

Supporting Information

Salicylidene Schiff Base Assembled with Mesoporous Silica SBA-15 as Hybrid Materials for Molecular Logic Function

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- The fluorescence spectra of the **SPEA/SBA-15** hybrid stimulated by the Zn^{2+} S2
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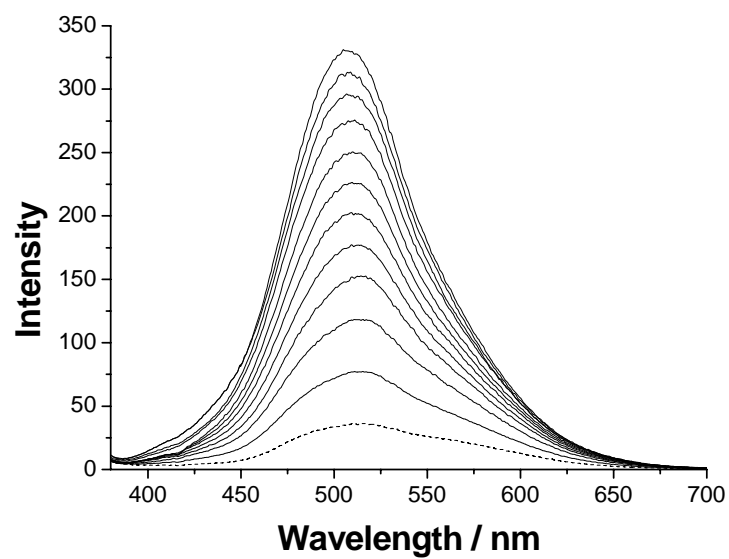


FIGURE S-1: The fluorescence spectra of the **SPEA/SBA-15** hybrid before (dash line) and after (solid line) stimulated by the OH^- .

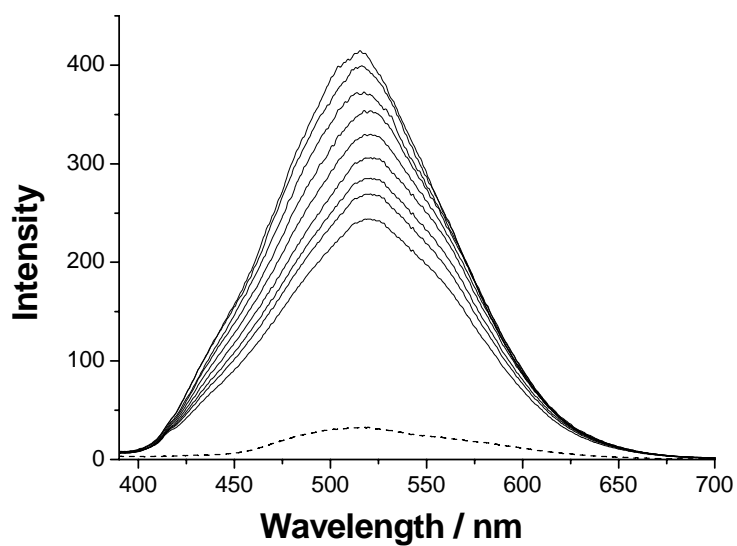


FIGURE S-2. The fluorescence spectra of the **SPEA/SBA-15** hybrid before (dash line) and after (solid line) stimulated by the Zn^{2+} .

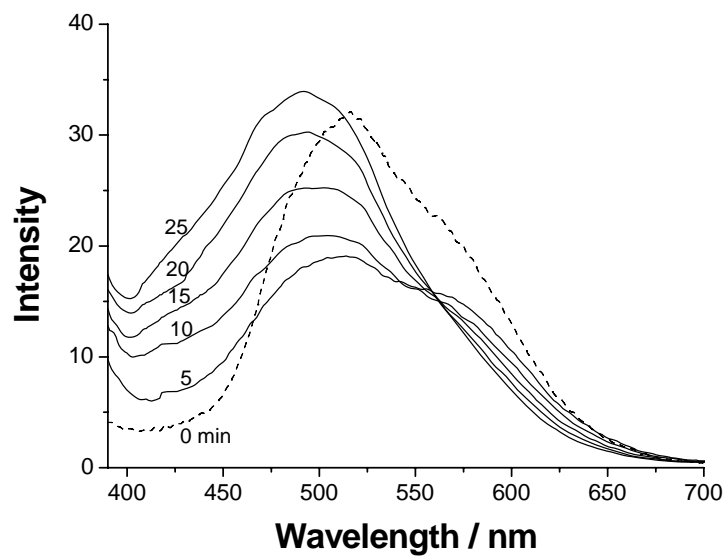


FIGURE S-3. The fluorescence spectra of the **SPEA/SBA-15** hybrid before (dash line) and after (solid line) stimulated by the UV light.

