**Supporting Information**

**Carbon-coated hierarchical NaTi2(PO4)3 mesoporous microflowers with superior sodium storage performance**

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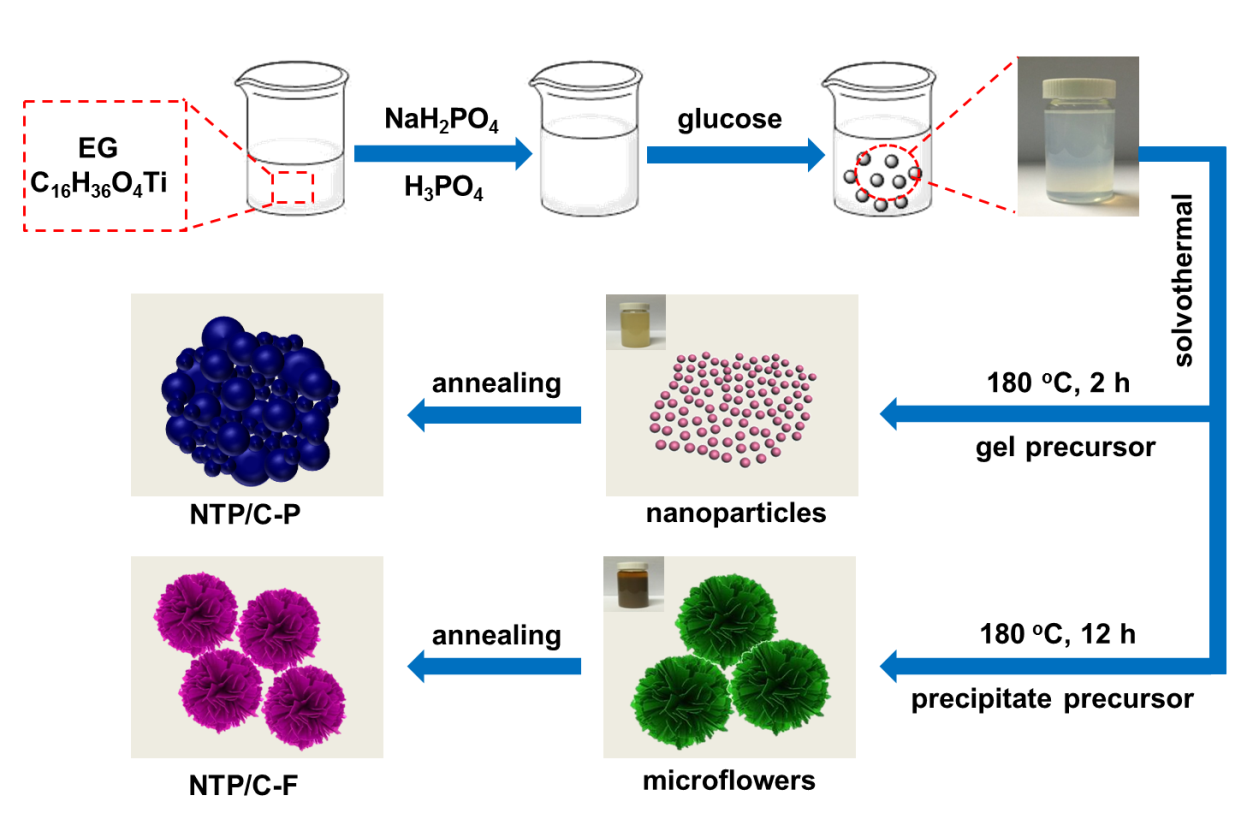
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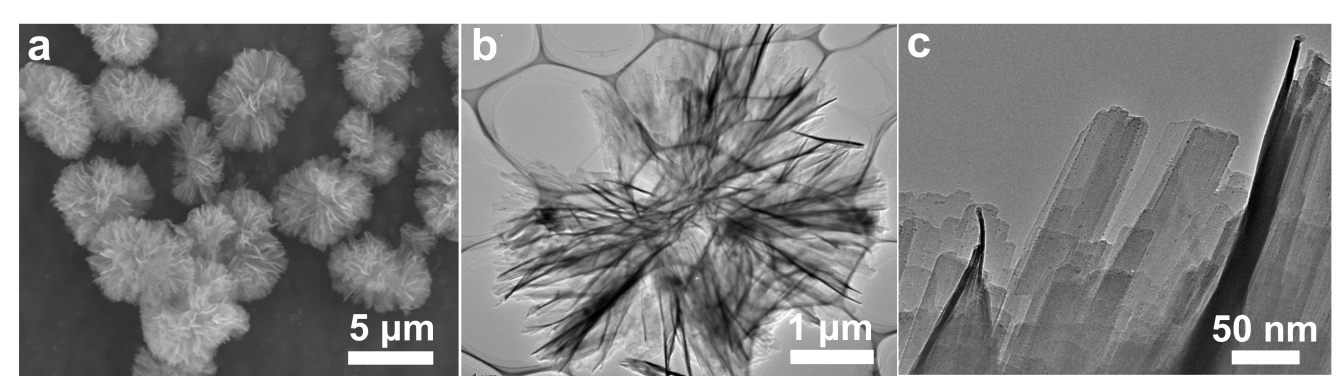
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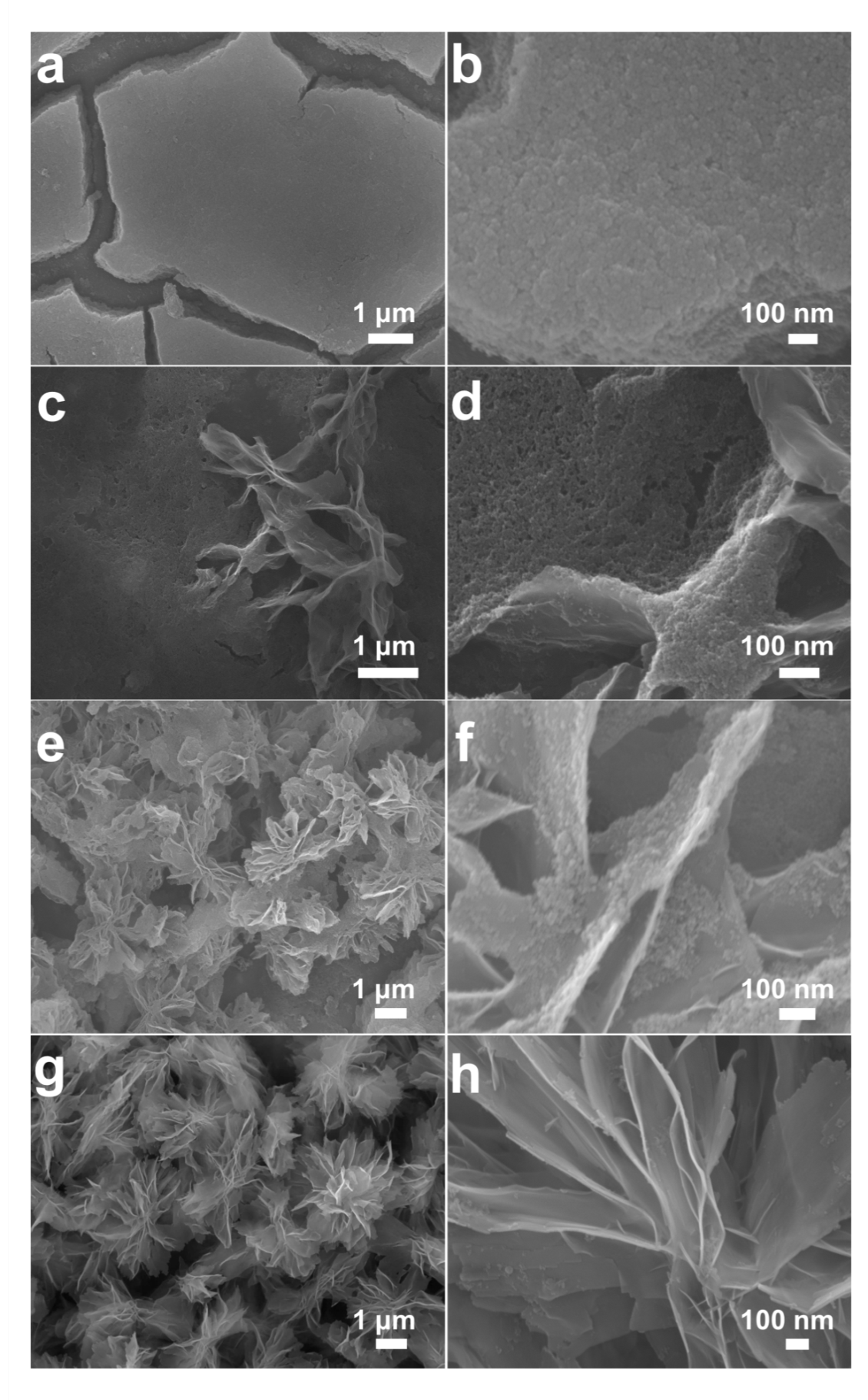
1 These authors contributed equally to this work.



