

Supporting Information

Non-ionic photo-acid generators for applications in two-photon lithography

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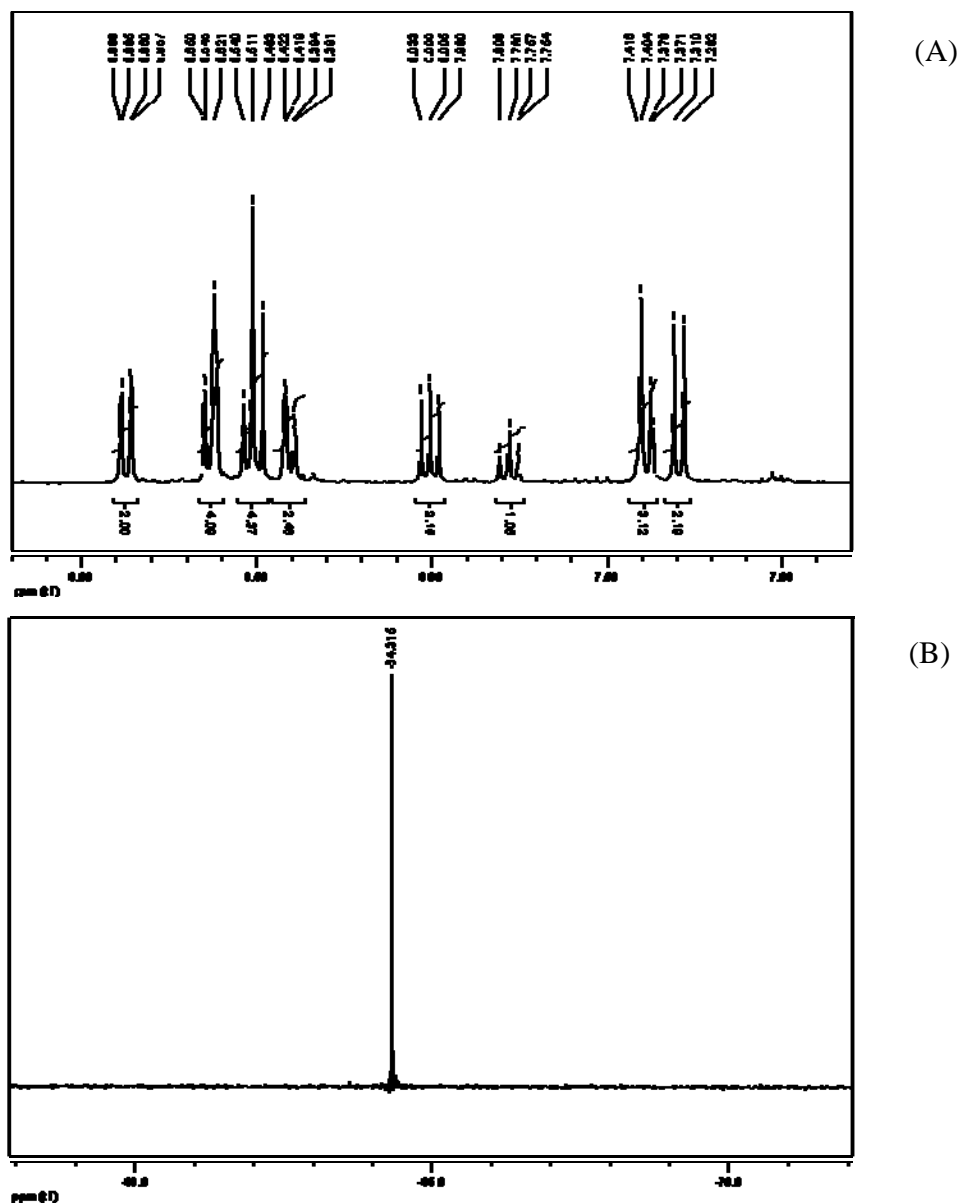
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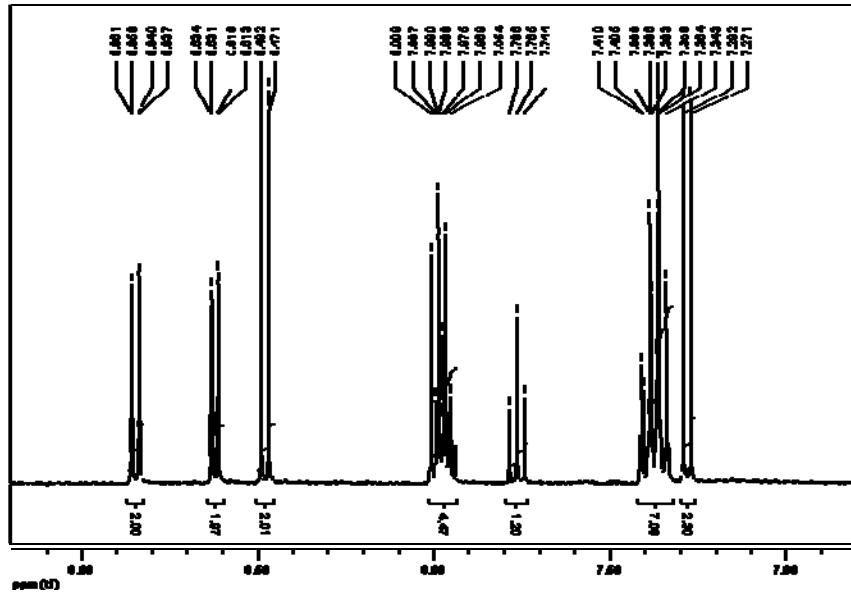
- ¹H- and ¹⁹F-NMR spectra of PAGs 1-4

