

1 **Synthesis of Uniform TiO₂@carbon Composite Nanofibers as**
2 **Anode for Lithium Ion Batteries with Enhanced Electrochemical**
3 **Performance**

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16 **Supporting Information**

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18 **Captions**

19 **Fig.s1 (a)** TGA/DSC curves of TiO₂@carbon composite nanofibers, **(b)** TGA curves
20 of TiO₂ composite nanofibers showing that carbon has been removed completely.

21 **Fig.s2** Low magnification FE-SEM images of the nanofibers show the high

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22 uniformity and high yield, while the high magnification FE-SEM images reveal many
23 mesoporosities and interstices in the nanofibers: **(a)** low magnification FE-SEM image
24 of TiO₂@carbon nanofibers;

25 **Fig.s3 (a)** TEM image of TiO₂@carbon nanofibers and high magnification TEM
26 image of single TiO₂@carbon nanofiber (**inset**), indicating that the nanofibers consist
27 of TiO₂@carbon nanoparticles; **(b)** TEM image of TiO₂ nanofibers and high
28 magnification TEM image of single TiO₂ nanofiber (**inset**), indicating that the
29 nanofibers consist of TiO₂ nanoparticles; **(c)** EDX spectrum and corresponding
30 content table for TiO₂@carbon nanofibers (**inset**); **(d)** EDX spectrum and
31 corresponding content table for TiO₂ nanofibers (**inset**).

32 **Scheme S1** Charge diffusion mechanism of TiO₂@carbon (a) and pure TiO₂ (b)
33 nanofibers during charge/discharge processes. The insets show high resolution TEM
34 images of the TiO₂@carbon and TiO₂ nanofibers, respectively.

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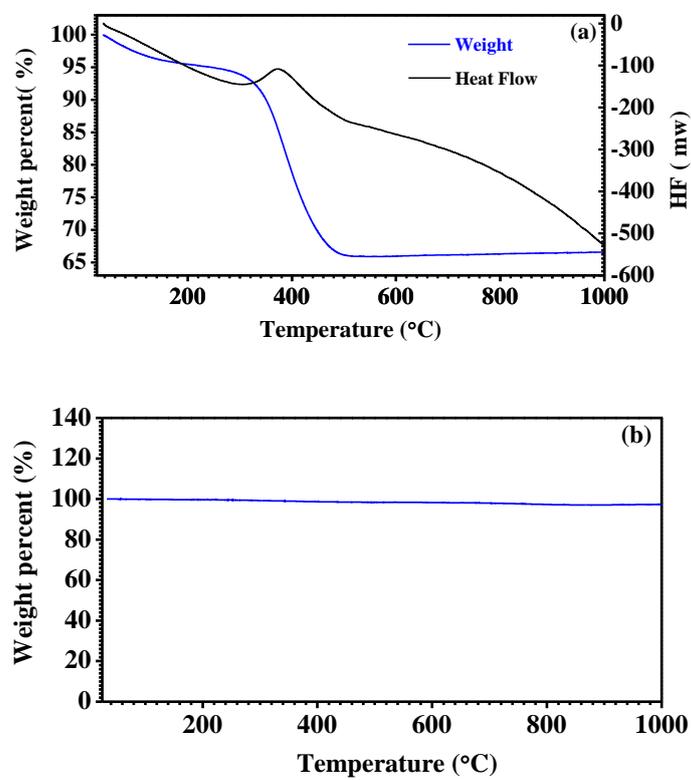


Fig.s1

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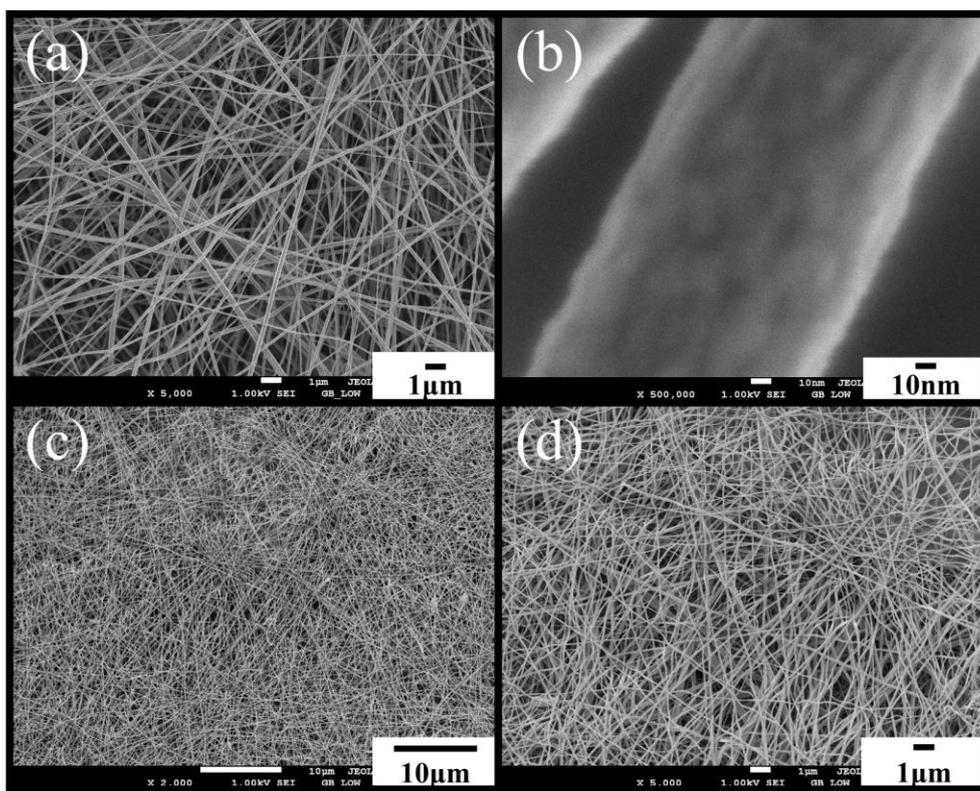


