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A novel design concept for fabricating 3D graphene with the assistant of anti-solvent precipitated sulphates and its Li-ion storage properties

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Supporting figures

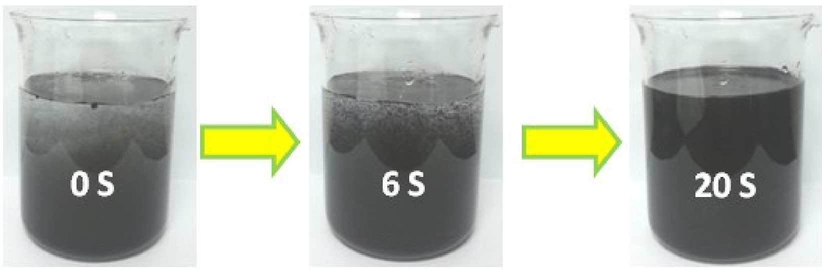
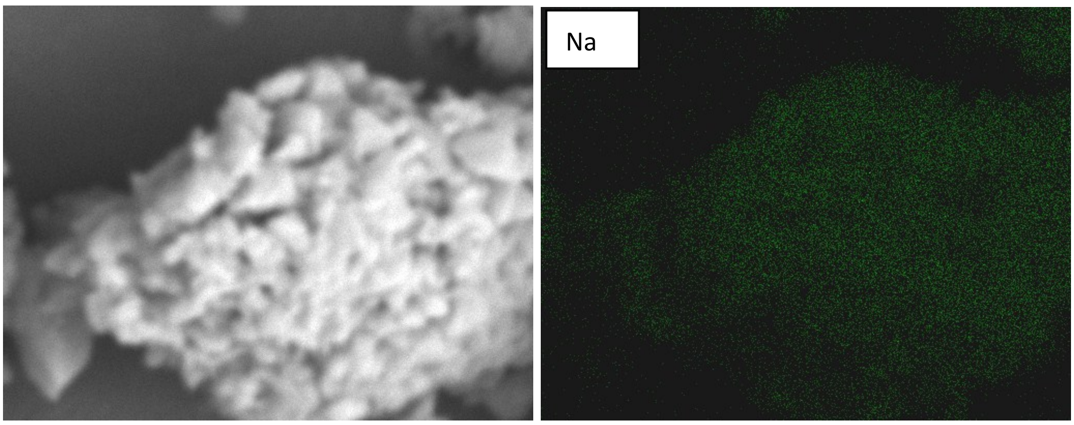


Figure S1. Photographs of the dissolving process of P-rGO-M in water.



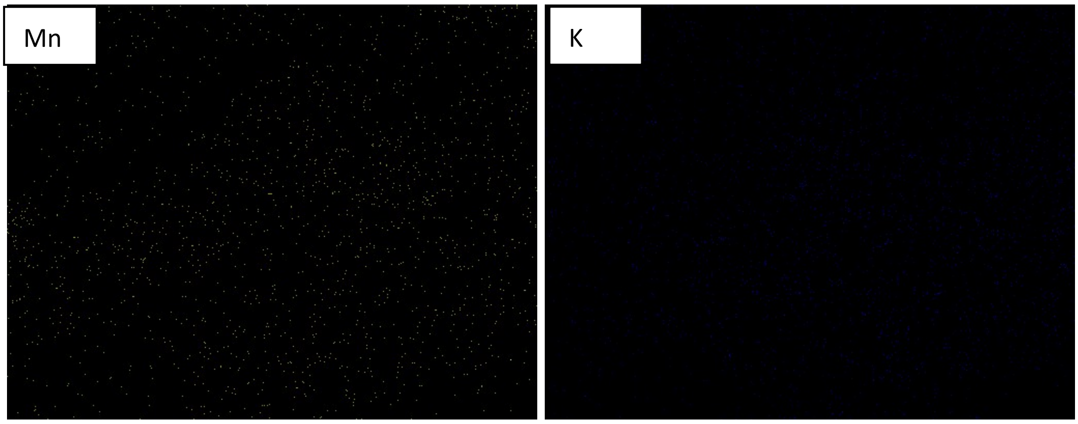


Figure S2. Elemental mapping spectra of P-rGO-M.

