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Electronic Supplementary Information

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Sol-Gel Nanoglues for Organic Binder-Free TiO_2 Nanofiber Anode for Lithium Ion Batteries

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Table S1 The volumetric capacities for TiO_2 nanofibers and nanofiber with nanoglues electrodes.

Electrodes	Volumetric capacity (mAh/cm^3)	
	Theoretical	**Geometrical**
Nanofibers	645.68	41.91
NF with nanoglues	747.29	231.63

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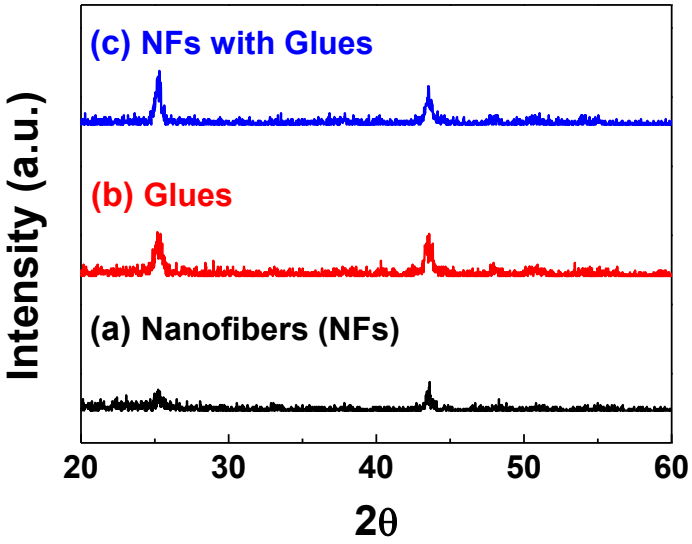

Fig.S1 XRD patterns of TiO_2 nanomaterials (a) TiO_2 nanofibers, (b) TiO_2 nanoglues, and (c) TiO_2 nanofiber with nanoglues.

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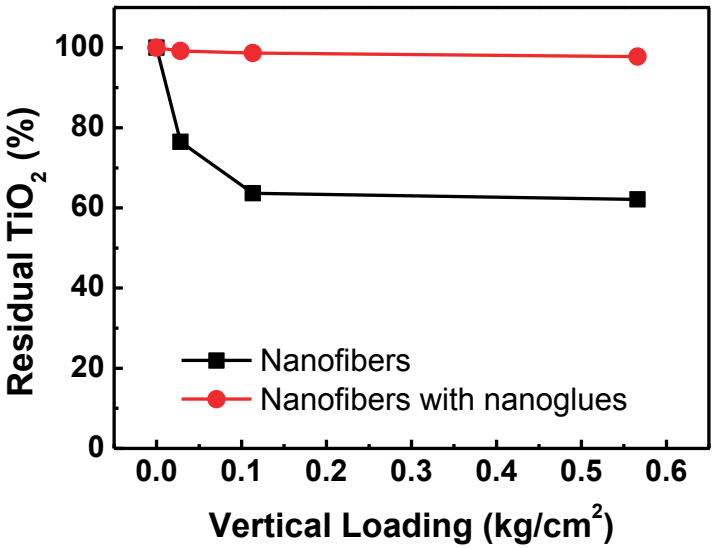

Fig.S2 Adhesion test using peeling off TiO_2 films with a PDMS stamp.

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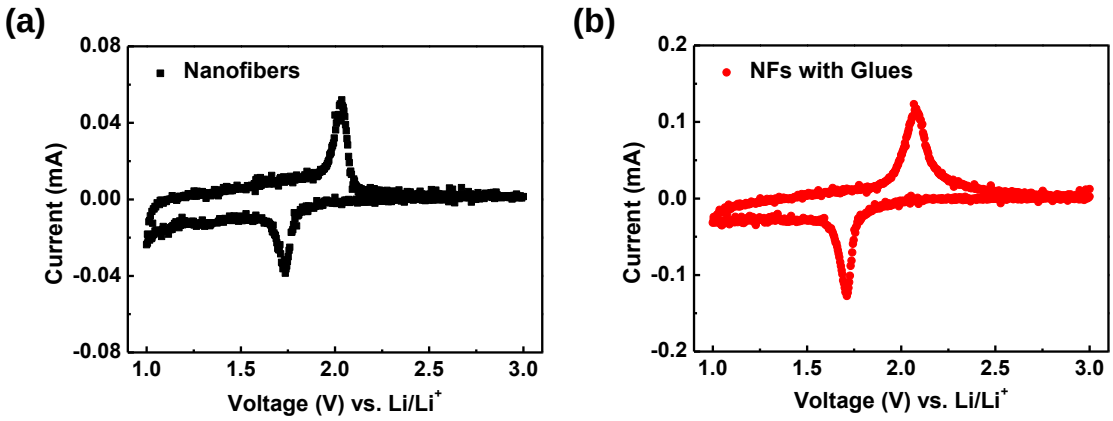

Fig.S3 Cyclic voltammetry (CV) curves of (a) TiO_2 nanofibers and (b) TiO_2 nanofibers with nanoglues between 3.0 V and 1.0 V at a scan rate of 0.2 mVs^{-1}.

