Supporting Information for

ZnO@ZnS Core/shell Microrods with Enhanced Gas Sensing Properties

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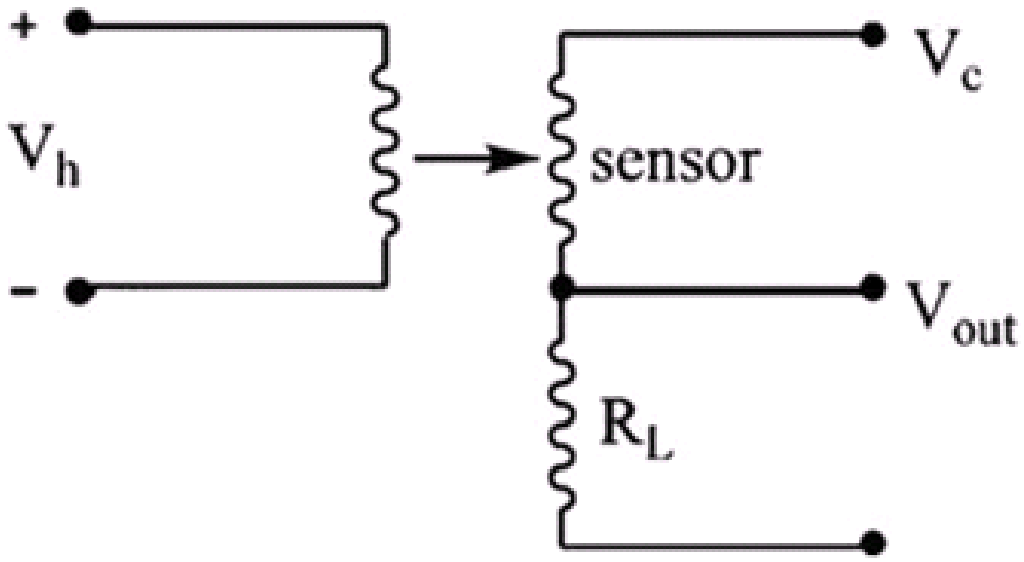

Figure S1. Working principle of gas sensor test. V_h: Heating voltage; V_{out}: Output signal voltage; V_c : Test circuit voltage; R_L: Load resistance.

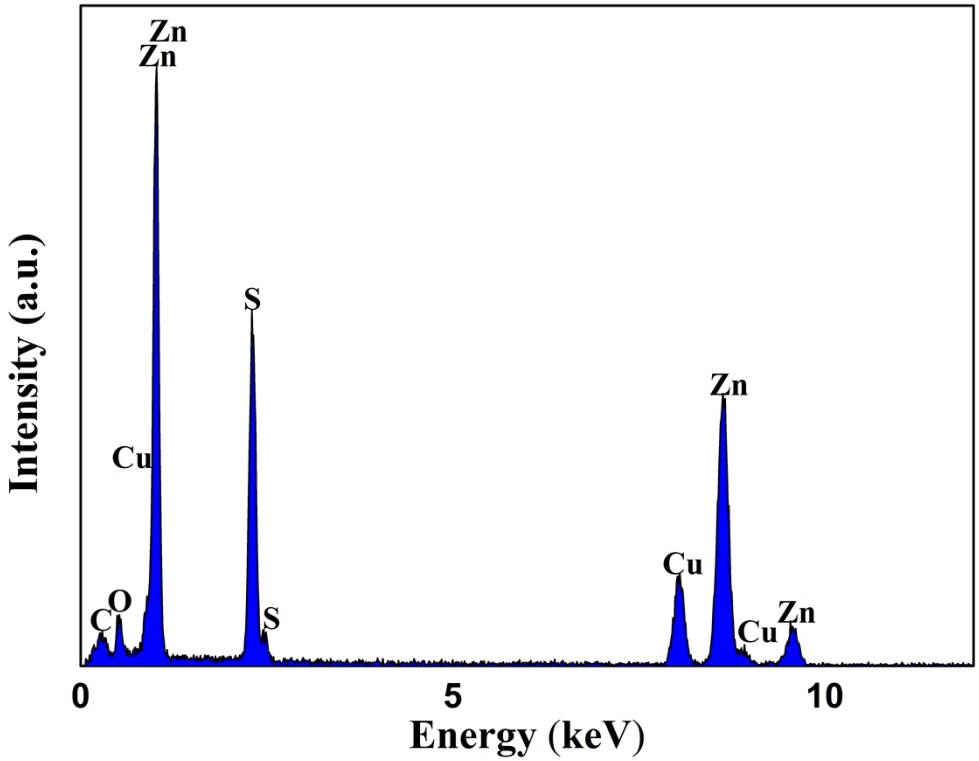

Figure S2. The corresponding EDS spectrum of the ZnO@ZnS core/shell MRs.

