Supporting Information

Interpenetrating PAA-PEDOT Conductive Hydrogels for Flexible Skin Sensors

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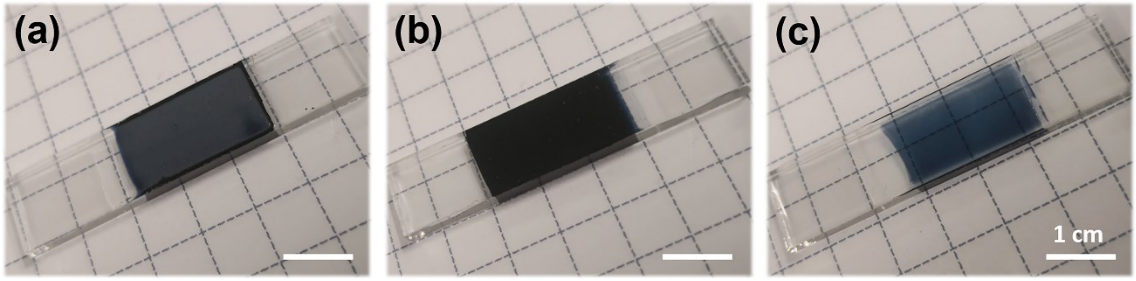

Fig. S1. The images of PAA-PEDOT hydrogels with different PAA concentrations. From left to right, the concentrations of PAA were 15% (wt.), 30% (wt.), and 45% (wt.), respectively.

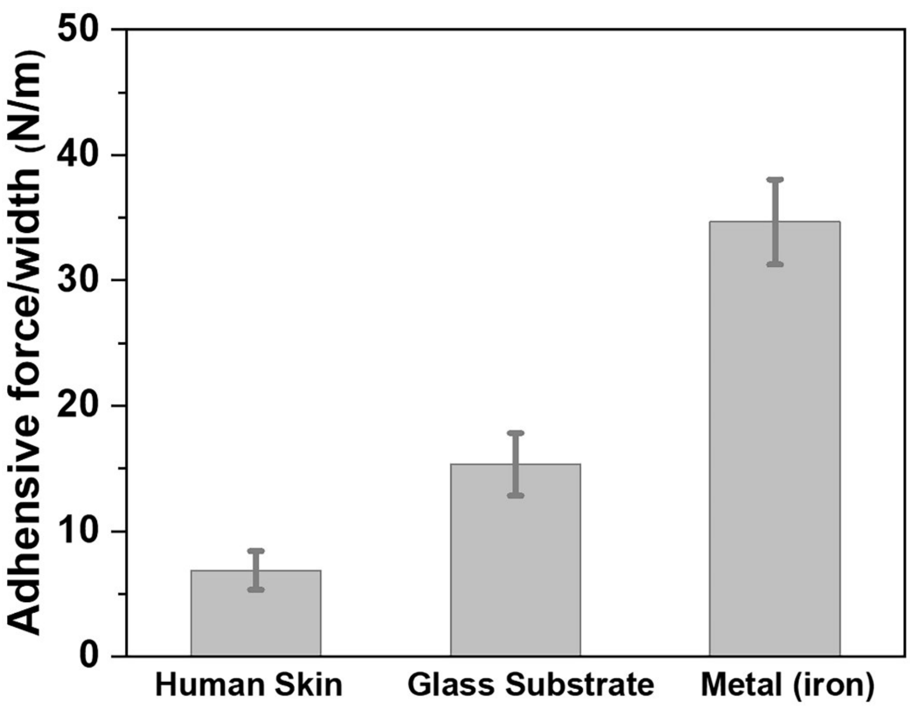

Fig. S2. Adhesion force of PAA hydrogel on human skin, glass substrate, and metal (iron) substrate.

