

## Supplementary Information

### Controllable Synthesis of Zn-Doped $\alpha$ -Fe<sub>2</sub>O<sub>3</sub> Nanowires for H<sub>2</sub>S Sensing

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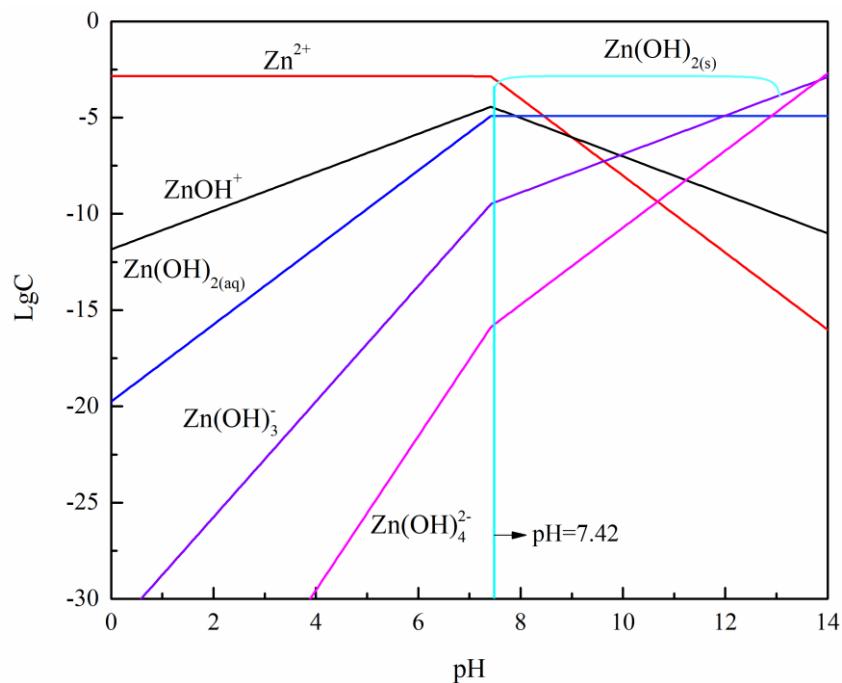
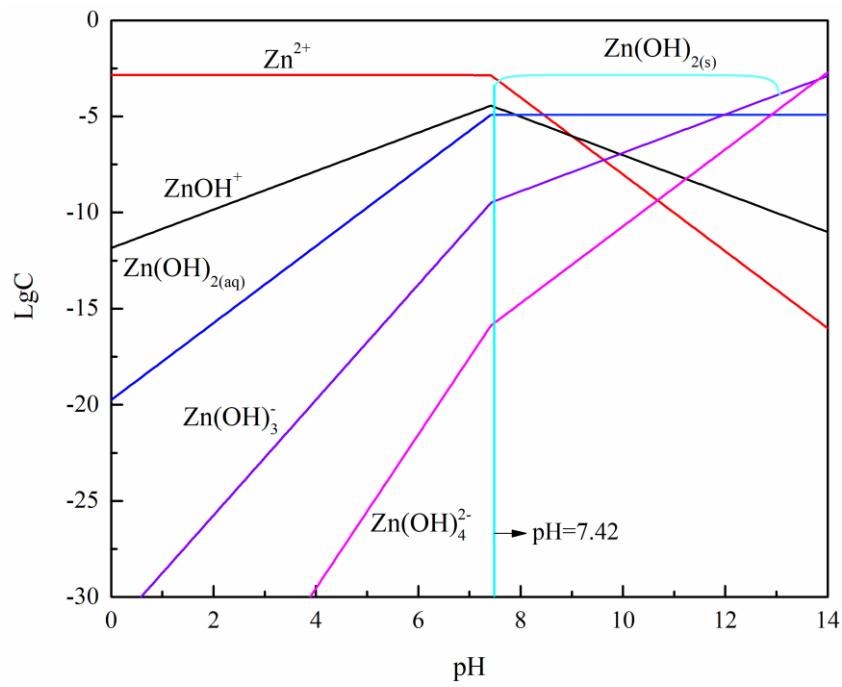


Figure S1. Concentration logarithmic diagram of  $\text{Fe}^{3+}$  hydrolysis components ( $\text{Fe}^{3+}$ : 0.14 mol/L).



**Figure S2.** Concentration logarithmic diagram of  $\text{Zn}^{2+}$  hydrolysis components ( $\text{Zn}^{2+}$ :  $1.4 \times 10^{-3}$  mol/L).