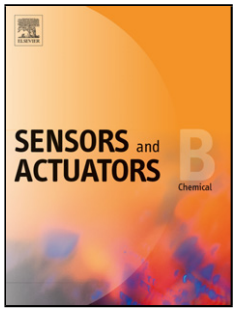

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Combining two different strategies to overcome the aggregation caused quenching effect in the design of ratiometric fluorescence chemodosimeters for pH sensing

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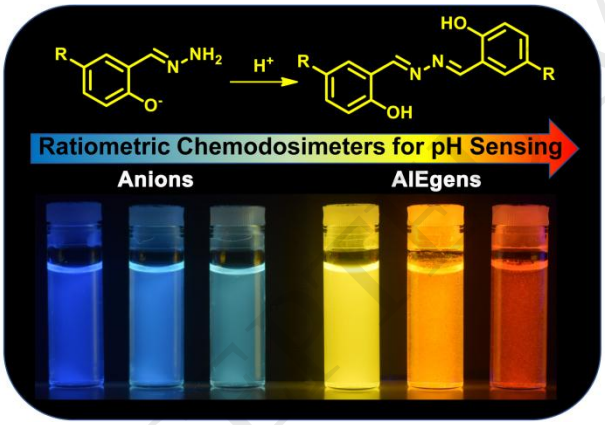
Graphical Abstract



Highlights

- Two different strategies were used to overcome the aggregation caused quenching (ACQ) effect in the design of fluorescence chemodosimeters.
- A series of salicylicaldehyde hydrazone derivatives were facilely prepared for the detection of pH with ratiometric fluorescence changes.
- The sensors exhibited multiple-fluorescence emissions and the emission wavelengths in alkaline solution are far away from that in acidic solution.