Supporting Information

Superhydrophobic Pressure-Responsive Pressure Sensor Based on Inner-Outer Synergistic Conductive Network of GAF/PDMS

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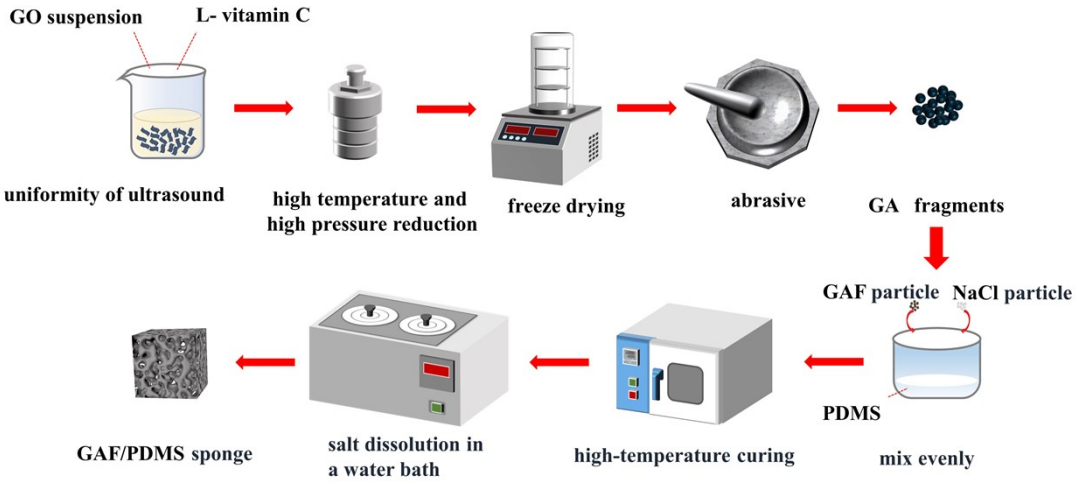

Figure.S1 Preparation process of porous GAF/PDMS sponge

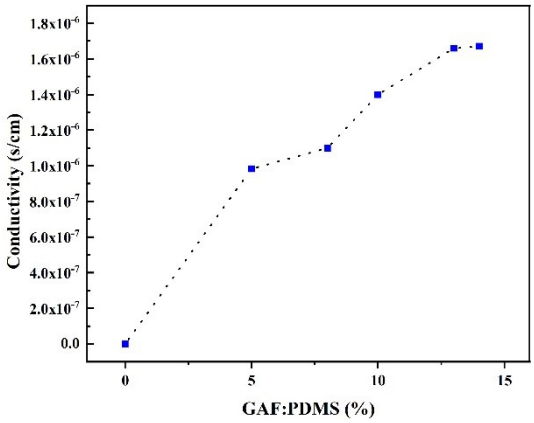

Figure.S2 Conductivity of porous GAF/PDMS sponges with different GAF blend loadings

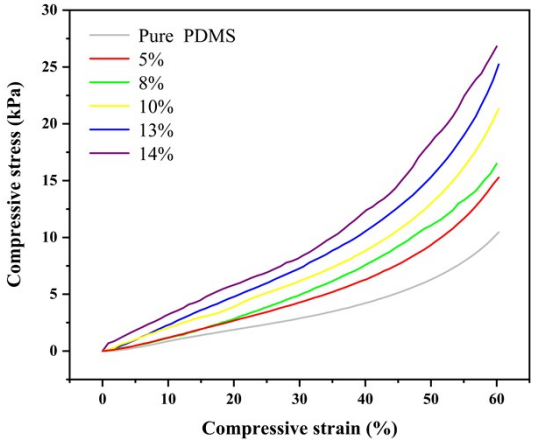

Figure.S3 Compressive stress-strain curve of porous GAF/PDMS sponges with different GAF blend loadings