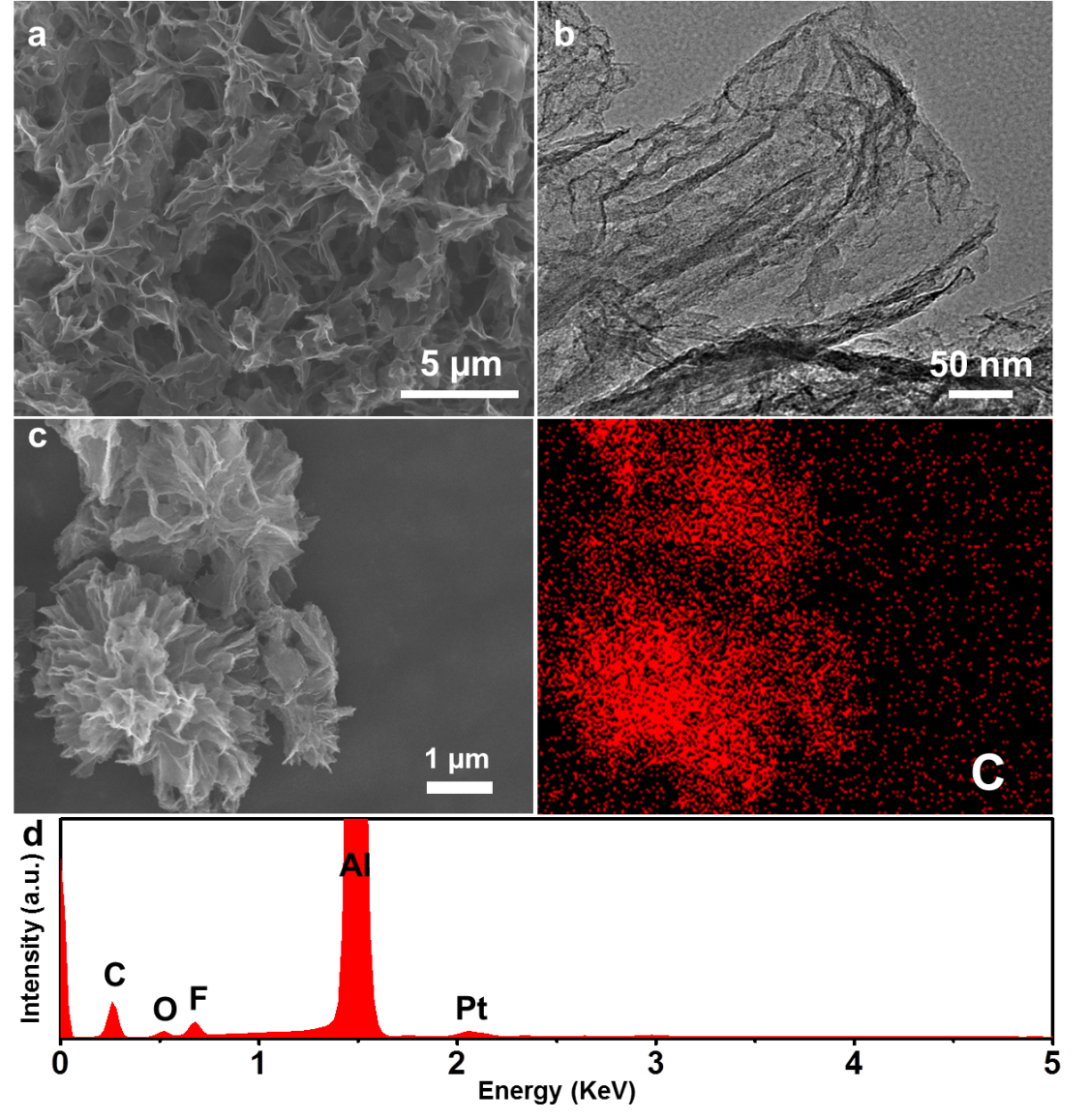
**Figure S1** Schematic illustration of the fabrication process for the NTP/C-P and NTP/C-F.



