

Supplementary Materials for

Mapping the chiroptical properties of local domains in thin films of chiral silicon phthalocyanines by CD imaging

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1. Spectroscopic characterisation of molecule 3

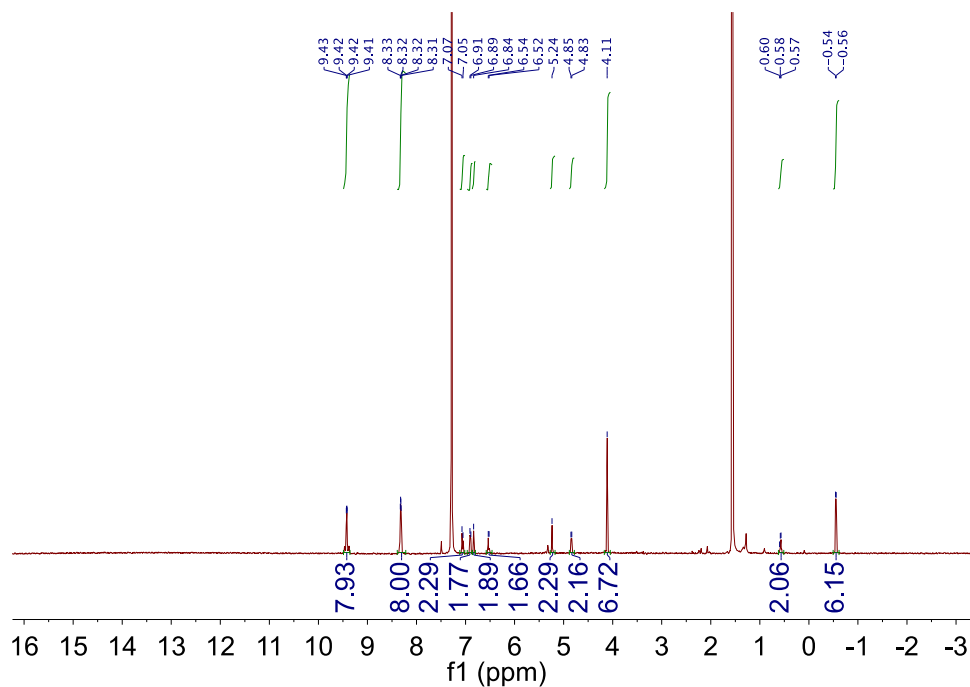


Fig. S1: ¹H NMR spectrum of 3 in CDCl₃.

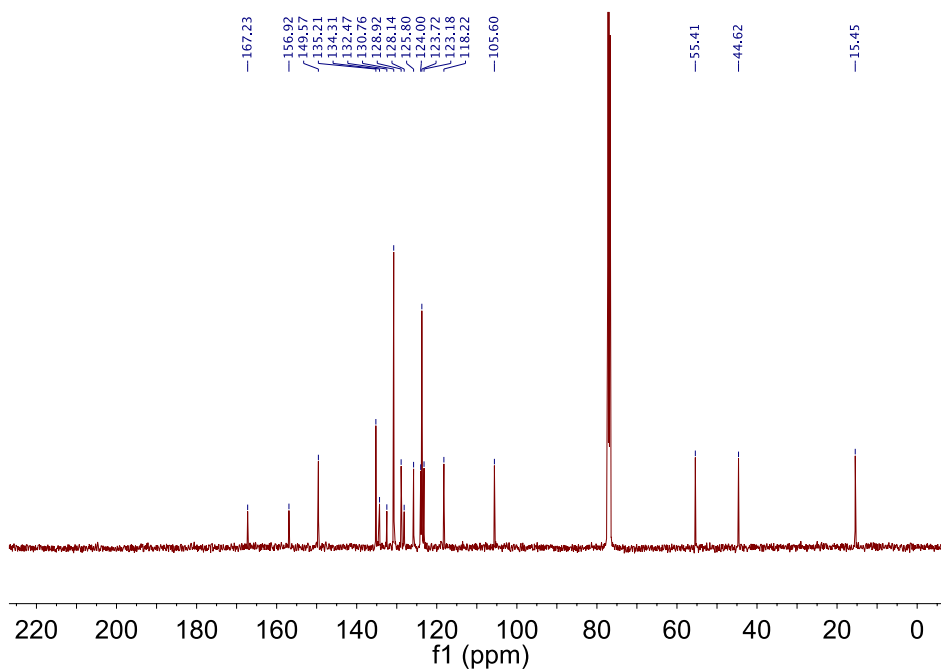


Fig. S2: ¹³C NMR spectrum of 3 in CDCl₃.

