

Supporting Information

Self-Power Dynamic Sensor Based on Triboelectrification for Tilt of Direction and Angle

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1. The tilting direction of the OT-TES

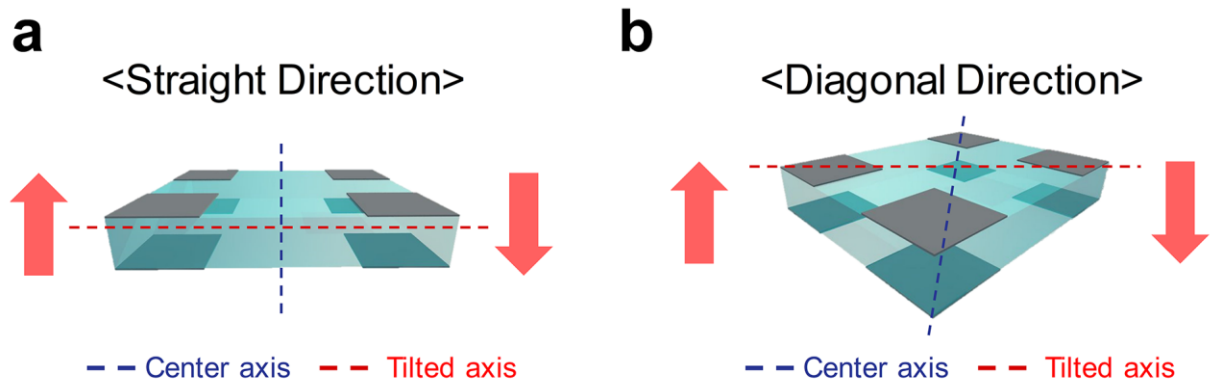


Figure A1. Two ways of the tilting direction (a) Straight direction (b) Diagonal direction.