- Determination of photoacid formation in solution.

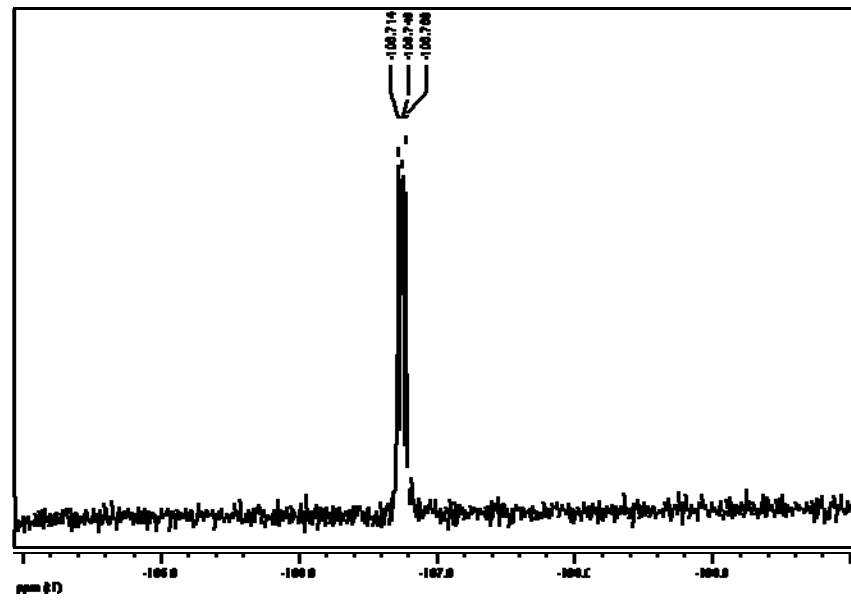
- Determination of photoacid formation in PtBOCS film.



S-Figure 1. $^1\text{H-NMR}$ (A) and $^{19}\text{F-NMR}$ (B) spectra of PAG 1.

