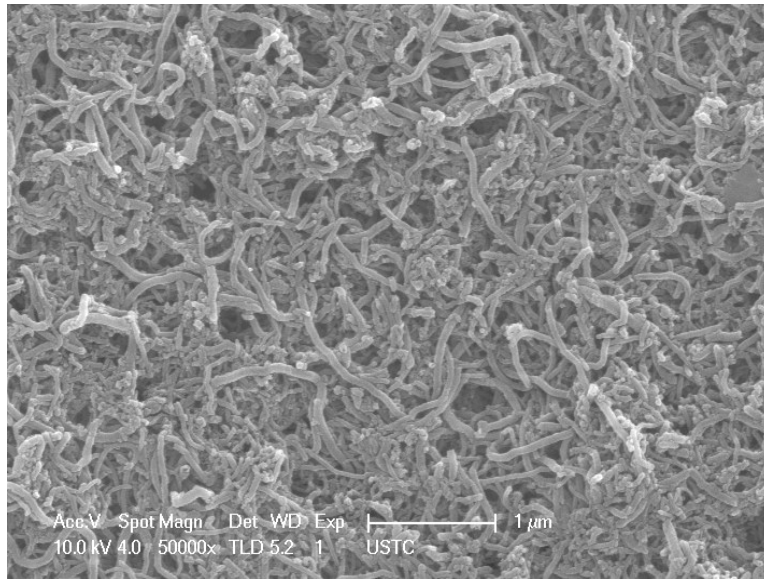


Fig. S3 SEM image of functionalized multi-walled carbon nanotubes (MWCNTs).

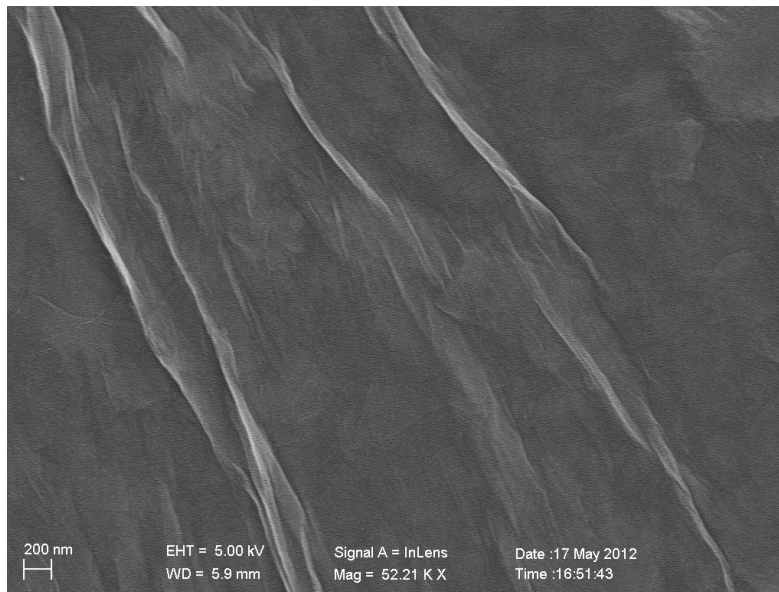


Fig. S4 SEM image of graphene nanosheets (rGO)

