Self-powered Artificial Optoelectronic Synapse Based on Lead-free Organic-Inorganic Hybrid Molecular Ferroelectric $[C_4N_2H_{14}][BiI_5]$

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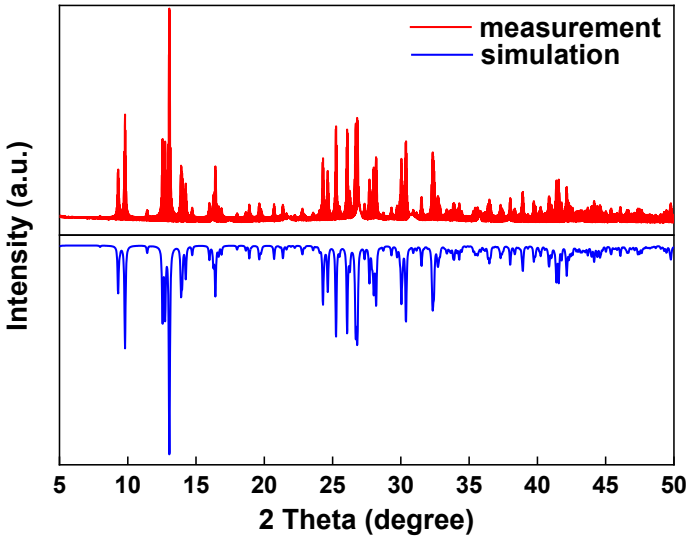

Figure S1 The XRD patterns of BDA-BiI_5 film.

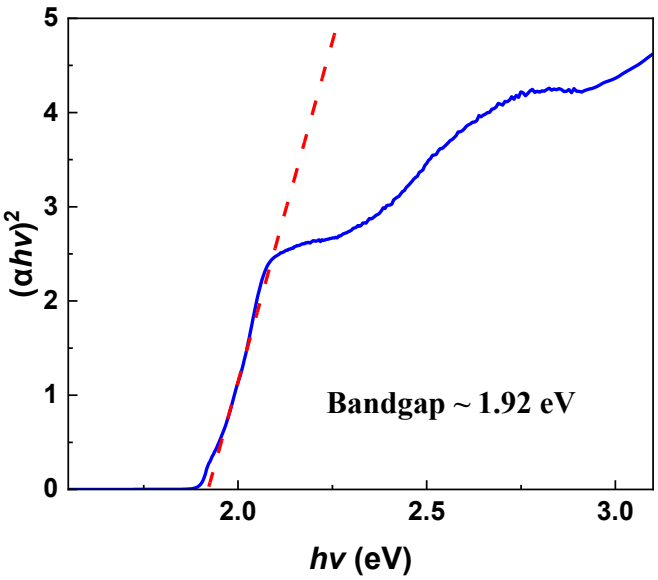

Figure S2 Estimated band gaps of the BDA-BiI_5 thin film.

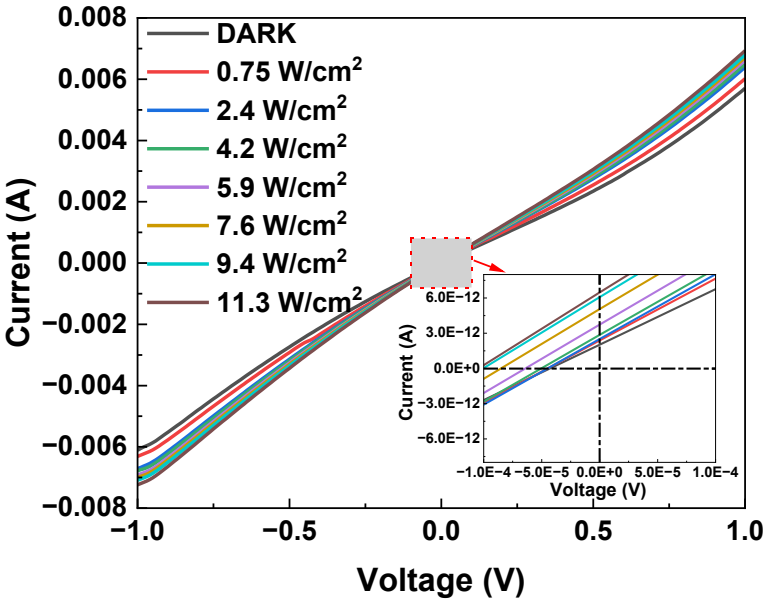

Figure S3 I-V curves of the device based on BDA-BiI_5 thin films under dark conditions and different light intensities at 445 nm.

