

## Supplementary Information

### Large Ferroelectric-Polarization-Modulated Photovoltaic Effect in Bismuth Layered Multiferroics/Semiconductor Heterostructure Devices

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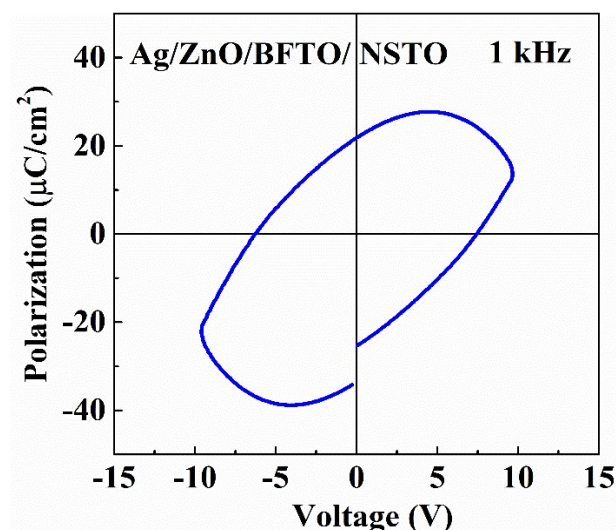
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**Fig. S1** Room temperature ferroelectric hysteresis loop for the Ag/ZnO/BFTO/NSTO structure, as measured at 1 kHz.

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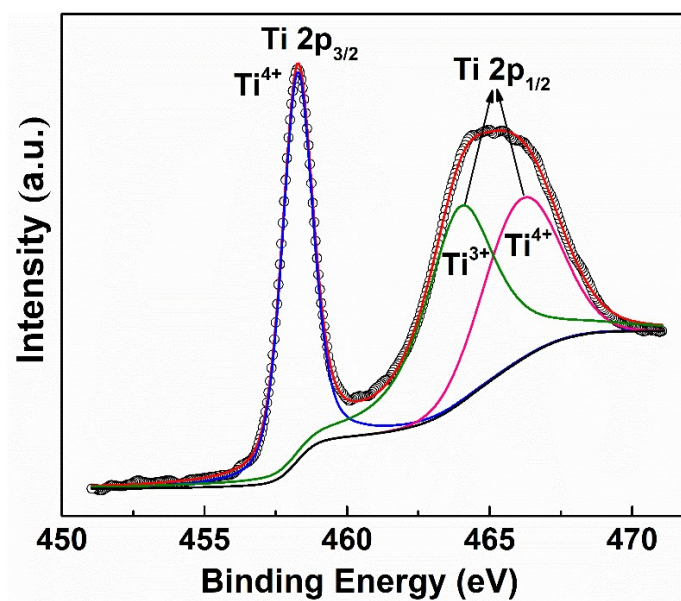


Fig. S2 XPS spectra for Ti-2p of a BFTO film.