

Supporting Information

Rationally designed hierarchical ZnCo₂O₄/PPy nanostructures for high-performance supercapacitor electrodes

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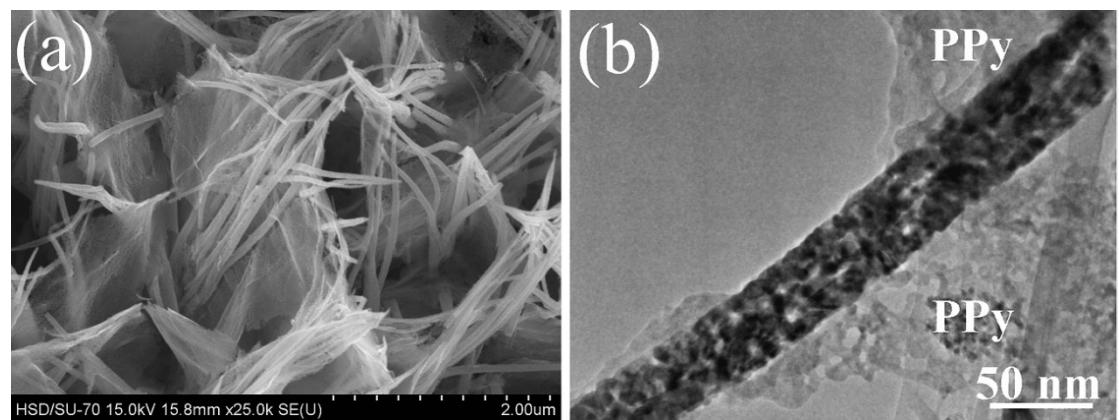


Fig. S1 (a) SEM and (b) TEM images of the $\text{ZnCo}_2\text{O}_4/\text{PPy}$ hybrid nanostructures.

