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Supporting Information

Self-supported ultrathin bismuth nanosheets acquired from in situ topotactic transformation of BiOCl for high performance aqueous anode material

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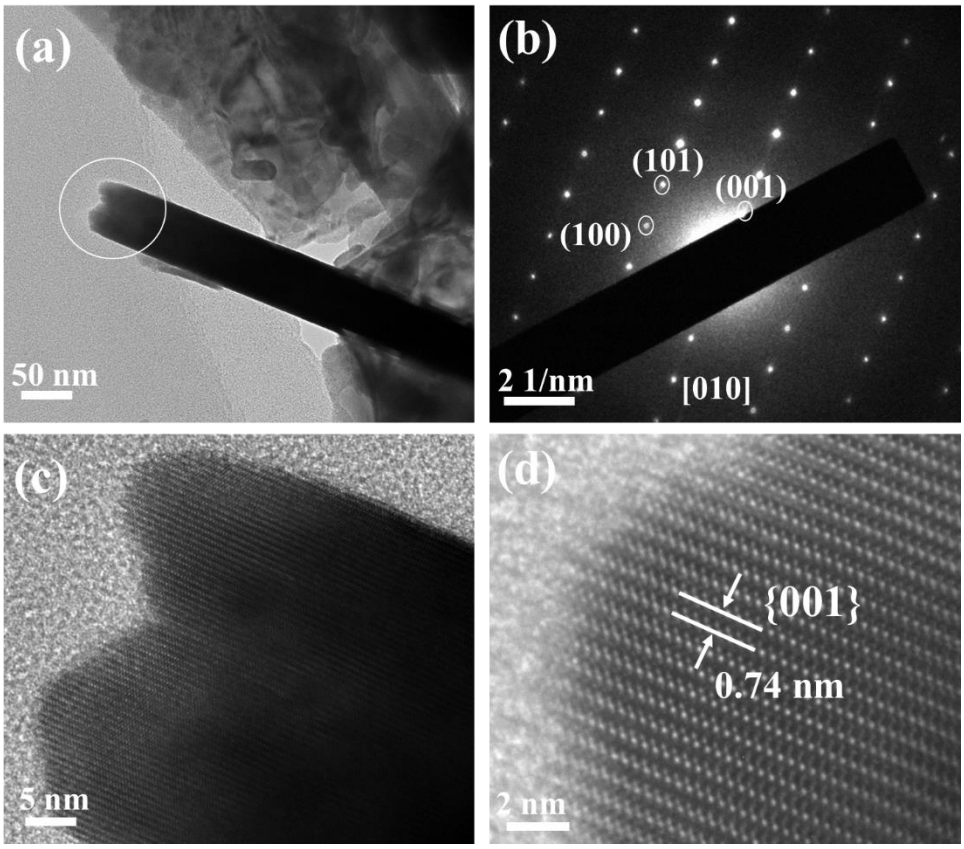

Figure S1. (a) TEM image of the side view of layered BiOCl nanosheet, (b-d) the corresponding SAED pattern, enlarged TEM image and HRTEM image of the circle area marked in (a).

