Electronic Supplementary Information for:

N-doped graphdiyne derivative for highly selective and ultrasensitive NH$_3$ sensing at room temperature

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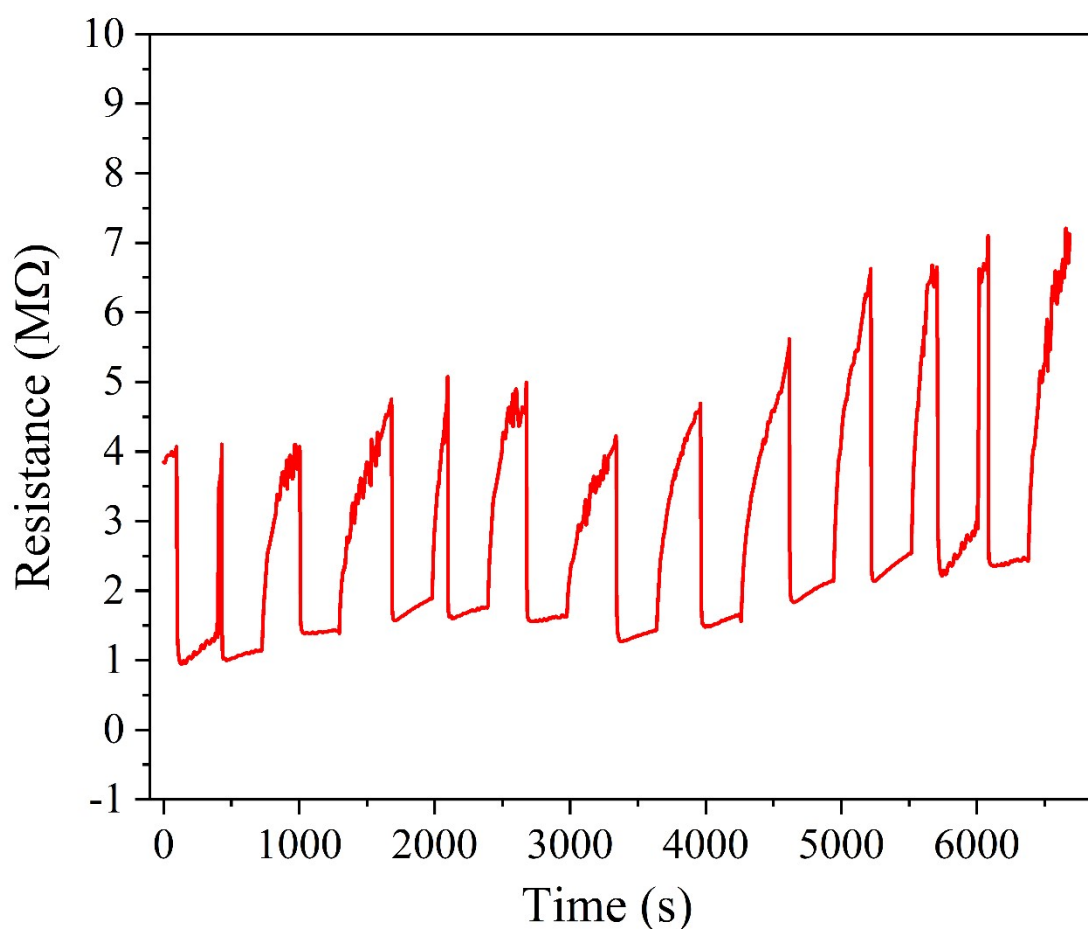
Fig. S1 Long-term response stability of N-GDYD for 100 ppm NH$_3$.
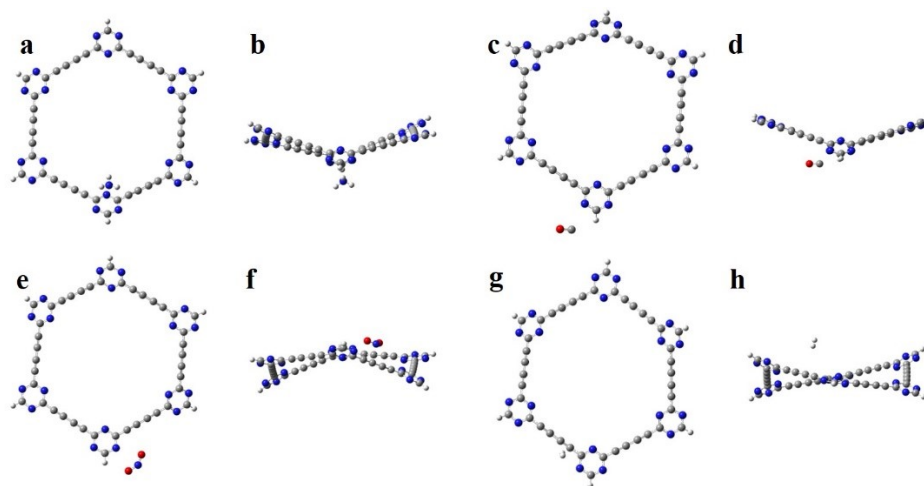
Fig. S2 Top view of optimized N-GDYD structure for model molecules interact with (a) NH_3, (c) CO, (e) NO_2, (g)H_2; the side view of the optimized N-GDYD structure for the model molecule interacts with (b) NH_3, (d) CO, (f) NO_2, (h)H_2. The grey, blue, white, and red ball represent for the carbon, nitrogen, hydrogen, and oxygen atom, respectively.