Multifunctional Sb_2O_3–Bi_2O_3 Nano-Leaves for Record-High Supercapacitor Energy Density and Efficient HER and OER Catalysis

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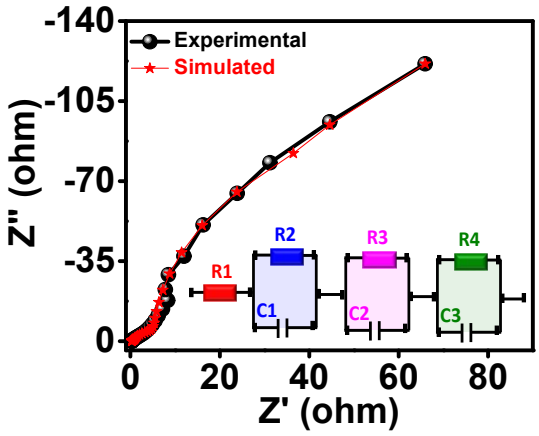

Figure S1: Nyquist plot of the AO–BiO electrode with experimental data and the corresponding fitted curve (red), obtained using the equivalent circuit shown in the inset.

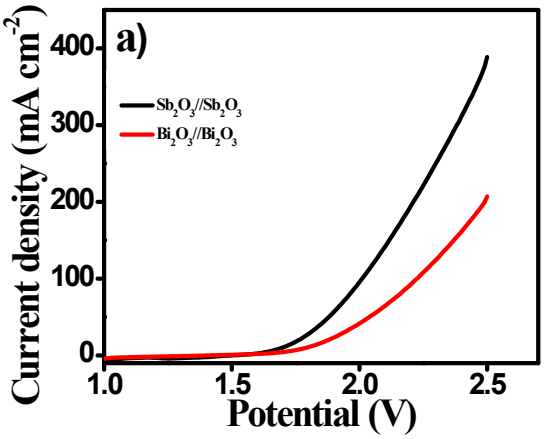

Figure S2: Two-electrode polarization curves at 10 mA cm^{-2} in 3.0 M KOH (without iR correction)

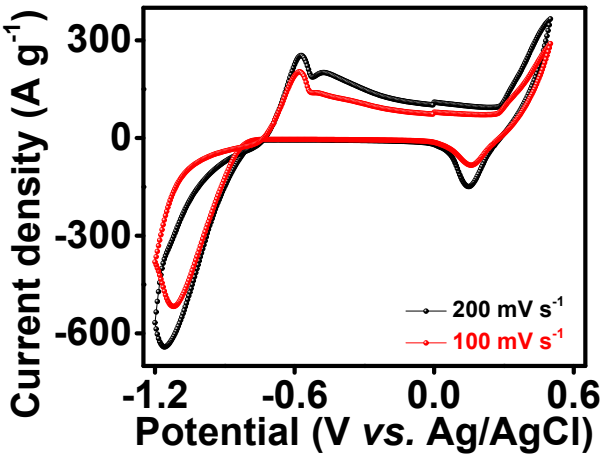

Figure S3: CV curves of AO–BiO electrode at 100 and 200 mV/s.

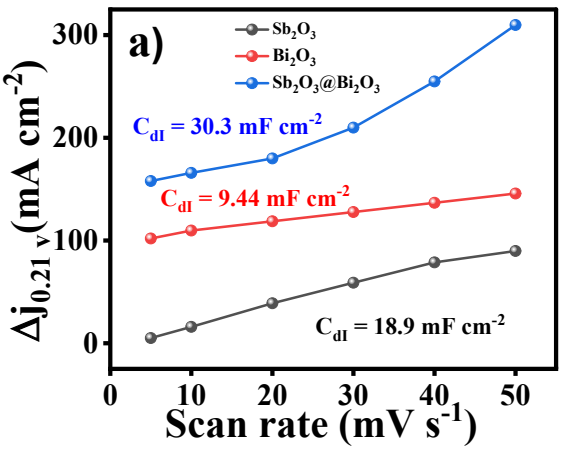

Figure S4: The corresponding capacitive current at 0.21 V as a function of the scan rate for Sb_2O_3, Bi_2O_3, and Sb_2O_3@Bi_2O_3 3 M KOH

Movie S1: Demonstration of LED illumination powered by the fabricated supercapacitor device, highlighting its practical energy storage capability.

Movie S2: Video demonstration of hydrogen and oxygen bubble evolution during the hydrogen evolution reaction (HER) and oxygen evolution reaction (OER) tests, confirming the efficient electrocatalytic activity of the fabricated electrode.