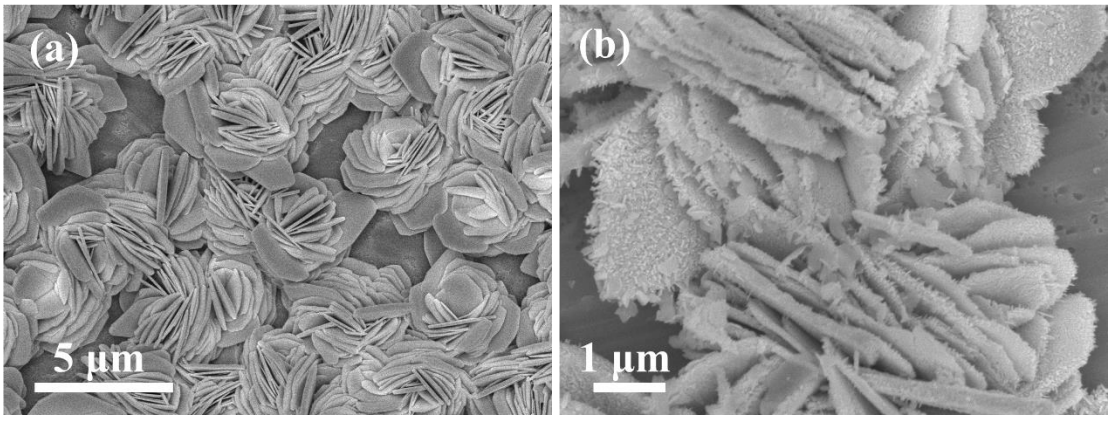

Figure S2. SEM images of BiOCl and T-BiNS electrodes in large scale.

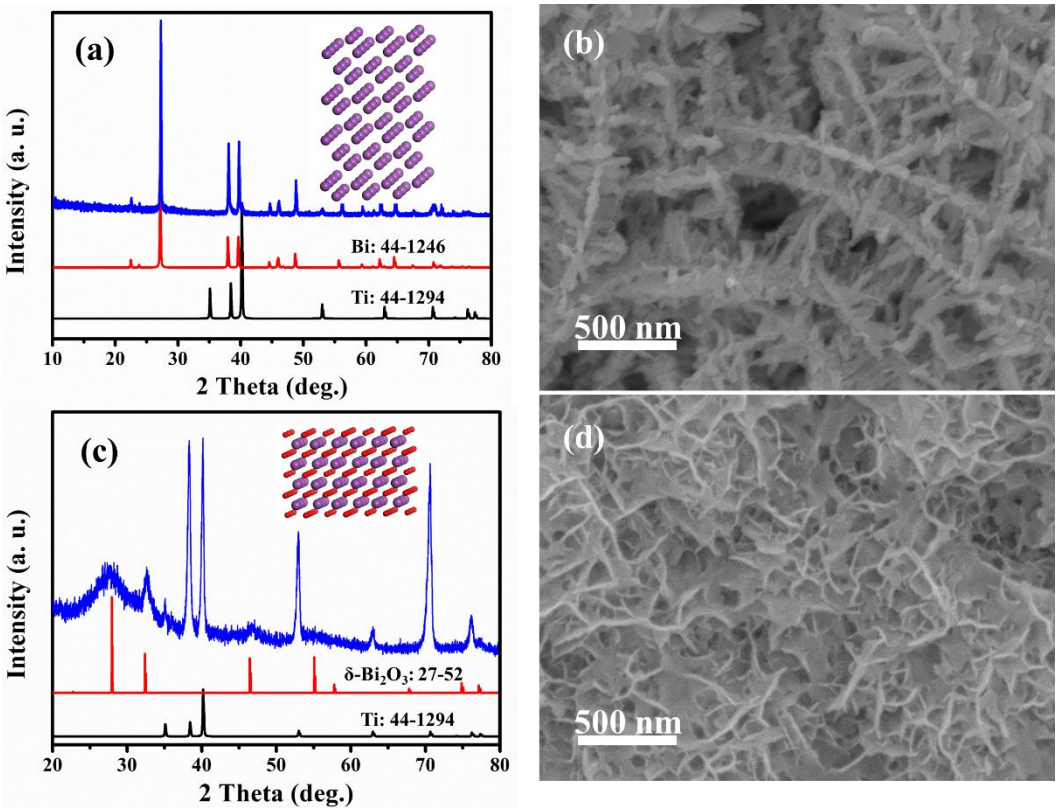

Figure S3. (a) and (b) XRD patterns and SEM image of Bi nanosheets. (c) and (d) XRD patterns and SEM image of Bi_2O_3 nanosheets.

