Supporting information

Stretchable and stable neuromorphic tactile system

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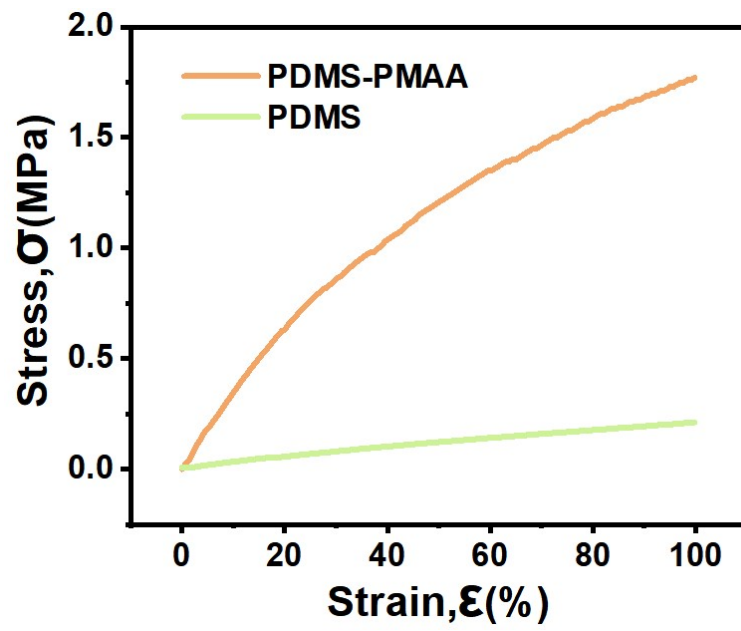Fujian Chuanzheng Communications College, Fuzhou 350007, China

