

Carbon intercalated porous $\text{NaTi}_2(\text{PO}_4)_3$ spheres as high-rate and ultralong-life anodes for rechargeable sodium-ion batteries

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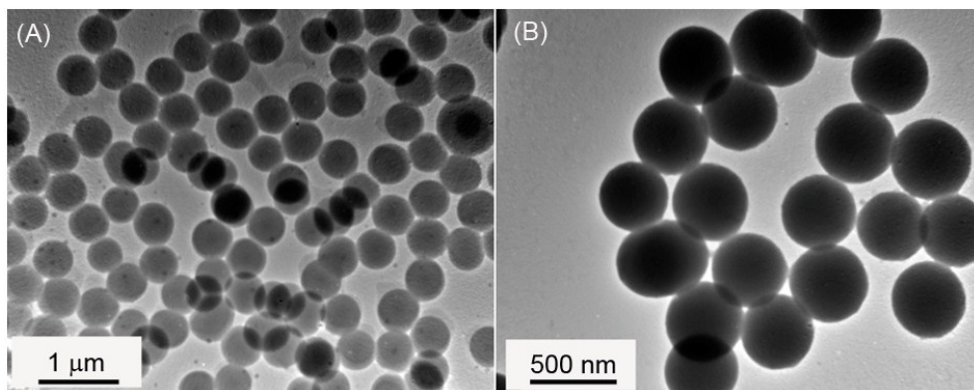


Fig. S1 (A, B) TEM images of the titanium glycolate precursor spheres.

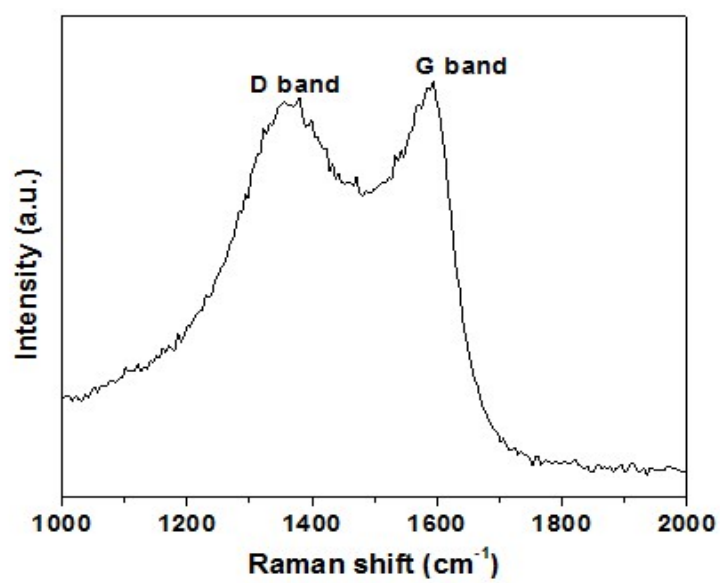


Fig. S2 Raman spectra of porous NTP@C spheres.

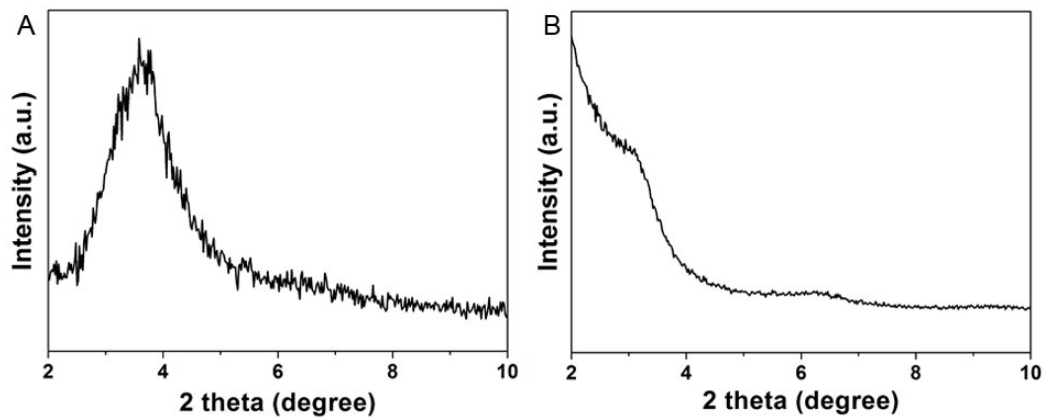


Fig. S3 Small-angle XRD patterns for the (A) NTP-precursor and (B) porous NTP@C spheres.

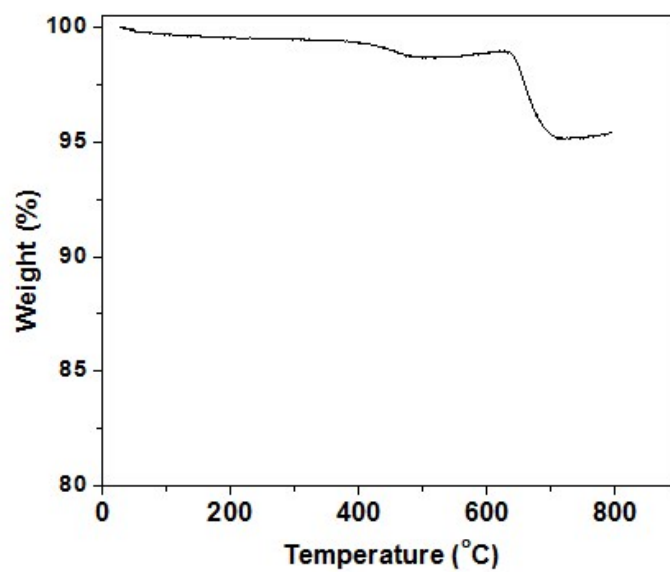


Fig. S4 TGA curve of the porous NTP@C spheres.