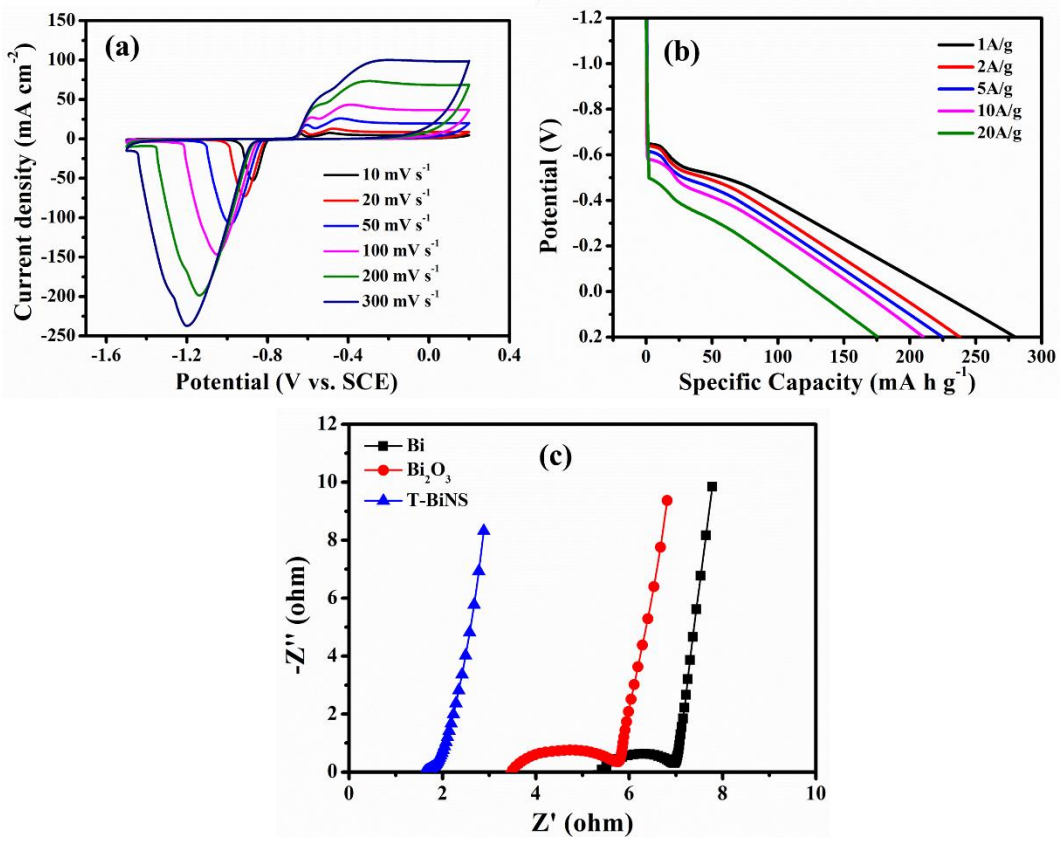

Figure S4. (a) and (b) CV and galvanostatic discharge curves of Ti-BiNS at various scan rates and current densities respectively. (c) Nyquist plots of Bi, Bi_2O_3 and T-BiNS electrodes.

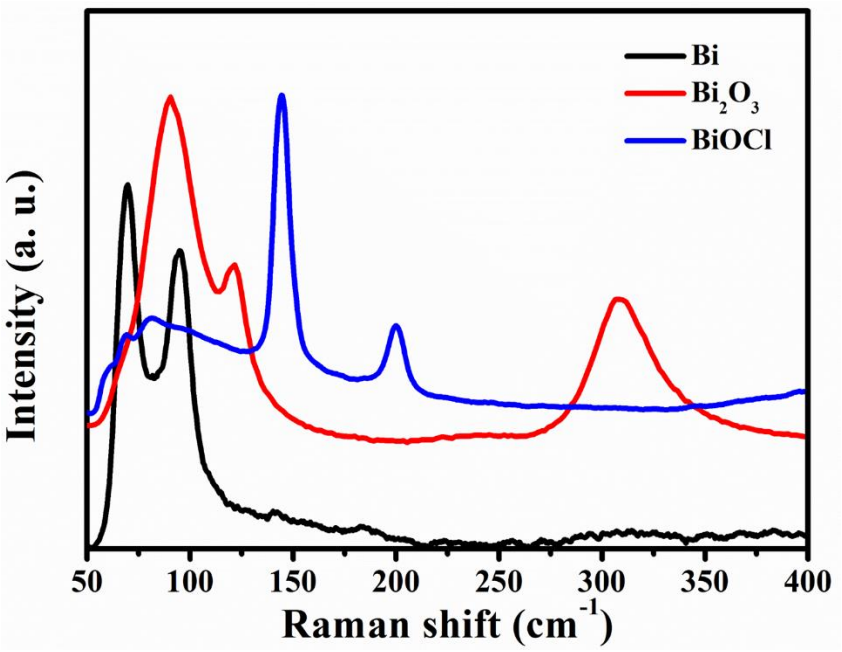

Figure S5. Raman spectra of Bi, Bi_2O_3 and BiOCl.