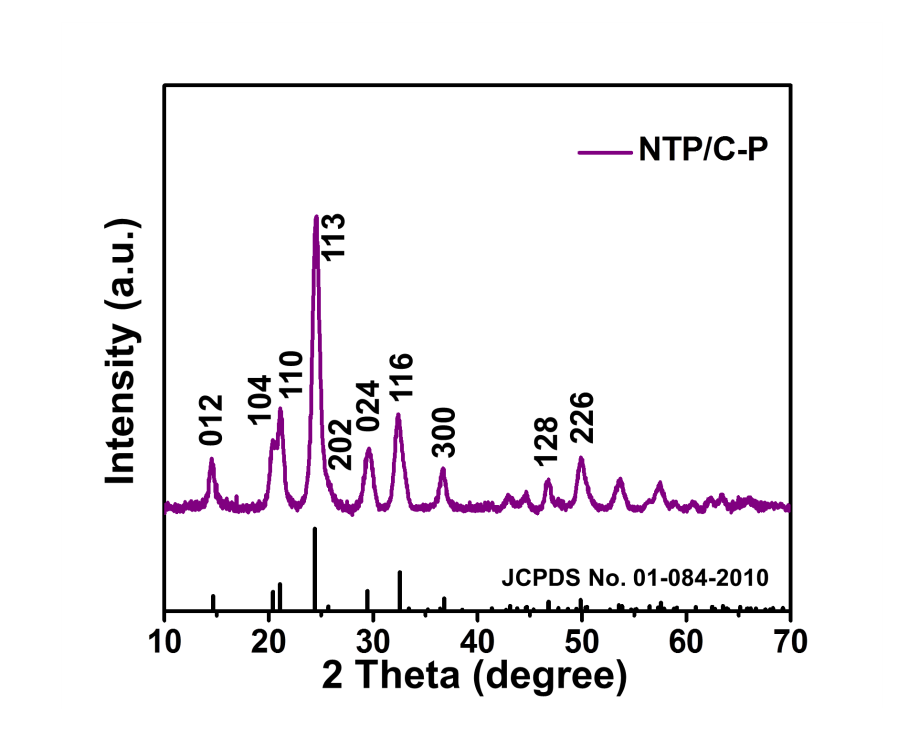
**Figure S2** (a) FESEM image and (b, c) TEM images of NTP/C-F precursor.