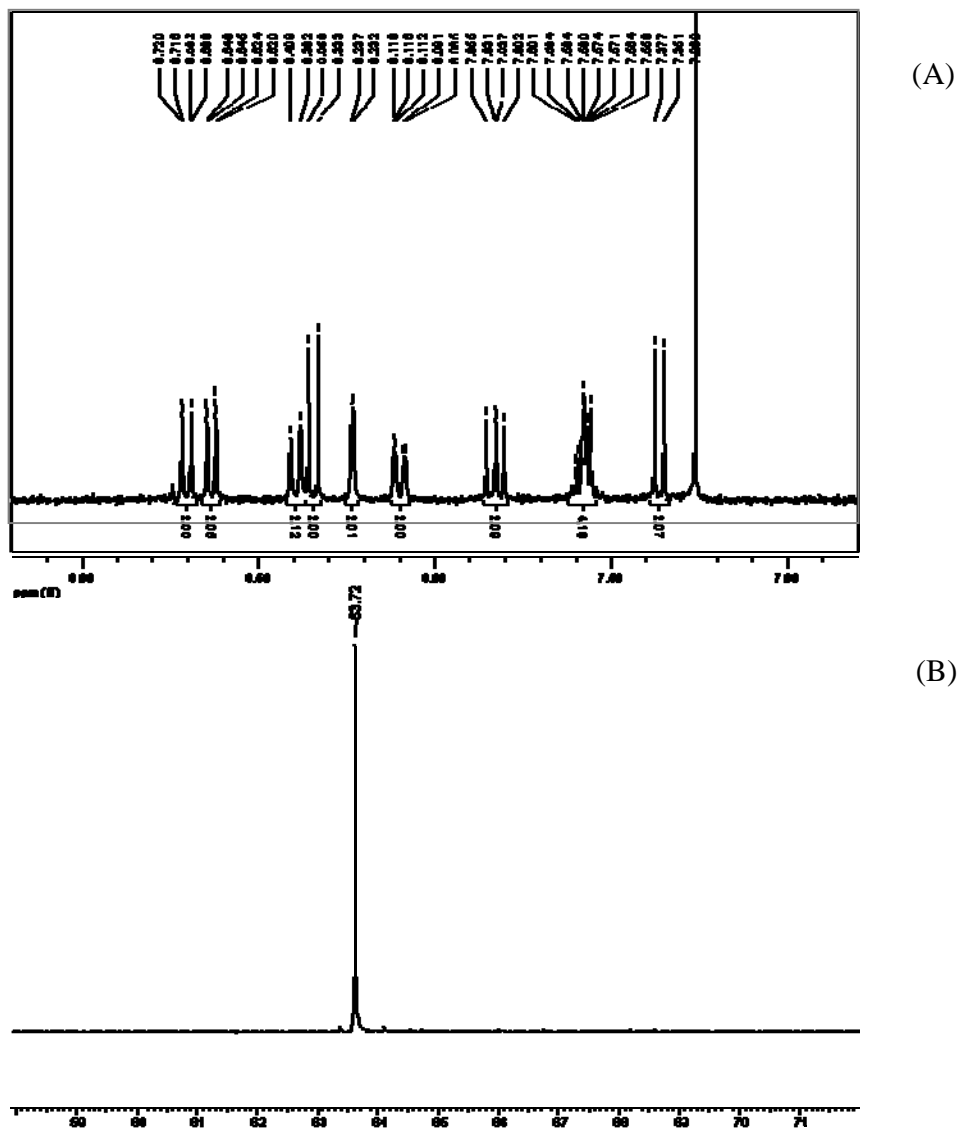


(A)

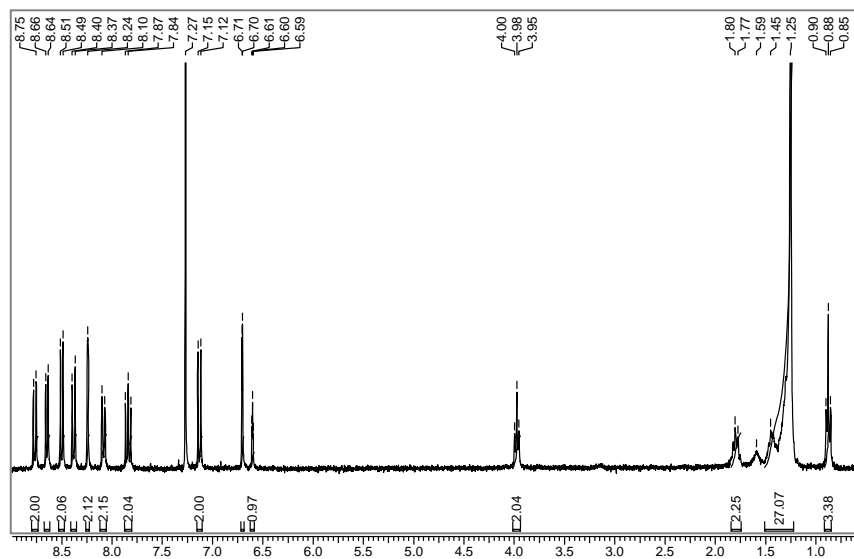


(B)

