Supporting Information

TiO_2-B nanowires via topological conversion with enhanced lithium-ion intercalation properties

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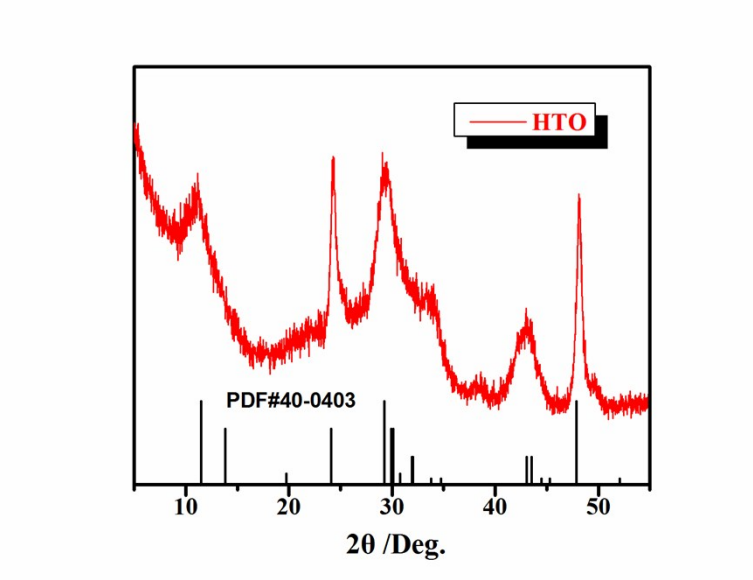

Fig. S1 XRD pattern of HTO nanowires precursor.

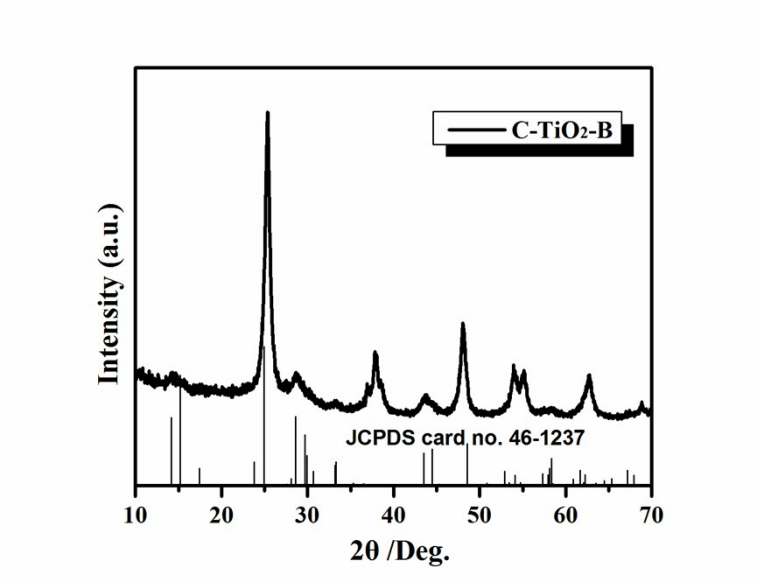

Fig. S2 XRD pattern of C-TiO_2-B.

Table S1 Lattice constants of HTO and TiO_2-B.

Phase	a(Å)	b(Å)	c(Å)	β(°)
$H_2Ti_6O_{13}$	15.59	3.79	9.10	99.78
TiO_2-B	12.20	3.74	6.53	107.36

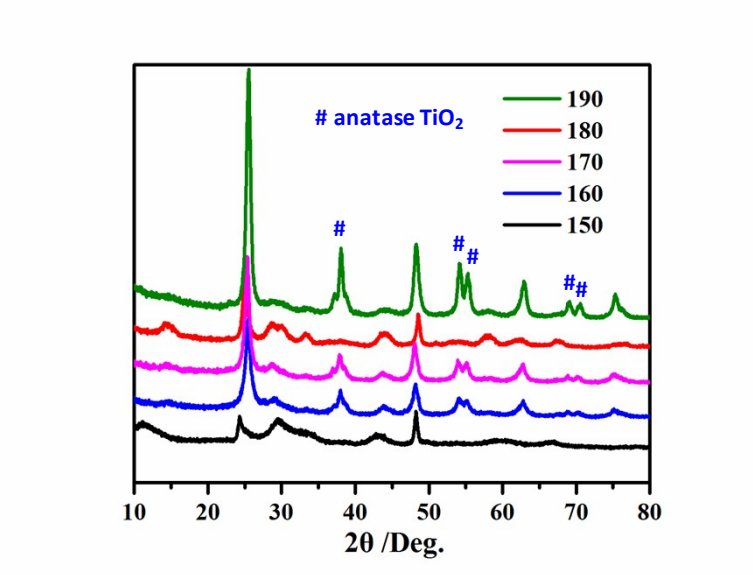

Fig. S3 XRD pattern of TiO_2 derived from titanate with different reaction times.

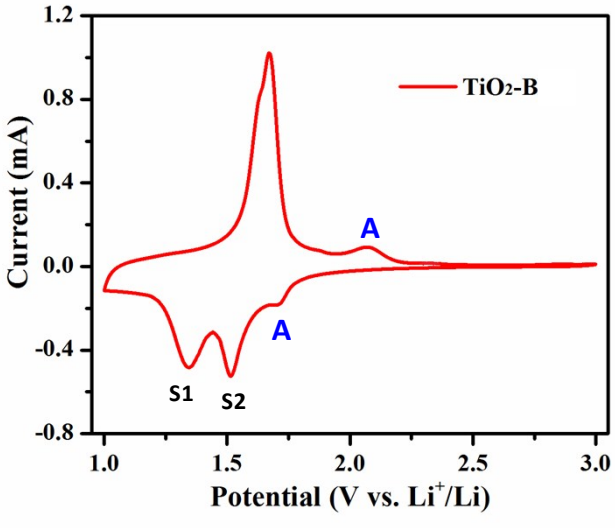

Fig. S4 CV curve of TiO_2-B.

Table S2 Electrochemical properties of TiO_2-B anodes in LIBs

TiO_2-B anodes	Reversible capacity, mA h g^{-1}/cycle, (Current density, A g^{-1})	References
Ultrathin TiO_2-B nanosheets	160/400th (5 C)	Energy Environ. Sci., 2015, 8, 1480
Hierarchically mesoporous TiO_2-B	143.2/1000th (10 C)	J. Mater. Chem. A, 2018, 6, 1196
Hierarchical TiO_2-B nanosheets	172.6/500th (10 C)	*J. Power Sources*, 2018, 392, 226
Porous TiO_2-B nanosheets	186.8/1000th (5 C)	*Nano Energy*, 2017, 31, *1*
Flower-like hydrogenated TiO_2-B	177.1/200th (10 C)	*J. Power Sources*, 2014, 267, 388
TiO_2-B nanowires	192.4/3600th (10 C)	**Our work**