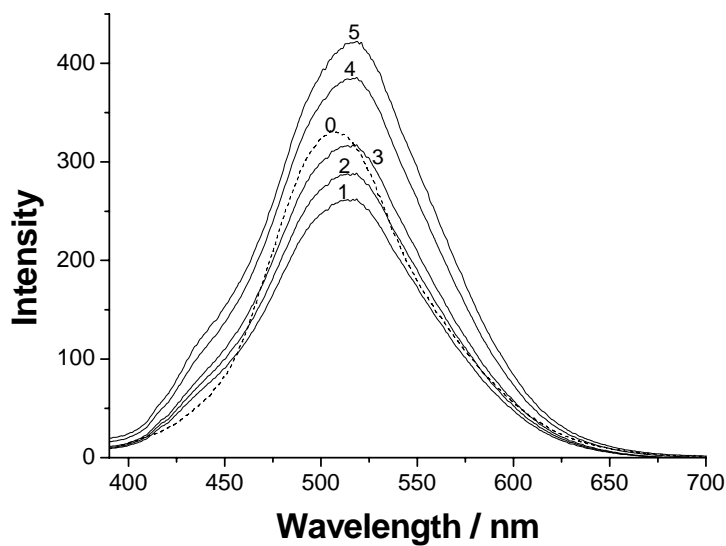


FIGURE S-4. The fluorescence spectra of the **SPEA/SBA-15** hybrid stimulated by the combinational actions of OH^- and Zn^{2+} . Dash line represents after titration of OH^- and solid lines represent sequentially titration of Zn^{2+} .

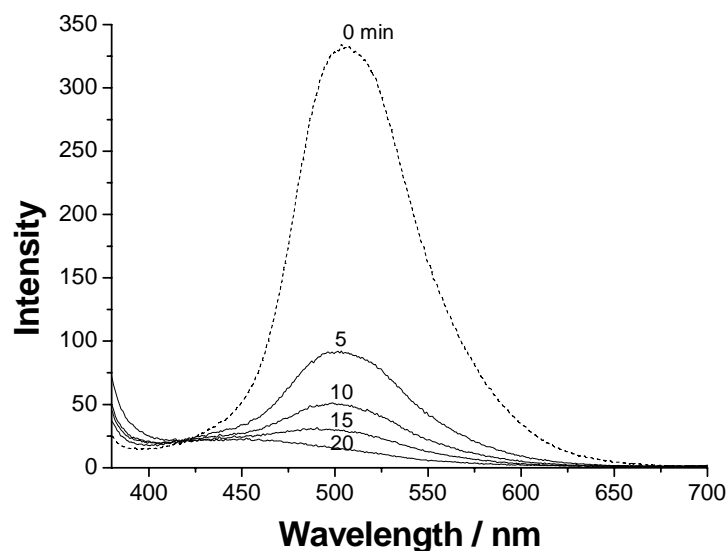


FIGURE S-5. The fluorescence spectra of the **SPEA/SBA-15** hybrid stimulated by the combinational actions of OH^- and UV light. Dash line represents after titration of OH^- and solid lines represent sequentially irradiation by UV light.

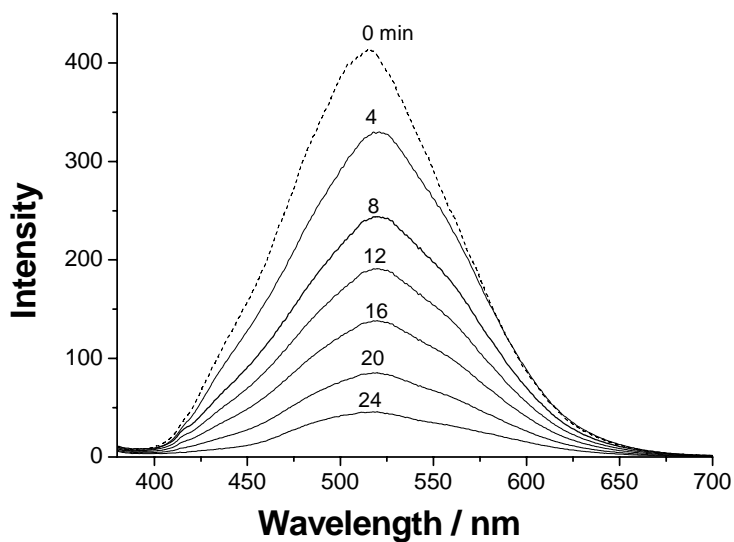


FIGURE S-6. The fluorescence spectra of the **SPEA/SBA-15** hybrid stimulated by the combinational actions of Zn^{2+} and UV light. Dash line represents after titration of Zn^{2+} and solid lines represent sequentially irradiation by UV light.