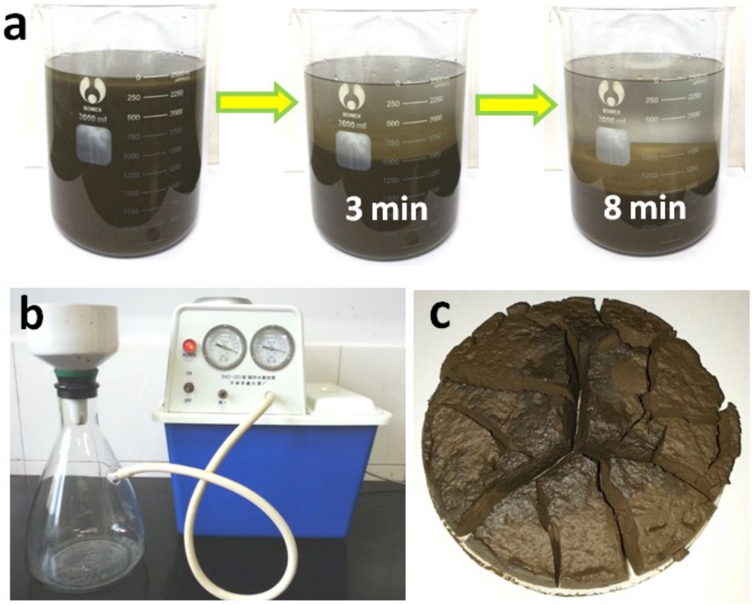


Figure S3. Photographs of the natural sedimentation process of GO-M (a), filtration device (b) and obtained filter cake (c).

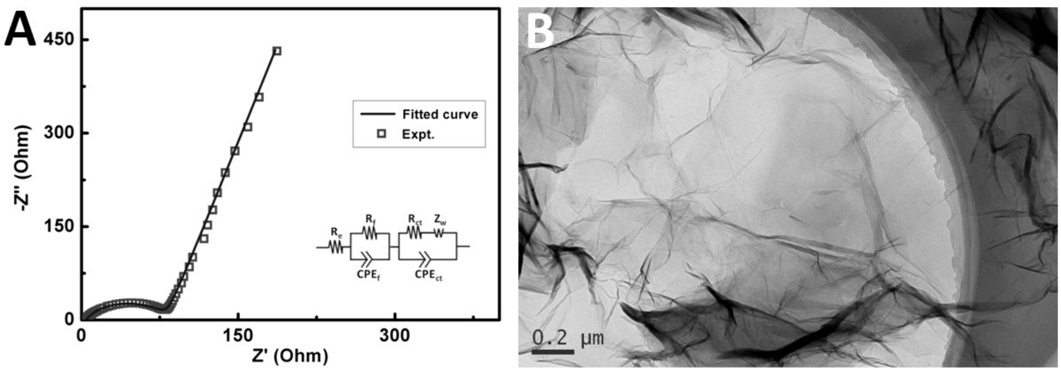


Figure S4. (a) EIS of 3D-rGO electrode (inset is the equivalent circuit model), (b) TEM image of 3D-rGO electrode after 100 cycles at 200 mA g^{-1}.

Table S1 Comparison of Li storage performances between this work and the previous literatures.

Materials	Current density (mA g^{-1})	Reversible capacity (mAh g^{-1})	Reference
3D graphene	327	452	1
RGO sheets	500	~250	2
Resultant flame reduced GO	372	283	3
3D porous graphene	372	~320	4
Porous graphene	400	~300	5
3D graphene frameworks	500	430	6
Graphene foams	372	~120	7
Holey graphene	1000	~400	8
Graphene sheets	1000	~300	9
Bare graphene	1000	~300	10
Reduced graphene nanosheets	400	~400	11
Free standing rGO	400	495.2	This work
	800	424.8	

Notes and references

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