Supporting Information for

Electron-Induced Perpendicular Graphene Sheets Embedded Porous Carbon Film for Flexible Touch Sensors

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Supplementary Figures

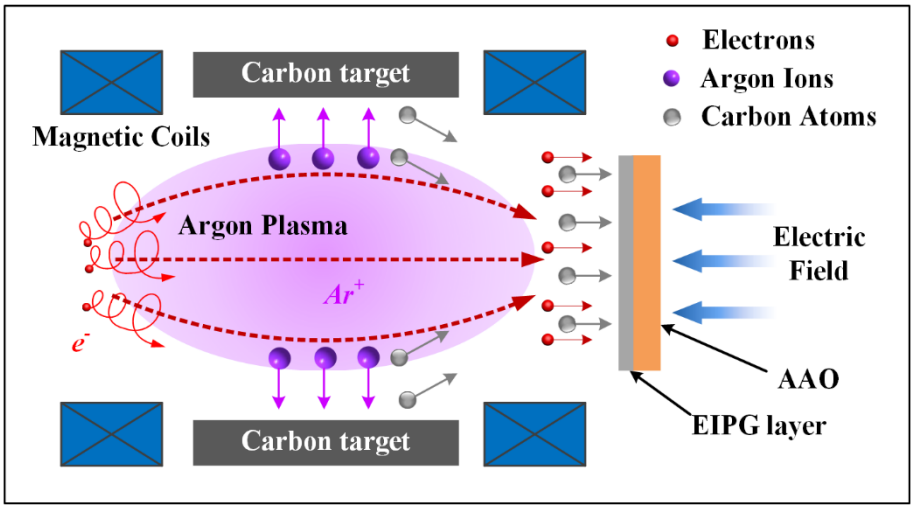

Fig. S1 Schematic illustrations of the ECR sputtering system

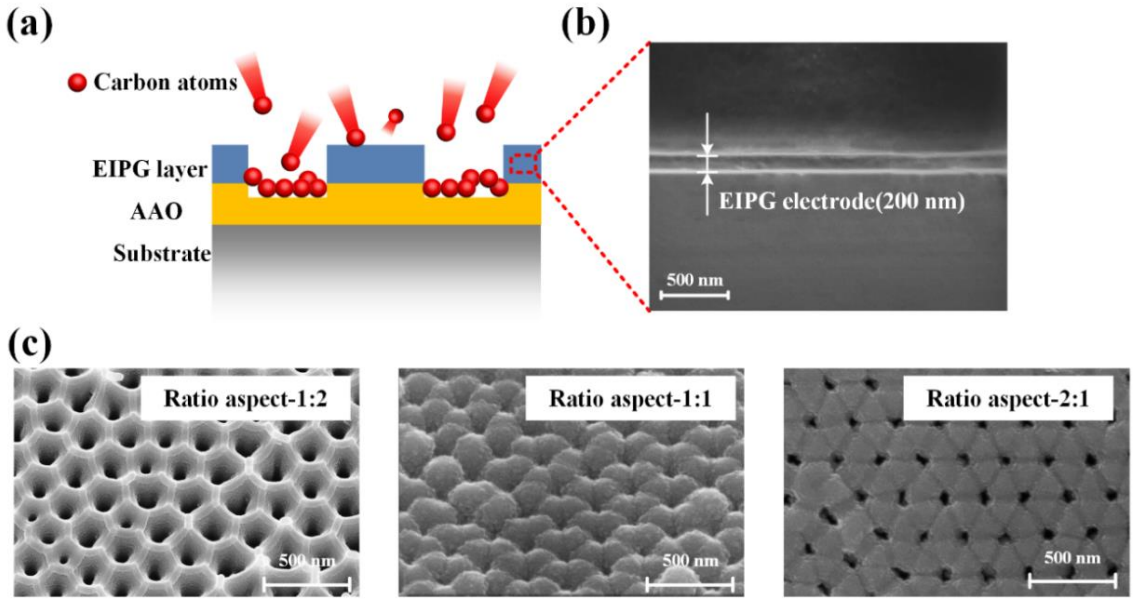

Fig. S2 a Schametics of accumulating carbon atoms and **b** Field-emission scanning electron micrographs of EIPG cross-section geometry and **c** Morphology of EIG layers under different ratio aspect (Ratio aspect=pit-depth/pit-diameter)