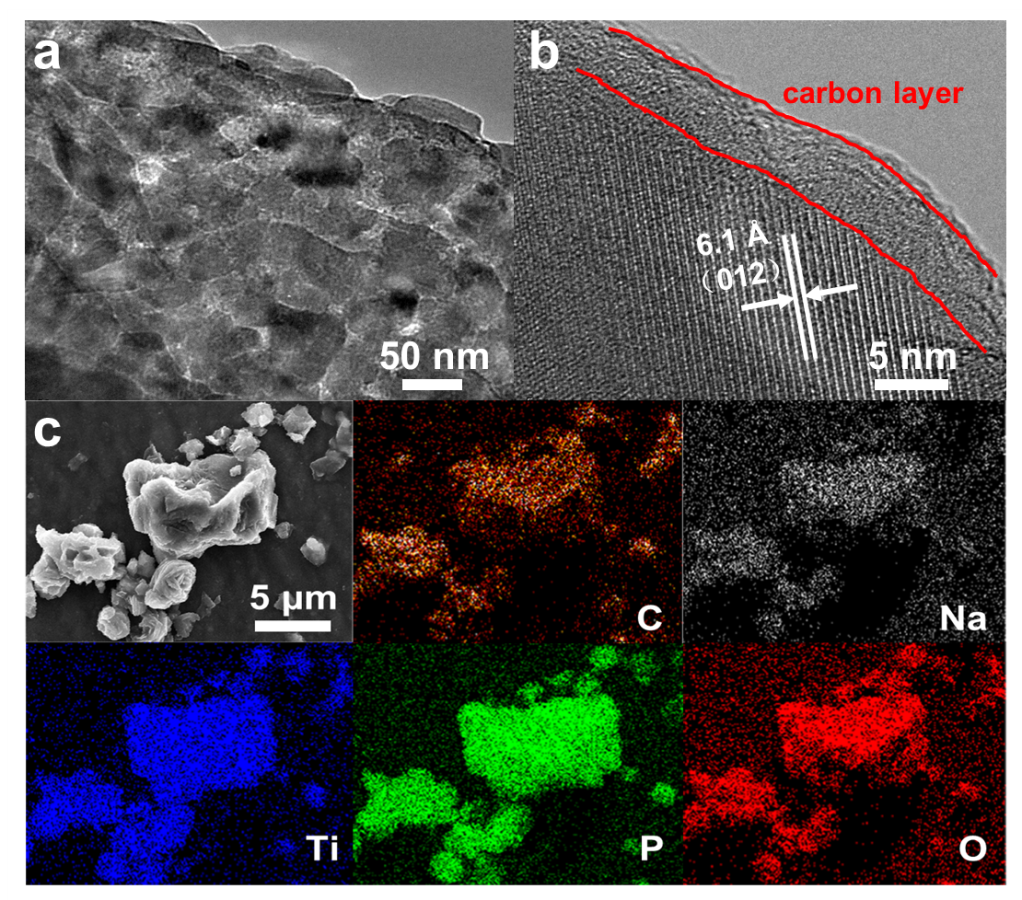
**Figure S3** FESEM images of NTP precursors prepared with different solvothermal reaction time: (a, b) 2 h, (c, d) 3 h, (e, f) 4 h, (g, h) 8 h.



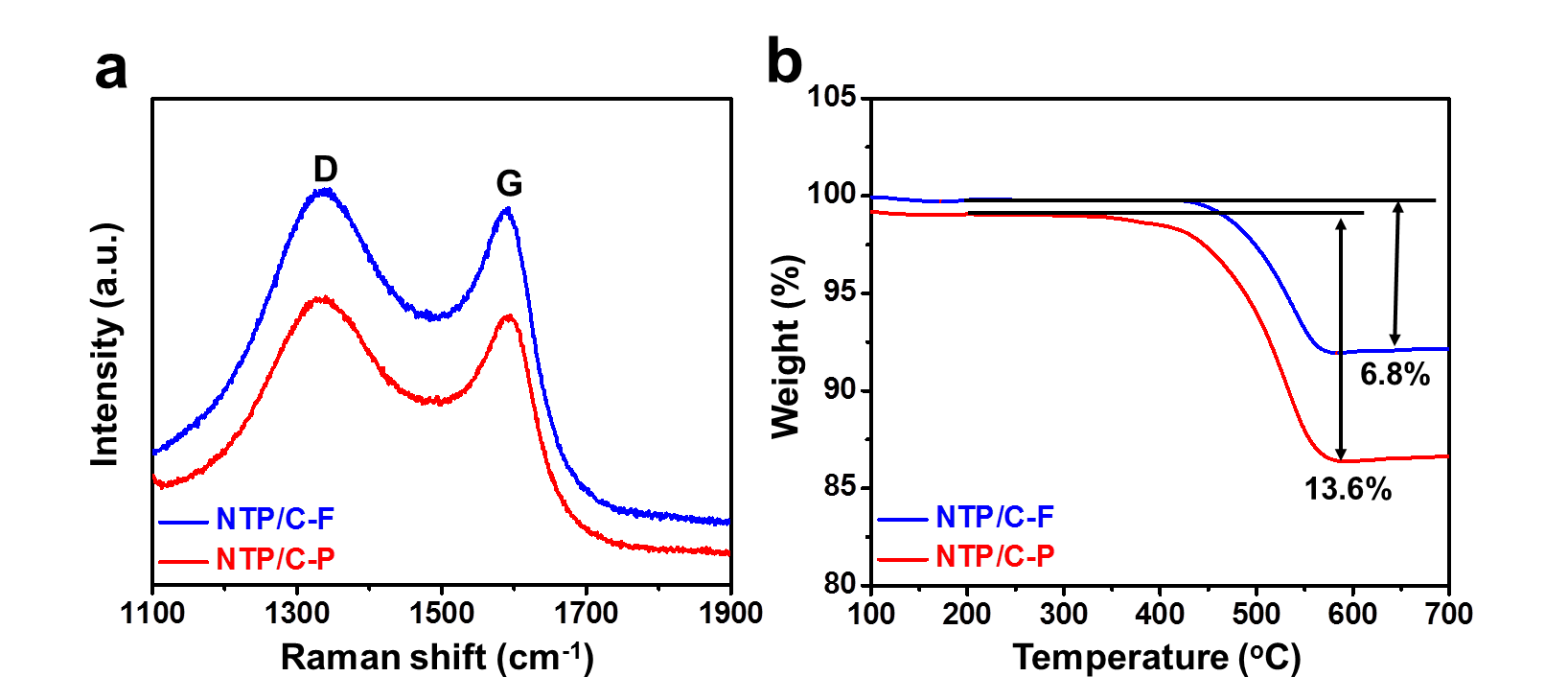
**Figure S4** (a) SEM image, (b) TEM image, (c) EDS elemental mappings, and (d) EDS spectrum of the residual carbon skeleton after etching the NTP from NTP/C-F.