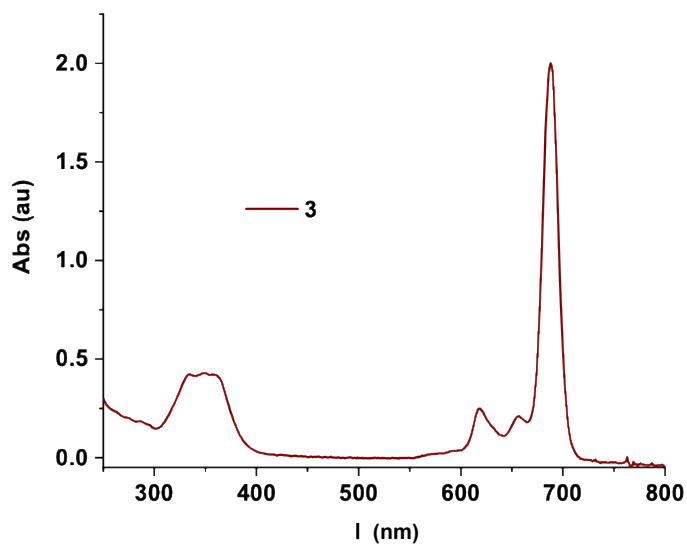


Fig. S3. UV-vis absorption spectrum of 3 in CH₂Cl₂ (2×10^{-5} M).

2. ECD/UV-vis absorption spectra of thin films of 1 – 3

All spectra of films not provided in the main manuscript are given below:

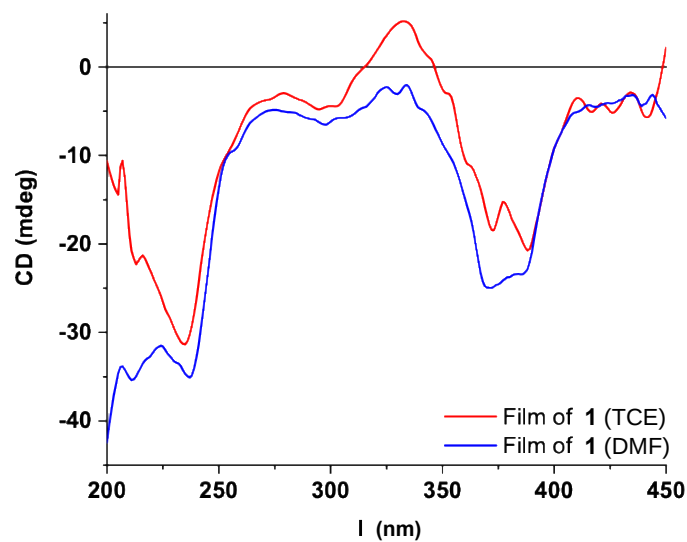


Fig. S4. Overlaid local ECD spectra of thin films of 1 from TCE (red line) and DMF (blue line).

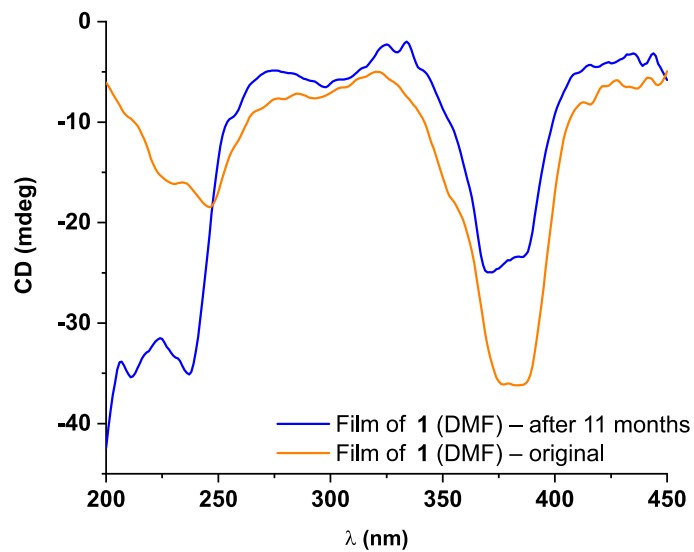


Fig. S5. Overlaid local ECD spectra of thin films of **1** freshly made from DMF (orange line) and the same film after kept 11 months at room temperature (blue line).

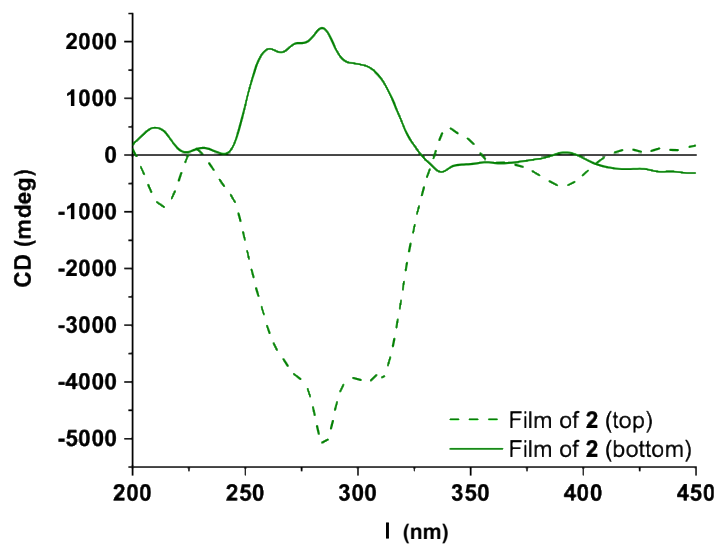


Fig. S6. Local ECD spectra of thin film of **2** from TCE, top (dashed line) and bottom (solid line).

