

A BODIPY boronium cation for the sensing of fluoride ions

Todd W. Hudnall and François P. Gabbaï*

†Department of Chemistry, Texas A&M University, College Station, Texas 77843

Supporting information

Fluorescence measurements

Emission spectra were recorded using an Ocean Optics Inc. USB4000-FL fluorometer equipped with a PX-2 pulsed xenon lamp. Solutions were excited at 486 nm using a LVF-HL linear variable high-low filter monochromator. In a typical experiment, a quartz cuvette was charged with 3 mL of [1-DMAP]OTf (5.1×10^{-5} M) in chloroform and mixed with 10 eq Bu₄NI (5 μ L, 0.3 M). The fluorescence of the resulting solution was then monitored upon addition of halide salts (Bu₄NF, BnEt₃NCl, and Bu₄NBr).

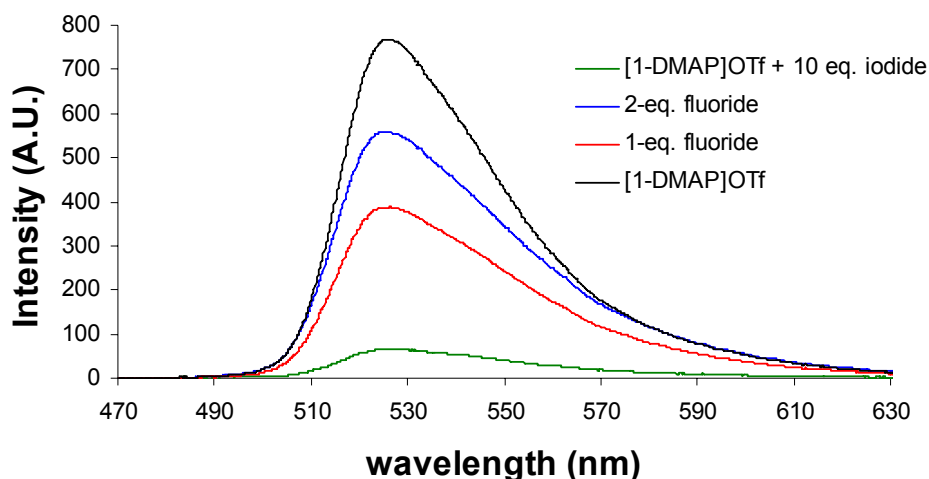


Figure S1. Emission spectra of [1-DMAP]OTf in the presence of iodide and fluoride anions.

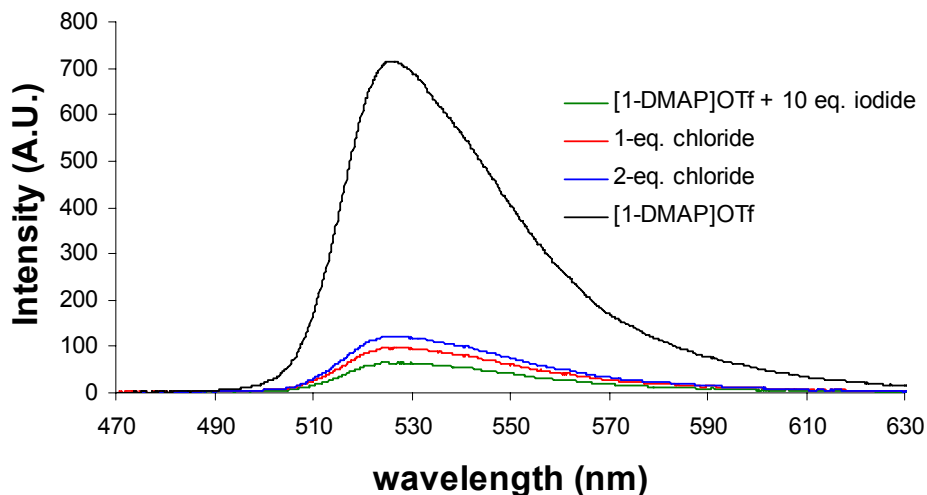


Figure S2. Emission spectra of [1-DMAP]OTf in the presence of iodide and chloride anions.

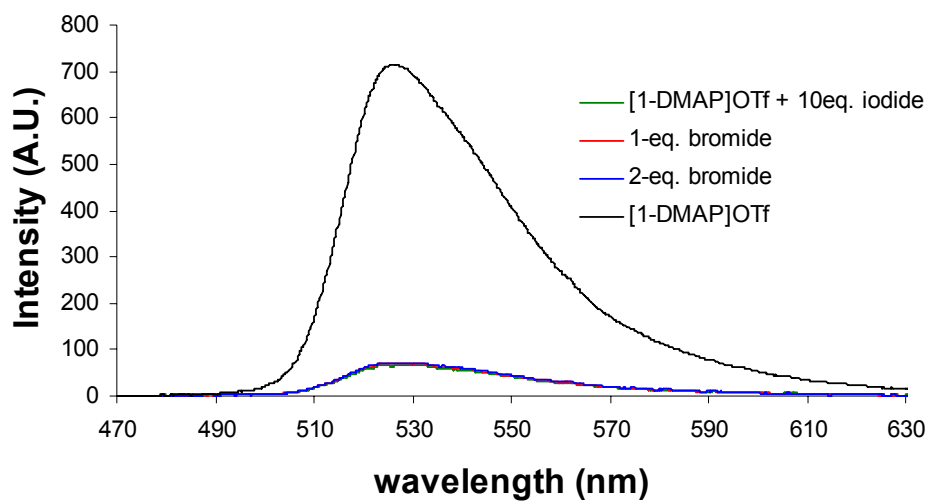


Figure S3. Emission spectra of [1-DMAP]OTf in the presence of iodide and bromide anions.