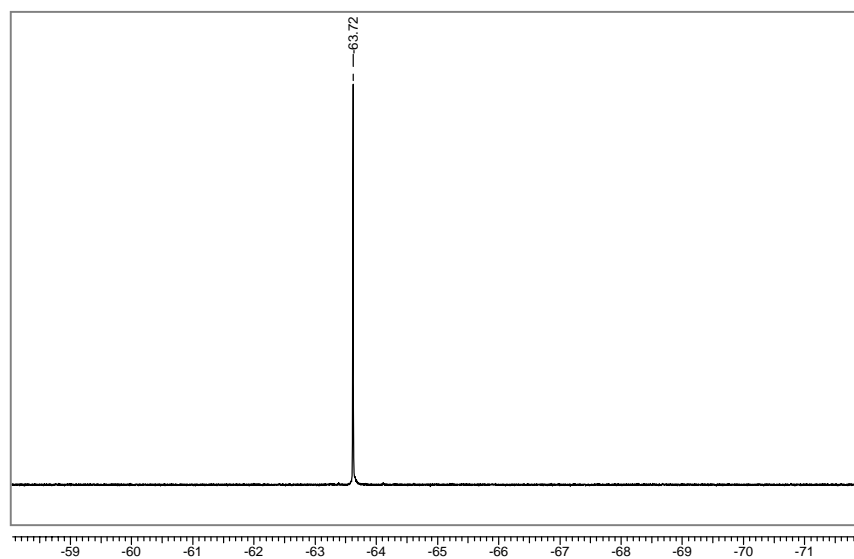
S-Figure 2. $^1\text{H-NMR}$ (A) and $^{19}\text{F-NMR}$ (B) spectra of PAG 2.



S-Figure 3. $^1\text{H-NMR}$ (A) and $^{19}\text{F-NMR}$ (B) spectra of PAG 3.

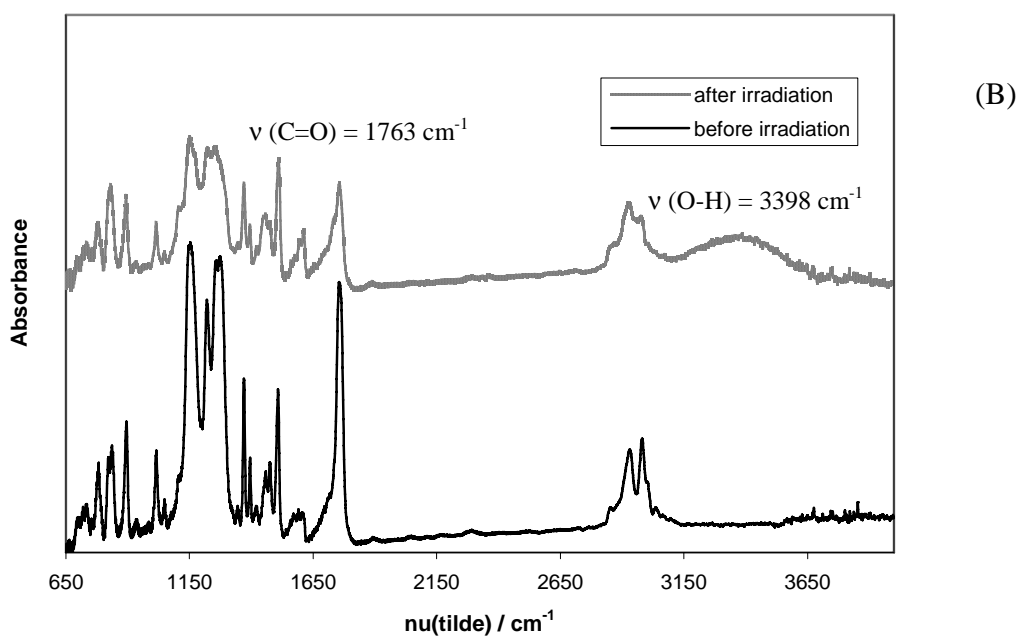
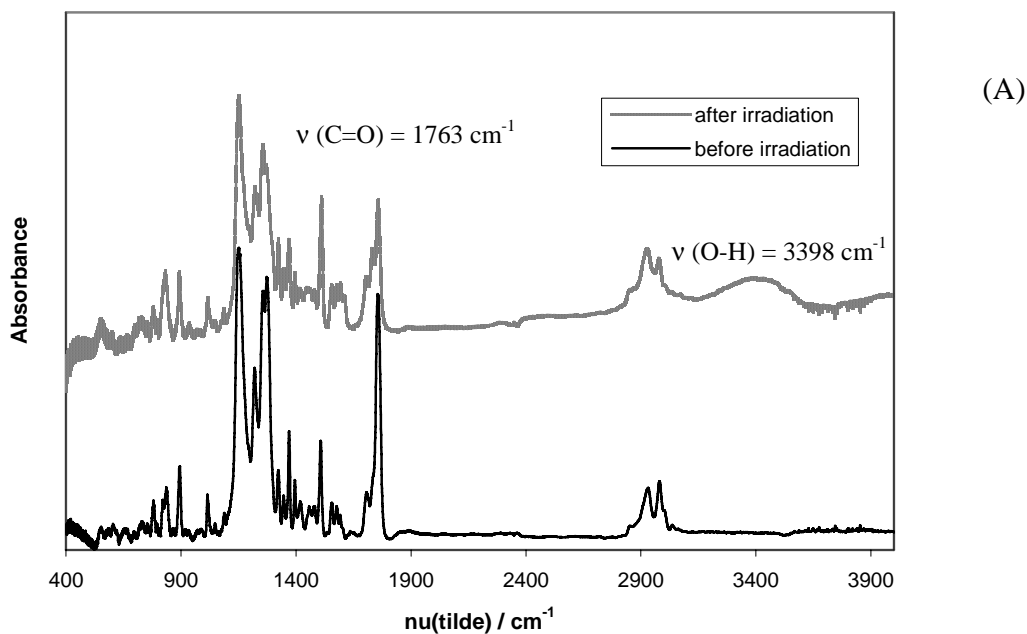