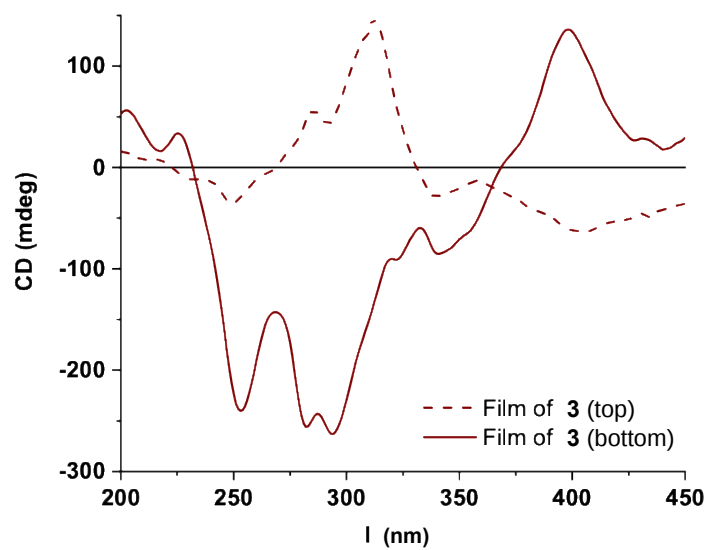


Fig. S7. Local ECD spectra of thin film of 3 from TCE, top (dashed line) and bottom (solid line).

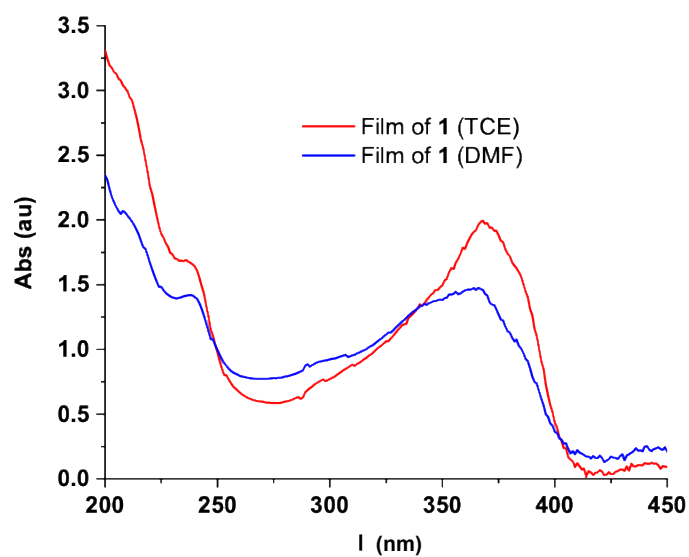


Fig. S8. Overlaid local UV-vis absorption spectra of films of 1 from TCE (red line) and from DMF (blue line).

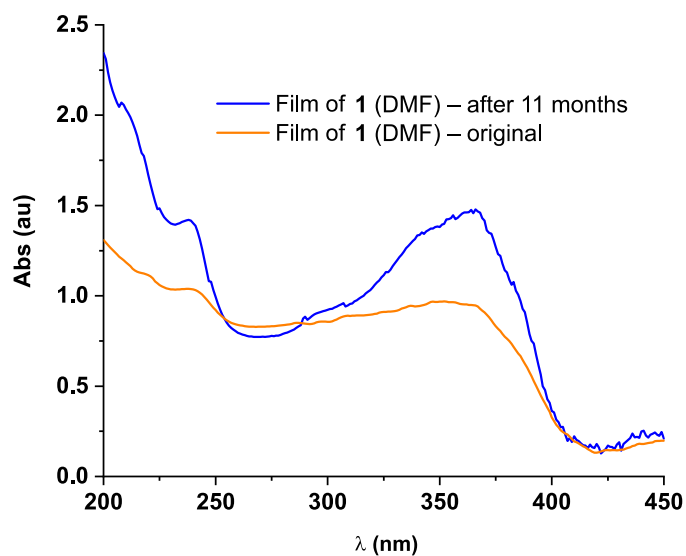


Fig. S9. Overlaid local UV-vis absorption spectra of freshly made (orange line) and the 11 months old (blue line) film of 1 from DMF.