Table S1. Raman shifts of Bi, Bi_2O_3 and BiOCl.

samples	Raman shifts (cm^{-1})
Bi	70, 96
Bi_2O_3	84, 126, 312
BiOCl	148, 199

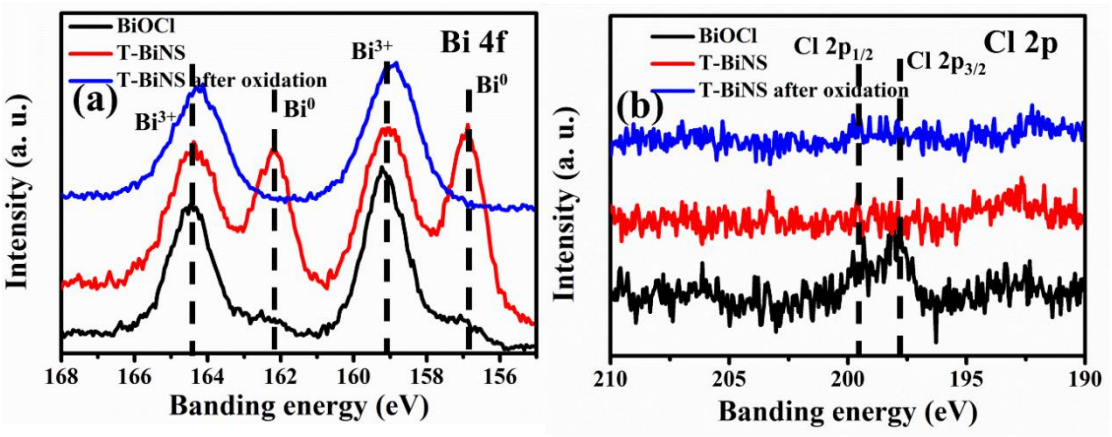

Figure S6. High resolution XPS spectra of Bi 4f and Cl2p for BiOCl, T-BiNS and T-BiNS after oxidation.

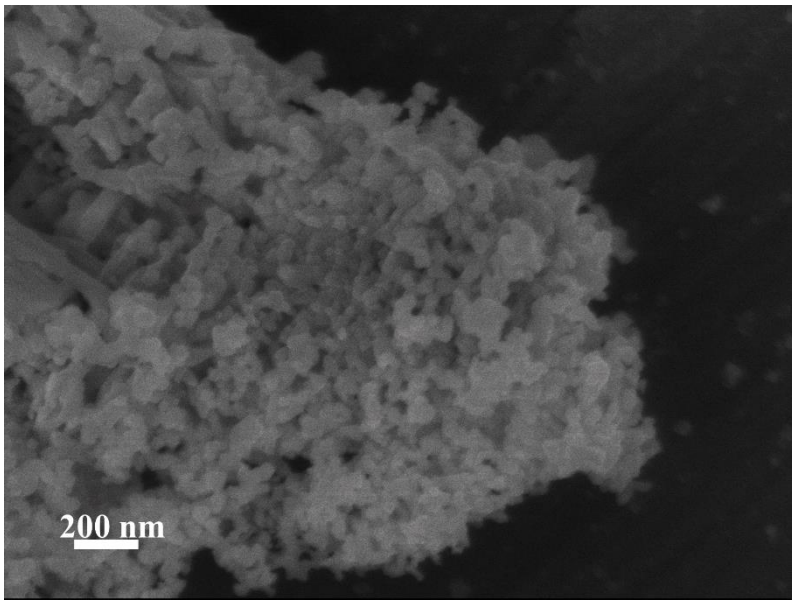

Figure S7. SEM image of T-BiNS after 5000 cycles.

