Electronic Supplementary Material (ESI) for Journal of Materials Chemistry B.

Supporting information

Synthesis and Characterization of a Fluorinated *S*-Nitrosothiol as the Nitric Oxide Donor for Fluoropolymer-Based Biomedical Device Applications

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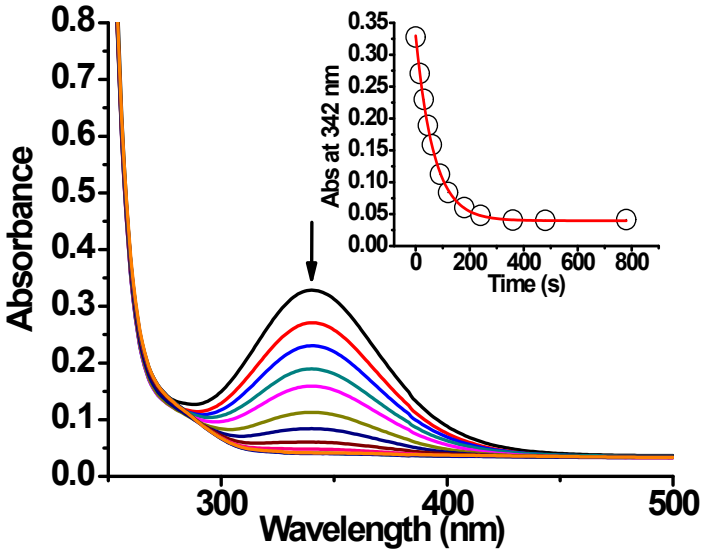


Fig. 1S UV-Vis spectra for the photolysis of SNAP (250.0 μM) at 23 °C in a mixture of PBS and DMSO (50:50, v/v). Inset: Plot of absorbance at 342 nm vs. time for this reaction and solid line is fit to first order rate equation line (rate constant k_{obs} = (1.50 ± 0.03) × 10^{-2} s^{-1} and $t_{1/2}$ ~ 46 s).

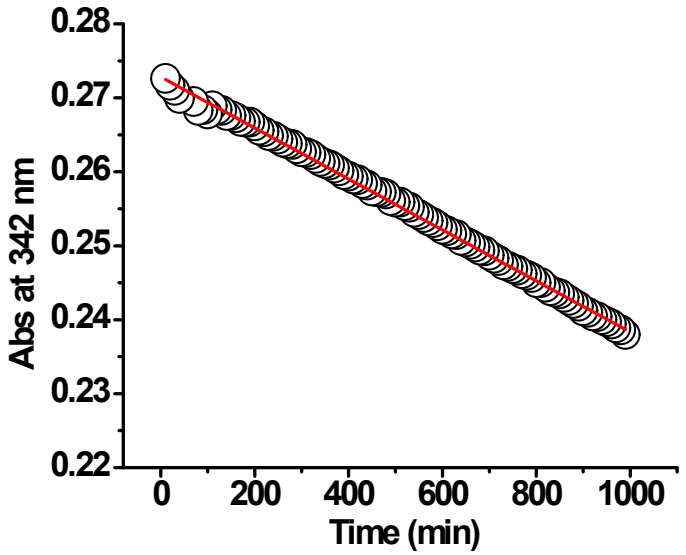


Fig. 2S Plot of absorbance at 342 nm vs. time for the thermal decomposition of SNAP (206.0 μM) at 37 °C in a mixture of PBS and DMSO (50:50, v/v), (rate constant k_{obs} = (3.45 ± 0.02) × 10^{-5} μM Min^{-1}).

