

Electronic Supplementary Information (ESI) for

Metal-Oxide Nanofiber-Decorated Three-Dimensional Graphene Hybrid Nanostructured Flexible Electrode for High-Capacity Electrochemical Capacitors

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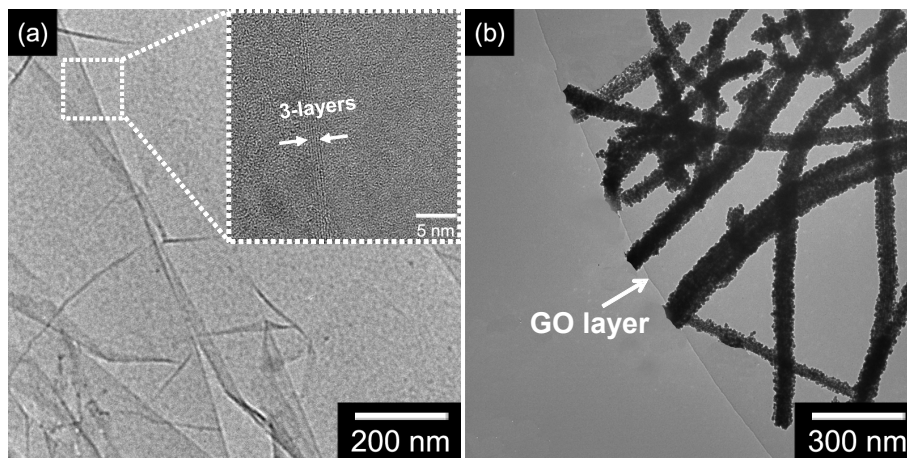


Fig. S1 (a) TEM and HR-TEM (inset) image of GO layer. (b) TEM image of PSCNF-decorated GO sheet.

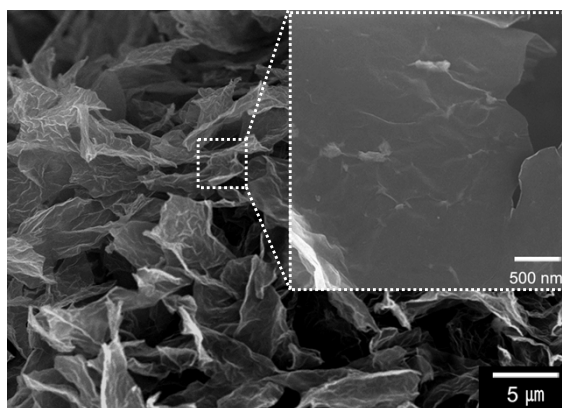


Fig. S2 SEM and enlarged SEM image of 3D pristine rGO.

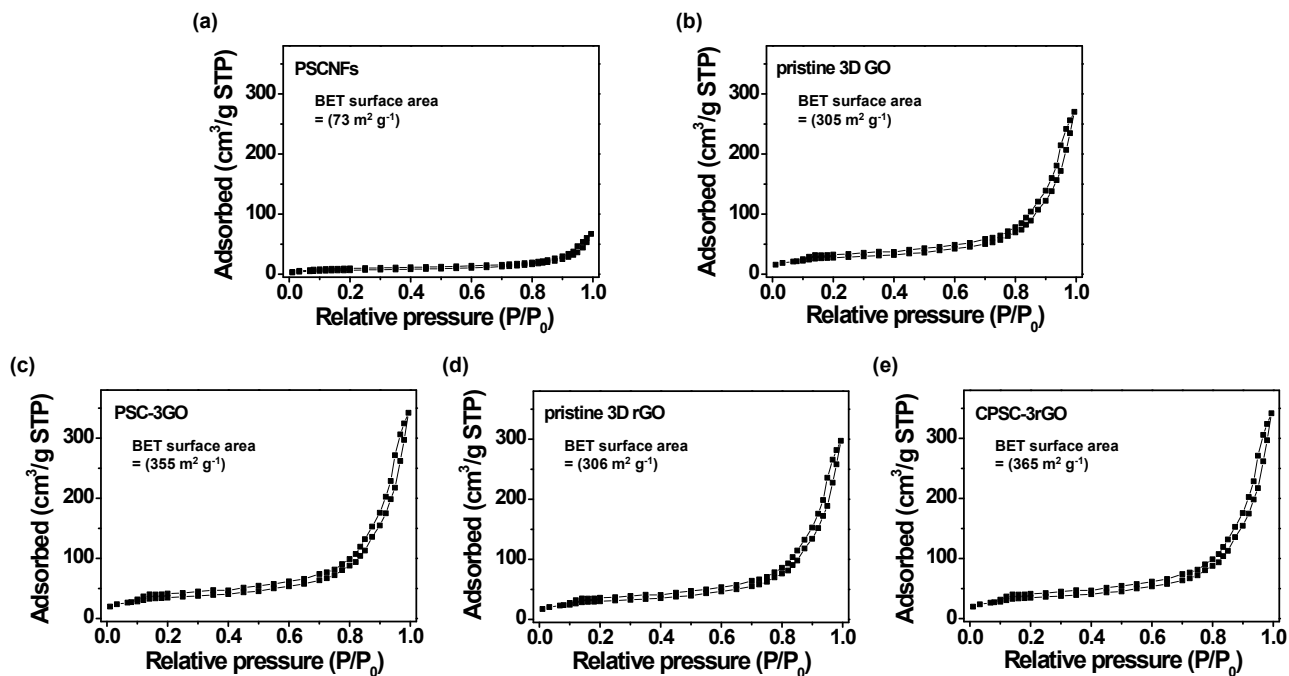


Fig. S3 Nitrogen adsorption-desorption isotherm of various hybrid nanomaterials: (a) PSCNFs, (b) pristine 3D GO, (c) PSC-3GO, (d) pristine 3D rGO, and (e) CPSC-3rGO.