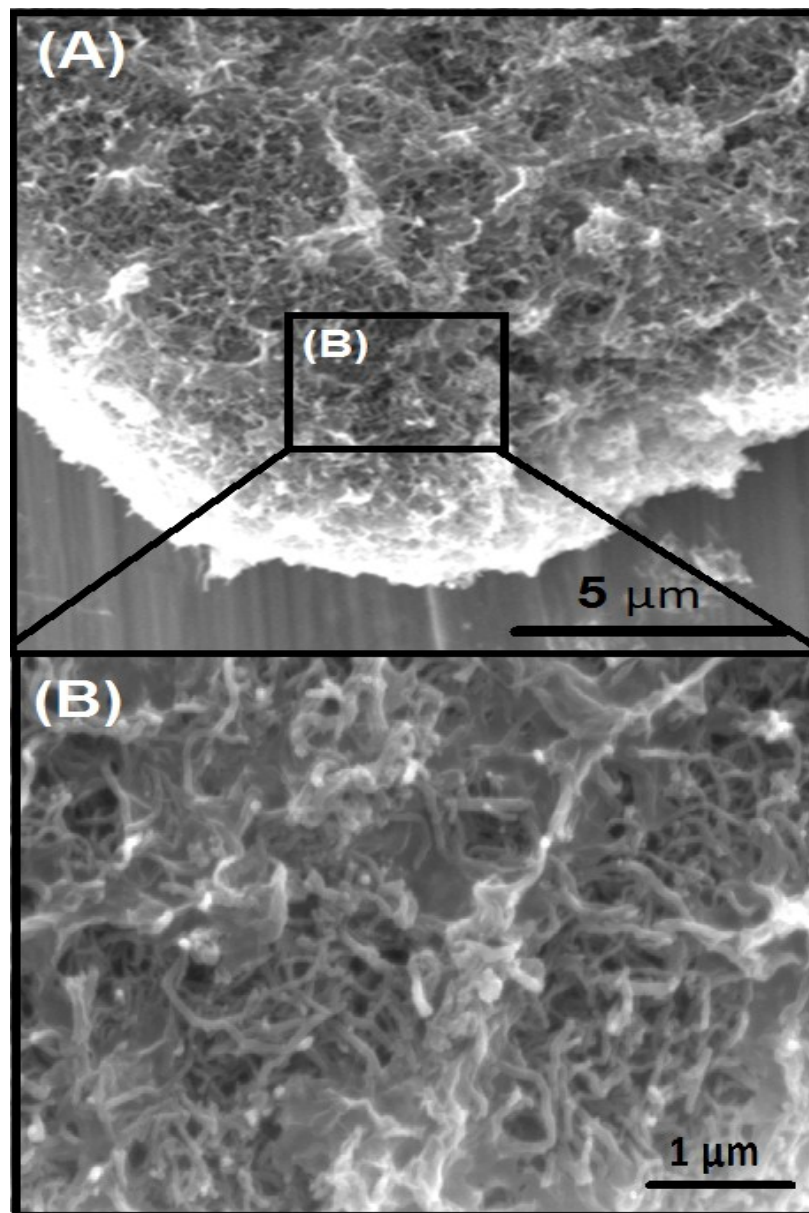


Fig. S5 SEM image of 3D porous rGO/MWCNTs composite material.

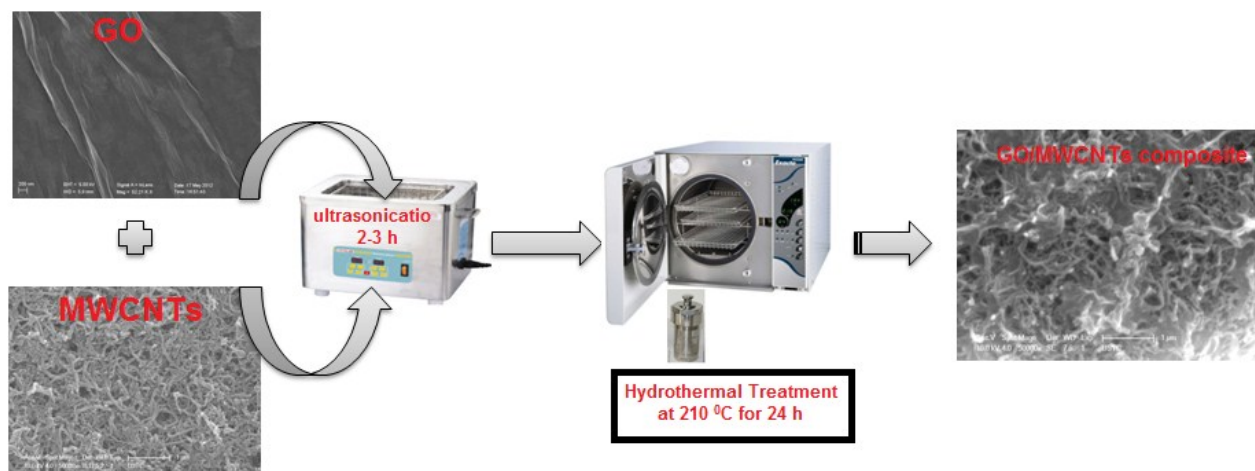


Fig. S6 Schematic representation for the synthesis of 3D porous GO/MWCNTs composite material.