Fig.s2

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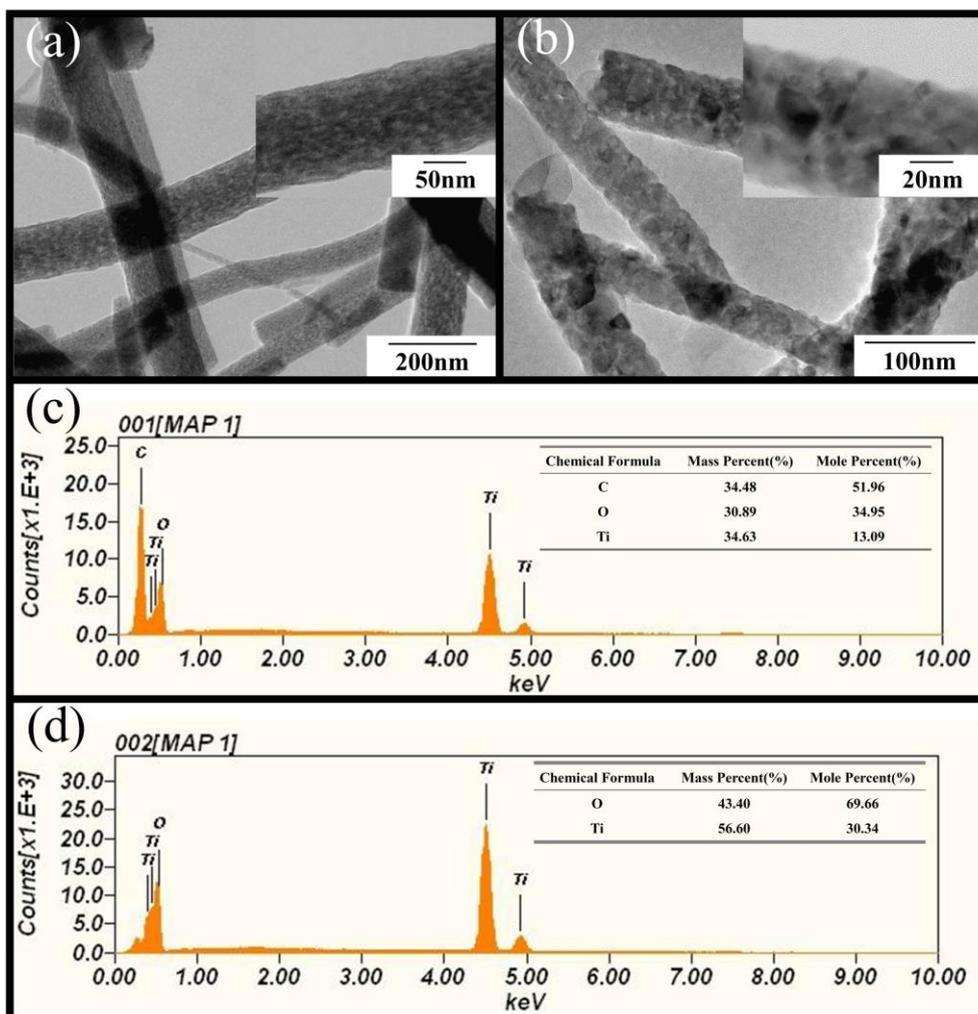


Fig.s3

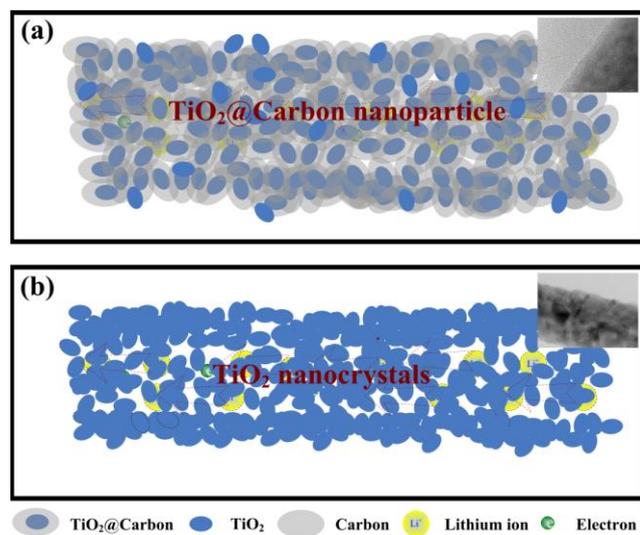
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Scheme S1

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