

Supplementary Materials

Amorphous BN-Based Synaptic Device with High Performance in Neuromorphic Computing

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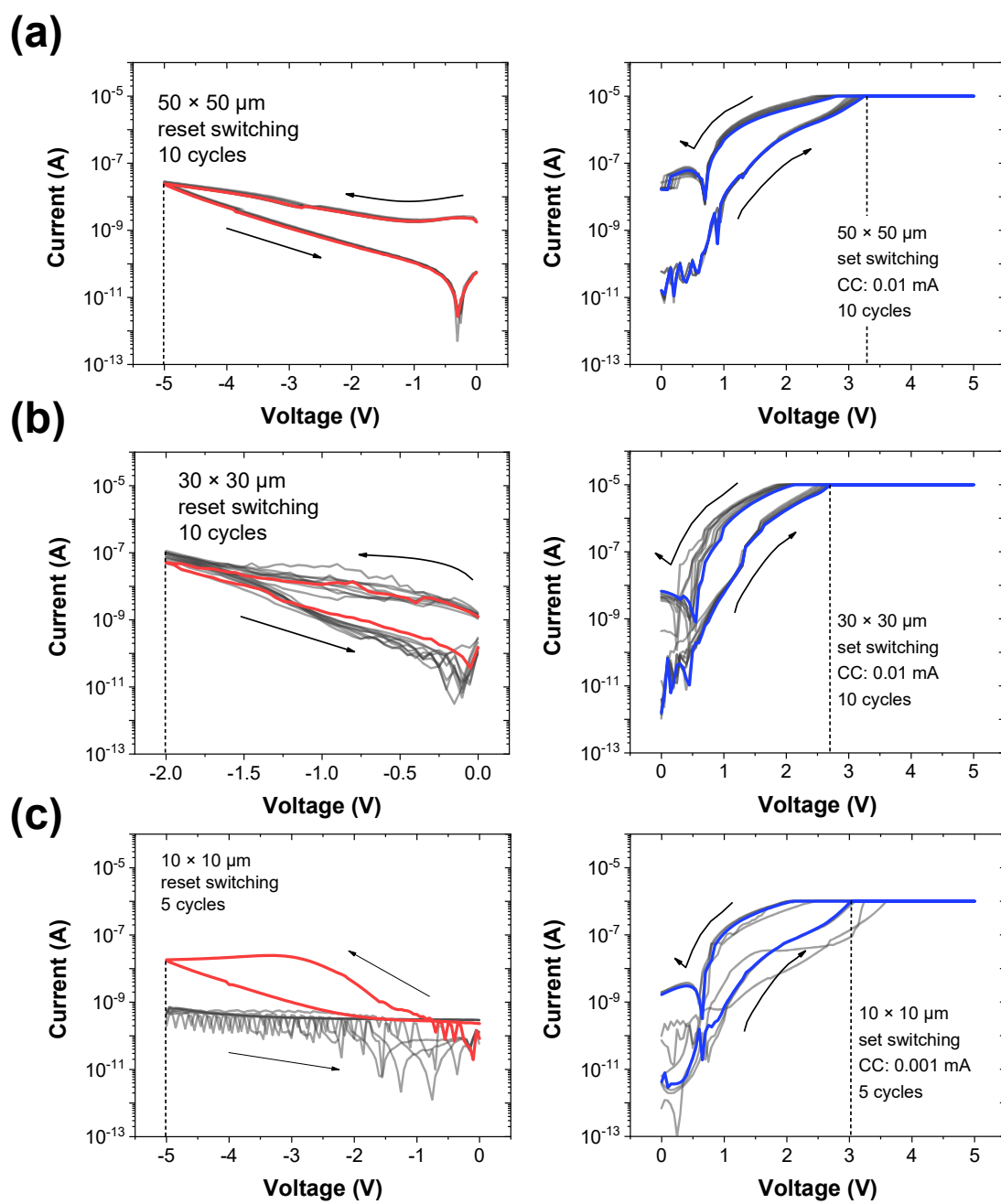


Figure S1. I-V curve according to (a) $50 \times 50 \mu\text{m}^2$, (b) $30 \times 30 \mu\text{m}^2$ and (c) $10 \times 10 \mu\text{m}^2$, respectively.

