Electronic Supplementary Material (ESI) for Environmental Science: Nano.

A fluorinated greenhouse gases sensor based on N-doped tin oxide materials

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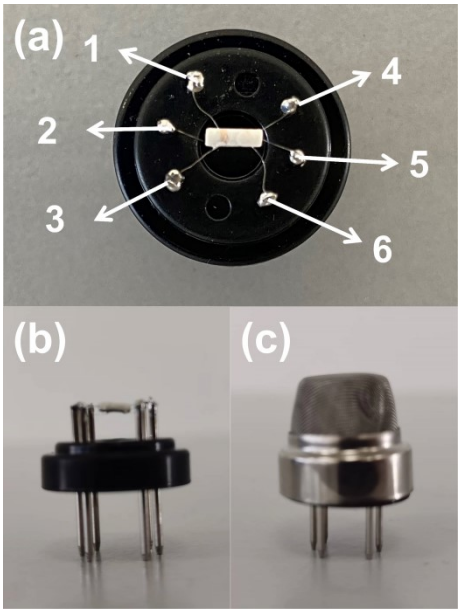

Fig. S1. The structure of self-made sensor and the gas sensing test device. (a) The top view of the sensor and the annotations of wire interface, (b) the side view of the sensor, (c) the side view of the sensor with cover.

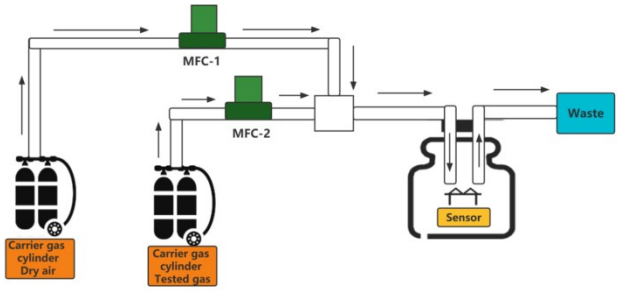

Fig. S2. The detailed gas system design of dynamic gas sensing.

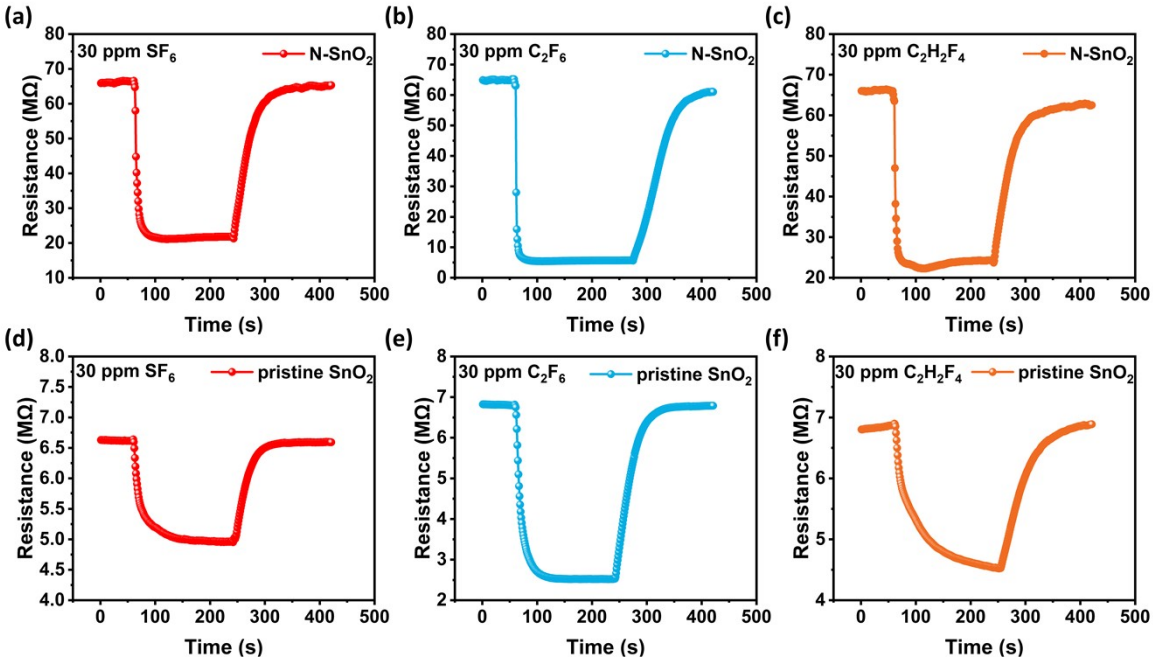

Fig. S3. The real resistance response-recovery curve of N-SnO_2 and pristine SnO_2 to 30ppm (a,d)SF_6, (b,e)C_2F_6 and (c,f)$C_2H_2F_4$ at 200 °C.

