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# Portable Mobile Gait Monitor System Based on Triboelectric Nanogenerator for Monitoring Gait and Powering Electronics

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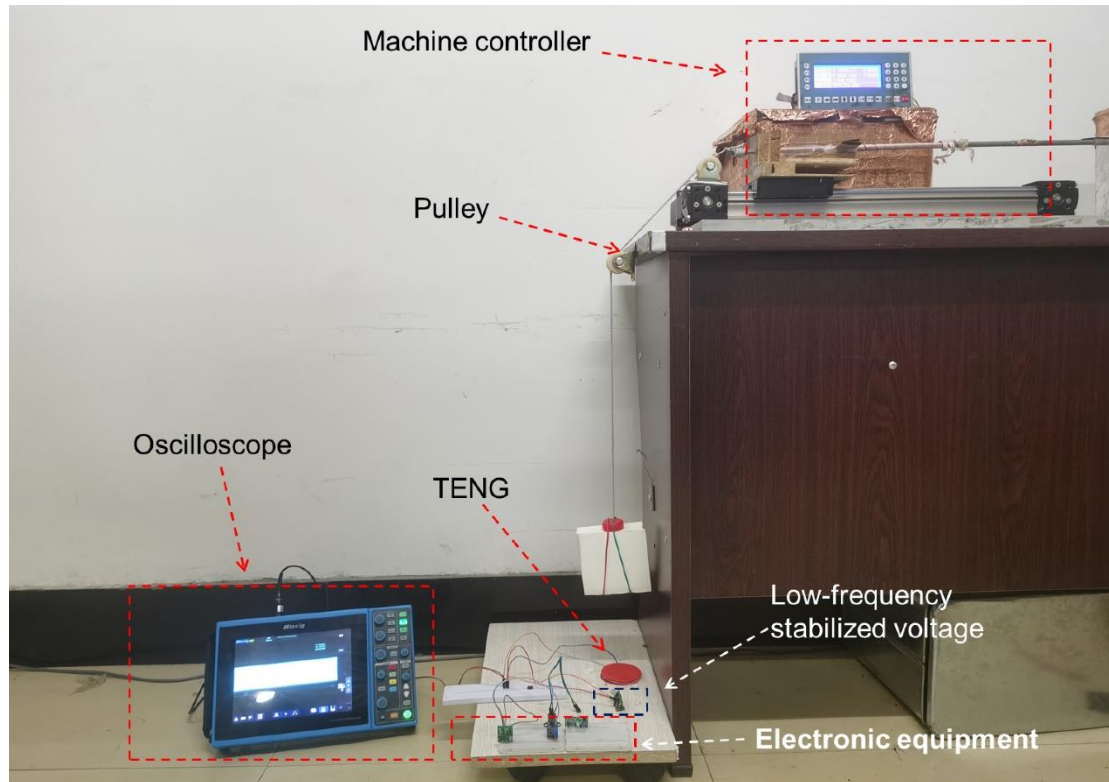
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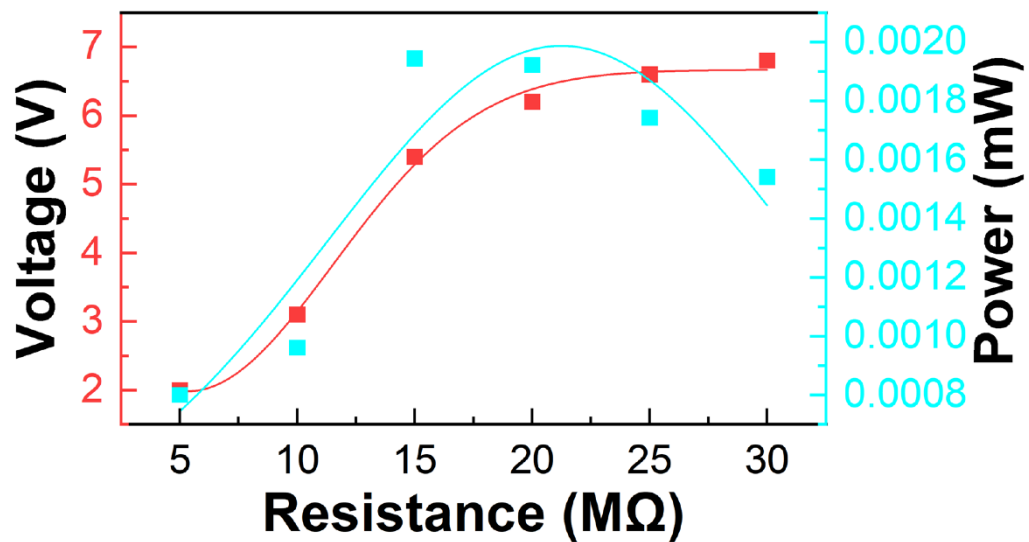
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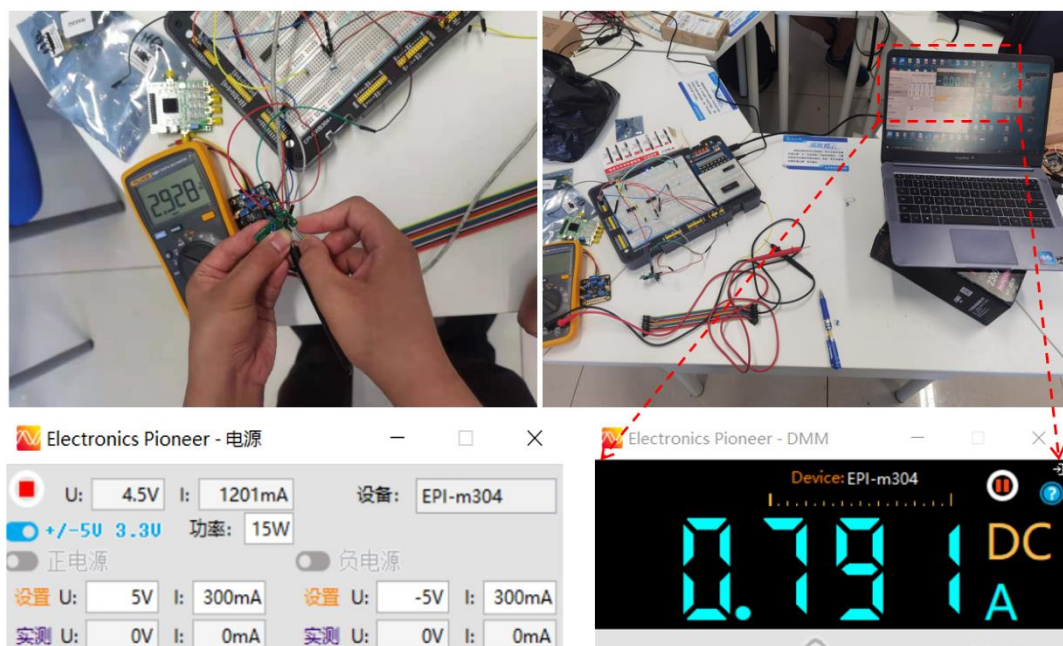
**Supplementary Movie S1.** The self-powered piezoelectric sensor can transmit wireless signal to control the LED.  
**Supplementary Movie S2.** TENG can collect mechanical energy to drive micro GPS equipment to launch signal.  
**Supplementary Movie S3.** TENG charge capacitor.



**Figure S1.** The actual test scenario.



**Figure S2.** The output voltage and power of TENG against different resistance.



**Figure S3.** Single test process of AC/DC conversion efficiency.

**Table S1.** Power density comparison.

Title	Power	Area	Power density	Reference
Our work	$1.94 \times 10^{-3}$ mW	28.26 cm <sup>2</sup>	0.686 mW/m <sup>2</sup>	47
Other work 1	$3.328 \times 10^{-6}$ mW	16cm <sup>2</sup>	0.00208 mW/m <sup>2</sup>	
Other work 2	$6.4 \times 10^{-3}$ mW	6cm <sup>2</sup>	10.7 mW/m <sup>2</sup>	
Other work 3	Unspecified	Unspecified	0.042 mW/m <sup>2</sup>	

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