2. The DAQ output voltage of the OT-TES when tilting the device in the straight direction

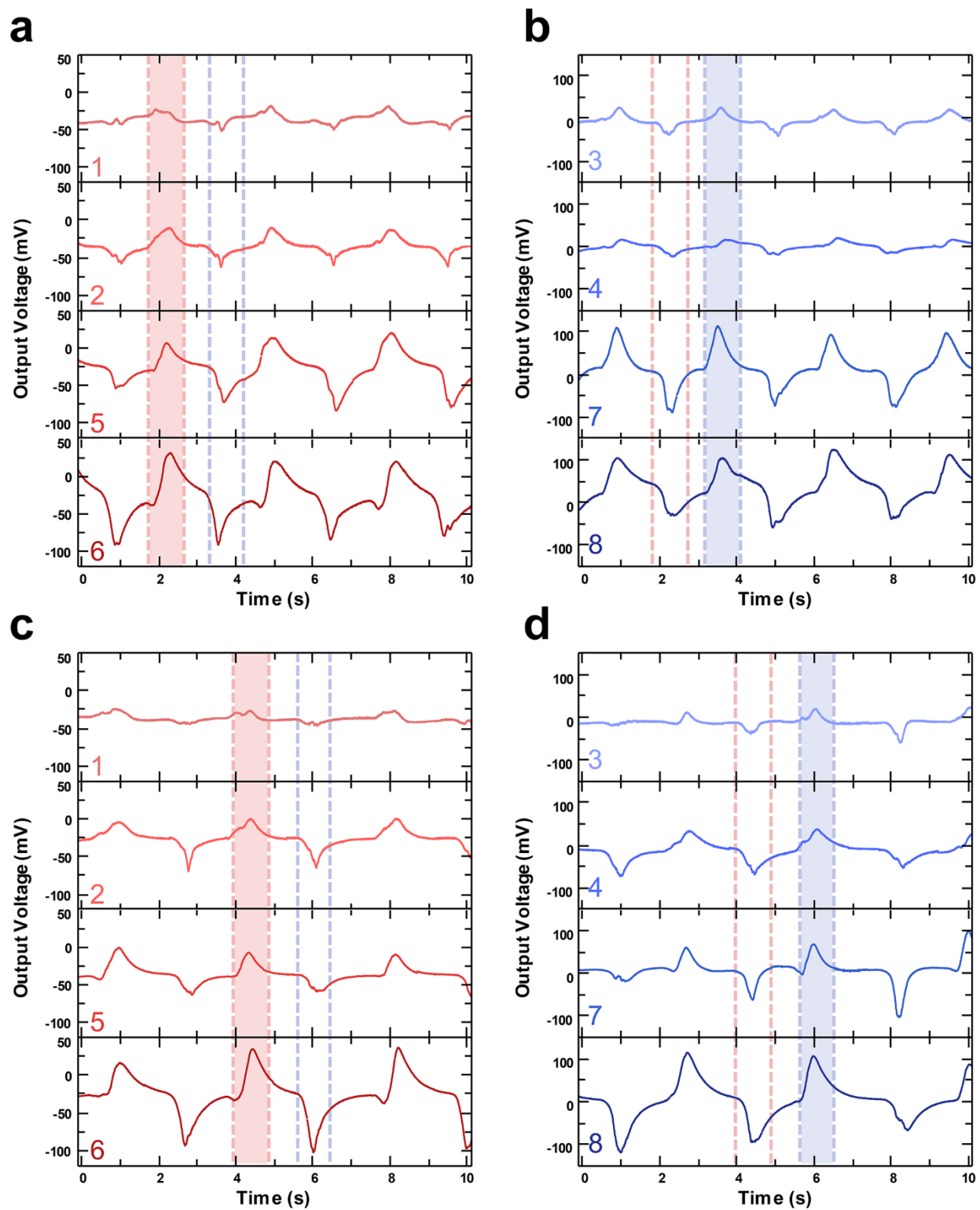


Figure A2. Voltage measurements of the OT-TES from eight different Al electrodes that

have adjusted tilt angle in the straight direction. (a) The DAQ output voltage of the left side electrodes at 10° (b) The DAQ output voltage of the right side electrodes at 10° (c) The DAQ output voltage of the left side electrodes at 20° (d) The DAQ output voltage of the right side electrodes at 20° .

3. The DAQ output voltage of the OT-TES from eight Al electrodes when tilting the device in the diagonal direction

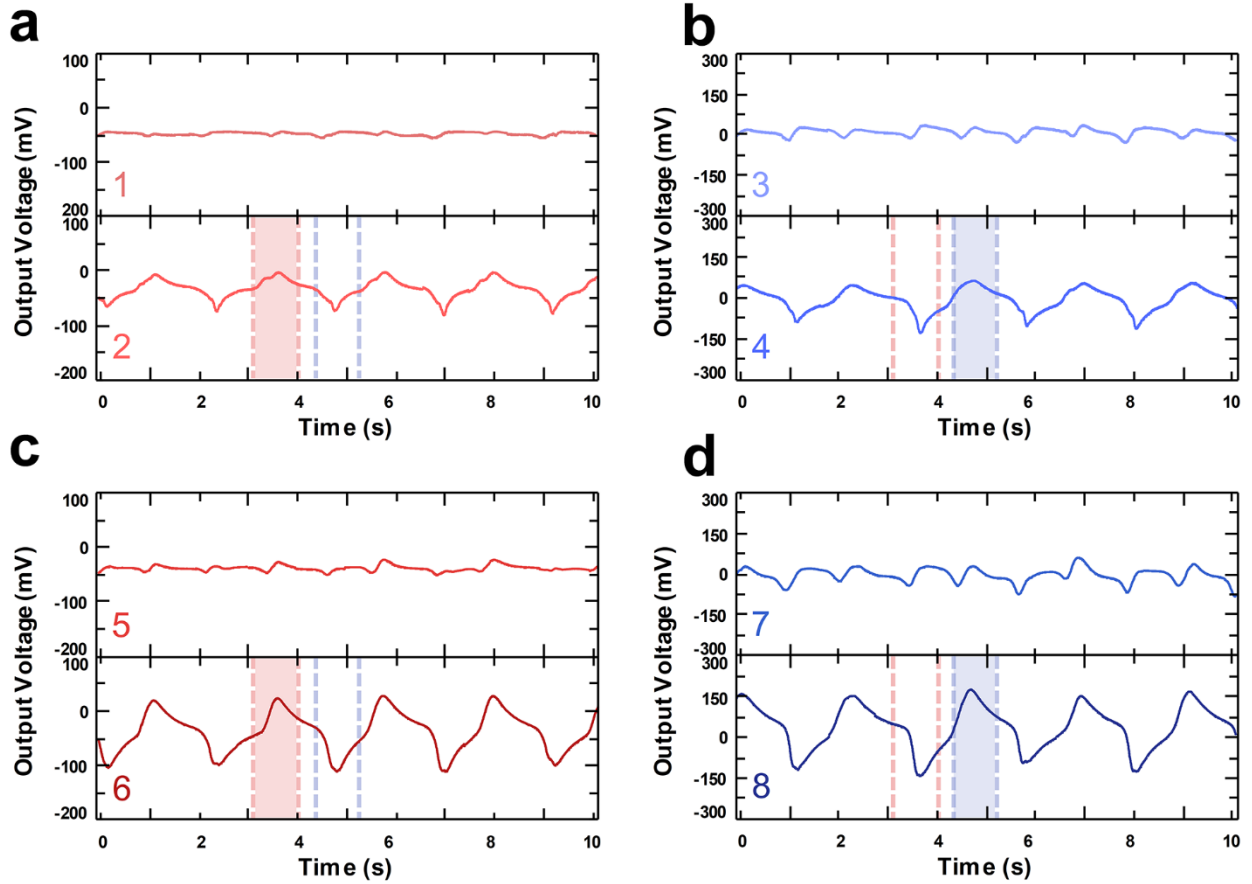


Figure A3. Voltage measurements of the OT-TES from eight Al electrodes that have 45 tilting degree in the diagonal direction: (a) The DAQ output voltage of the electrode 1 and 2 (b) The DAQ output voltage of the electrode 3 and 4 (c) The DAQ output voltage of the electrode 5 and 6 (d) The DAQ output voltage of the electrode 7 and 8.