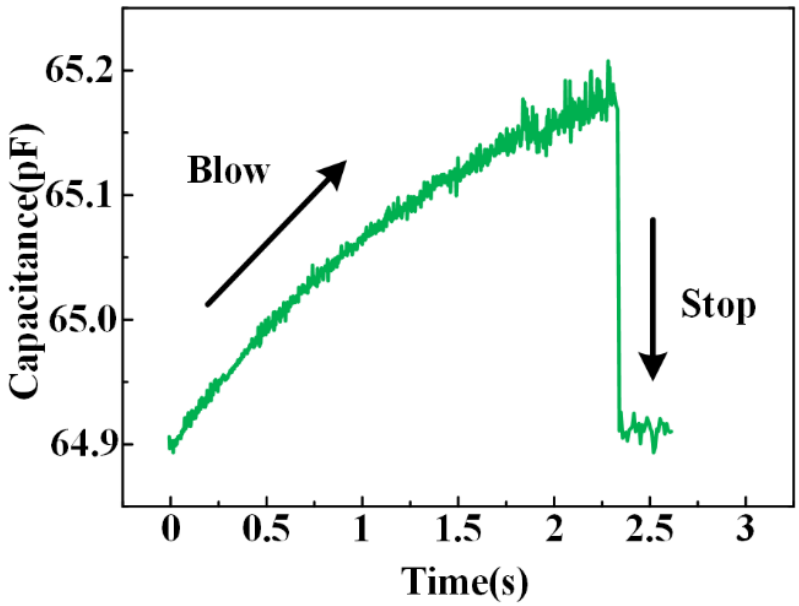

Fig. S3 Capacitance change when blowing on the sensor

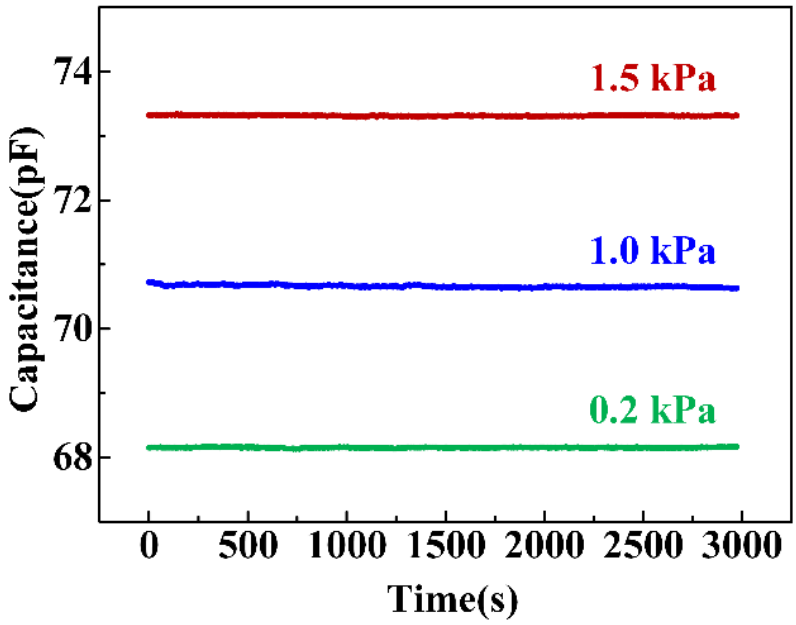

Fig. S4 Durability of capacitance under long-time loading process

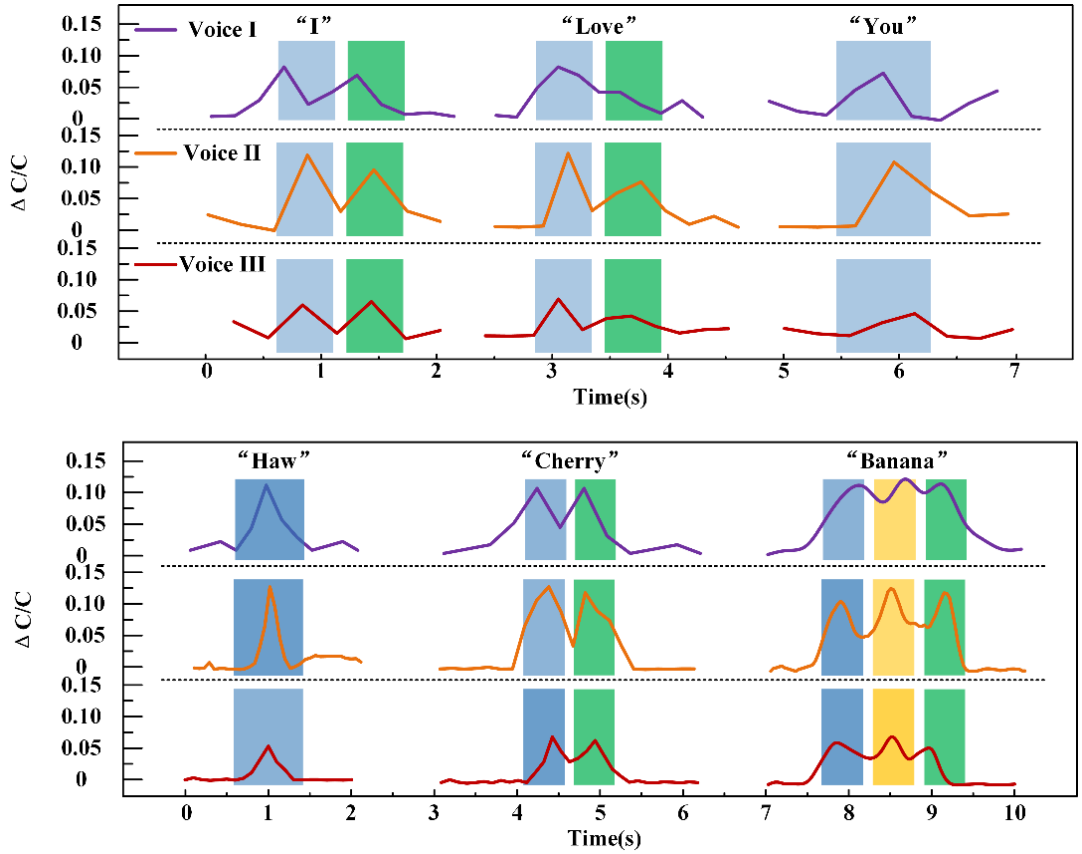

Fig. S5 Sound detection application of the EIPG sensor

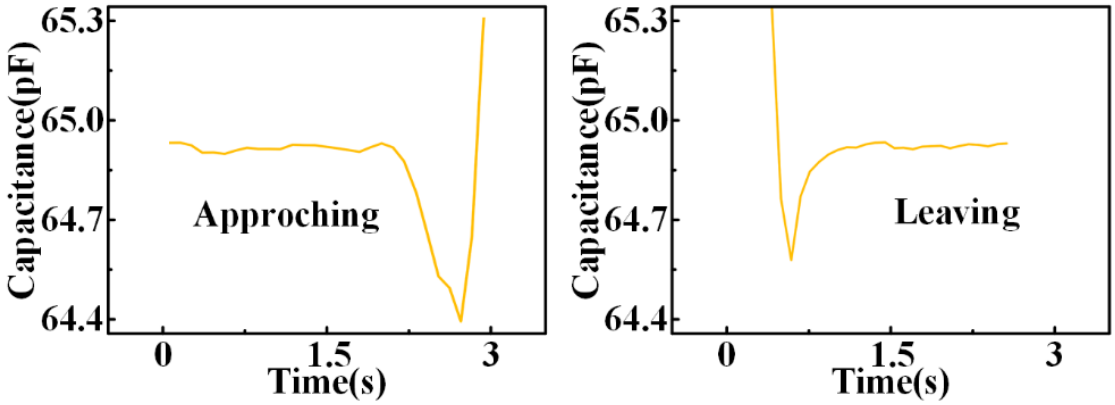

Fig. S6 Capacitance changes when approaching and leaving (Capacitance decreased