(A)

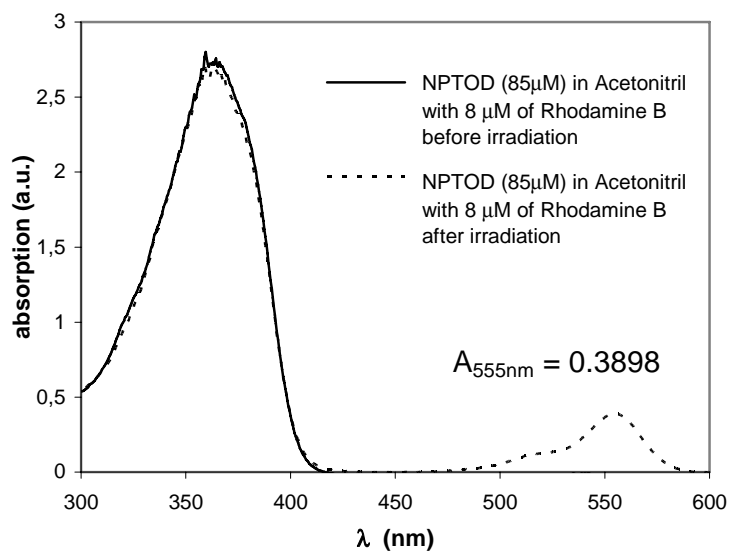
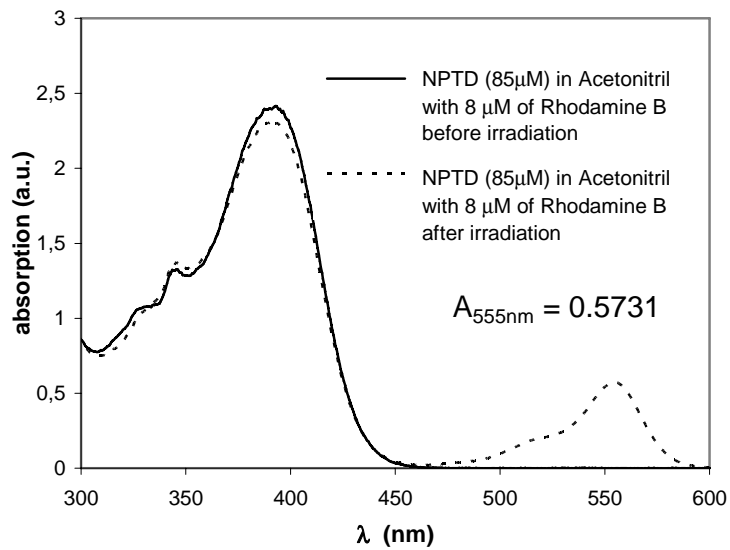


(B)

S-Figure 4. ^1H -NMR (A) and ^{19}F -NMR (B) spectra of PAG 4.



S-Figure 5. FT-IR spectra of PAGs PAG 1 (A) and PAG 2 (B) in polymer film before and after exposure to UV irradiation [Exposure = UVEXS SCU 110B (250 – 750 nm) for 120 sec; Total Lamp Power = 100 mW/cm²].



S-Figure 6. UV-Vis spectra of PAGs PAG 3 (A) and PAG 4 (B) in solution before and after exposure to UV irradiation [Exposure = Oriel 68910 Arc Lamp (500 W) for 60 sec using a filter (280-400 nm); lamp power measured with Delo UVA-Meter: 25 mW/cm²].