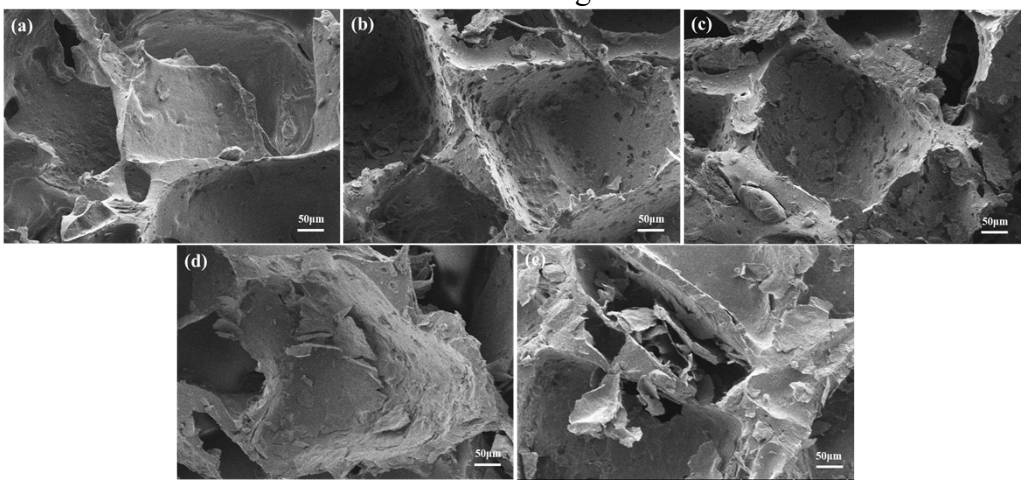

Figure.S4 (a) Porous GAF/PDMS sponge and different dip coating times SEM photos of rGO@GAF/PDMS composite materials: (b) 3 times, (c) 5 times, (d) 8 times, and (e) 10 times

