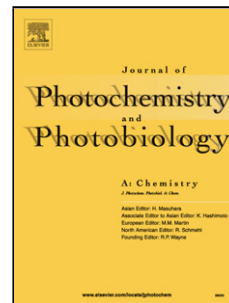


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# Exploiting Aggregation Induced Emission and Twisted Intramolecular Charge Transfer in a BODIPY Dye for Selective Sensing of Fluoride in Aqueous Medium and Living Cells

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## Highlights

- A novel BODIPY-based fluorescent probe **TPA-BDP** has been successfully designed and synthesized. The D-A-D structure and twisted molecular conformation make **TPA-BDP** have the AIE and TICT properties simultaneously. This new probe features high sensitivity and excellent selectivity to fluoride with a detection limit of 0.73  $\mu\text{M}$  in aqueous medium. **TPA-BDP** is cell-permeable and can effectively respond to  $\text{F}^-$  as a suitable fluorescence probe in living cells with very low cytotoxicity.

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## Abstract

A novel red fluorescent probe based on boron dipyrromethene (BODIPY) was successfully designed

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