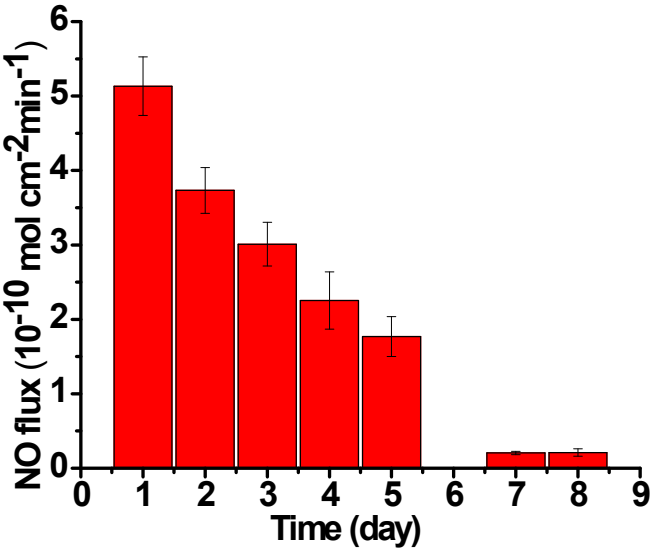
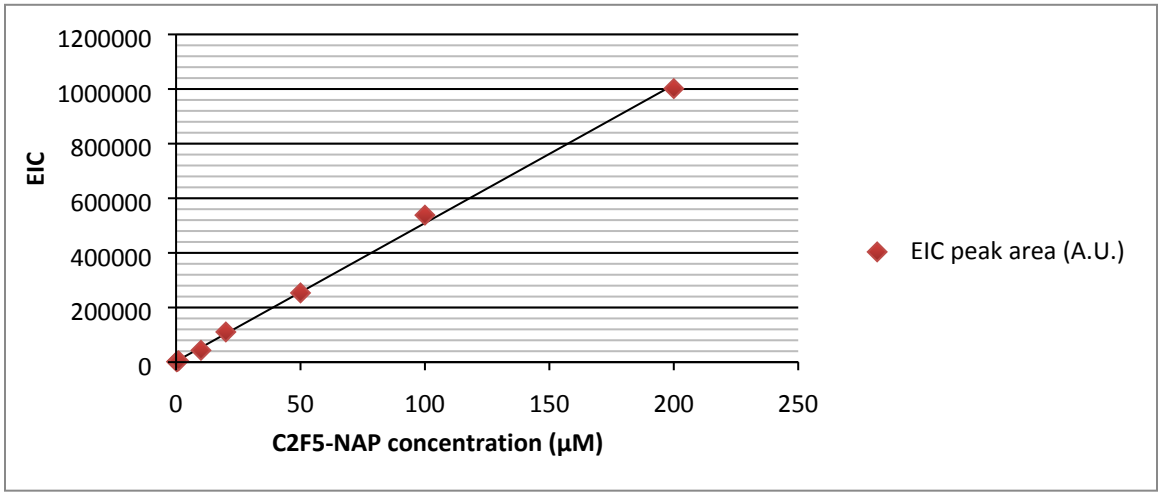
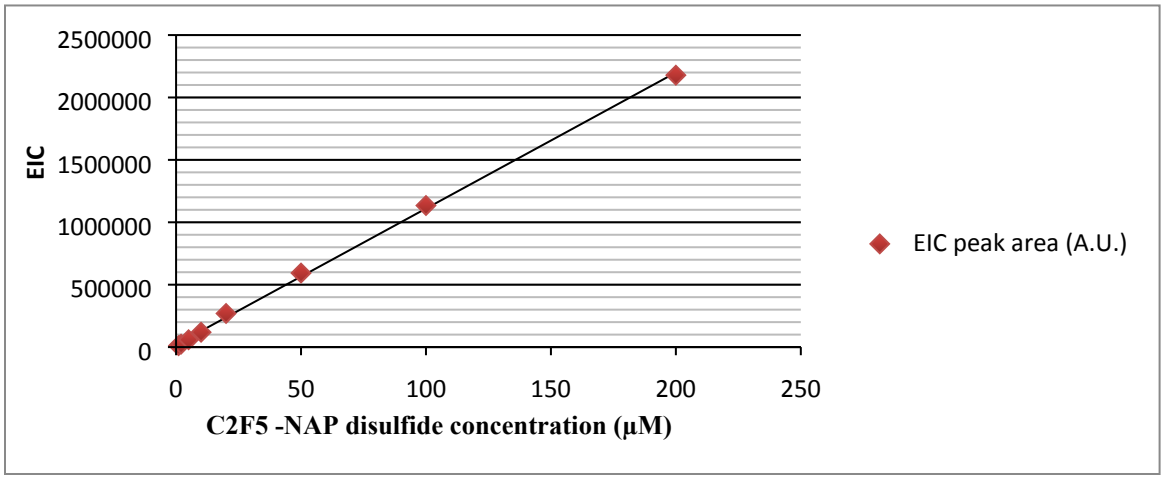


