

Supporting information

Adaptive Wind-Evoked Power Devices for Autonomous Motor Control Applications

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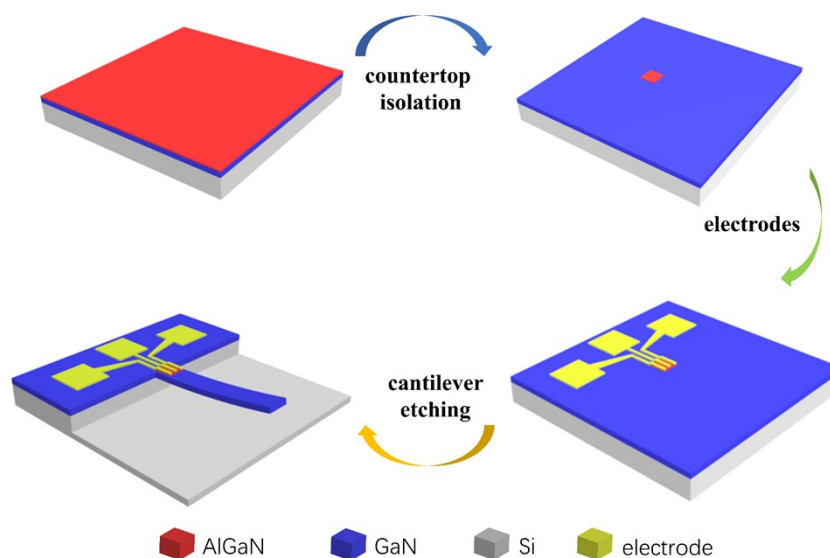


Fig. S1 The schematic illustration of cantilever device fabrication process. The cantilever device was fabricated by the micro-nano processing technology, including countertop isolation, source/drain ohmic electrode, gate Schottky contact, and cantilever dry etching.

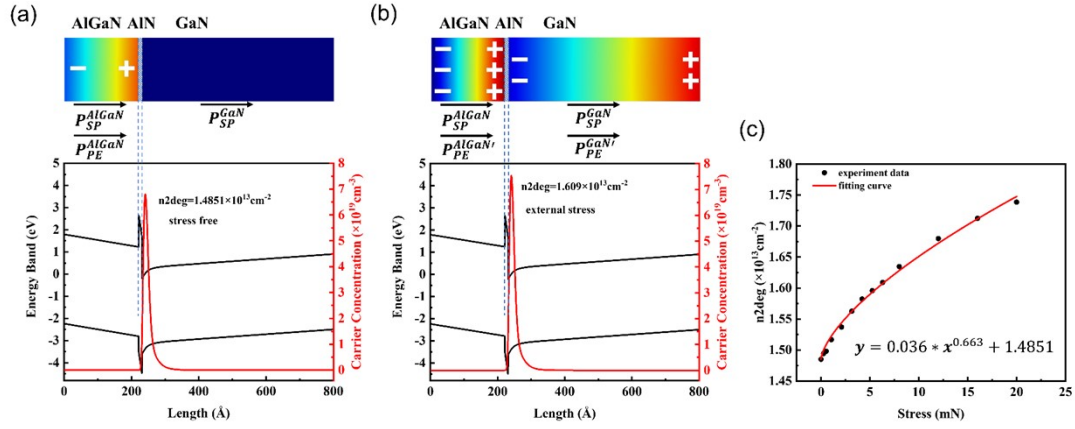


Fig. S2 Work mechanisms of AlGaIn/AlN/GaN heterojunction under external stress. Energy band diagrams at the interface of AlGaIn/AlN/GaN heterojunction (a) under stress-free and (b) under external stress. (c) The 2DEG density as a function of the external stress and the corresponding fitting curves.

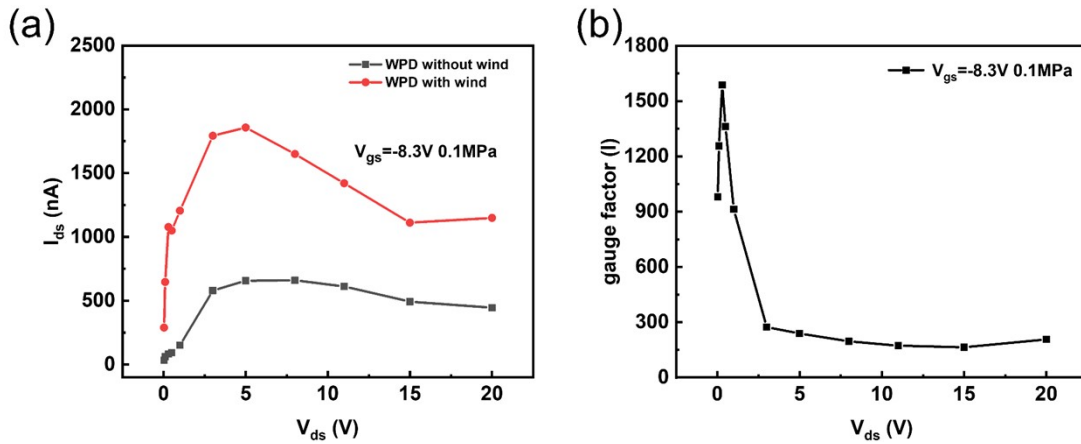


Fig. S3 The strain sensitivity of the WPD at $V_{gs} = -8.3 \text{ V}$. (a) The I_{ds} dependence of the V_{ds} with/without the 0.1 MPa wind pressure at $V_{gs} = -8.3 \text{ V}$. (b) The gauge factor of current as a function of the V_{ds} .