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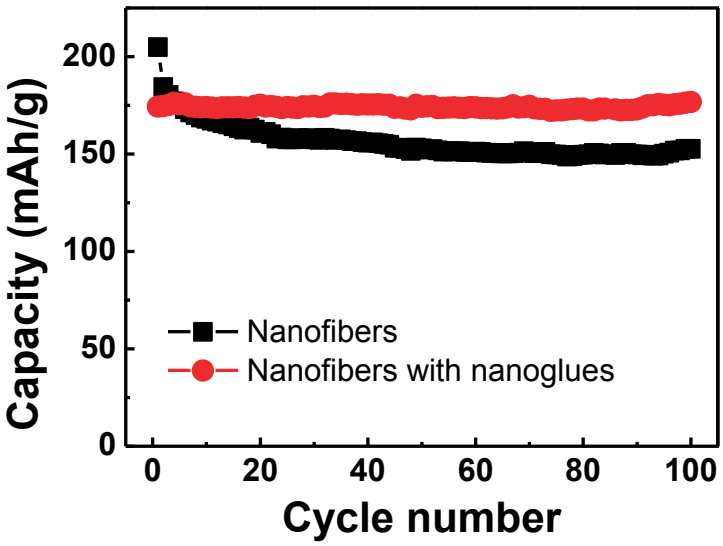

Fig.S4 Cycle performance of TiO_2 batteries.

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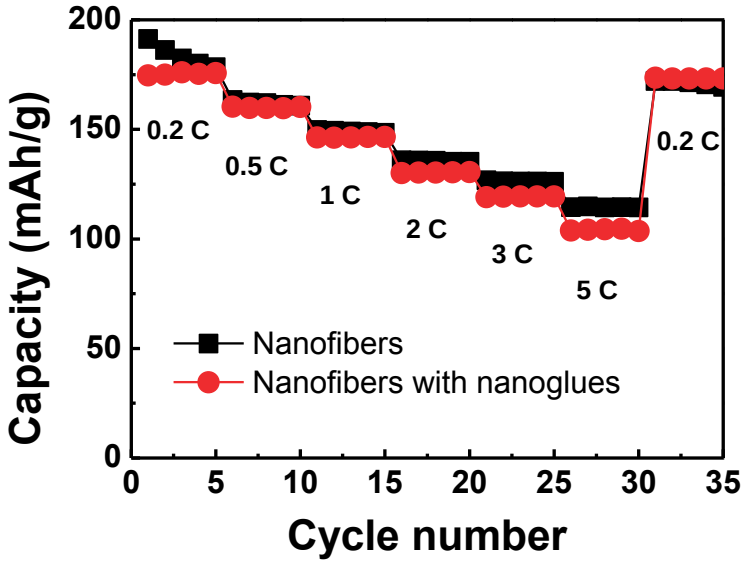

Fig.S5 Rate capability of TiO_2 batteries.

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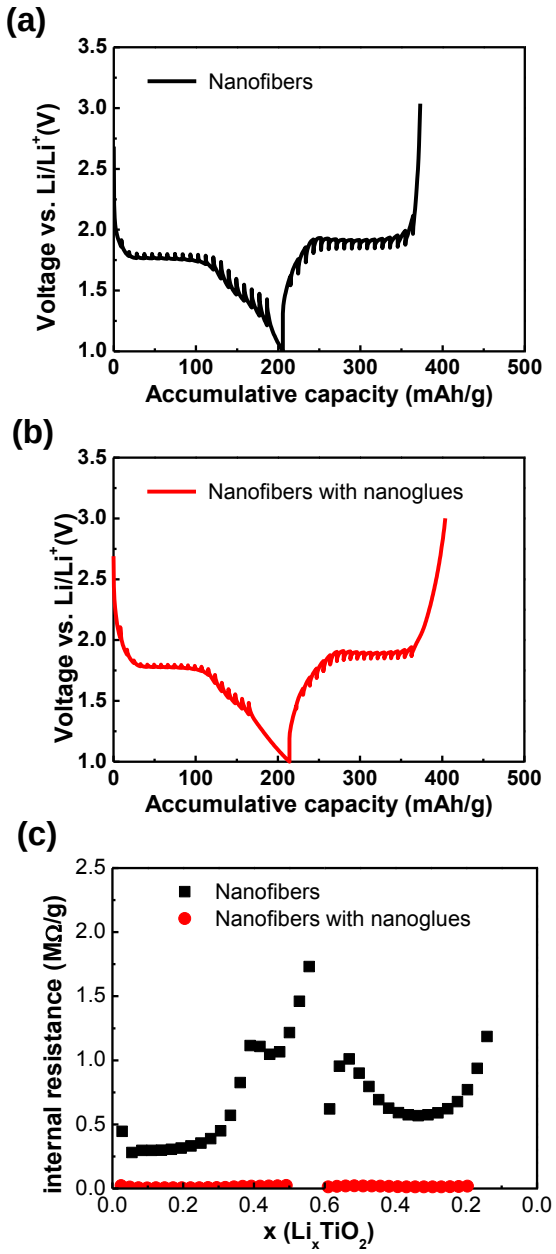

Fig.S6 GITT voltage profiles of (a) TiO_2 nanofibers electrode and (b) TiO_2 nanofibers with nanoglues electrode, and (c) internal resistance of both electrodes.