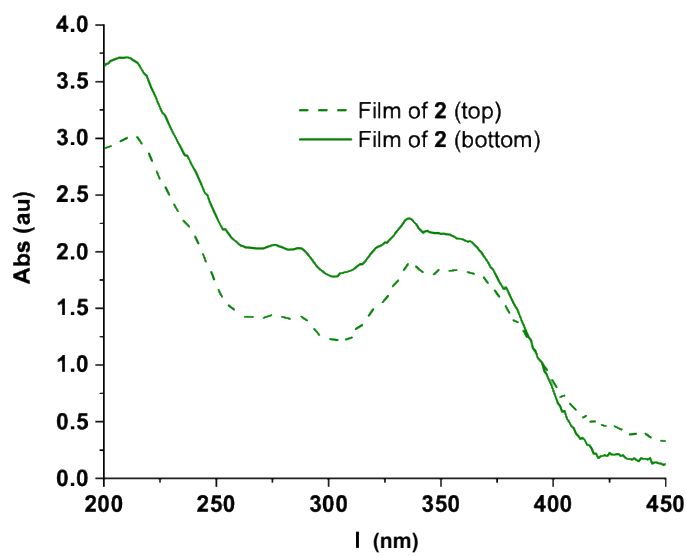


Fig. S10. Local UV-vis absorption top (dashed line) and bottom (solid line) spectra of film of 2 from TCE.

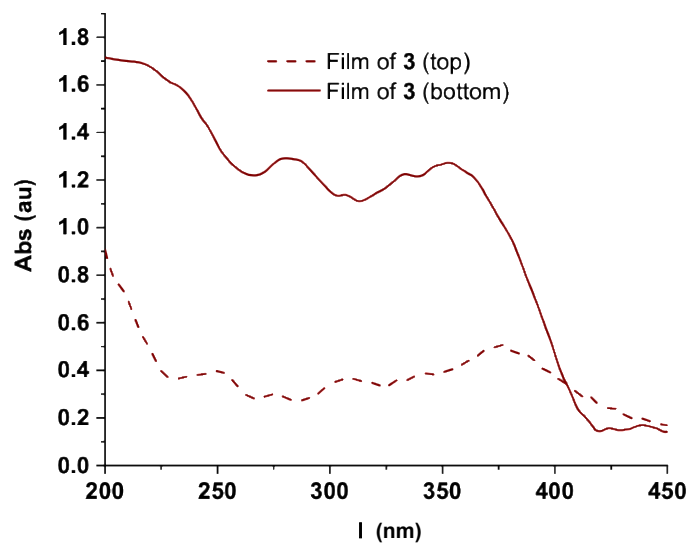


Fig. S11. Local UV-vis absorption top (dashed line) and bottom (solid line) spectra of film of **3** from TCE.

3. 2D CDi maps of films of **1** – **3**

The mapped grid array area of each map is given in the corresponding caption.

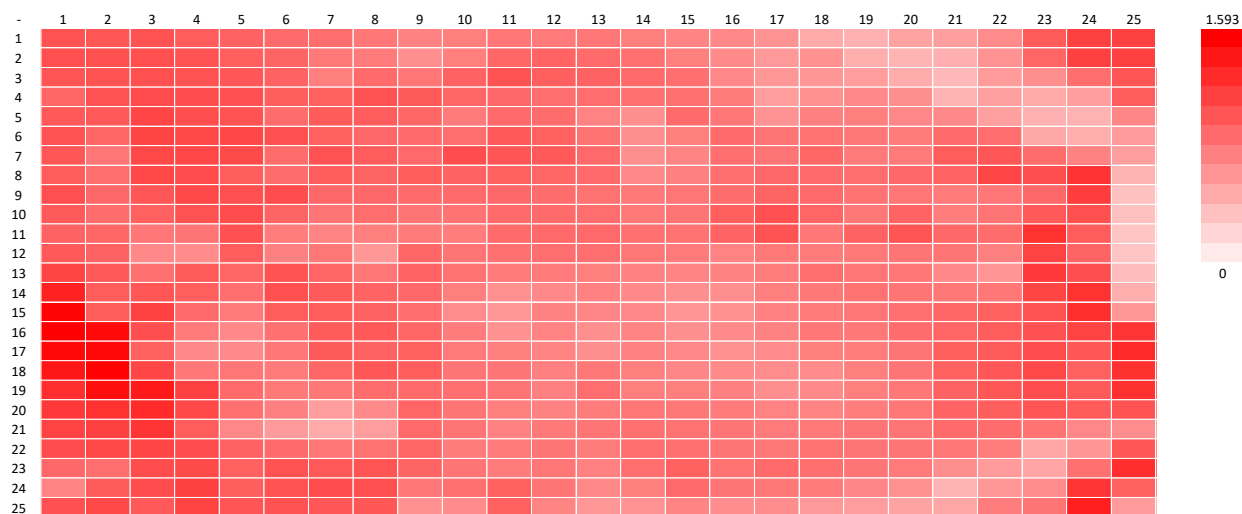


Fig. S12. UV-vis absorption 2D map of freshly made film of **1** from DMF (25×25 grid array area of 0.2 mm step size at 391 nm; top side).