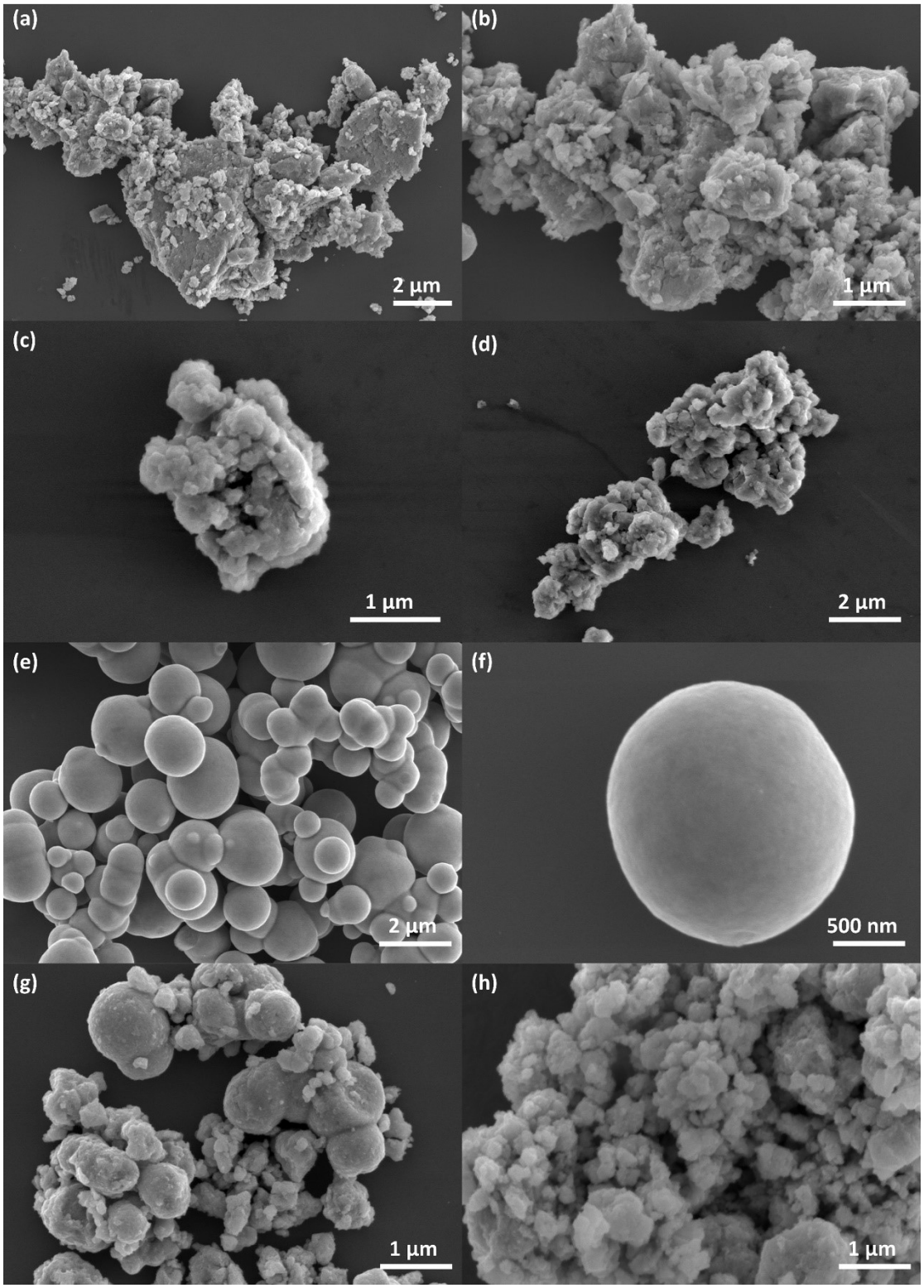

Fig. S4. (a.b)SEM images of N(2), (c.d)SEM images of N(3), (e,f)SEM images of N(4), (g)SEM images of N(5) and (h)SEM images of N(6).