

Figure 1. Fluorescence of solutions of the radicals **2** (blue), **7a** (black), **7b** (red), **7c** (green).

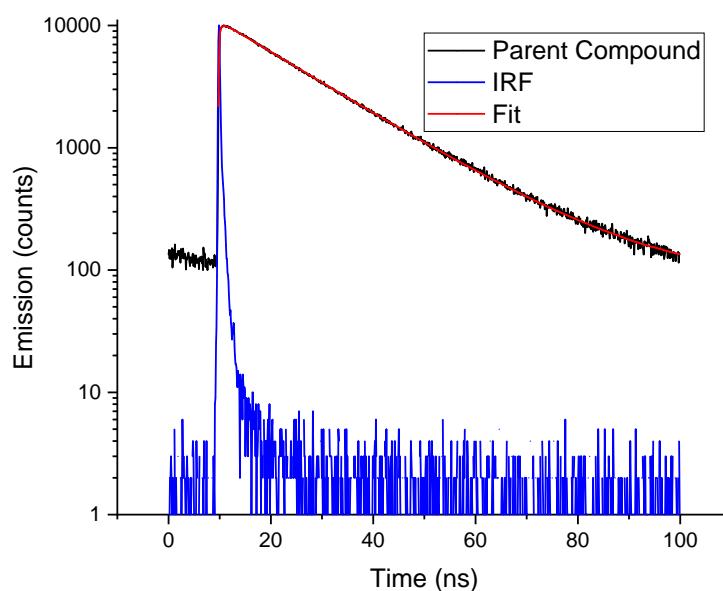
Continuous excitation at 529 nm of CHCl_3 solutions (2.0 mg in 100 cc).

Fluorescence Lifetime Measurements

Lifetime measurements were made using an Edinburgh Instruments FLS980 fluorescence spectrophotometer. Excitation: 473 nm, pulsed diode laser (EPL-475), repetition rate: 10MHz, pulse peak power: 150 mW, laser pulse width: 79.5 ps. Detector: high-speed red-sensitive PMT (Hamamatsu H10720-20 PMT), emission slit width: 16 nm. Instrument response function (IRF) collected with colloidal silica dispersed in water (LUDOX HS-30).

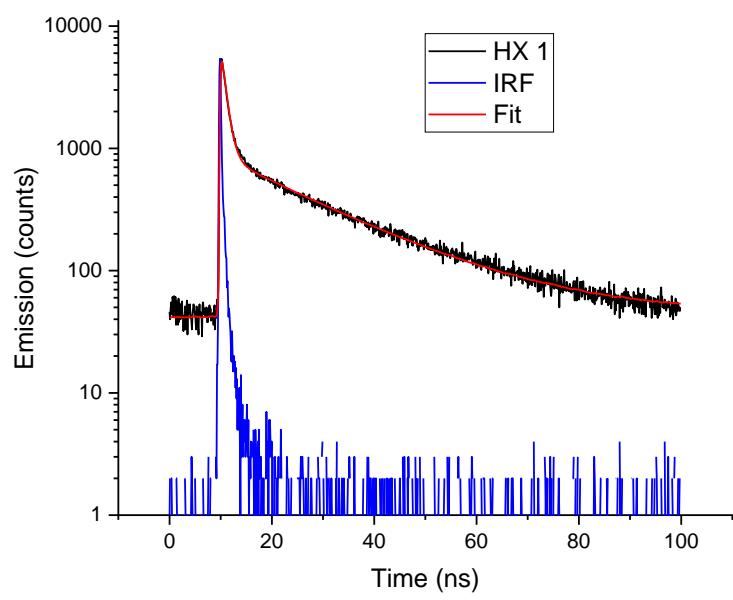
Lifetime fitting used Edinburgh Instruments FL980 software using the equation:

$$f(t) = \sum \beta_n e^{-t/\tau_n}$$



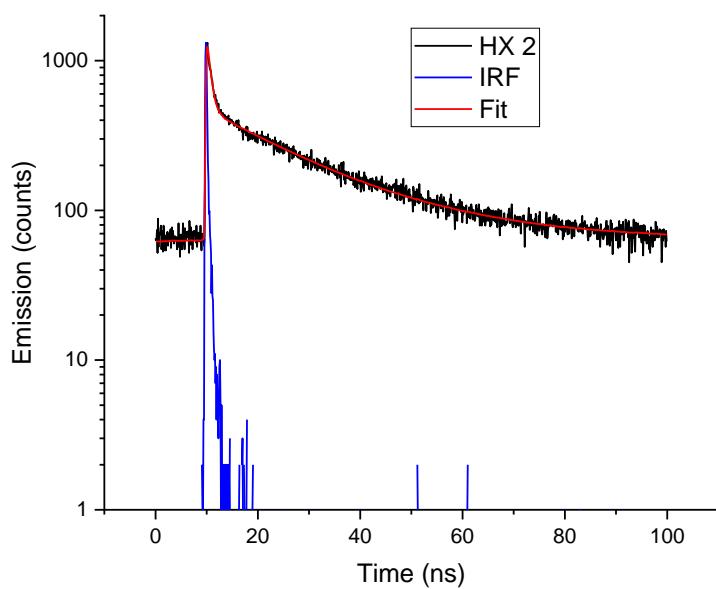
Parent radical **2**

PARAM	VALUE/NS	STD. DEV./NS	PARAM	VALUE
T ₁	0.24	0.05	B1	0.06
T ₂	16.89	0.02	B2	0.25



(H_xO)₁ radical **7a**

PARAM	VALUE/NS	STD. DEV./NS	PARAM	VALUE
T ₁	0.85	0.01	B1	0.34
T ₂	20.11	0.12	B2	0.04



(HxO)₂ radical **7b**

PARAM	VALUE/NS	STD. DEV./NS	PARAM	VALUE
T1	0.58	0.02	B1	0.3