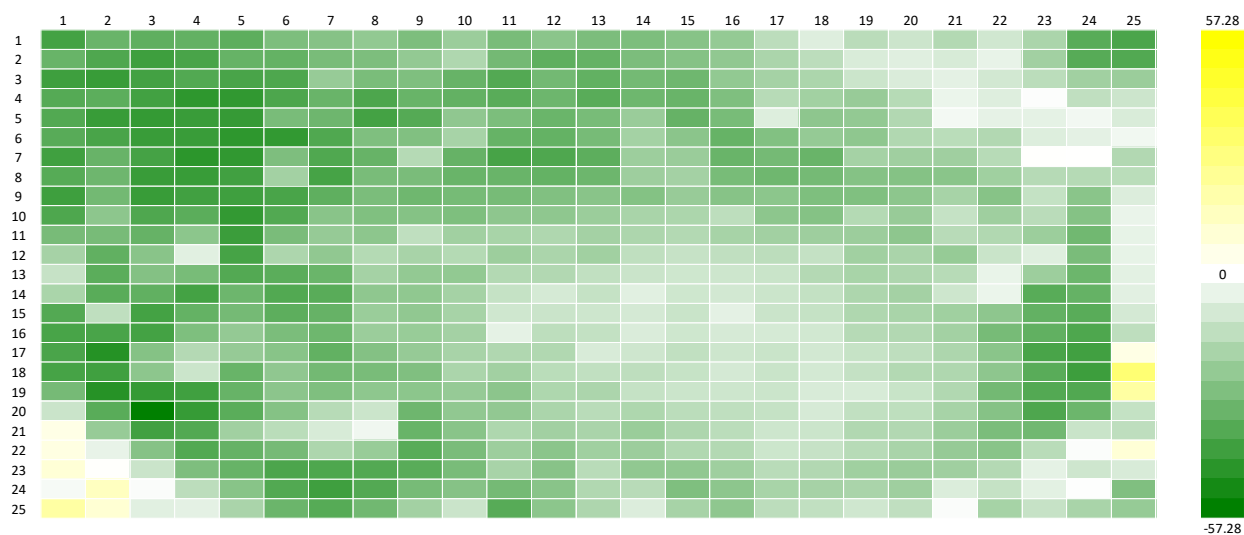


Fig. S13. ECD 2D map of freshly made film of 1 from DMF (25×25 grid array area of 0.2 mm step size at 391 nm; top side).

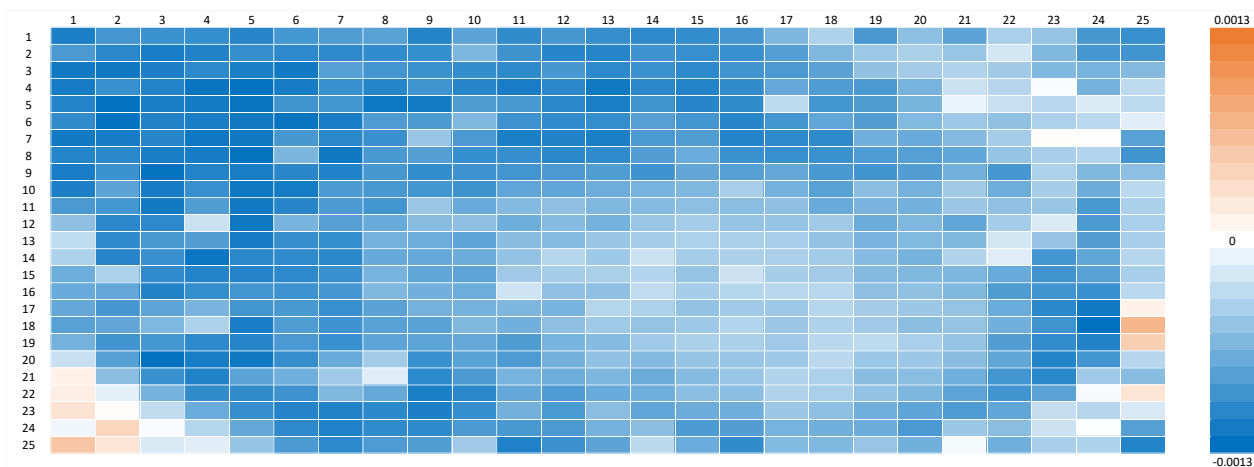


Fig. S14. Dissymmetry g-factor 2D map of freshly made film of 1 from DMF (25×25 grid array area of 0.2 mm step size at 391 nm; top side).

