Synthesis of Hierarchical Bi$_2$O$_3$/Bi$_4$Ti$_3$O$_{12}$ p-n Junction Nanoribbons on Carbon Fibers from (001) Facets Dominated TiO$_2$ Nanosheets

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Supporting information:

Figure S1. (a) XRD patterns of Bi$_2$O$_3$/Bi$_4$Ti$_3$O$_{12}$ p-n junction NRs on CFs and the precursor TiO$_2$ NSs. (b) EDS pattern of Bi$_2$O$_3$/Bi$_4$Ti$_3$O$_{12}$ p-n junction NRs on CFs. The standard XRD pattern of Bi$_2$O$_3$ (JCPDS No. 16-0654) and Bi$_4$Ti$_3$O$_{12}$ (JCPDS No. 65-2527) are also presented.
**Figure S2.** SEM images of CFs supported TiO$_2$ NSs precursor (a), the second step hydrothermal treatment of the precursor in the high pH bismuth aqueous solution for 3 h (b) and 10 h (c).

**Figure S3.** Nyquist plots of Bi$_2$O$_3$ NSs, Bi$_4$Ti$_3$O$_{12}$ NSs, Bi$_2$O$_3$/Bi$_4$Ti$_3$O$_{12}$ p-n junction NRs.
Figure S4. Isotherm curves of $\text{Bi}_2\text{O}_3/\text{Bi}_4\text{Ti}_3\text{O}_{12}$ p-n junction NRs and the hierarchical CFs supported $\text{Bi}_2\text{O}_3/\text{Bi}_4\text{Ti}_3\text{O}_{12}$ p-n junction NRs, respectively.