

Supporting Information for

Enhanced gas sensor based on SiO₂@mesoporous MCM-41 core-shell nanocomposites for SO₂ visual detection

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Figure S1. The $\text{SiO}_2\text{@MCM-41}$ sensing system for SO_2 gas detection.

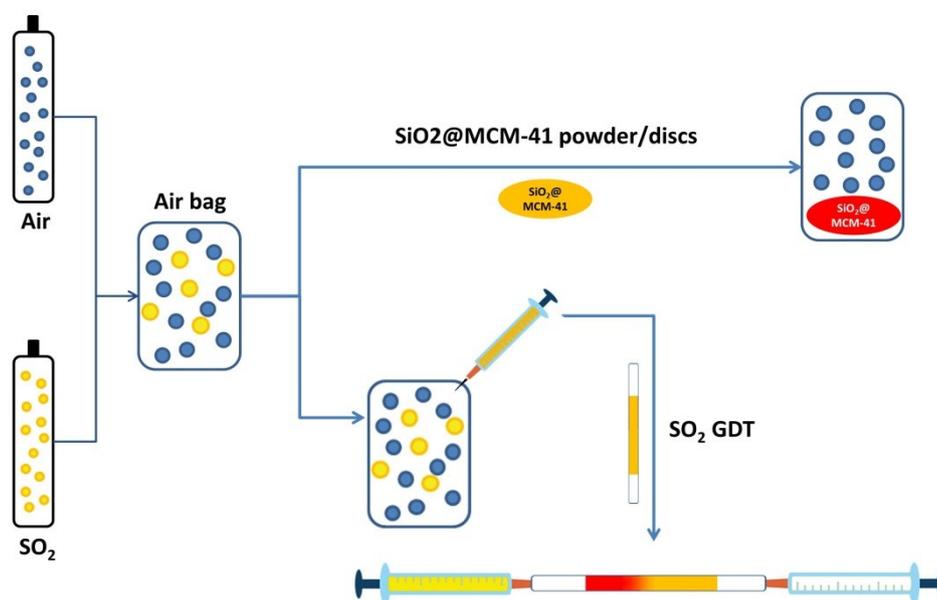
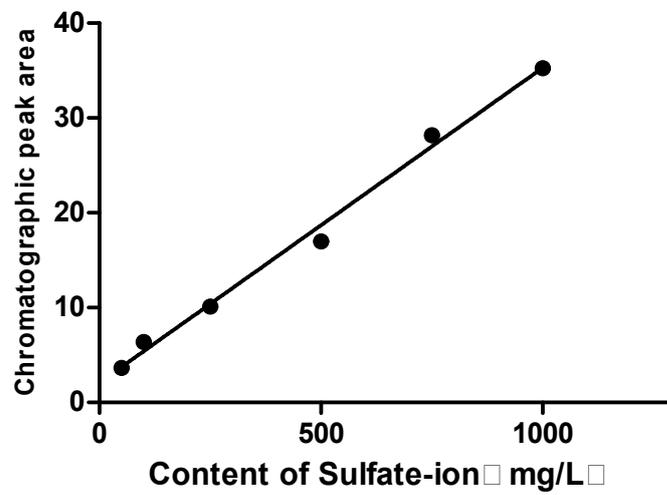


Figure S2. The standard working curve of sulfate ion for the chromatographic peak area.



The standard working curve equation of sulfate ion is $y = 0.0324x + 2.2662$, $R^2 = 0.9923$, and the linear range of the equation is 50-1000 mg/L.

Figure S3. Photo image of the homemade sensing system of SO₂ GDT.



Figure S4. (a) N₂ adsorption-desorption isotherm (77 K) and (b) pore size distribution profile of SiO₂@MCM-41.

