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A Fluoride-sensing Receptor Based on 2,2'-Bis(indolyl)methane by Dual-function of Colorimetry and Fluorescence

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Abstract:

A compound based on 2,2'-bis(indolyl)methane containing nitro group was studied as a new anion receptor. It could recognize selectively F^- by an increasing fluorescence signal and a visible color change from colorless to blue. The introduction of nitro group induced the spectral dual-function related to the deprotonation of N–H protons.

Keywords:

Anion recognition, Indolylmethane, deprotonation, Spectroscopy

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