Fig. 3S NO flux for the PDVF tubings swelled in C_2F_5-SNAP (400.5 mg/mL in THF) under physiological conditions (PBS, 10 mM, pH 7.4, with 100 μM EDTA at 37 °C in the dark), and the total loading of C_2F_5-SNAP in PVDF tubing was estimated to be ~ 32.3 nmol/mg.



(a)

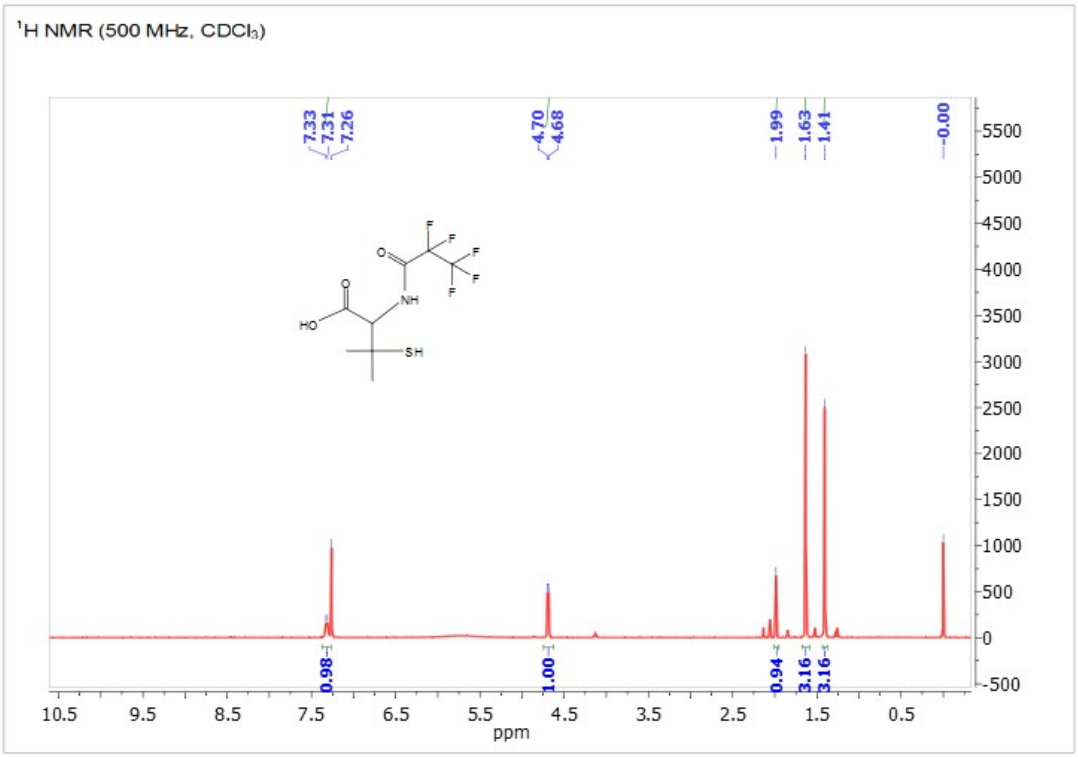


(b)

