Supporting Information

Visible Light Enhanced Gas Sensing of CdSe Nanoribbons to Ethanol

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1. Response of CdSe nanoribbons-based sensors for ethanol under the dark and visible light illumination at 160 °C.

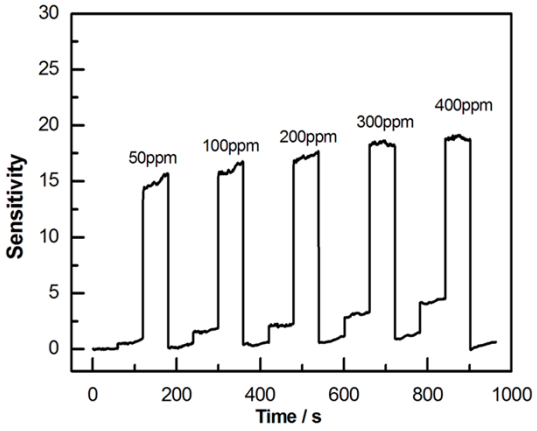

Figure S1. Response of CdSe nanoribbons-based sensors upon exposure to various concentrations of ethanol (50-400 ppm) under the dark and visible light illumination at 160 °C.

2. Response of CdSe nanoribbons-based sensors for ethanol under the dark and visible light illumination at 240 °C.

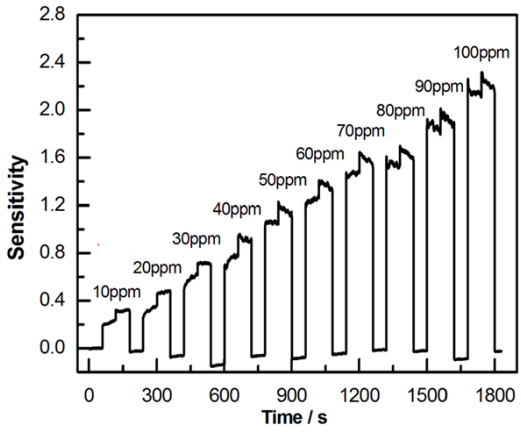

Figure S2. Response of CdSe nanoribbons-based sensors upon exposure to various concentrations of ethanol (10-100 ppm) under the dark and visible light illumination at 240 °C.

3. XRD pattern CdSe nanoribbons under temperature of 300 °C showing the appearance of CdO.

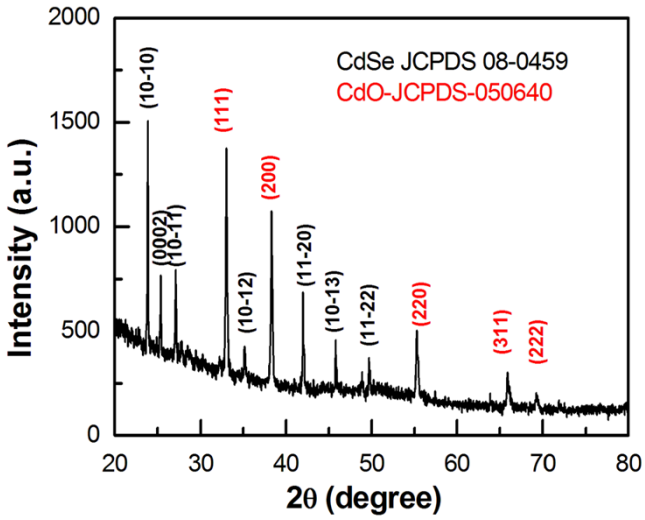

Figure S3. XRD pattern CdSe nanoribbons under temperature of 300 °C showing the

appearance of CdO.

4. Photographs of the experimental setup and gas sensor. We injected a certain amount of ethanol onto the evaporation station though a hole beside the evaporation station with a transfer liquid gun. Then the ethanol was gasified and tested. The size of the CdSe sensor is about Φ2 × 5 mm.

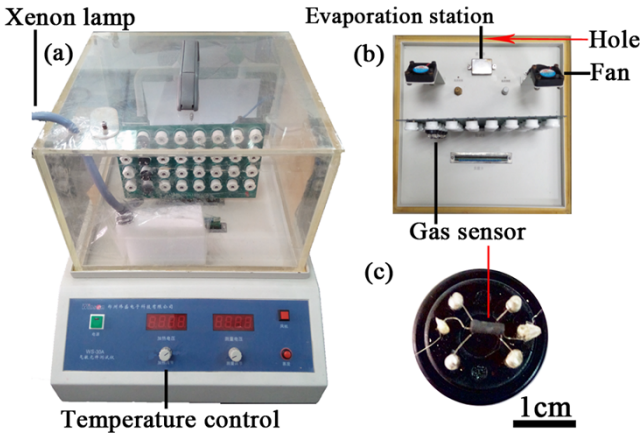

Figure S4. Photographs of the experimental setup and gas sensor.

5. Five sequential cycles of the response transients of the gas sensor after exposure to 500 ppm ethanol at 200 °C.

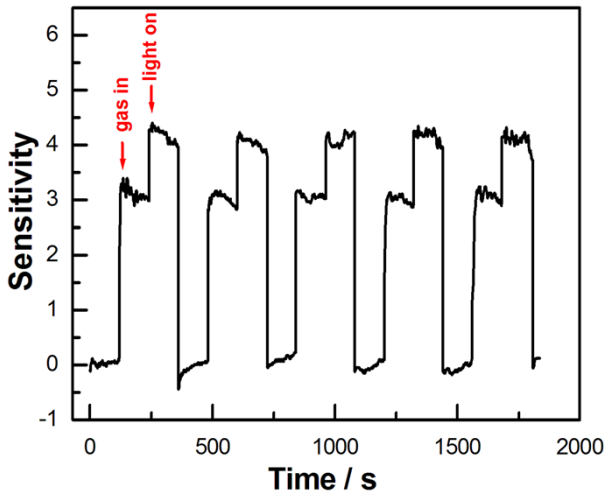

Figure S5. Five sequential cycles of the response transients of the gas sensor after exposure to 500 ppm ethanol at 200 ^{o}C.

6. SEM image of the CdSe gas sensor. The thickness of CdSe film was about 25 μm.

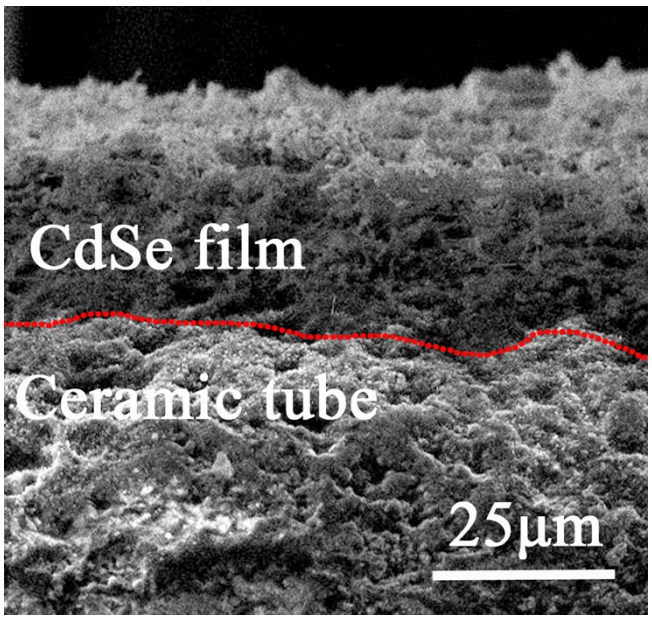

Figure S6. SEM image of the CdSe gas sensor.