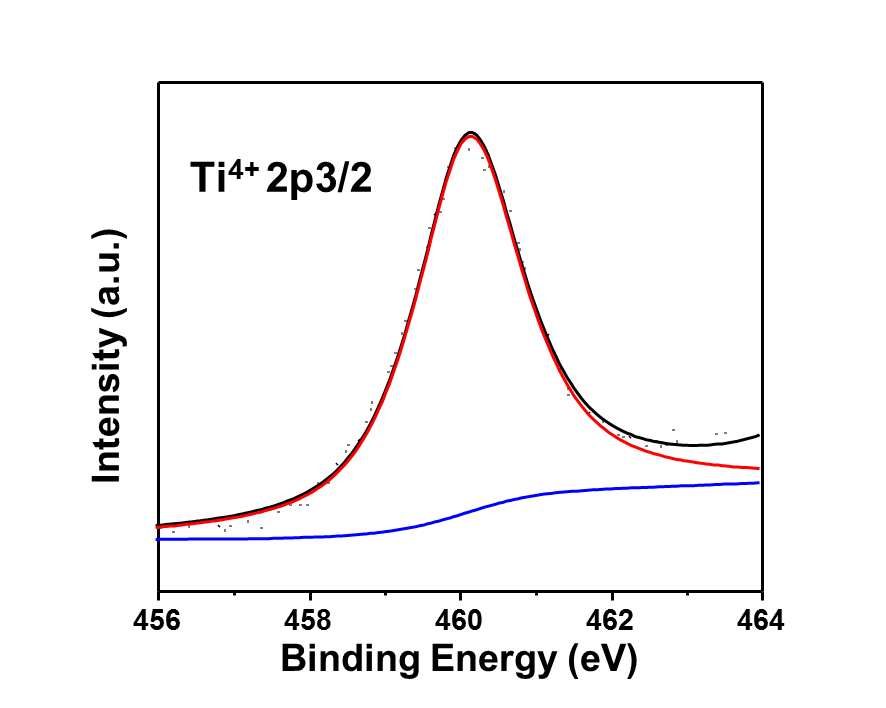
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**Figure S5** The XRD pattern of NTP/C-P.