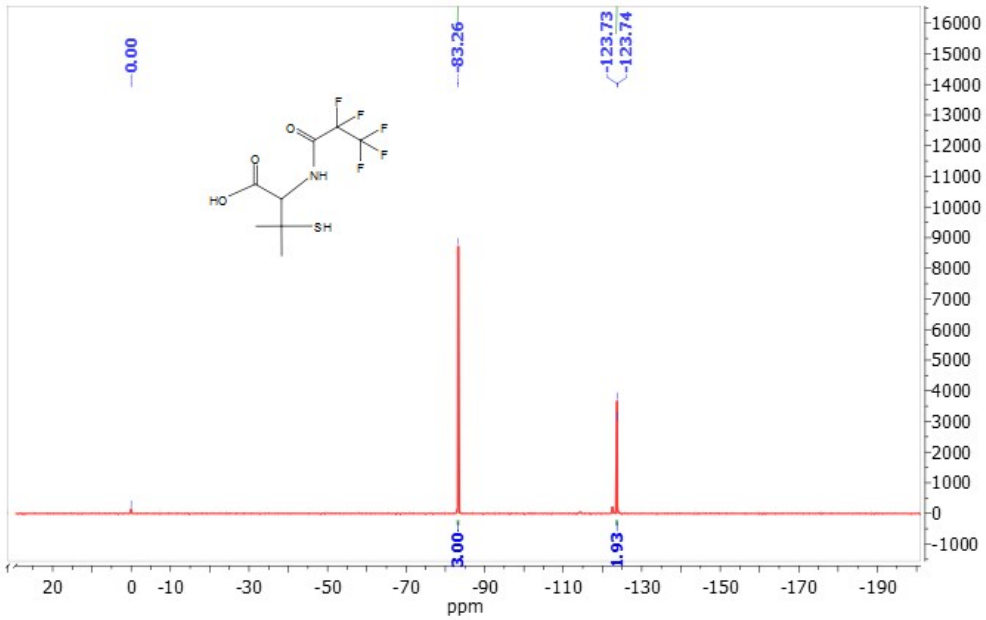
Fig. 4S (a) Calibration curve for the concentration of C_2F_5-NAP obtained in HPLC-MS and (b) Calibration curve for the concentration of C_2F_5-NAP disulfide obtained in HPLC-MS.

Fig. 5S The corresponding black image for Fig. 9d

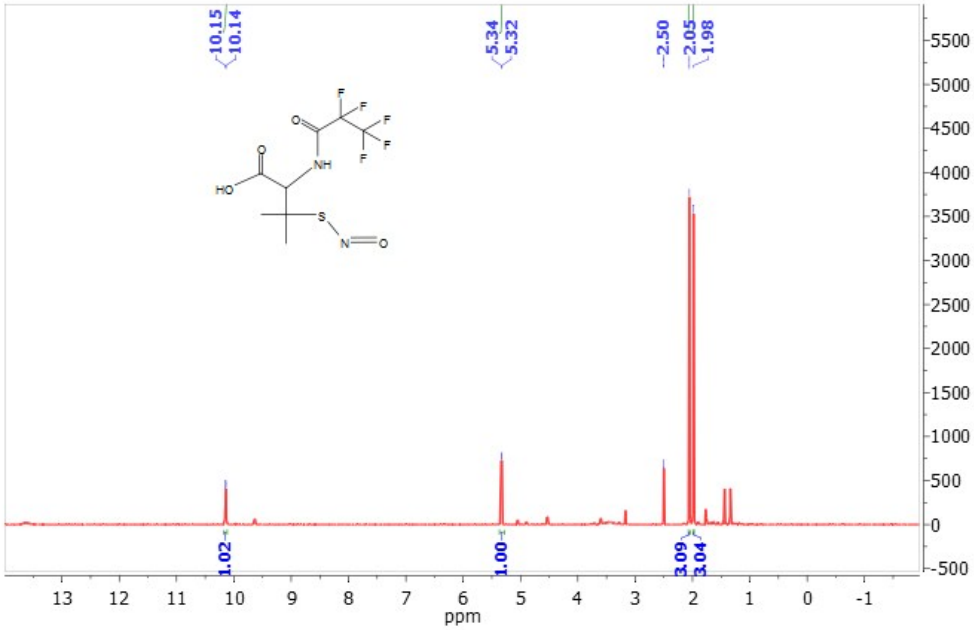
NMR spectra



^{19}F NMR (471 MHz, $CDCl_3$)



^{1}H NMR (700 MHz, DMSO-d_6)



^{19}F NMR (377 MHz, DMSO-d_6)