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## Supporting Information

15 **One-Pot Mass Preparation of MoS<sub>2</sub>/C Aerogel for High-**

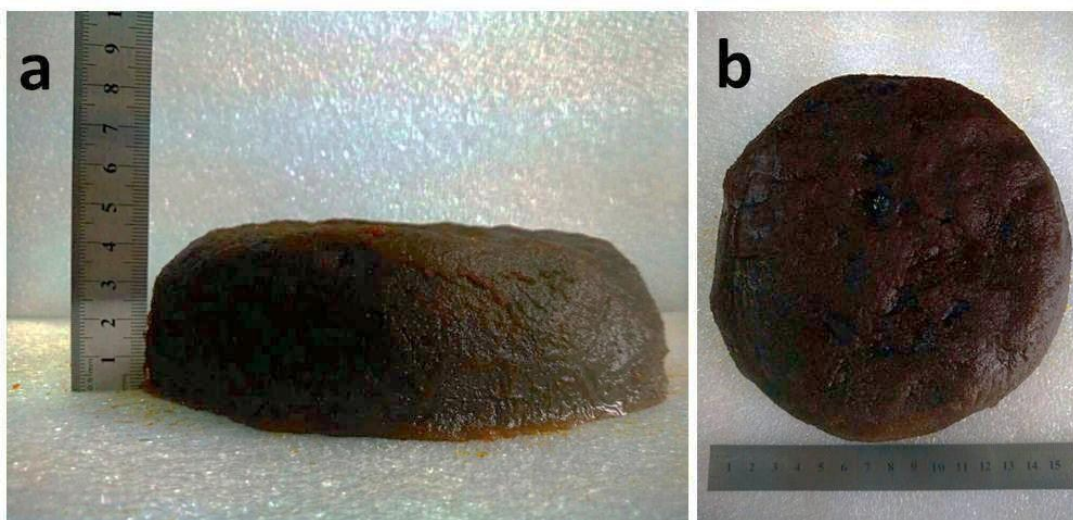
16 **Performance Supercapacitors and Lithium-Ion Batteries**

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19 Corresponding author E-mail: [yangjinhua@tongji.edu.cn](mailto:yangjinhua@tongji.edu.cn)

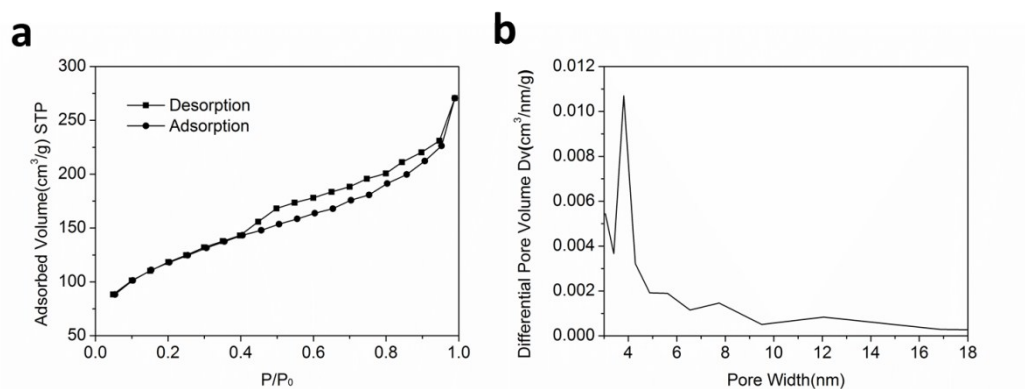
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2 **Fig. S1** Optical photographs of the obtained precursor gel in a larger scale.

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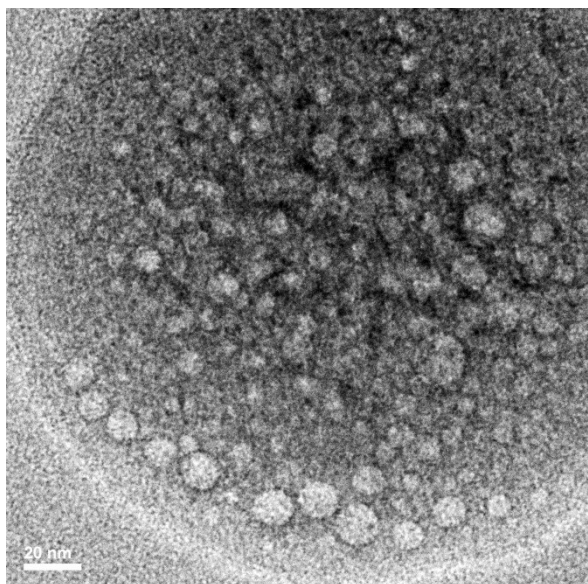


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5 **Fig. S2** (a) Nitrogen adsorption-desorption isotherms and (b) pore-size distribution  
6 curves of the MoS<sub>2</sub> composite aerogel.