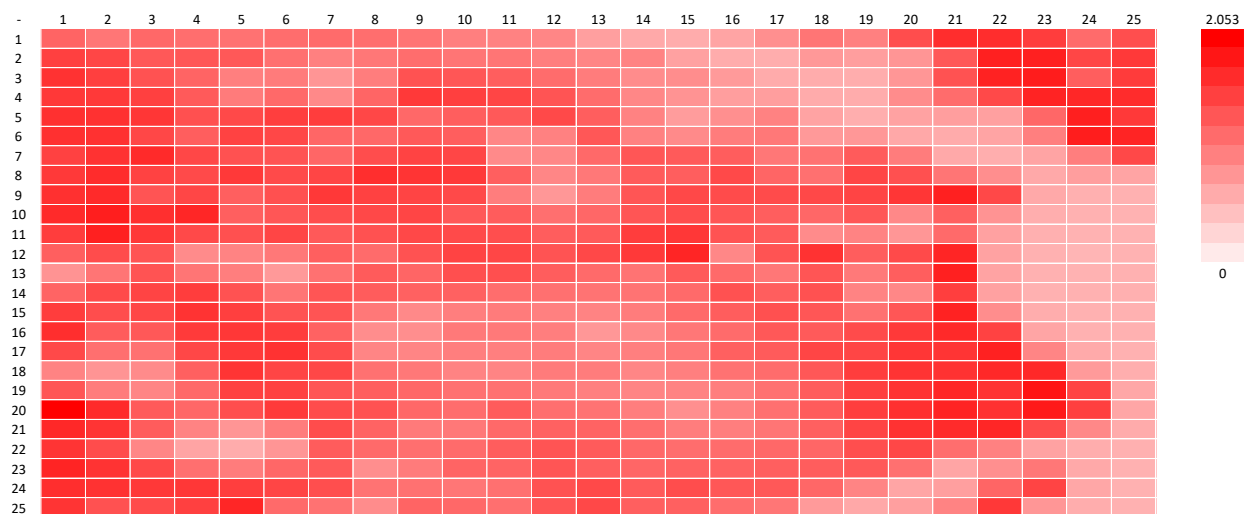


Fig. S15. UV-vis absorption 2D map of freshly made film of 1 from DMF (25×25 grid array area of 0.2 mm step size at 237 nm; top side).

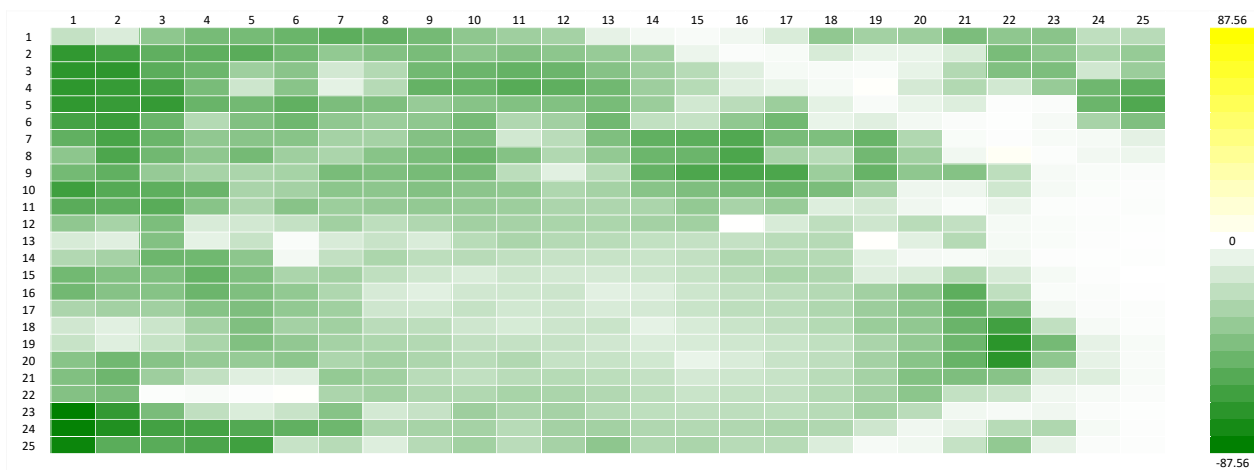


Fig. S16. ECD 2D map of freshly made film of 1 from DMF (25×25 grid array area of 0.2 mm step size at 237 nm; top side).