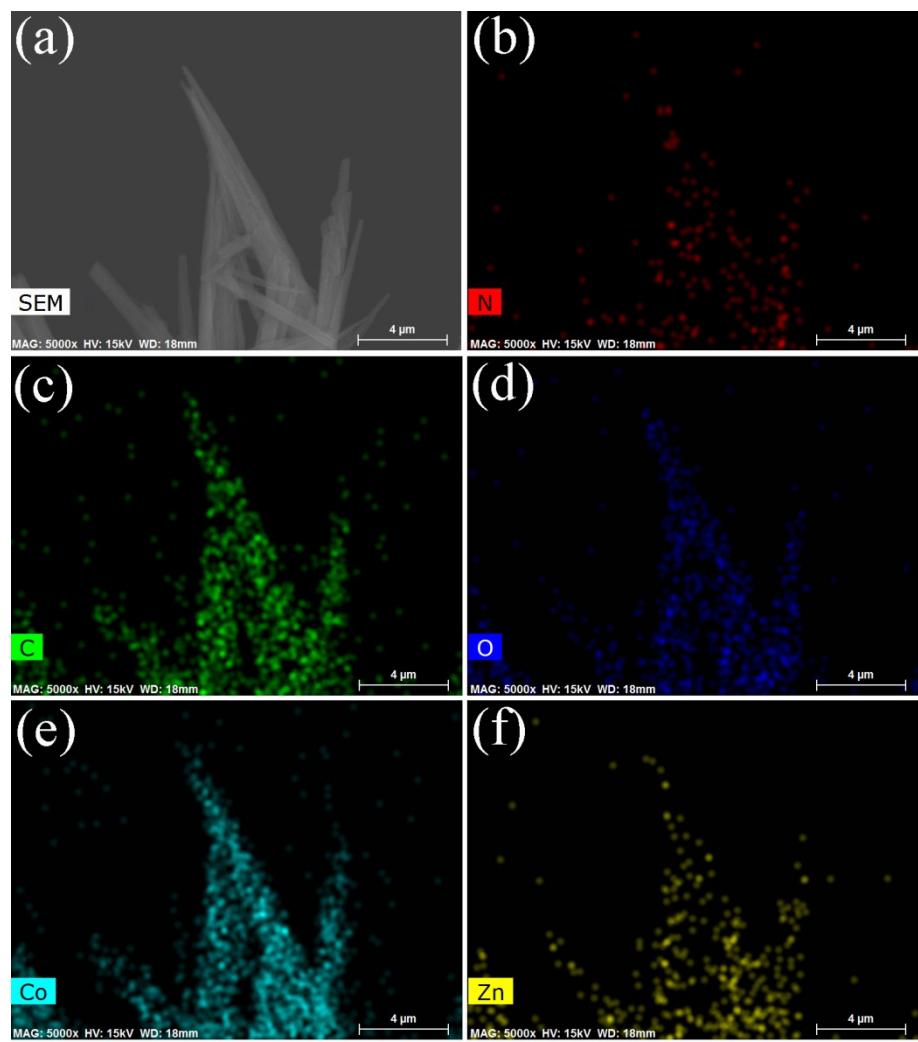


Fig. S2 (a) SEM image, and (b) nitrogen, (c) carbon (d) oxygen, (e) cobalt and (f) zinc element mapping images of PPy/ZnCo₂O₄ nanostructures.

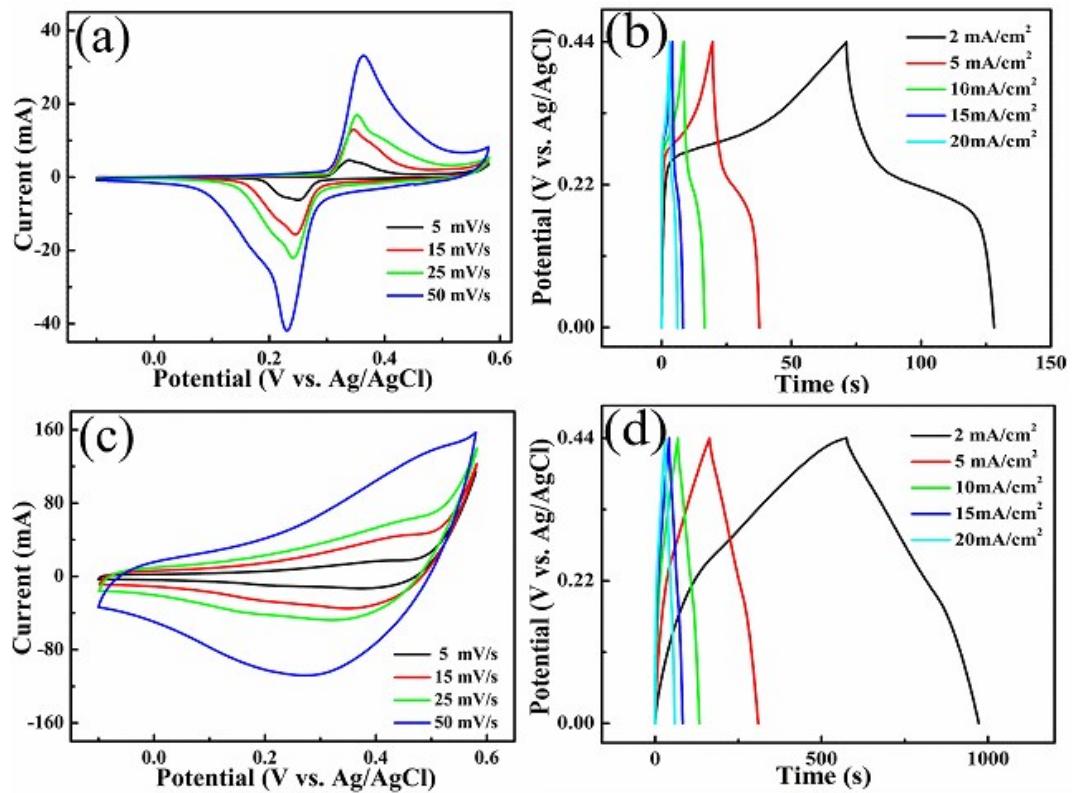


Fig. S3 (a) CV and (b) GCD curves of PPy nanostructures at various scan rates and current densities; (c) CV and (d) GCD curves of ZnCo₂O₄ nanowires at various scan rates and current densities.