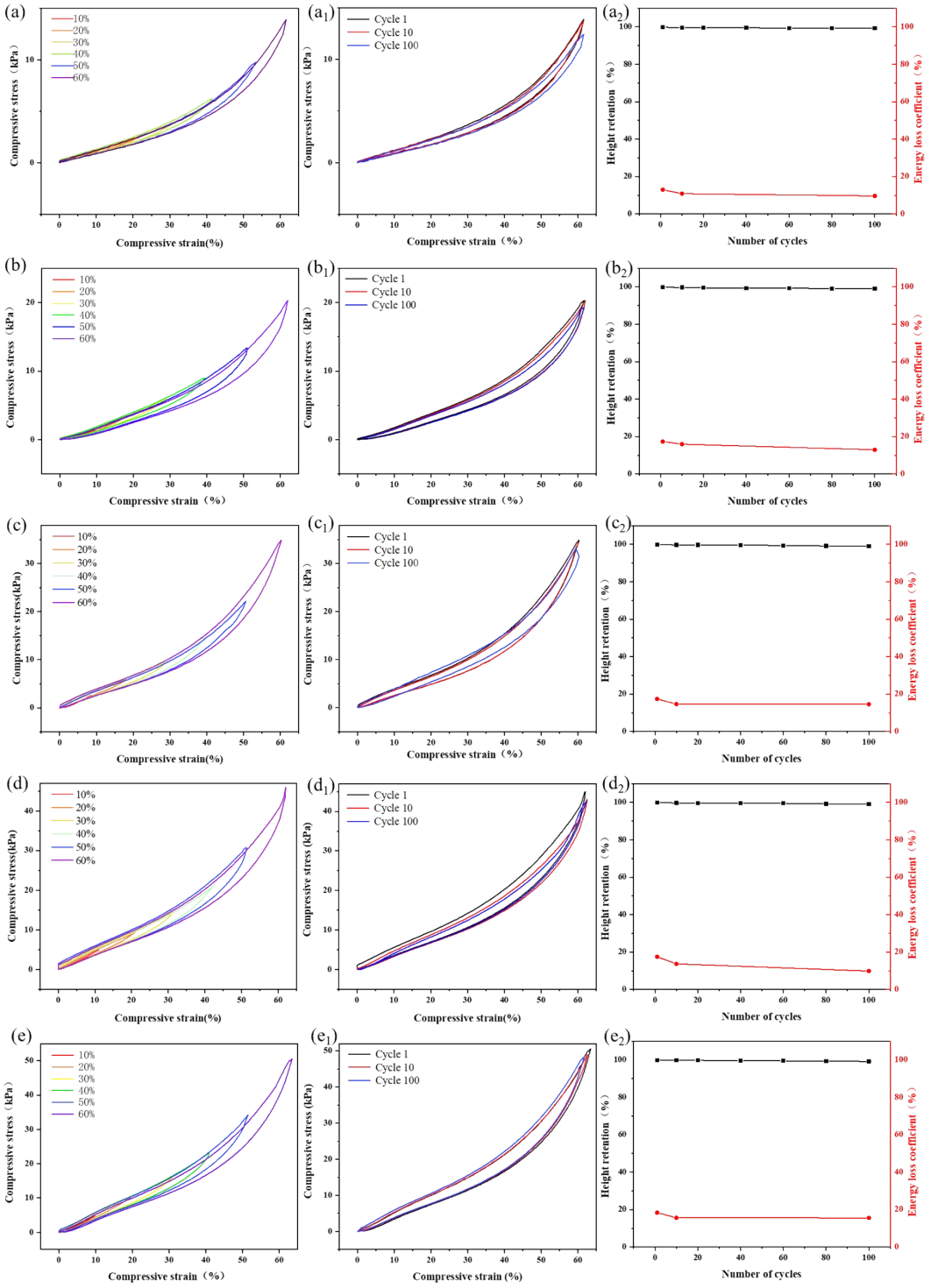

Figure.S5 Composite materials(GAF:PDMS=14%) with (a, a1, a2) 0 times, (b, b1, b2) 3 times, (c, c1, c2) 5 times, (d, d1, d2) 8 times, (e, e1, e2) 10 times under different dip coating times: (a-e) compressive stress-strain curve, (a1-e1) cyclic compressive stress-strain curve, (a2-e2) high retention and energy loss coefficient

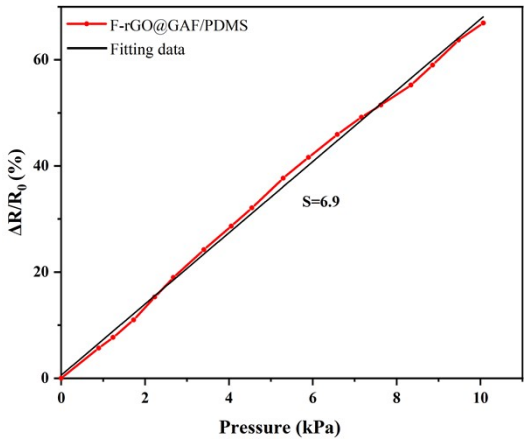

Figure.S6 Curve of the relative resistance of the F-rGO@GAF/PDMS sensor under the small pressure range

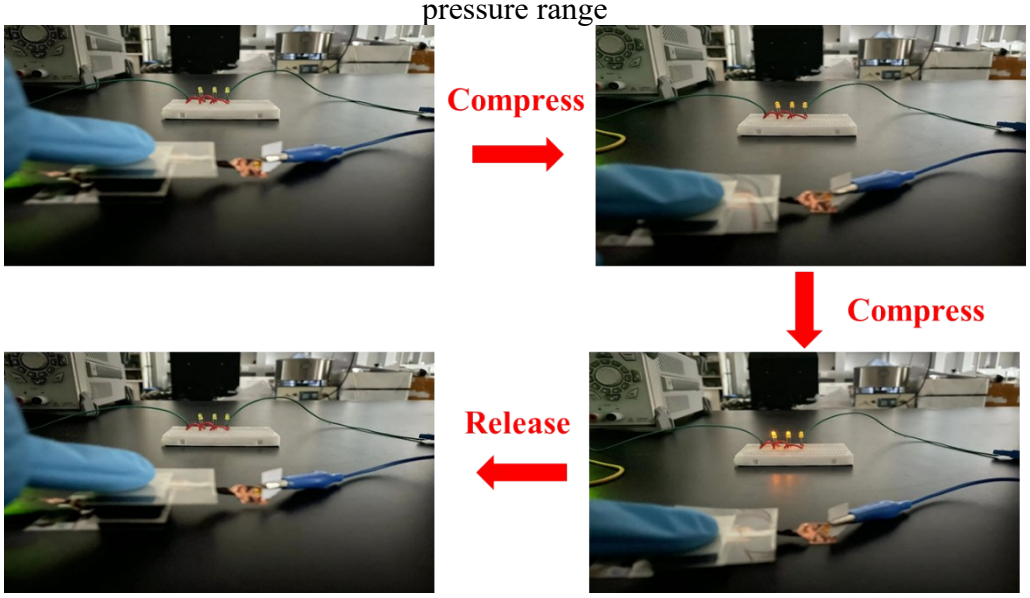

Figure.S7 Electrical signal change of porous F-rGO@GAF/PDMS sensor and LED integrated circuit in compression/release stat

Figure.S8 Photos of water droplets on the surface of rGO@GA/PDMS composite material

Video S1.mp4