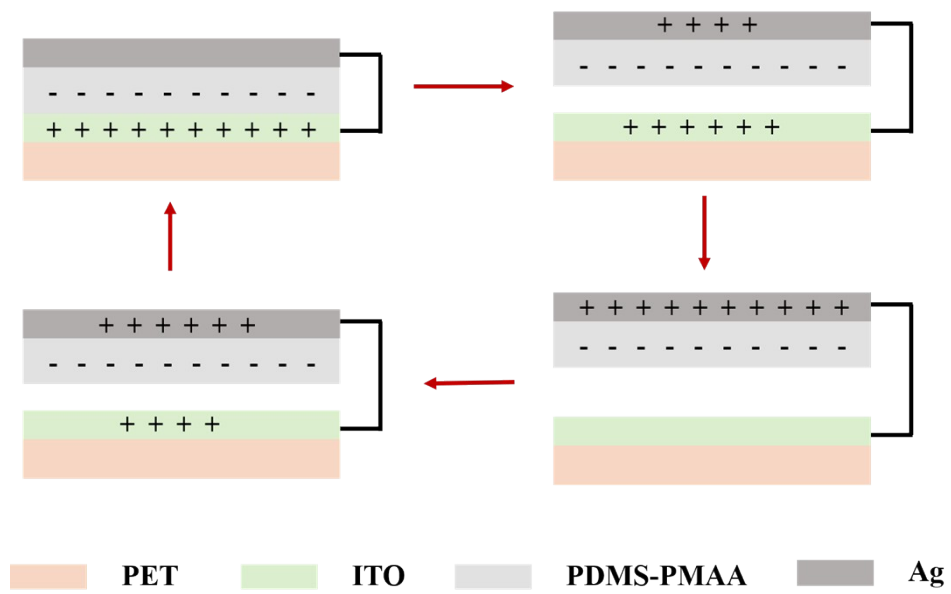**Figure S1.** Comparison of stress-strain curves of PDMS-PMAA and PDMS.
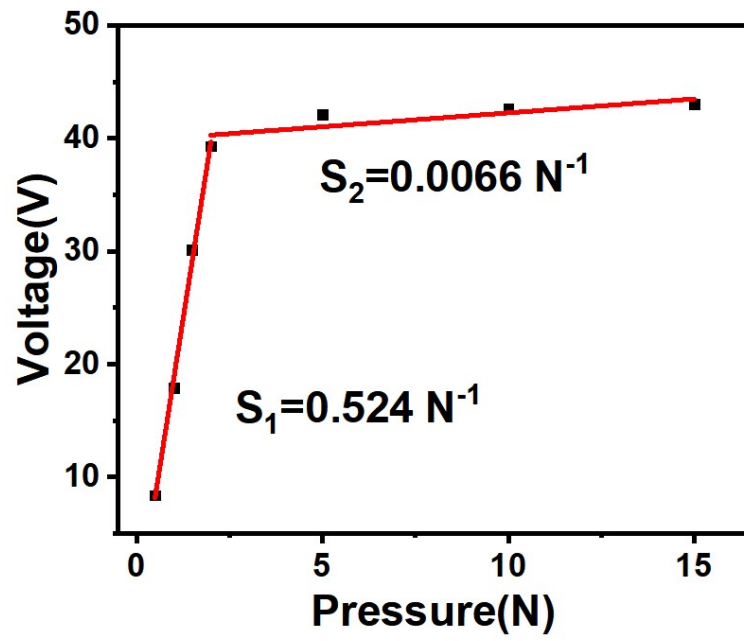
Figure S2. Working mechanism of TENG.
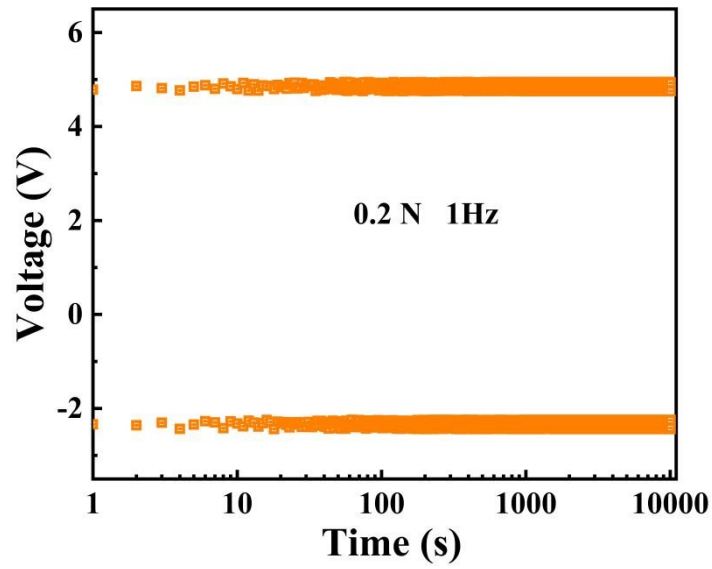
Figure S3. The pressure sensitivity of TENG.

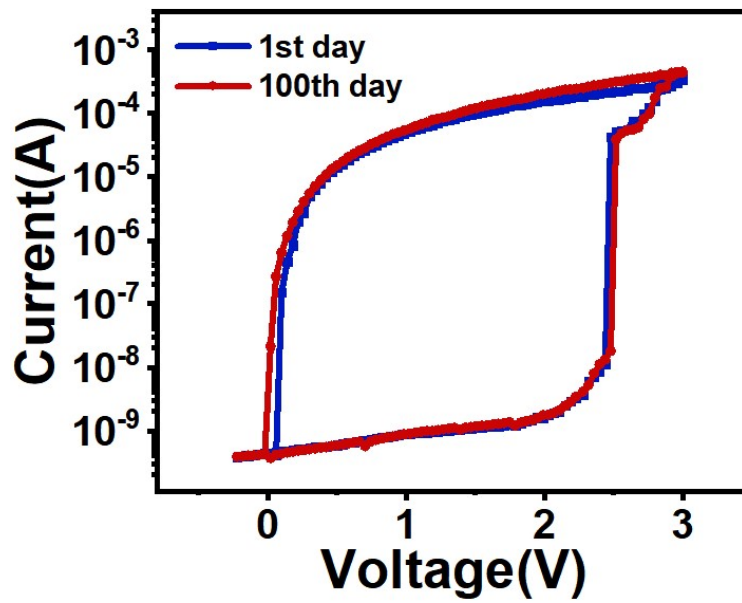**Figure S4.** The stability of TENG.

