Stretchable and wearable sensors for contact touch and gesture recognition based on poling-free piezoelectric polyester elastomer

Supporting Information

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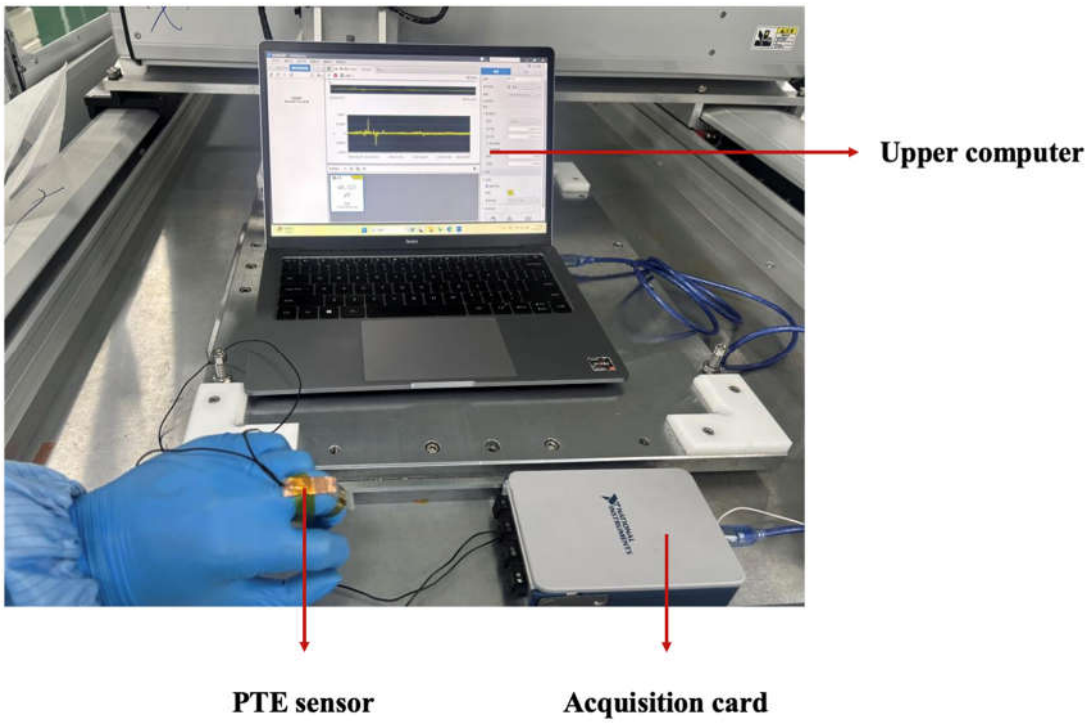


Figure S1 Experimental setup of piezoelectric and triboelectric response of PTE sensor

Table S1 performances comparation of PTE sensor and related work

Work	Tensile properties	sensing mode	piezoelectric coefficient(d_{33})	Response time
PVDF-PAN(1)	259.3%	piezoelectricity	63pC/N	15ms
MXene/Ag(2)	-	piezoelectricity	-	100ms
PUVE（3）	-	piezoelectricity	-	40ms
P（NaSS-co-AN）（4）	250%	piezoelectricity	40pC/N	-
Double-sandwich structure triboelectric sensor(5)	-	triboelectricity	-	26ms
PAN/SA(6)	-	triboelectricity	-	7ms
P-TPS（7）	＜200%	Triboelectricity piezoelectricity	-	8.8ms
PME(8)	-	piezoelectricity	-	55ms
PTE	＞1000%	Triboelectricity piezoelectricity		15ms