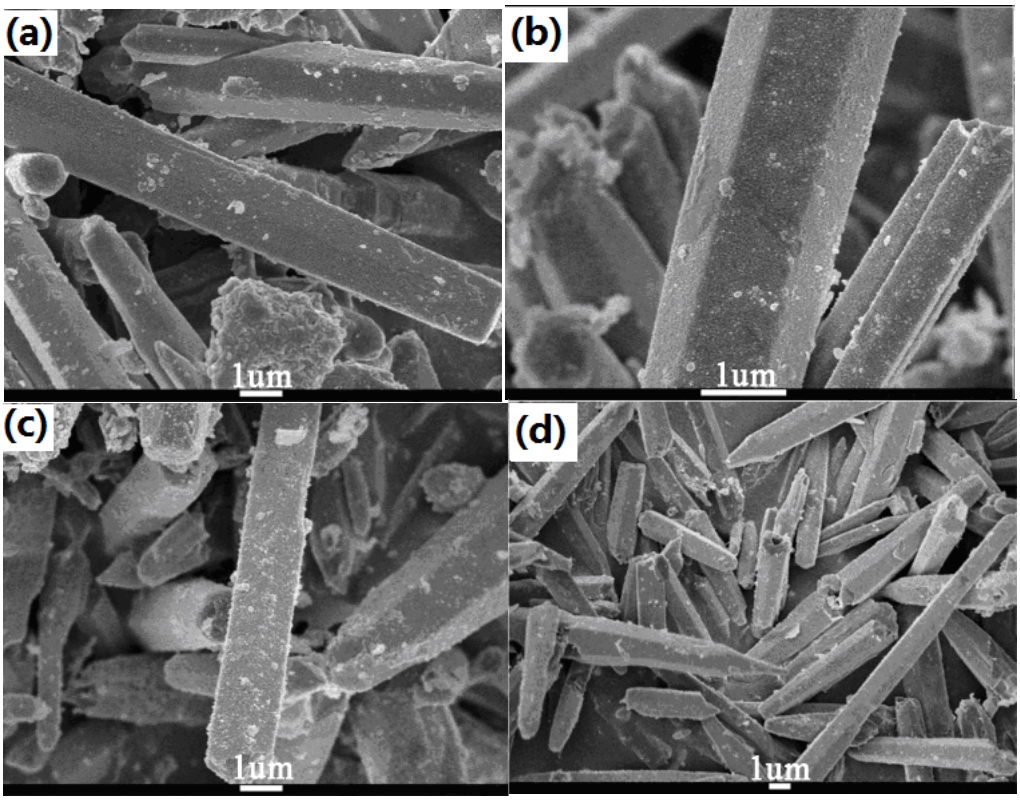

Figure S3. SEM images of ZnO@ZnS MRs sulfurized in Na_2S solution for (a) 12 h, (b) 16 h, (c) 20 h, and (d) 28 h.

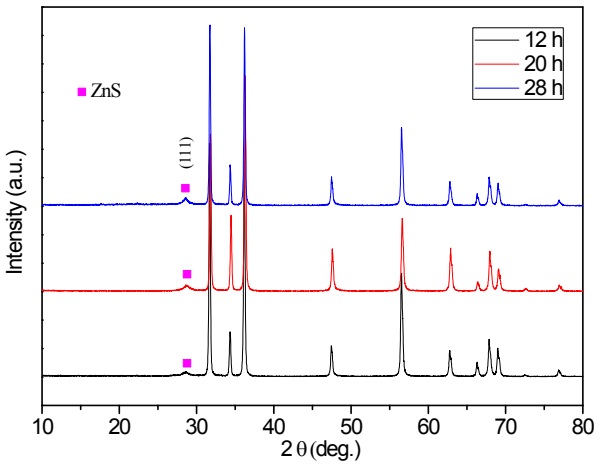

Figure S4. XRD patterns of the ZnO@ZnS core/shell MRs sulfurized for different times.

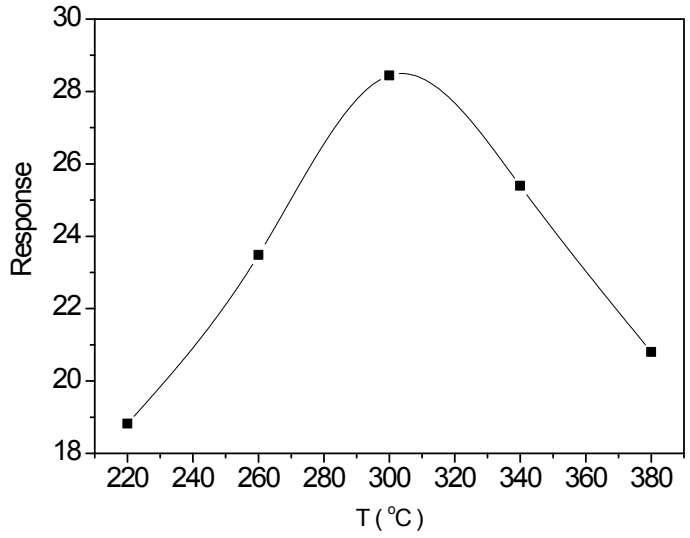

Figure S5. Response of the ZnO@ZnS core/shell MR sensor to 100 ppm n-butanol at different temperature.

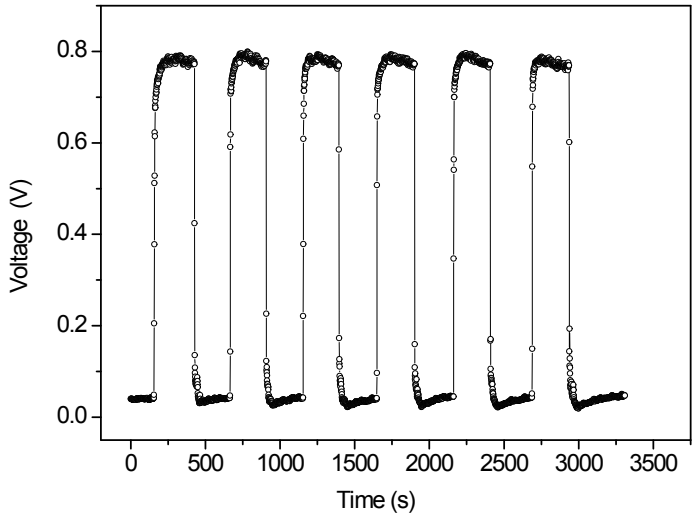

Figure S6. Reproducibility of the ZnO@ZnS core/shell MR based sensor on successive 100 ppm of n-butanol.