Electronic Supplementary Material (ESI) for Journal of Materials Chemistry C.

Supporting Information

Enhanced photovoltaic effect in $Bi_2FeMo_{0.7}Ni_{0.3}O_6$ ferroelectric thin films by tuning the thickness

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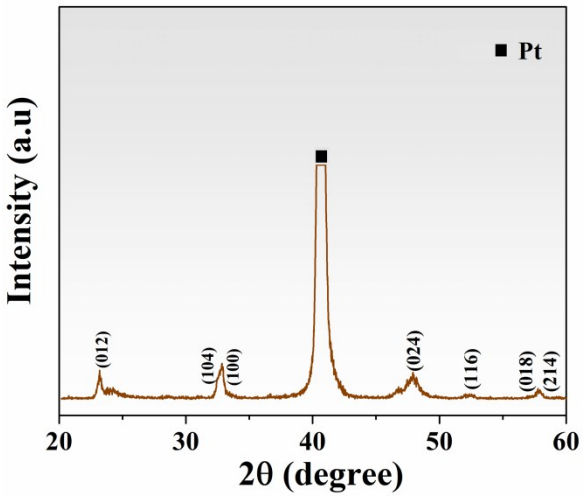

Fig. S1 XRD pattern of the BFMNO thin film with *d* = 700 nm.

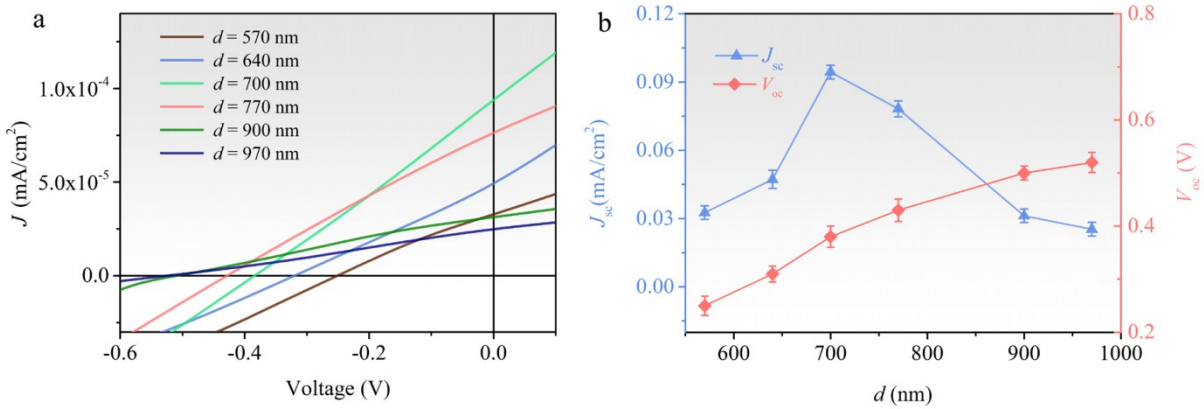

Fig. S2 (a) The *J-V* characteristics of the BFMNO thin films with different thickness. (b) The thickness-dependent J_{sc} and V_{oc} of the thin films.

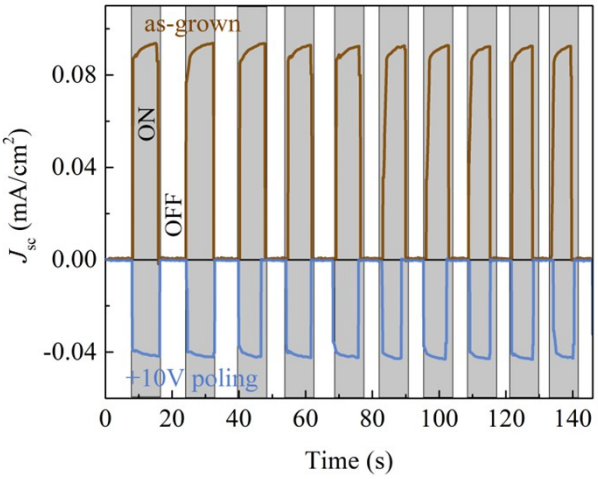

Fig. S3 The time dependence of photocurrent of BFMNO thin film (700 nm) before and after poling.