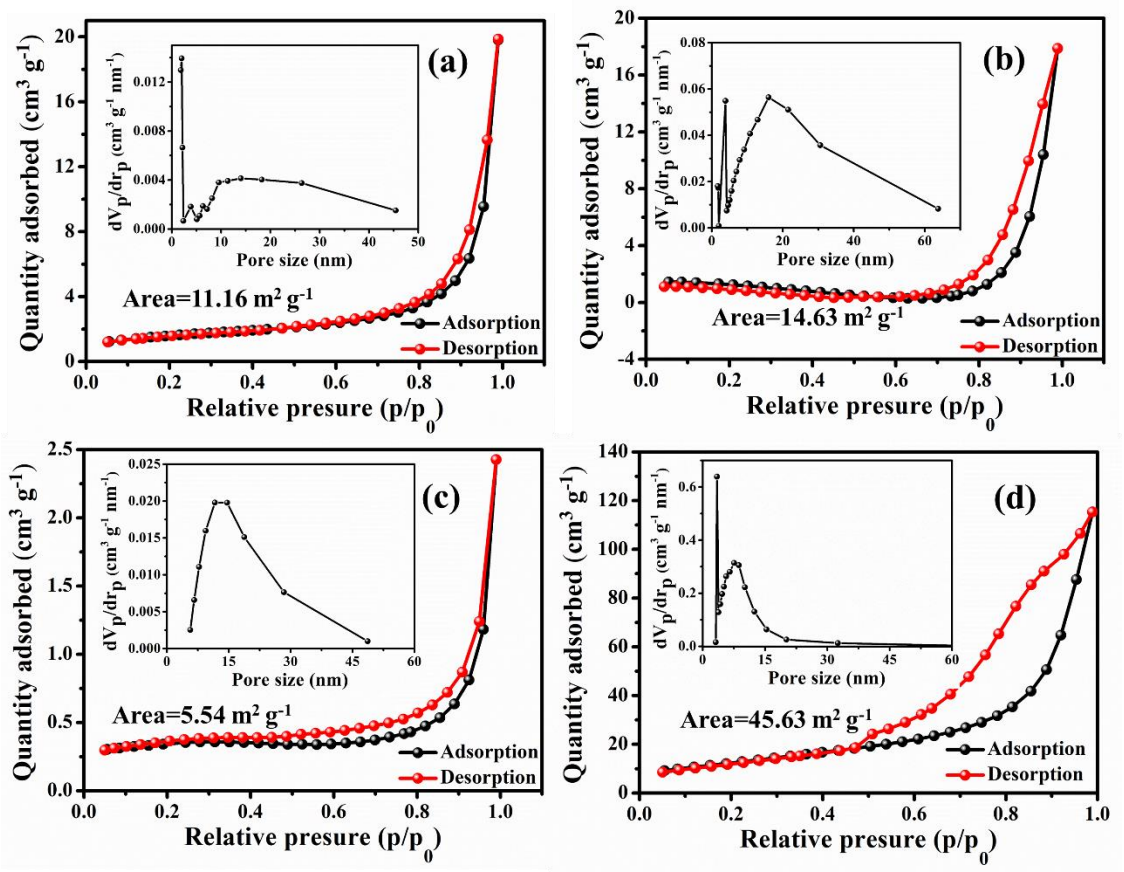

Figure S8. N_2 adsorption-desorption isotherm curves of Bi, Bi_2O_3, BiOCl and T-BiNS (the inset is the BJH pore size distribution).