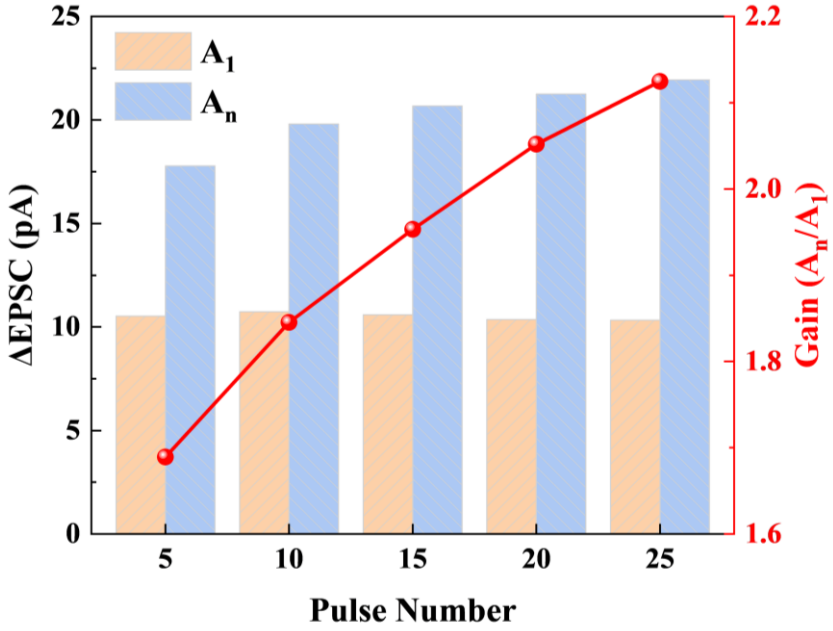

Figure S4 the amplitude A_1 and A_n of ΔEPSC and the SNDP gain plotted as a function of pulse number.

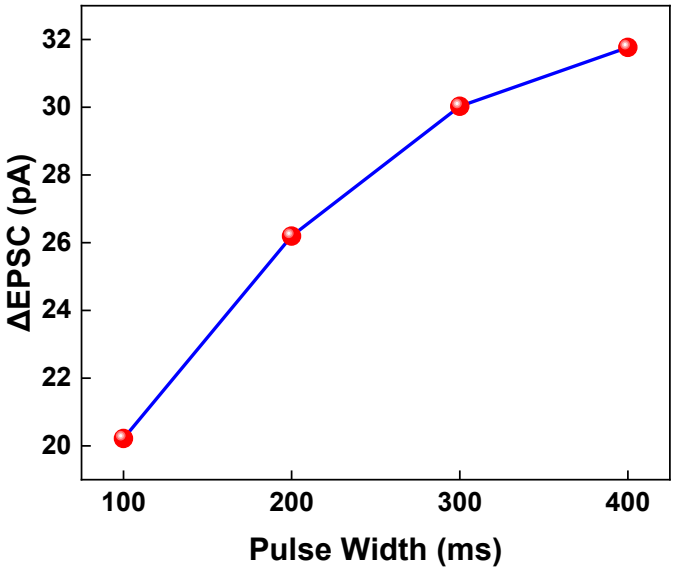

Figure S5 The dependence of ΔEPSC on the light pulse width.

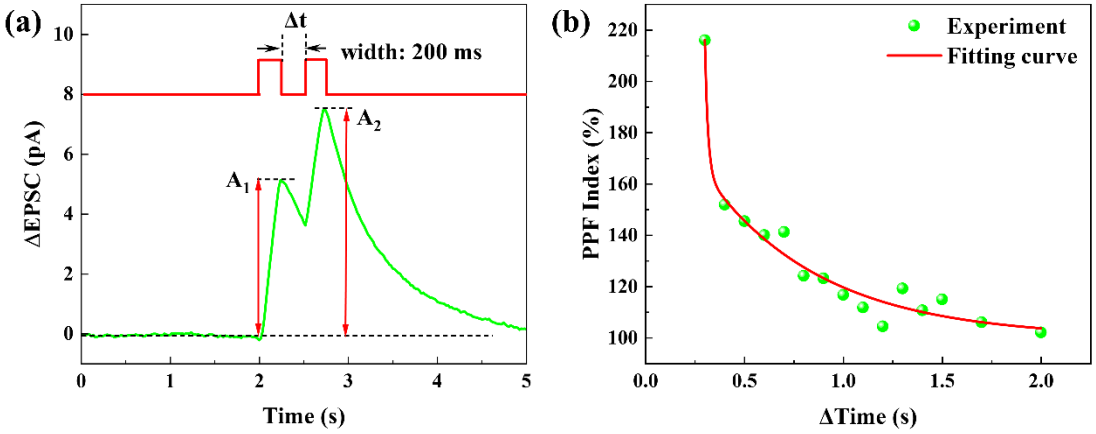

Figure S6 a) PPF behavior excited by a pair of 520 nm light pulses with an interval (Δt) of 300 ms and an optical power density of 3.17 W/cm². (b) Relationship between the PPF index and the time interval (Δt).