Figure S5. Threshold switching characteristics stability of the artificial neuron.
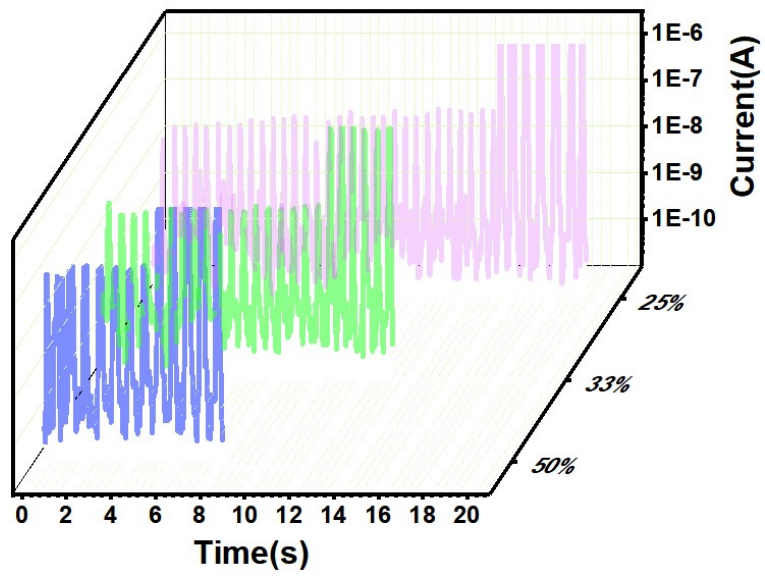
Figure S6. The firing time is affected by the duty ratio of stimulation pulse (50%, 33%, 25%).
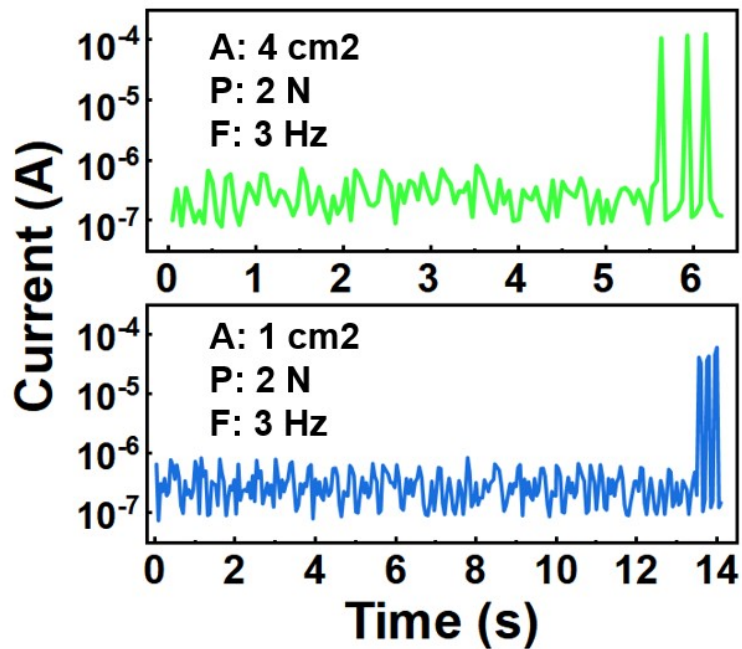
Figure S7. The firing time is affected by the pressure area on TENG.

Table S1 The comparison between other strain-isolated stretchable substrates research and this work.

Materials	Methods	Self-powered	Strain intensity	Ref.
Ecoflex/Liquid	Microfluidic space	No	50%	[1]
Acetate	Rigid-soft combination	No	50%	[2]
PI	Cut-transfer-release	No	200%	[3]
PDMS	Microislands	No	45%	[4]
PDMS	3D buckling assembling	No	100%	[5]
Cu	wrinkled	No	40%	[6]
PDMS-PMAA	Double-network	Yes	60%	This work

References

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