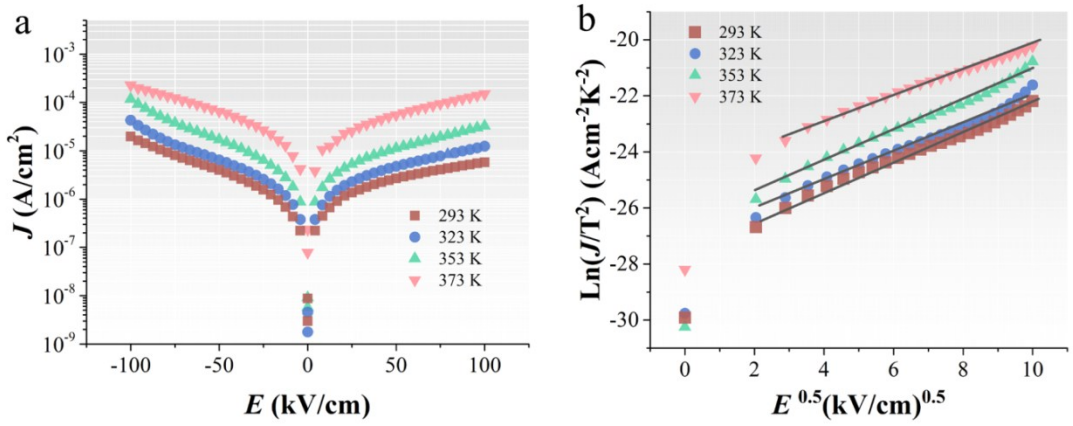

Fig. S4 (a) The *J-E* measurements of the BFMNO thin film with *d* = 700 nm at different temperature. (b) The Schottky plots under negative bias voltage.

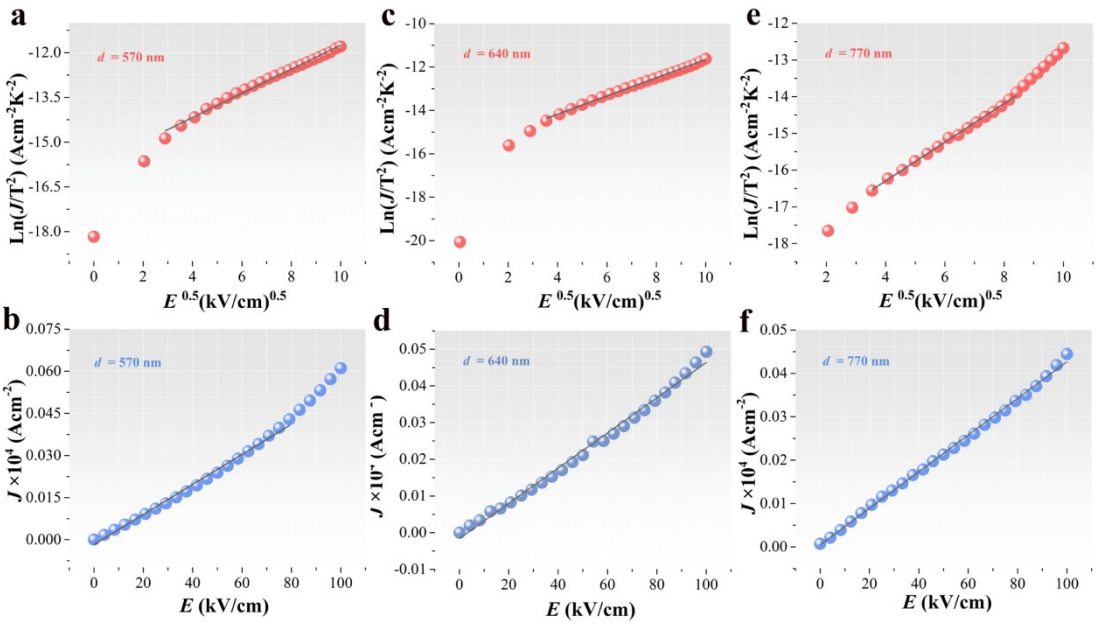

Fig. S5 The Schottky plots under negative bias voltage and Ohmic plots under positive bias voltage of the thin films with different thickness.

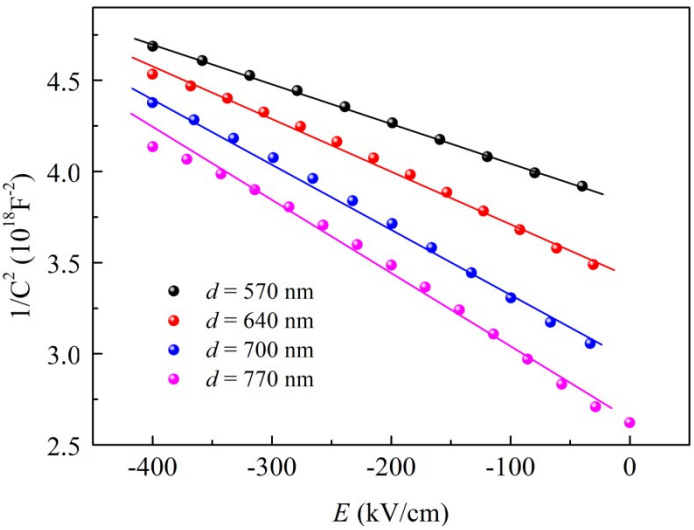

Fig. S6 The capacitance as the function of electric field for the BFMNO thin films.