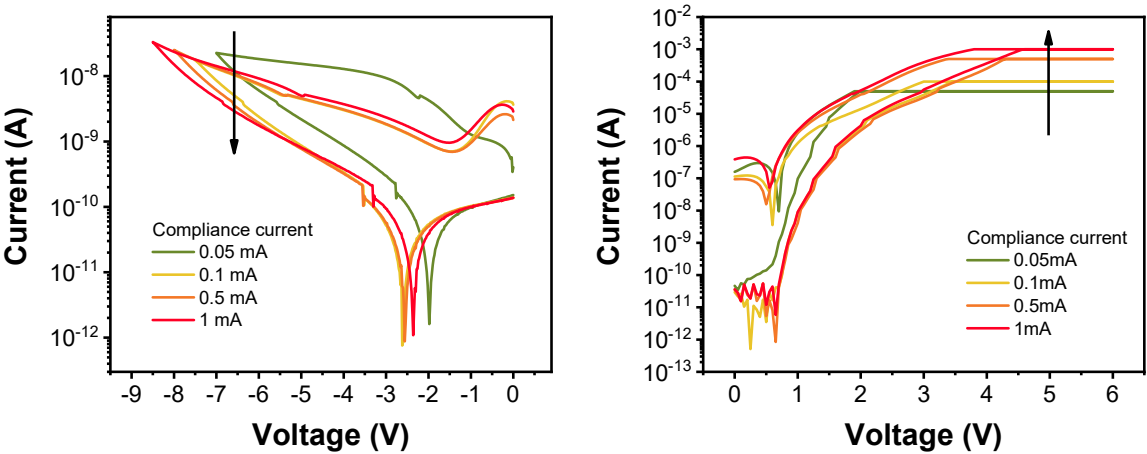


Figure S2. Different compliance currents and reset voltages were used to achieve a multilevel state.

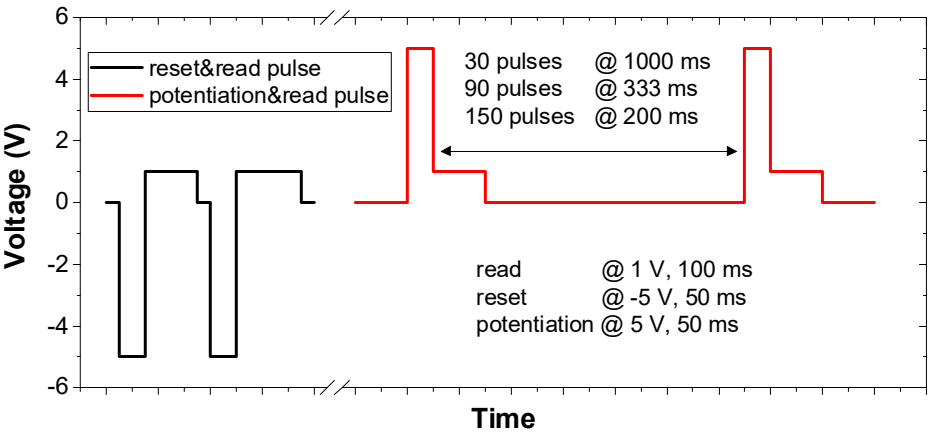


Figure S3. Pulse scheme for voltage and time interval variations.

