Supporting information for

Supercapacitor electrodes with especially high rate capability and cyclability based on a novel Pt nanosphere and cysteine-generated graphene

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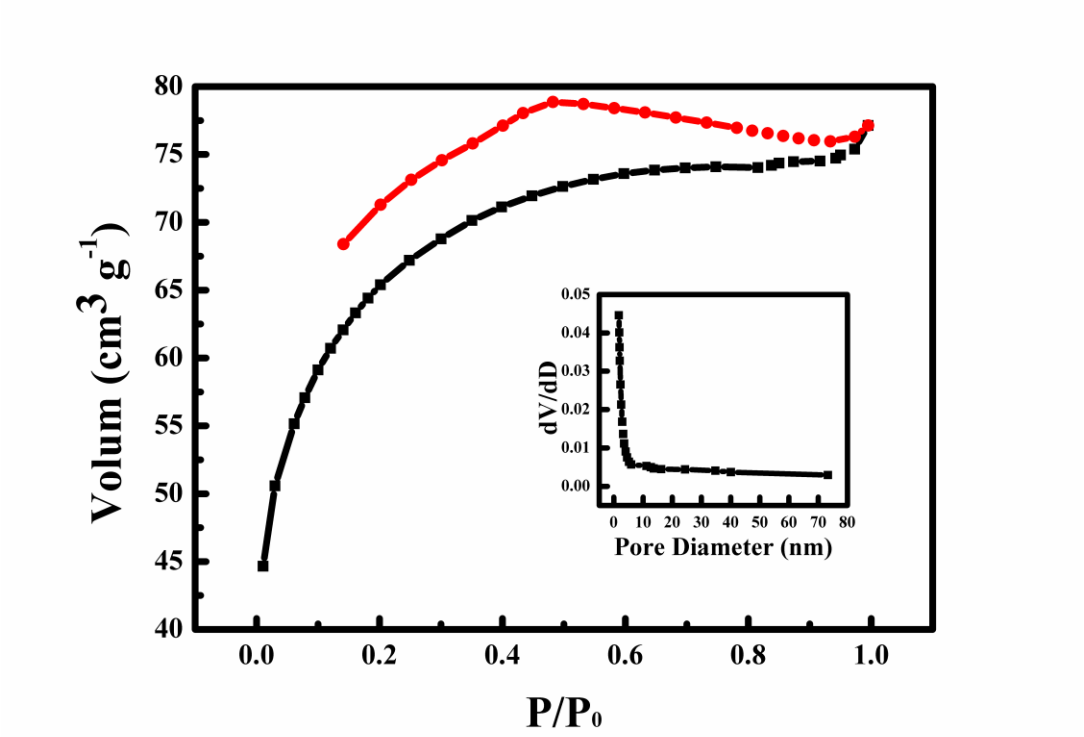
Fig. S1 Nitrogen adsorption and desorption isotherms of CG and corresponding pore-size distribution (inset) calculated by BJH method from desorption.



Tab. S1 Electrochemical performance comparisons of graphene-based supercapacitors

Ref.	Maximum capacitance	Capacitance at high current load	Cycle life
CG[a]	249 F g^{-1} (0.1 A g^{-1})	150 F g^{-1} (50 A g^{-1})	120% (40000 cycles)
1	276 F g^{-1} (0.1 A g^{-1})	205 F g^{-1} (5 A g^{-1})	106% (2000 cycles)
1	238 F g^{-1}(0.1 A g^{-1})	143 F g^{-1} (5A g^{-1})	-
2	238 F g^{-1}(0.1 A g^{-1})	140 F g^{-1} (5 A g^{-1})	97% (1000 cycles)
3	175 F g^{-1}(10 mV s^{-1})	152 F g^{-1} (20 mV s^{-1})	-
4	147 F g^{-1} (2 mV s^{-1})	-	110% (1500 cycles)
5	165 F g^{-1} (20 mV s^{-1})	125 F g^{-1} (5 A g^{-1})	108% (8000 cycles)
6	262 F g^{-1} (1 mV s^{-1})	169 F g^{-1} (800 mV s^{-1})	97% (100 cycles)

a Samples in the present work

Notes and references

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