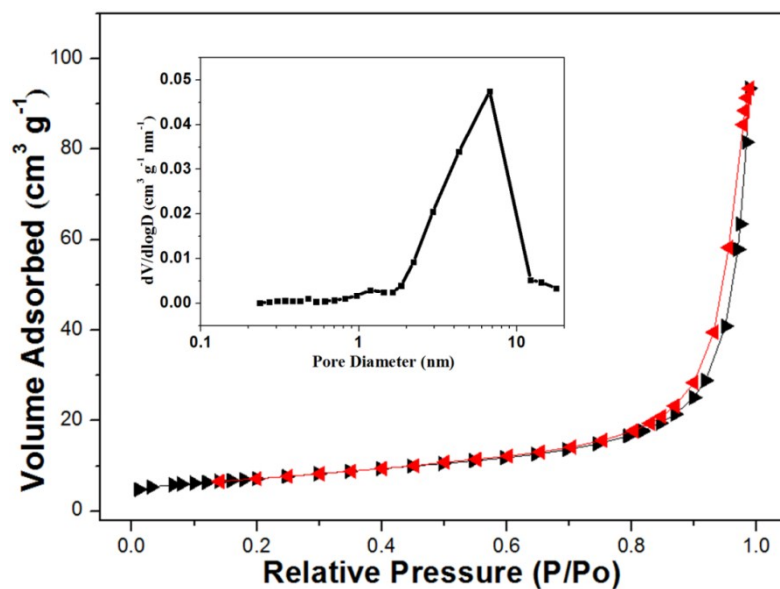


Fig. S5 N₂ adsorption-desorption isotherms of porous NTP@C spheres (Inset is the corresponding Barrett-Joyner-Halenda (BJH) pore size distribution curve).

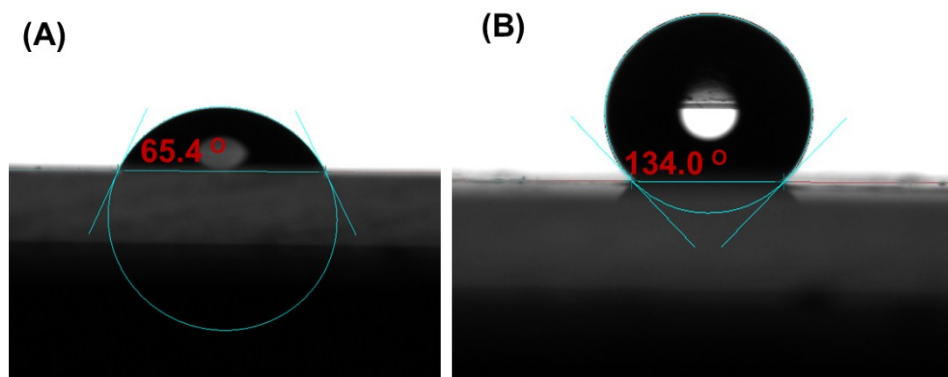


Fig. S6 Dynamic water contact angle measurement for (A) the porous NTP@C spheres, (B) pure NTP. The image was captured when the water droplet rests on the surface and stopped at 10 s or longer until no change in droplet size.

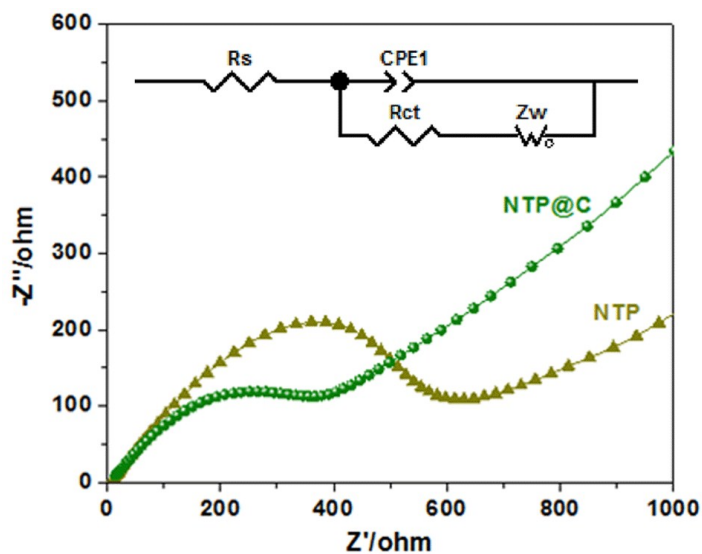


Fig. S7 Nyquist plots of the pure NTP and the porous NTP@C spheres and the corresponding fitted equivalent circuit model (inset).

Table S1: Atomic parameters of the porous NTP@C spheres refined from XRD. NASICON-type structure in space group R-3c. Cell parameters: $a = 8.4830 \text{ \AA}$, $c = 21.8043 \text{ \AA}$, $R_{wp} = 6.51 \%$, $V = 1358.88 \text{ \AA}^3$, $S = 2.96$.

Atom	Wyck. site	x	y	z
Na	6b	0	0	0
Ti	12c	0	0	0.1453
P	18e	0.2891	0	0.2500
O1	36f	0.1724	0.2980	0.1932
O2	36f	0.1922	0.1637	0.0890