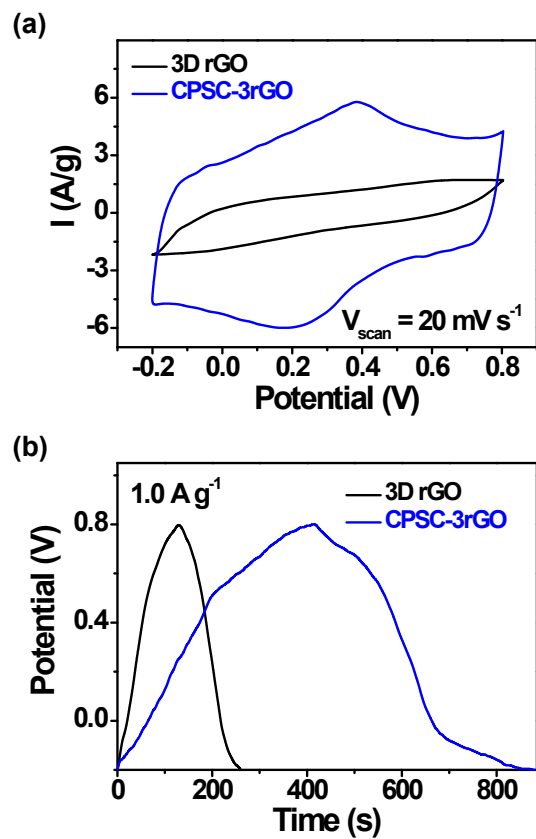
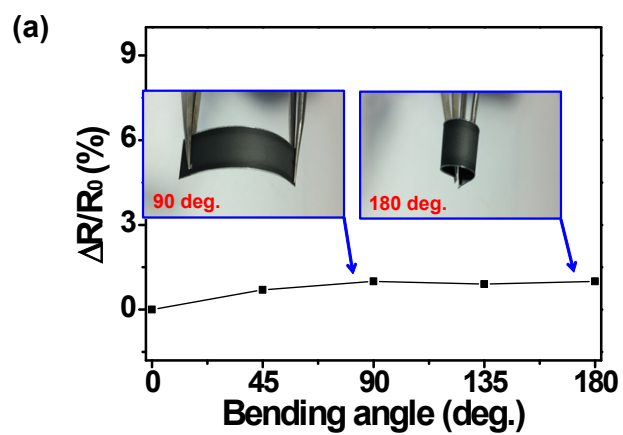


Fig. S4 (a) CV curves (scan rate: 20 mV s^{-1}), and (b) galvanostatic charge/discharge curves of 3D rGO (black) to compare with CPSC-3-rGO (blue).



(b)

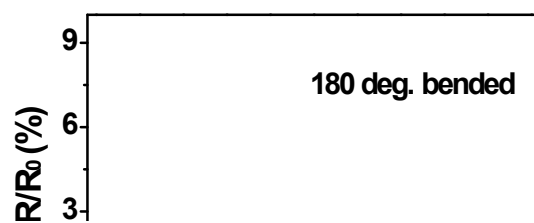


Fig. S5 Electrical-resistance variation of CPSC-3rGO electrode with (a) different bending angles (inset: digital photographs of different bending angles) and (b) increasing bending number (bending angle: 180°).

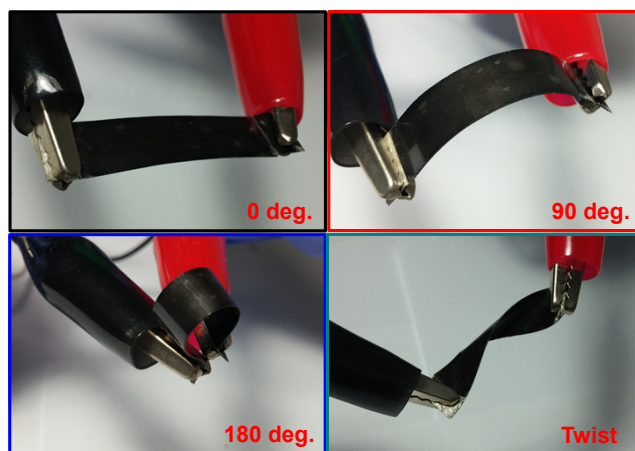


Fig. S6 Digital photographs of CPSC-3rGO based two-electrode EC cell with various deformation.

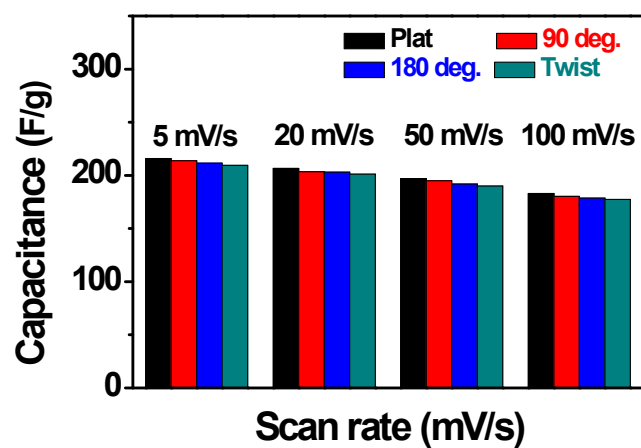


Fig. S7 Calculated specific capacitance with various voltage scan rates (black: plat; red: bending with 90°; blue: bending with 180°; green: twist).