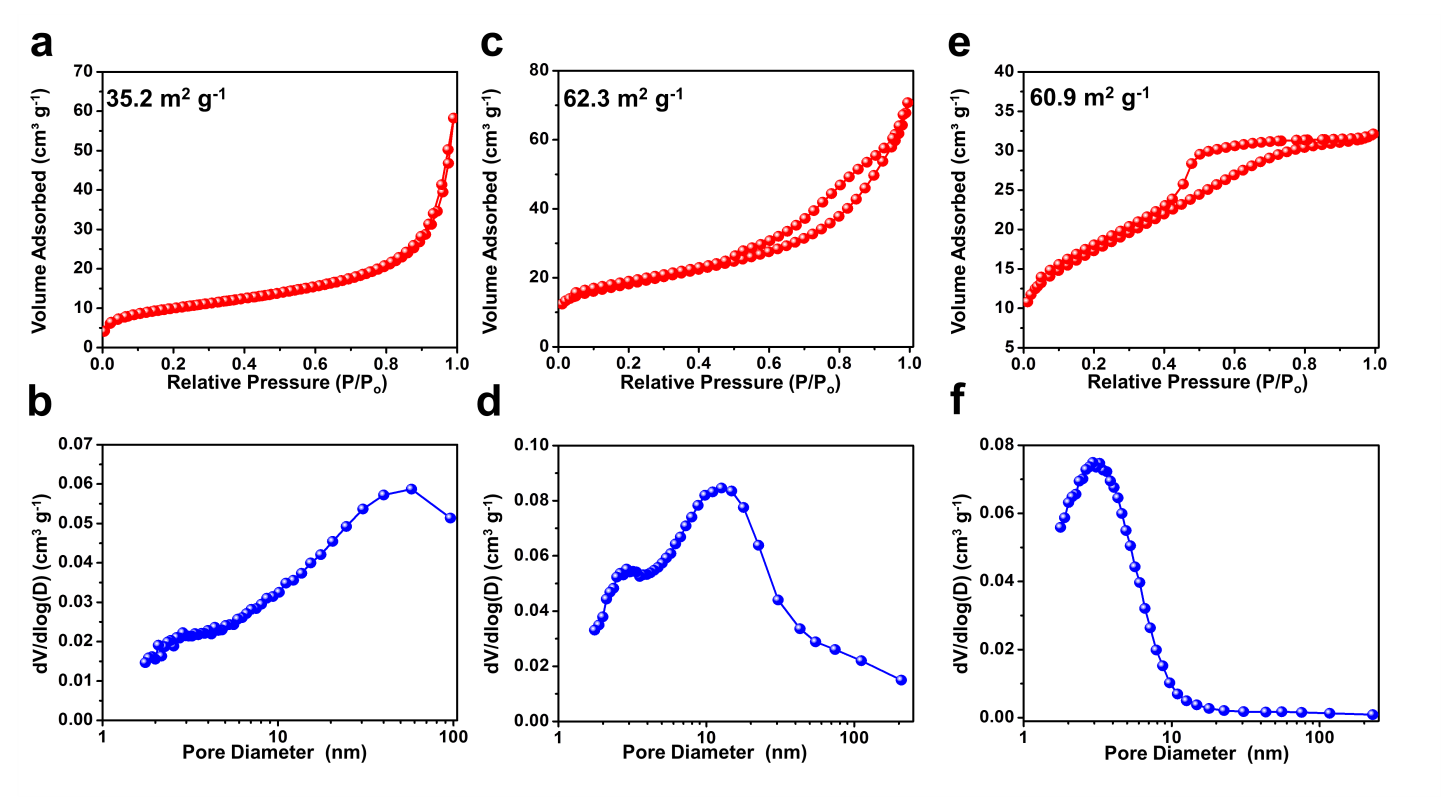
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**Figure S6** (a) TEM image, (b) HRTEM image, and (c) EDS elemental mappings of NTP/C-P.

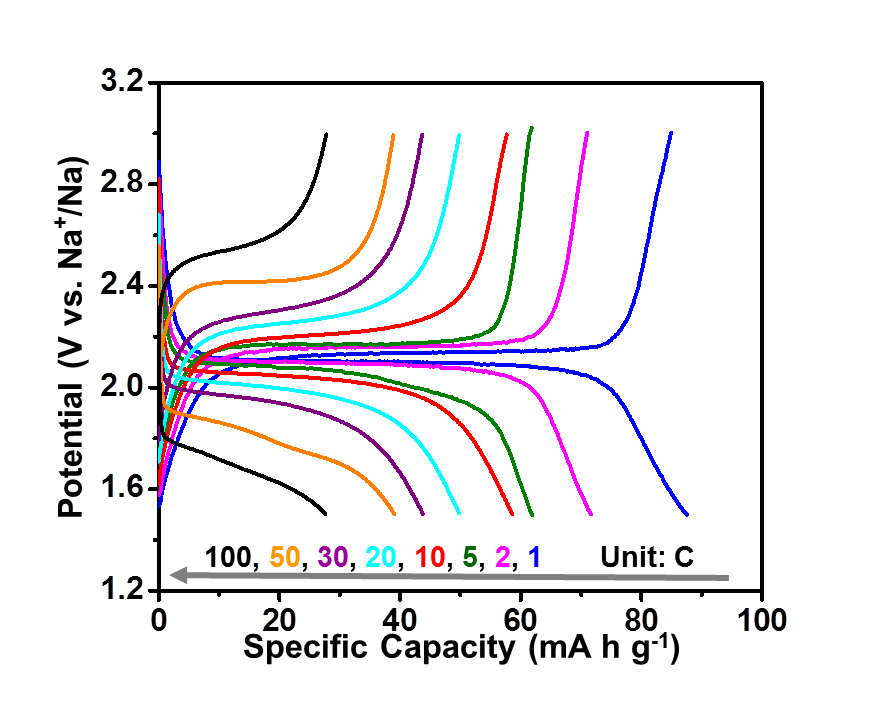
**Figure S7** (a) Raman spectra and (b) TGA curves of NTP/C-F and NTP/C-P.