4. The DAQ output voltage of the OT-TES when tilting the device in the diagonal direction

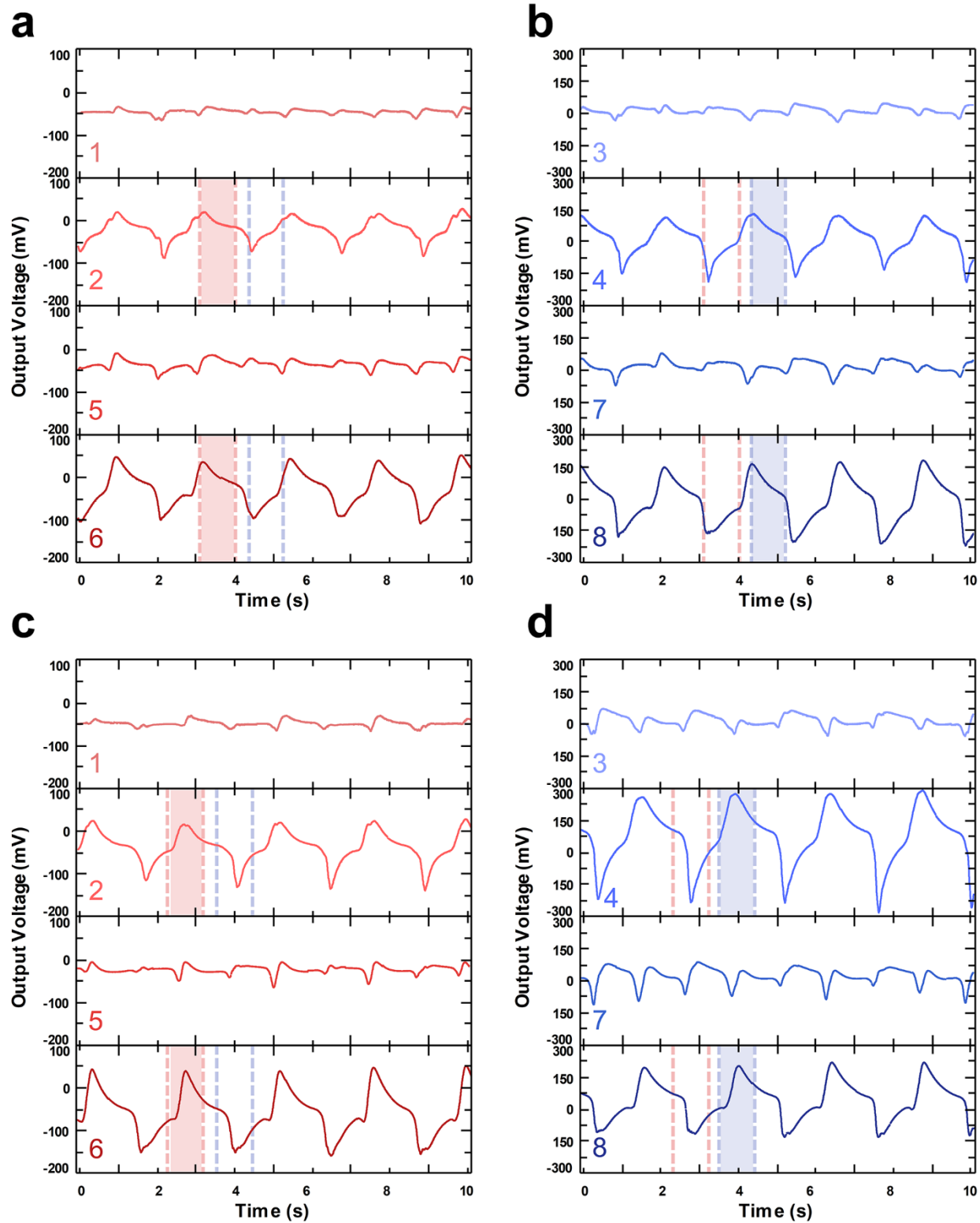


Figure A4. Voltage measurements of the OT-TES from eight different Al electrodes that have adjusted tilt angle in diagonal side. (a) The DAQ output voltage of the left side electrodes at 10° (b) The DAQ output voltage of the right side electrodes at 10° (c) The DAQ output voltage of the left side electrodes at 20° (d) The DAQ output voltage of the right side electrodes at 20° .