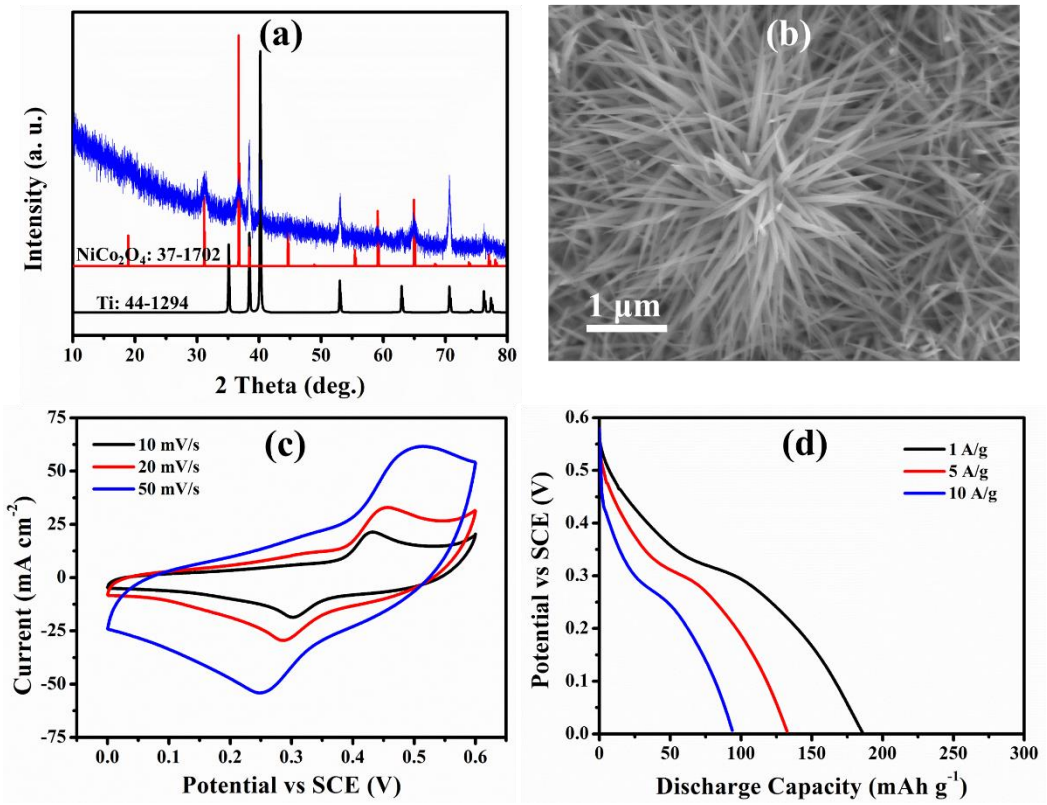

Figure S9. (a) and (b) XRD patterns and SEM image of $NiCo_2O_4$ nanorods. (c) and (d) CV and galvanostatic discharge curves of $NiCo_2O_4$ at various scan rates and current densities respectively.

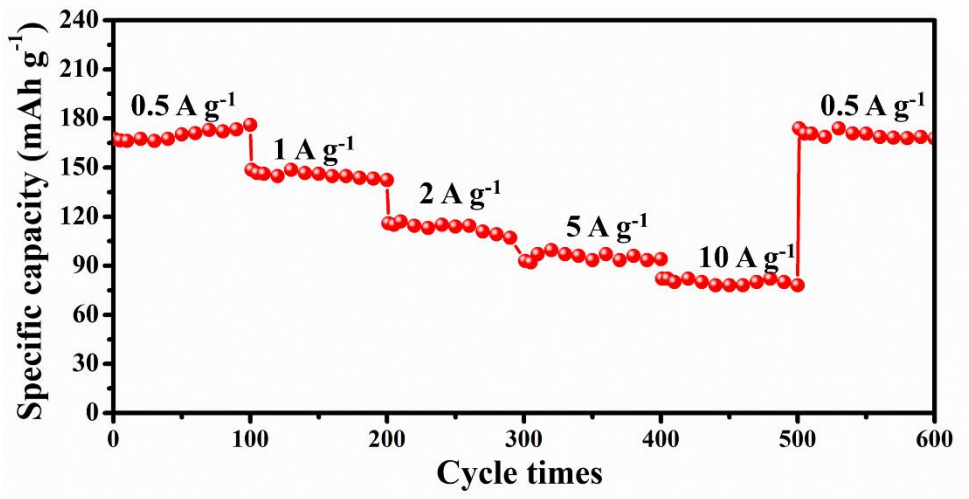

Figure S10. Rate performance of $NiCo_2O_4$//T-BiNS full battery.