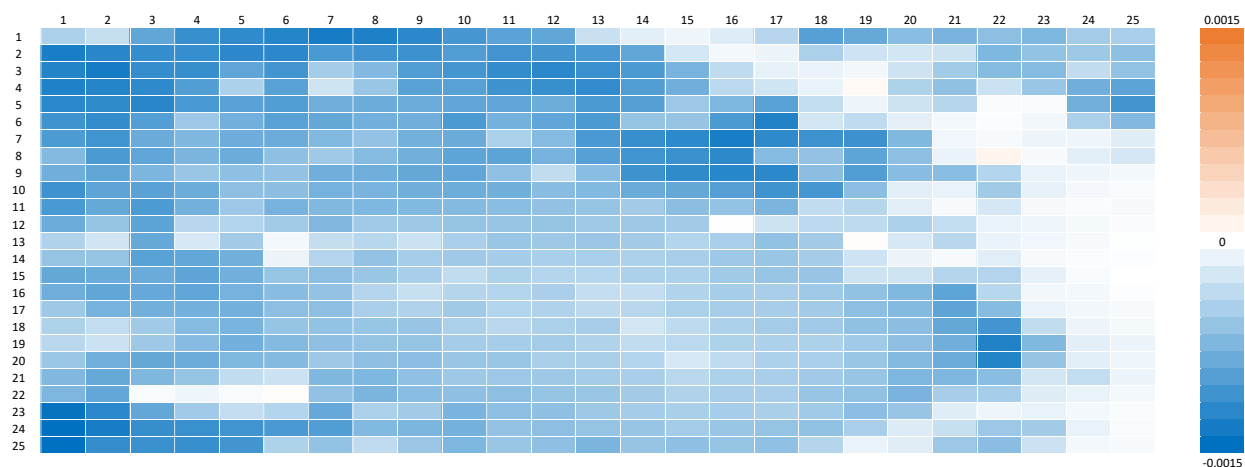


Fig. S17. Dissymmetry g-factor 2D map of freshly made film of 1 from DMF (25×25 grid array area of 0.2 mm step size at 237 nm; top side).

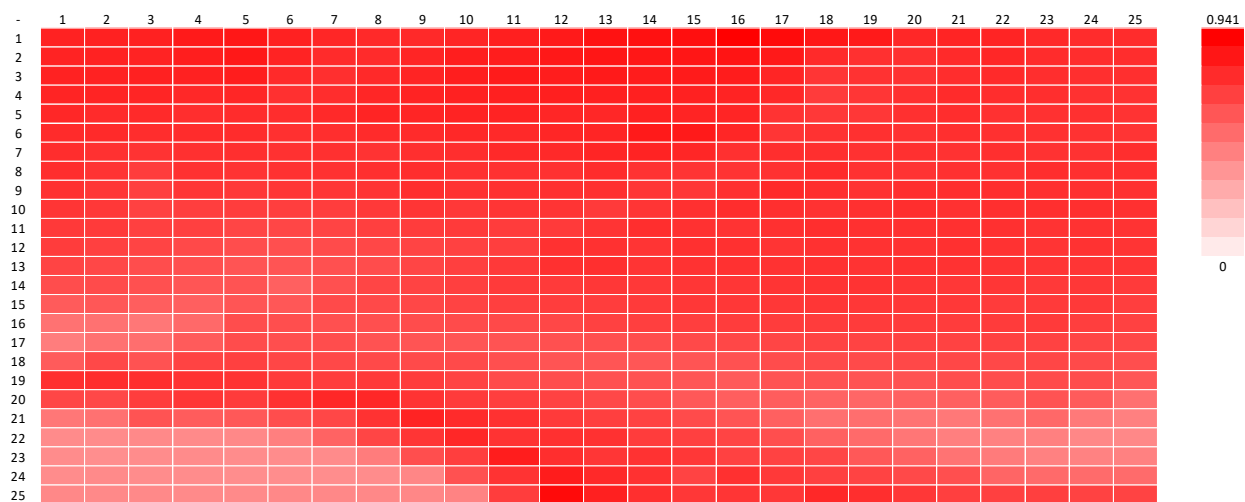


Fig. S18. UV-vis absorption 2D map of a 11 months old film of 1 from DMF (25×25 grid array area of 0.2 mm step size at 391 nm; top side).

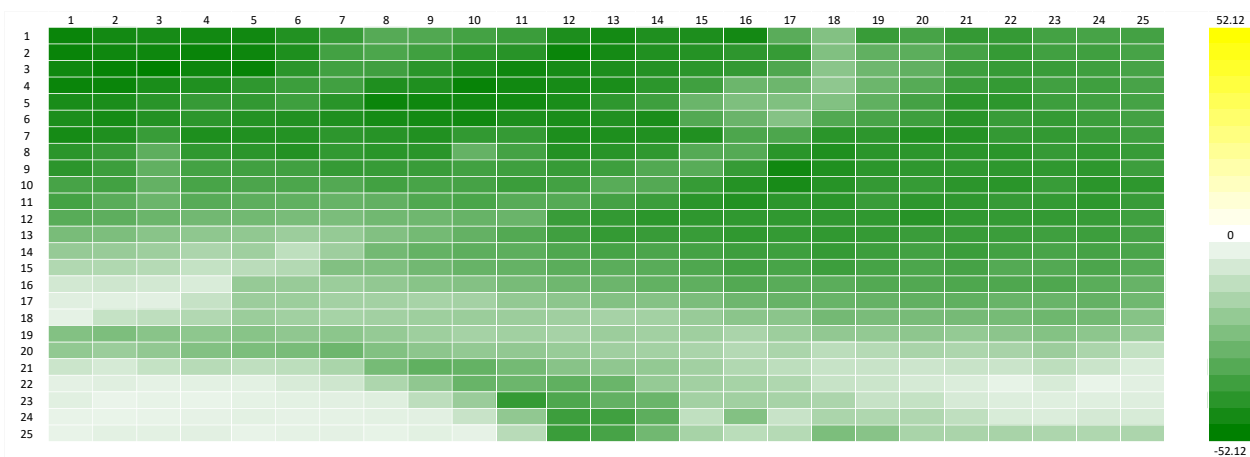


Fig. S19. ECD 2D map of a 11 months old film of 1 from DMF (25×25 grid array area of 0.2 mm step size at 391 nm; top side).

