

Supporting Information of

“Ferroelectric Polymer Tuned Two Dimensional Layered MoTe₂ Photodetector”

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Contents

1. The gate-source current (I_{gs}) of the P(VDF-TrFE) topgate MoTe₂ phototransistor.

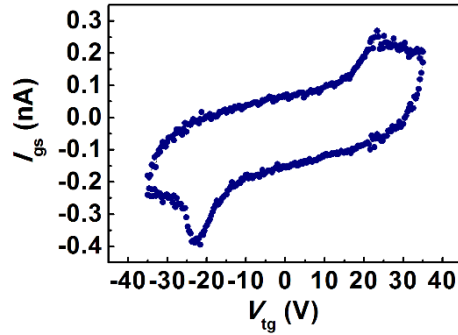


Fig. S1. The I_{gs} - V_{tg} curves for the P(VDF-TrFE) topgate MoTe₂ phototransistor. It has a fairly low leakage current under high gate voltage. And two peaks appeared at ± 23 V, which correspond to the polarization switching current of ferroelectric P(VDF-TrFE).

2. The gate voltage dependent field effect mobility of P(VDF-TrFE) topgate MoTe₂ phototransistor.

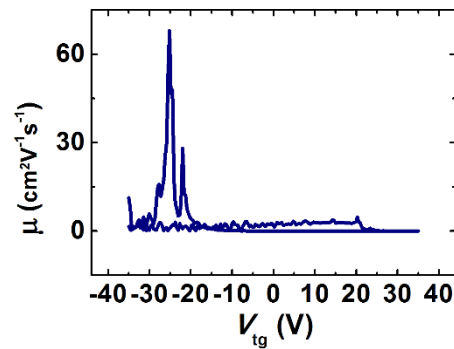


Fig. S2. The mobility of P(VDF-TrFE) topgate MoTe₂ phototransistor as a function of the gate voltage. It has a maximum value of 68 cm²V⁻¹s⁻¹ when the gate voltage is at approximately -25 V.