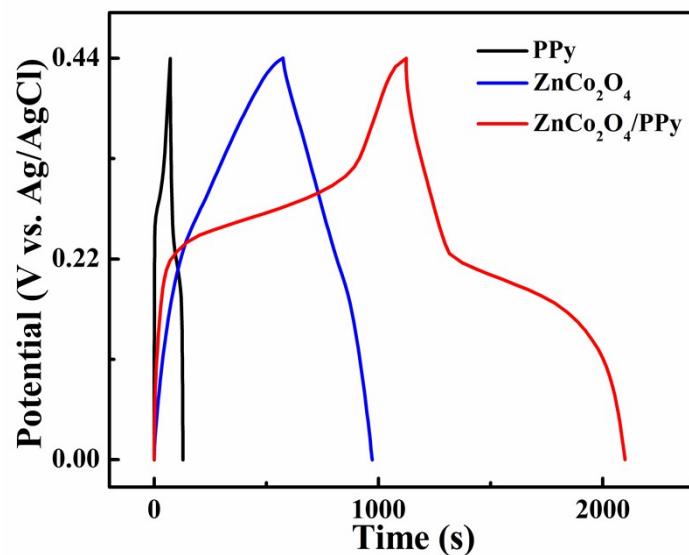


Fig. S4 GCD curves of the PPy, ZnCo_2O_4 , $\text{ZnCo}_2\text{O}_4/\text{PPy}$ hybrid electrodes at a current density of 2 mA/cm^2 .

Table S1Specific capacitance (Cs) of PPy, ZnCo₂O₄ and ZnCo₂O₄/PPy at different currents.

i (mA/cm ²)	Cs of PPy (F/g)	Cs of ZnCo ₂ O ₄ (F/g)	Cs of ZnCo ₂ O ₄ /PPy (F/g)
2	180	1275	1559
5	142	1165	1500
10	119	1029	1442
15	105	993	1414
20	96	941	1388

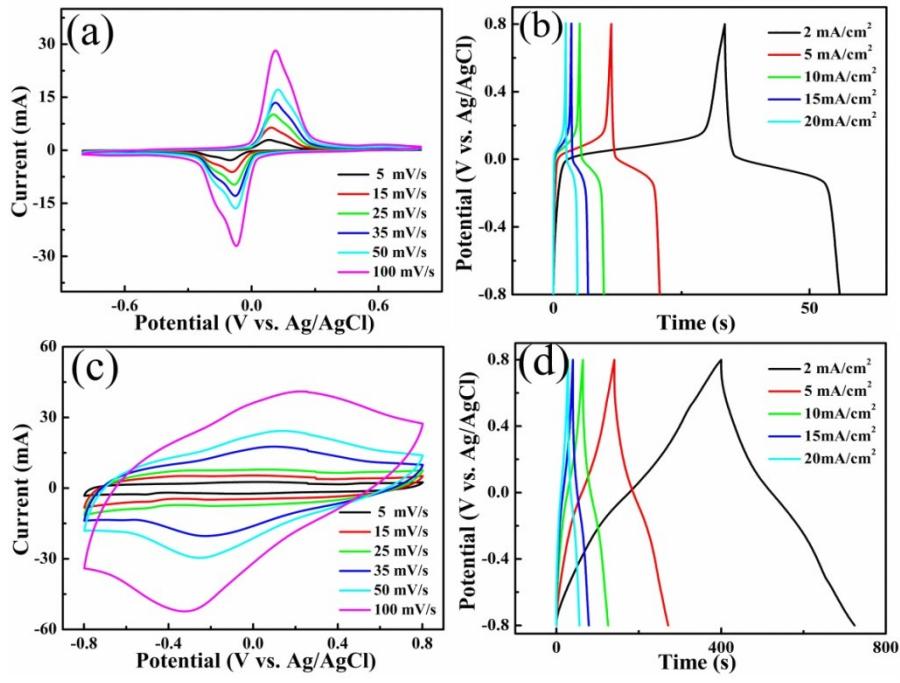


Fig. S5 (a) CV and (b) GCD curves of PPy nanostructures at various scan rates and current densities in a two electrode system; (c) CV and (d) GCD curves of ZnCo₂O₄ nanowires at various scan rates and current densities in a two electrode system.