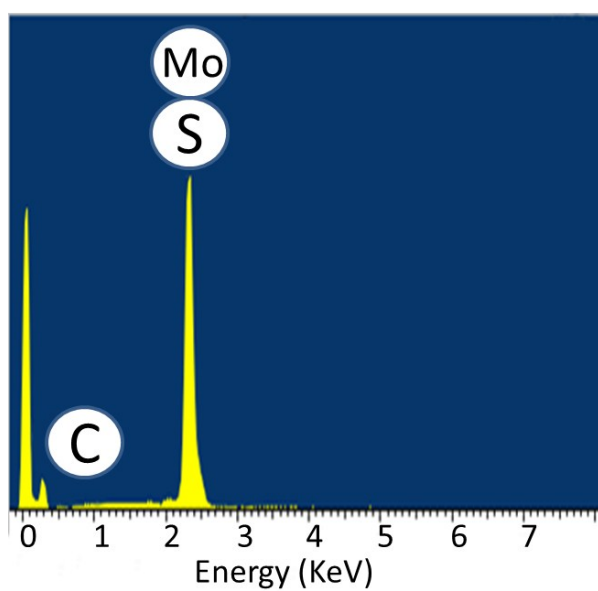
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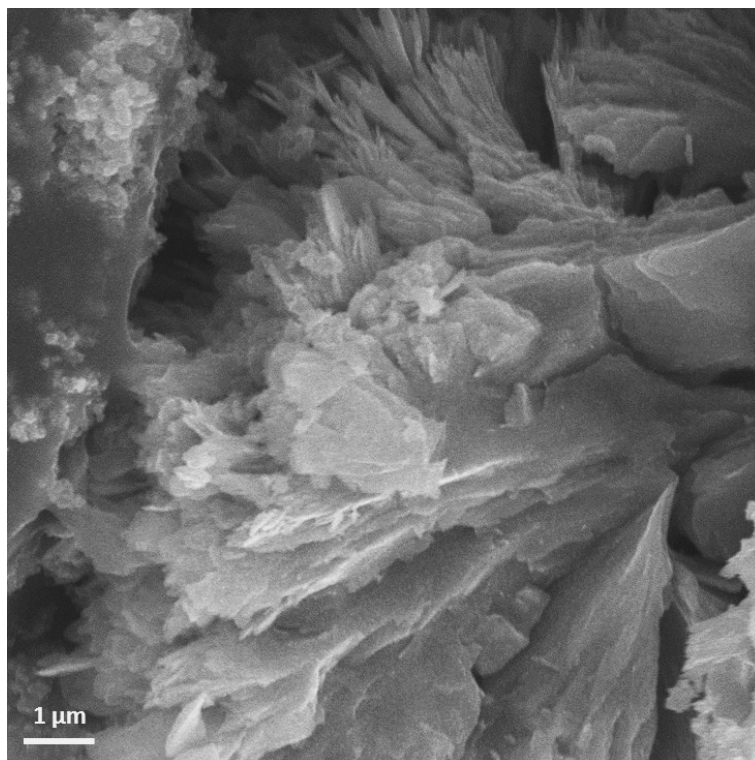


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2 **Fig. S3** TEM image of the MoS<sub>2</sub>/C composite aerogel.

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5 **Fig. S4** Energy dispersive X-ray spectrometry (EDS) spectrum of the MoS<sub>2</sub>/C  
6 composite aerogel.



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2 **Fig. S5** SEM image of MC-3 overloaded with MoS<sub>2</sub>.

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4 **Tab. S1** Summary of electrochemical performance comparisons of various MoS<sub>2</sub>/C  
5 composites used as electrode materials in supercapacitors.

	<b>Material</b>	<b>Capacity at (X) Current Density</b>	<b>Coulombic Efficiency after (Y) Cycles</b>	<b>At Current Density</b>
a	MoS <sub>2</sub> /RGO@PANI	1224 F g <sup>-1</sup> (1 A g <sup>-1</sup> )	82.5% (3 000)	10 A g <sup>-1</sup>
b	three-dimensional graphene/MoS <sub>2</sub>	410 F g <sup>-1</sup> (1 A g <sup>-1</sup> )	80.3% (10 000)	2 A g <sup>-1</sup>
c	MoS <sub>2</sub> /N-doped graphene	245 F g <sup>-1</sup> (0.25 A g <sup>-1</sup> )	91.3% (1 000)	2 A g <sup>-1</sup>
d	MoS <sub>2</sub> /microporous carbons	189 F g <sup>-1</sup> (1 A g <sup>-1</sup> )	98% (3 000)	10 A g <sup>-1</sup>
e	MoS <sub>2</sub> /PANI	552 F g <sup>-1</sup> (0.5 A g <sup>-1</sup> )	79% (6 000)	1 A g <sup>-1</sup>
	<b>This work</b>	712.6 F g <sup>-1</sup> (1 A g <sup>-1</sup> )	97.3% (13 000)	6 A g <sup>-1</sup>

6 Note: a, b, c, d and e correspond to Ref.s 29, 30, 31, 32 and 33, respectively, in the  
7 main text.

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1 **Tab. S2** The mass percentage of MoS<sub>2</sub> and C in the three samples, calculated based  
2 on ICP results.

<b>Sample</b>	<b>Mass percentage of MoS<sub>2</sub> (%)</b>	<b>Mass percentage of C (%)</b>
MC-1	22.9	77.1
MC-2	41.3	58.7
MC-3	59.2	40.8

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