Supporting information

$ZnO/ZnFe_2O_4$ n-n heterojunction and Au loading synergistically improve the sensing performance of acetone

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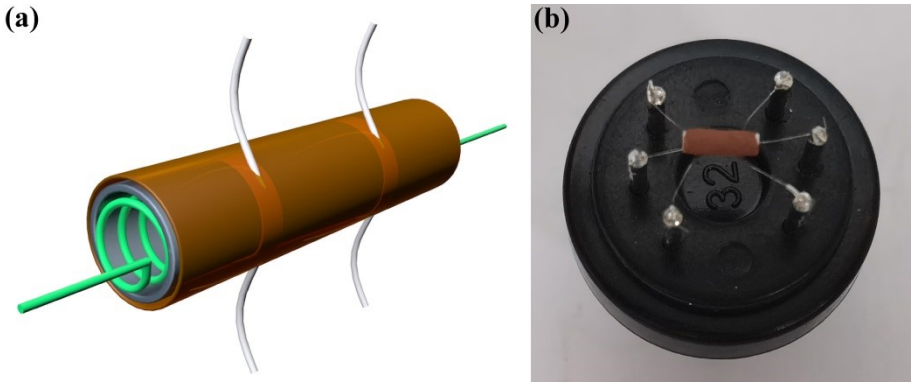

Fig. S1. (a) Schematic diagram of the gas sensor; (b) Example image of the fabricated gas sensor.

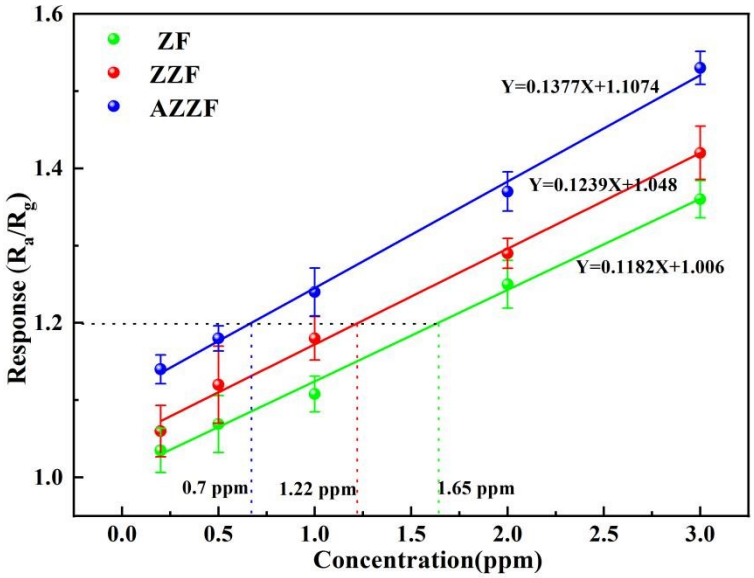

Fig. S2. Responses of ZF, ZZF, and AZZF based sensors as a function of acetone concentration (0.2-3 ppm) at 85% RH.

Fig. S3. Exhaled breath collected from a subject using a fluorine membrane collection bag.

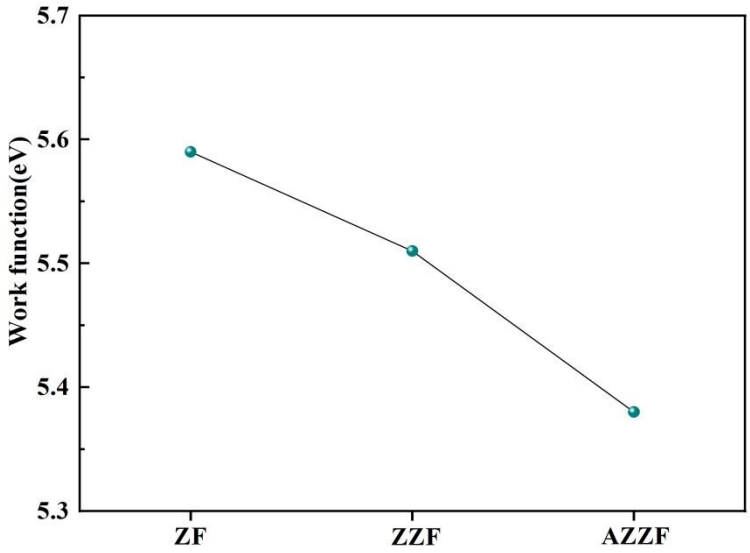

Fig. S4. Work function of ZF, ZZF, and AZZF via Kelvin Probe.

Table. S1. Structural Information of ZF, ZZF, and AZZF.

Samples	Specific surface (m^2g^{-1})	Pore size (nm)	Pore volume (cm^3g^{-1})
ZF	138.2	13.5	9.58
ZZF	159.8	10.32	4.26
AZZF	165.1	9.84	3.45