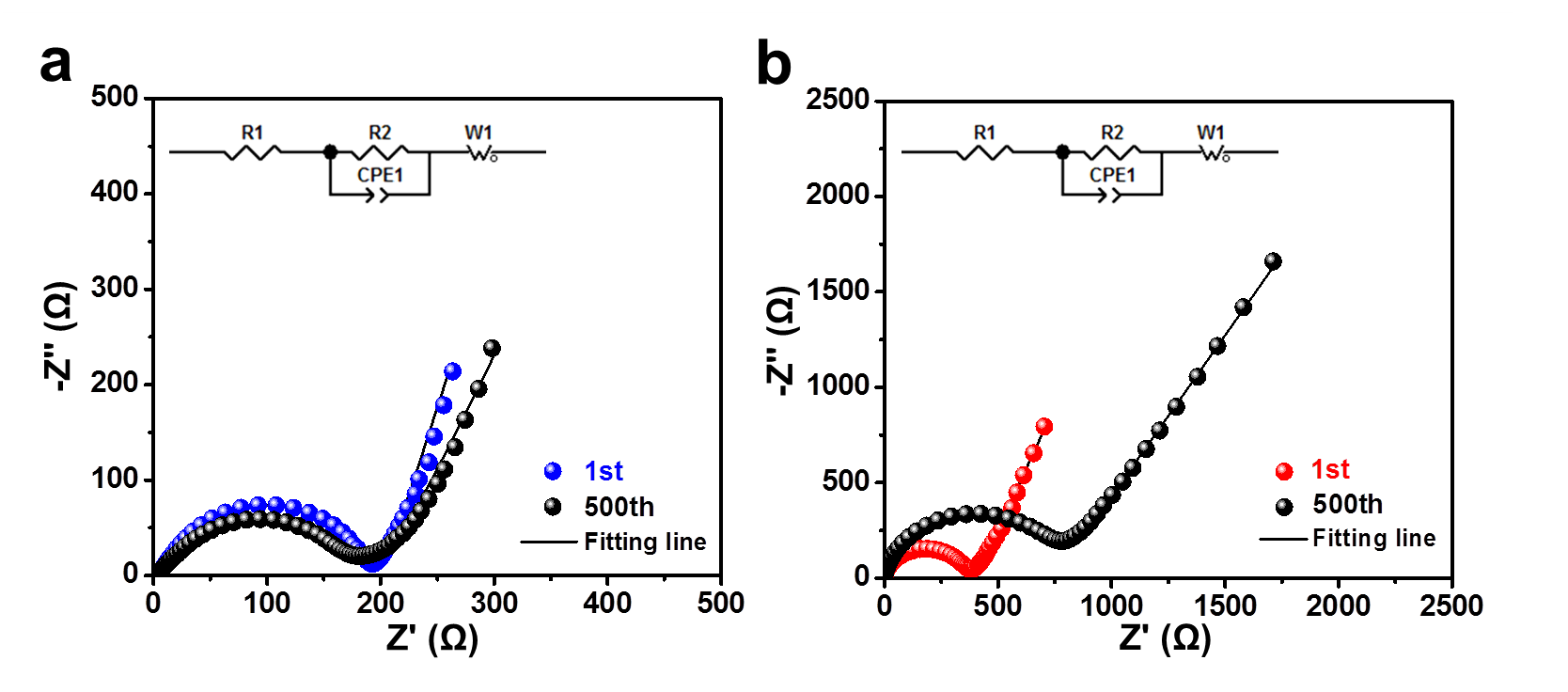
**Figure S8** XPS spectra of the Ti 2p3/2 core level region of NTP/C-F.



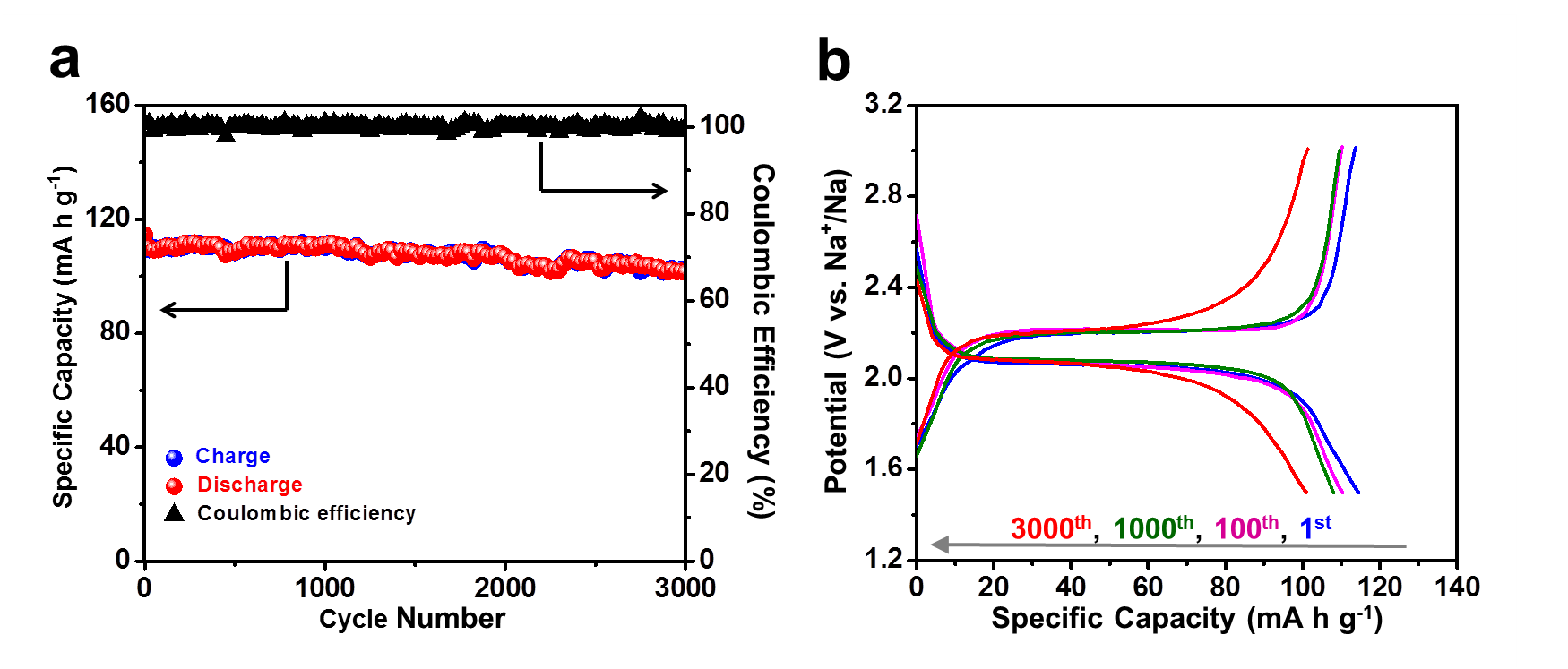
**Figure S9** Nitrogen adsorption-desorption isotherms and corresponding pore size distributions of NTP/C-F precursor (a, b), NTP/C-F (c, d), and NTP/C-P (e, f).



