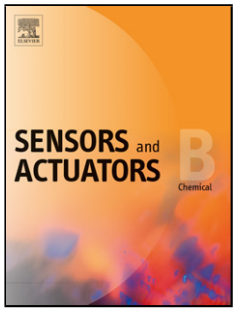

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Highly selective near-infrared fluorescent probe with rapid response, remarkable large Stokes shift and bright fluorescence for H_2S detection in living cells and animals

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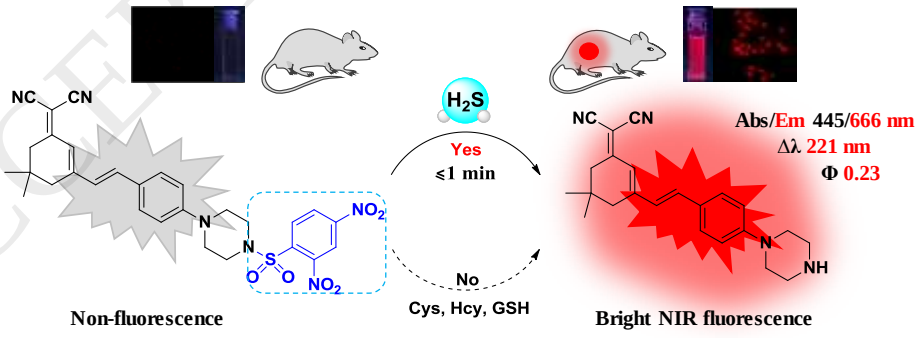
Graphical Abstract

A novel dicyanoisophorone-based NIR fluorescent turn-on probe with remarkable large Stokes shift and bright fluorescence for rapid *in vitro* and *in vivo* detection of H_2S was reported.



Highlights

- A novel NIR fluorescent turn-on probe for rapid detection of H_2S was reported.
- This probe uses a sulfonamide group for the first time as a selective reaction site for H_2S.
- This probe shows high selectivity and sensitivity for H_2S with bright NIR fluorescence.