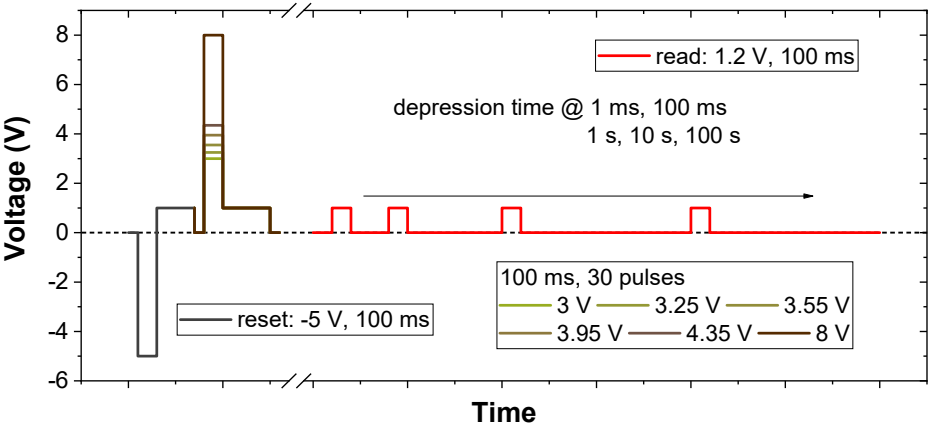


Figure S4. Pulse scheme for initialization voltage and depression interval time.

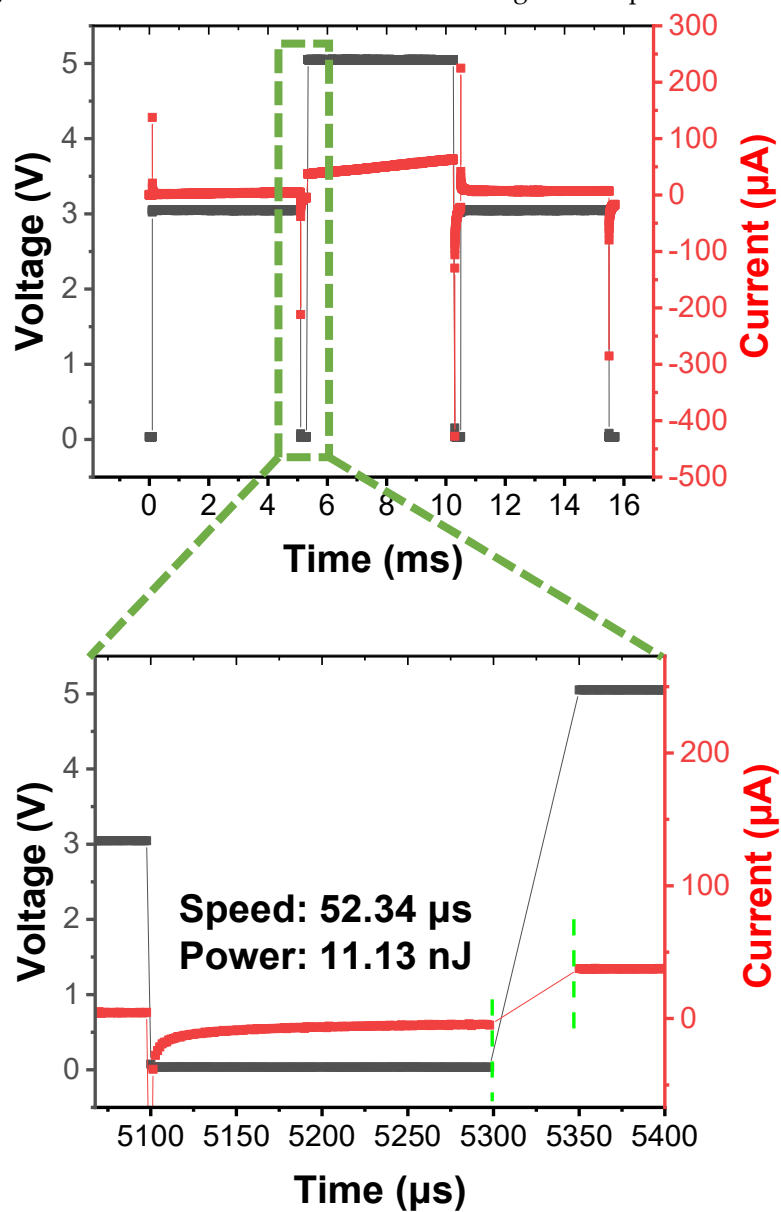


Figure S5. The switching speed of the SET pulse for Pt/BN/TiN devices is illustrated in the graph. The black lines represent the applied voltage, while the red lines depict the current response pulses.