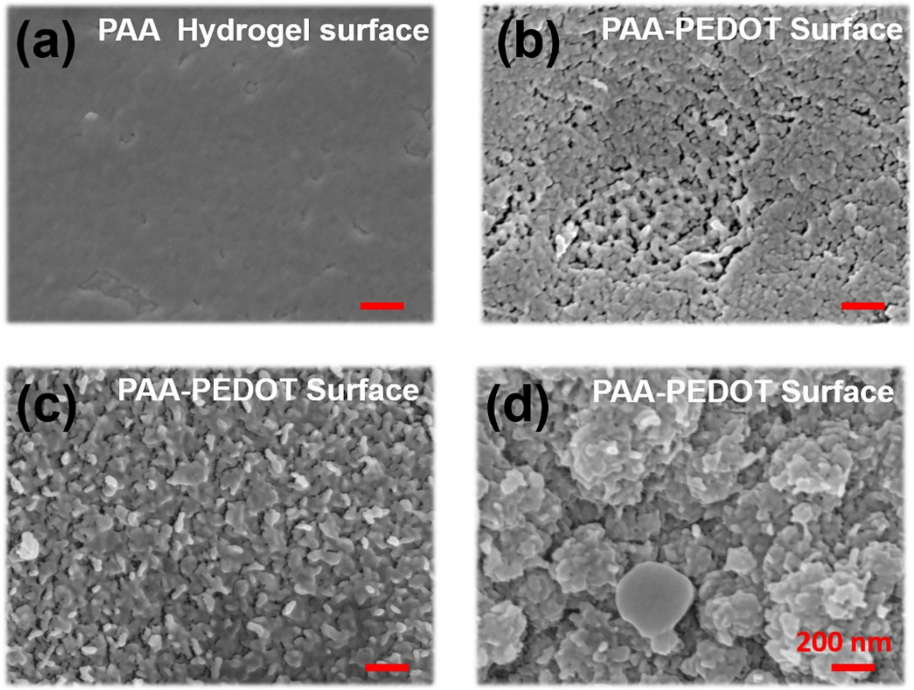

Fig. S3. SEM images of PAA and PAA-PEDOT hydrogels. (a) SEM image of the surface of a PAA hydrogel. (b-d) SEM image of the surface of PAA-PEDOT hydrogels with different electronical deposition times. From left to right, the electronical deposition times were 1 min, 5 min, and 10 min, respectively.

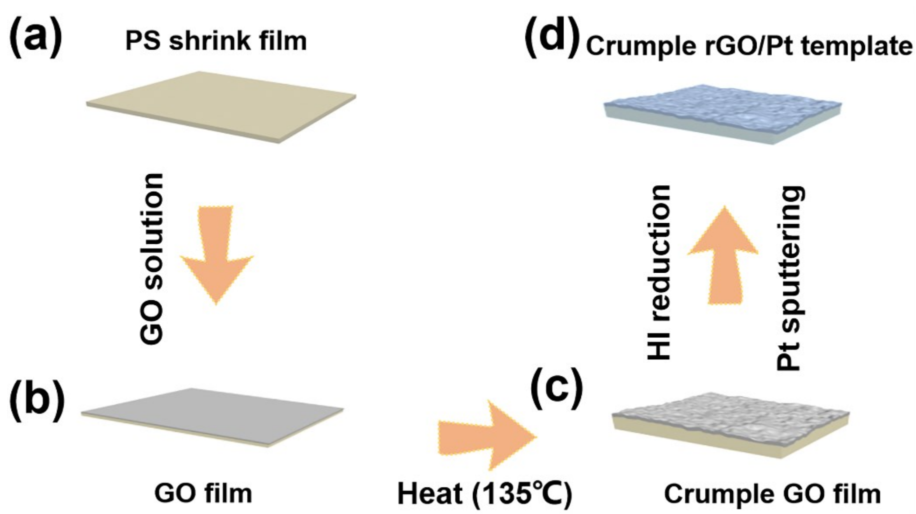

Fig. S4. Schematic of the generation process of crumpled rGO/Pt template.

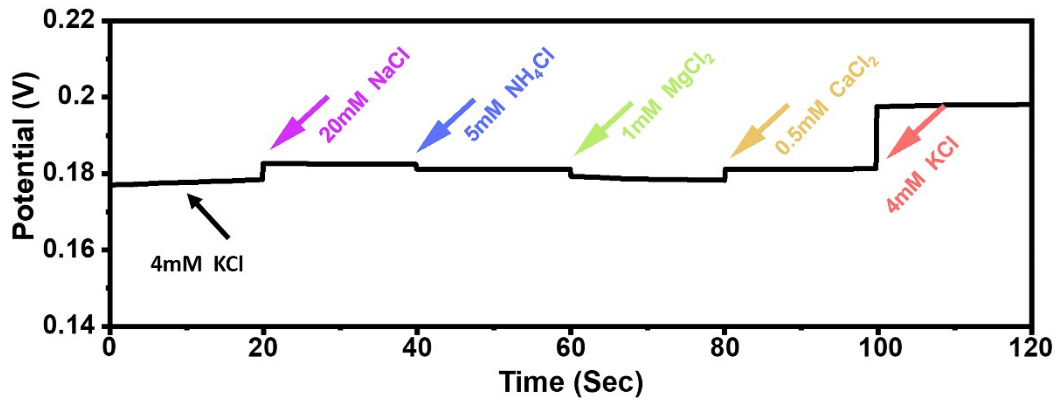

Fig. S5. The selectivity performances of K^+ sensor in different ionic solution.