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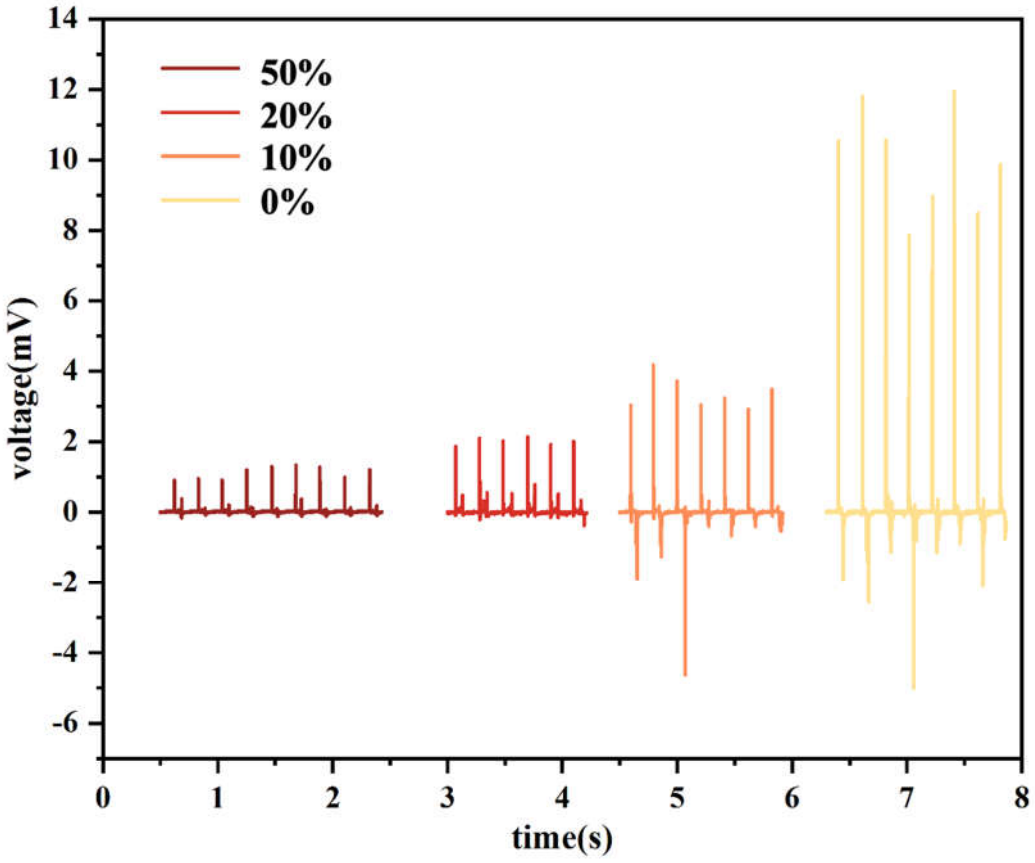


Figure S2 Piezoelectric performances of PTE sensor under different strain

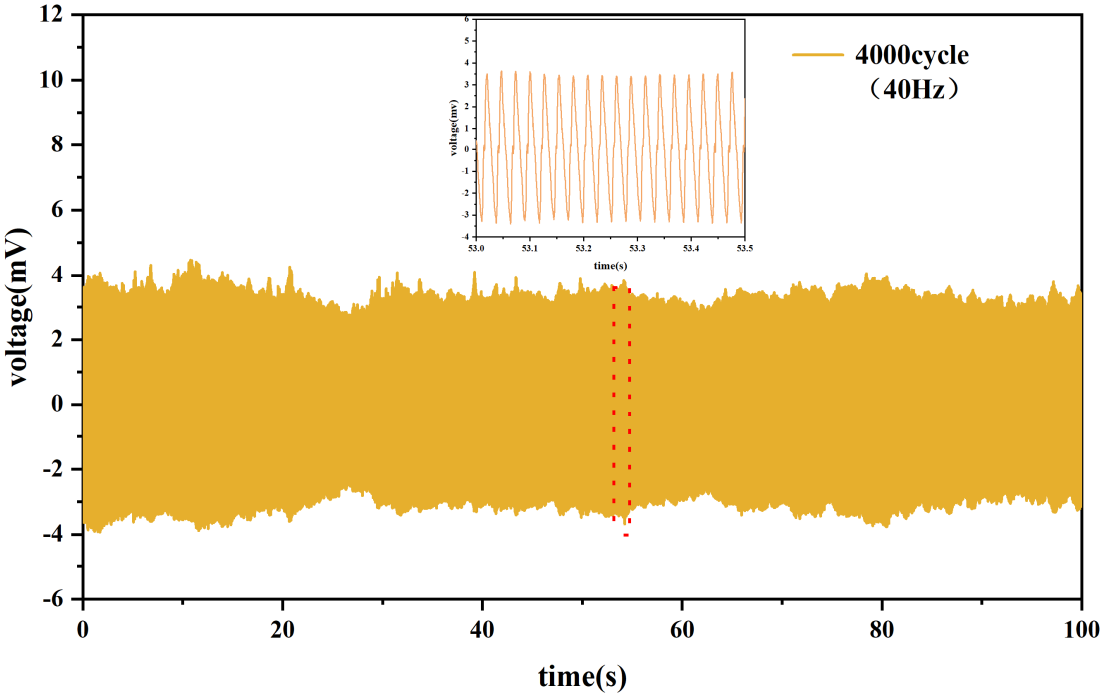


Figure S3 Piezoelectric output of PTE sensor after 4000 impact cycles