

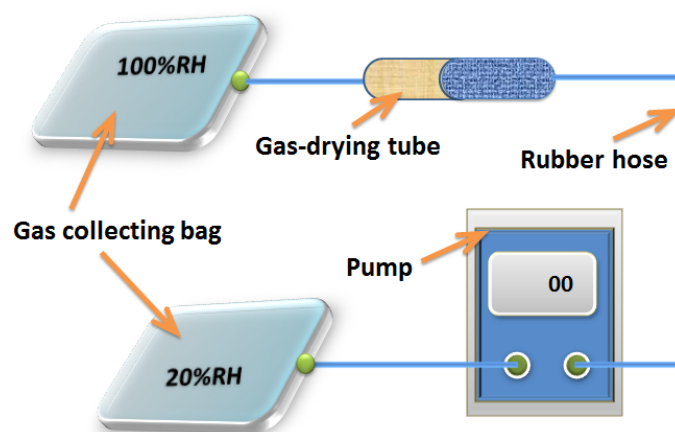
**Au modified three-dimensional In₂O₃ inverse opals: synthesis
and improved performance for acetone sensing toward diagnosis
of diabetes**

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Scheme S1. Diagram of the dehumidification process.



Fig. S1 (a-e) Photos of S1-S5 3DIO thin film on the glass substance. The photos were taken under normal indoor environment.

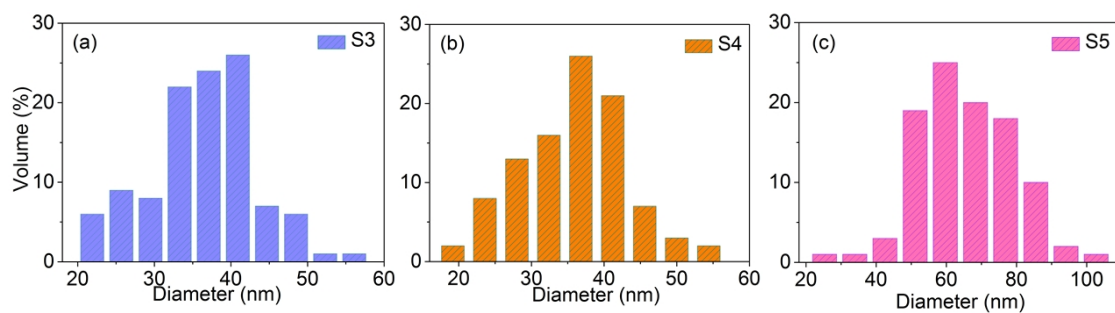


Fig. S2 (a-c) The Au NPs size distribution of S3-S5 3DIO Au/In₂O₃, and the size distribution were calculated through measuring at least 100 Au NPs.

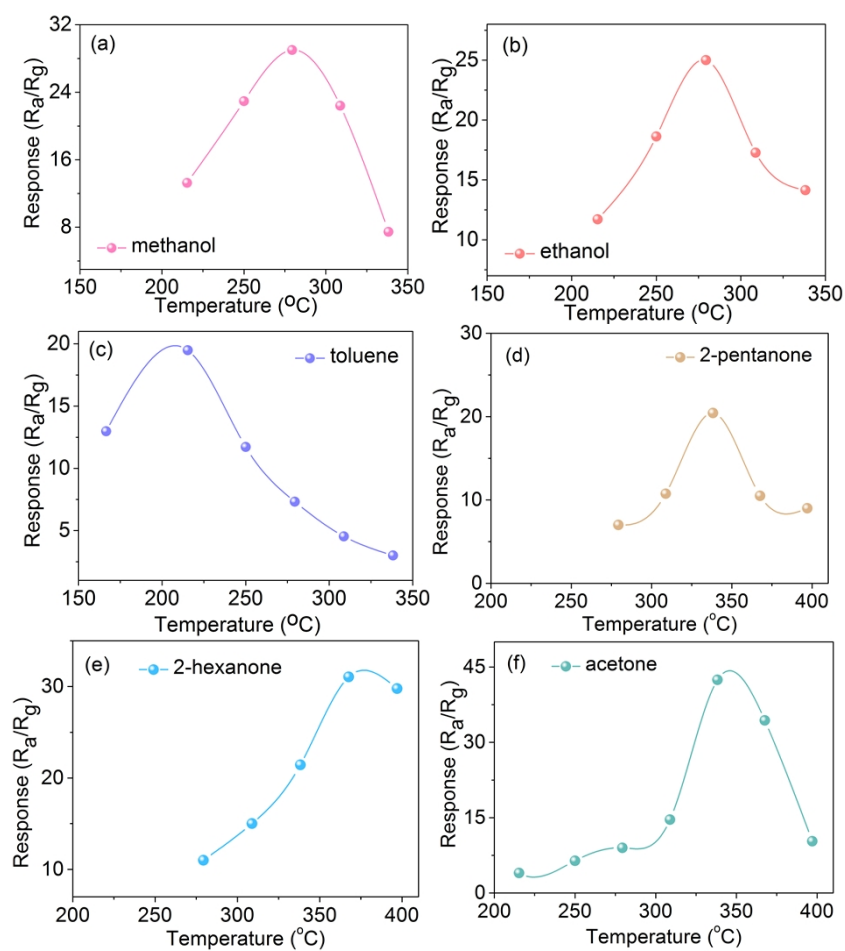


Fig. S3 (a-f) Responses of S4 3DIO gas sensor to 5 ppm gases as a function of operating temperature.