**Figure S10** Discharge-charge curves of the NTP/C-P at different rates (1–100 C).



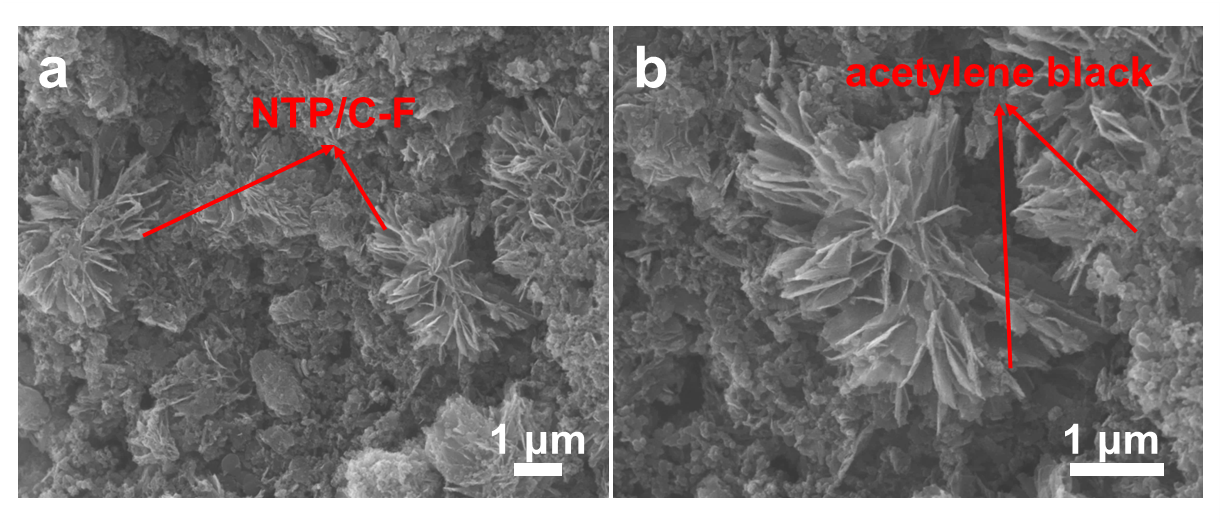
**Figure S11** The Nyquist plots of the fully charged NTP/C-F (a) and NTP/C-P (b) after different cycles at 5 C with equivalent circuit inset.



**Figure S12** (a)Capacity retention and coulombic efficiency through 3000 cycles of the NTP/C-F at 10 C. (b) The 1st, 100th, 1000th, and 3000th discharge-charge profiles of the NTP/C-F at 10 C.

**Table S1.** Comparison of the long-cycling performance of the NTP/C-F with the recently reported NTP electrode materials for nonaqueous SIBs.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **NTP Samples** | **Cycles** | **Rate**  **(C)** | **Initial capacity**  **(mA h g-1)** | **Final** **capacity**  **(mA h g-1)** | **Capacity retention**  **(%)** |
| NTP⊂GN[18] | 1000 | 10 | 96 | 77 | 80 |
| C/NTP-RT[19] | 10,000 | 10 | 81 | 72.3 | 89.3 |
| NTP/CMK-3[21] | 1000 | 0.5 | 110 | 62.9 | 57.1 |
| NTP-NBA[22] | 10,000 | 10 | 115 | 87 | 75.5 |
| NTP@C@PC[24] | 6000 | 10 | 110 | 76 | 69 |
| **This work** | **10,000** | **20** | **110** | **85** | **77.3** |



**Figure S13** (a, b)SEM images of the NTP/C-F electrode after 5000 cycles at 20 C.