rapidly when adjacent objects approach, like hyperbolic curve as the element of "1/D", the turning point of leaving is slightly higher than that of approaching for the charge exchange between capacitance surface and adjacent object)

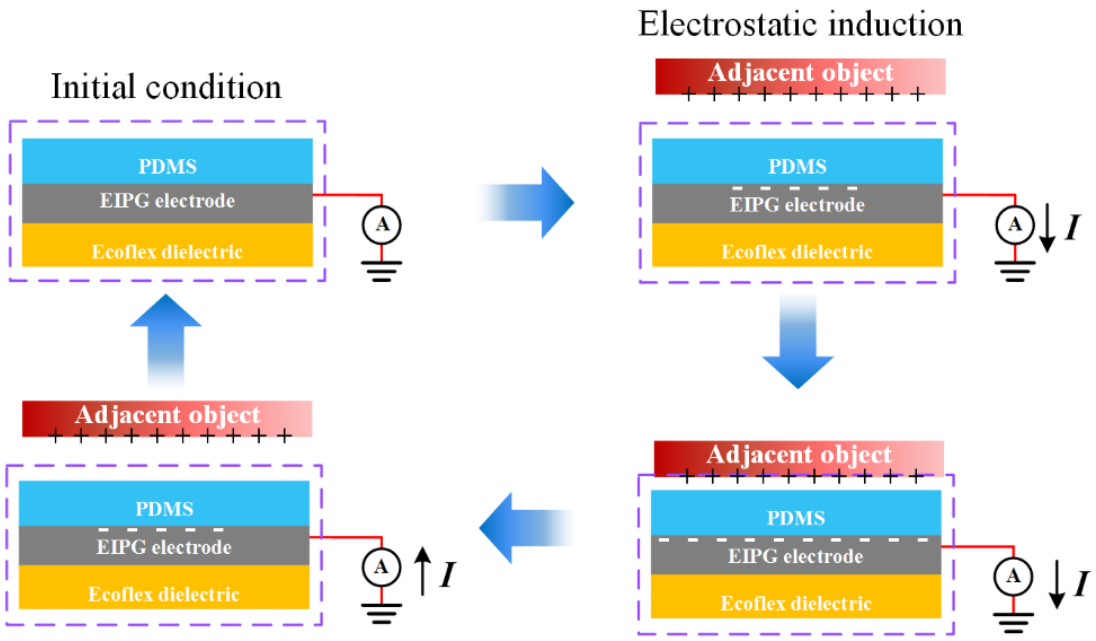

Fig. S7 Schematic illustrations for the working process of bimodal function when detecting adjacent objects using single-electrode connection