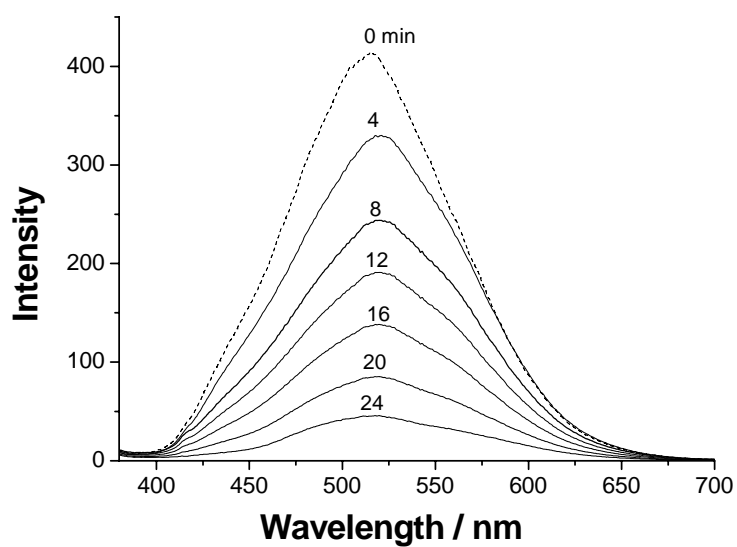


FIGURE S-7. The fluorescence spectra of the **SPEA/SBA-15** hybrid stimulated by the combinational actions of OH^- , Zn^{2+} and UV light. Dash line represents after titration of OH^- and Zn^{2+} ; solid lines represent sequentially irradiation by UV light.

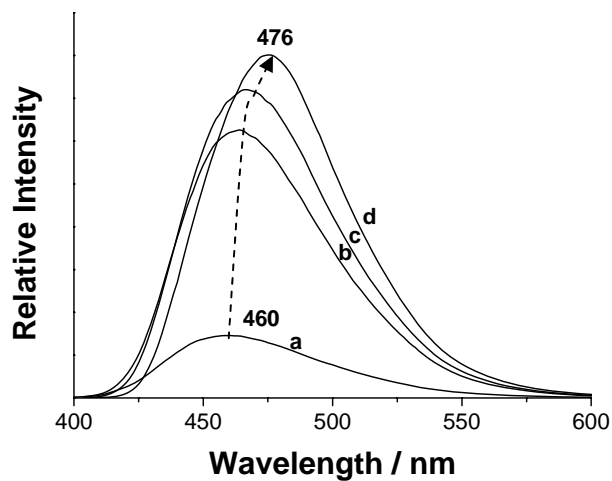


FIGURE S-8. The fluorescence spectra ($\lambda_{\text{ex}} = 370 \text{ nm}$) of the complex of **SPEA** with Zn^{2+} at various concentrations, **a**: $1 \times 10^{-6} \text{ mol/L}$; **b**: $1 \times 10^{-5} \text{ mol/L}$; **c**: $1 \times 10^{-4} \text{ mol/L}$; **d**: $1 \times 10^{-3} \text{ mol/L}$.

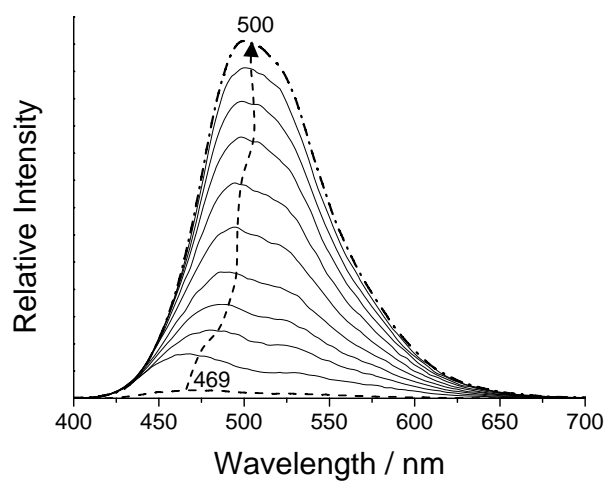


FIGURE S-9. The fluorescence spectra ($\lambda_{\text{ex}} = 370$ nm) for the molecular aggregation of the deprotonated **SPEA** at 1×10^{-3} mol/L, the time interval is 10 min.