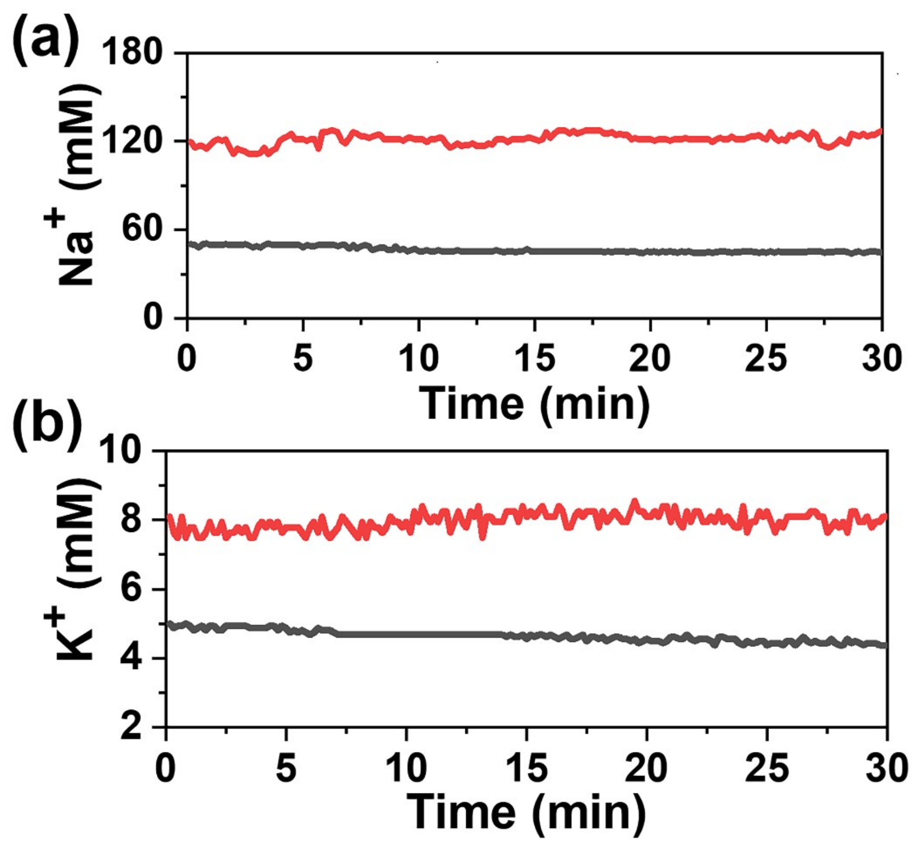

Fig. S6. The stability performances of the PAA-PEDOT-based sensors in Na^+ (50 mM, 120 mM) and K^+ (5 mM, 8 mM) ionic solution for 30 min.

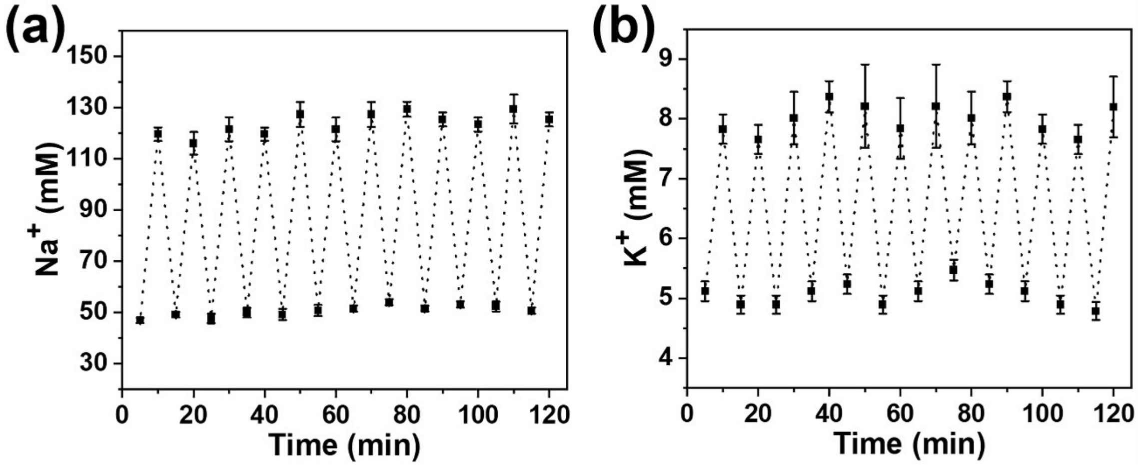

Fig. S7. The multicycle stability performances of the PAA-PEDOT-based sensors in Na^+ (50 mM, 120 mM) and K^+ (5 mM, 8 mM) ionic solution for 2 hours.