

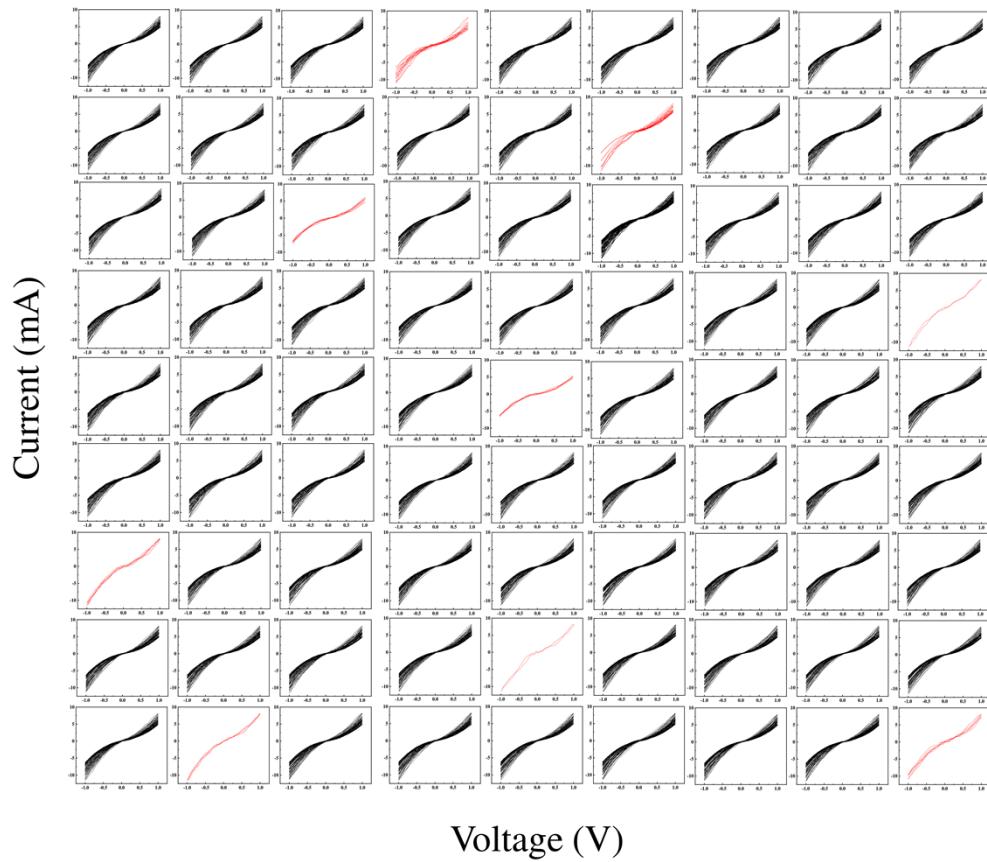
## High hall mobility carbonized steamed buns-based polymer memristor for neuromorphic computing and image recognition

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**Fig. S1.** The current-voltage characteristics of the Al/CSB:PVK/ITO device fabricated in a  $9 \times 9$  crossbar array. All the I-V curves were obtained by sweeping the voltage in the sequence of  $0 \text{ V} \rightarrow -1 \text{ V} \rightarrow 0 \text{ V} \rightarrow 1 \text{ V} \rightarrow 0 \text{ V}$ .