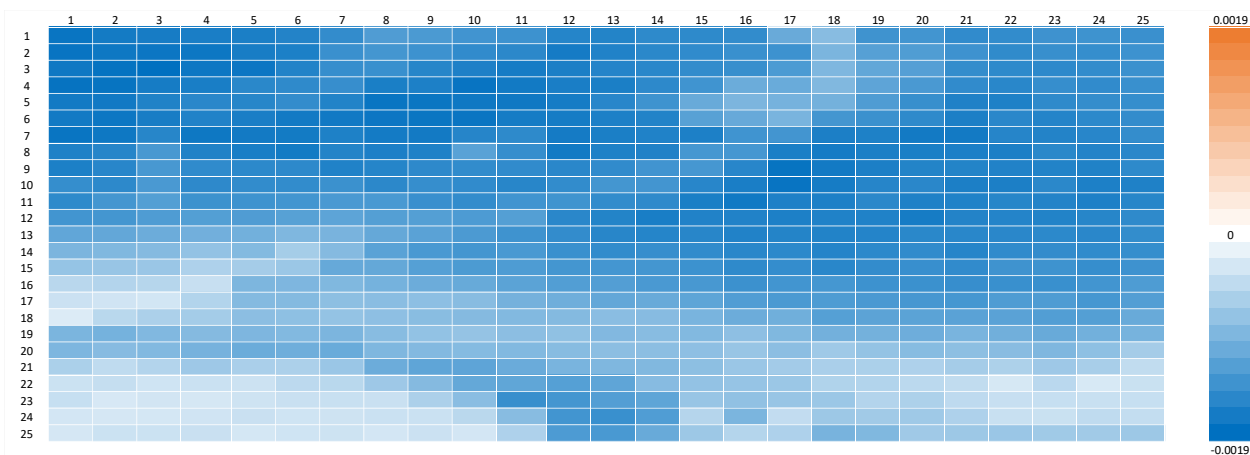


Fig S20. Dissymmetry g-factor 2D map of a 11 months old film of 1 from DMF (25×25 grid array area of 0.2 mm step size at 391 nm; top side).

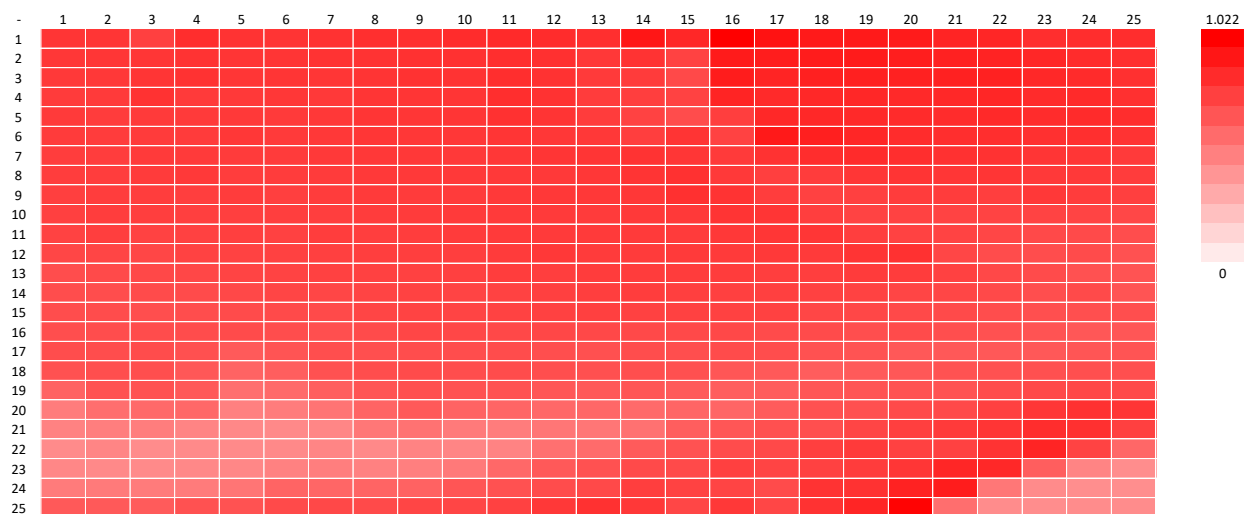


Fig. S21. UV-vis absorption 2D map of a 11 months old film of 1 from DMF (25×25 grid array area of 0.2 mm step size at 391 nm; bottom side).

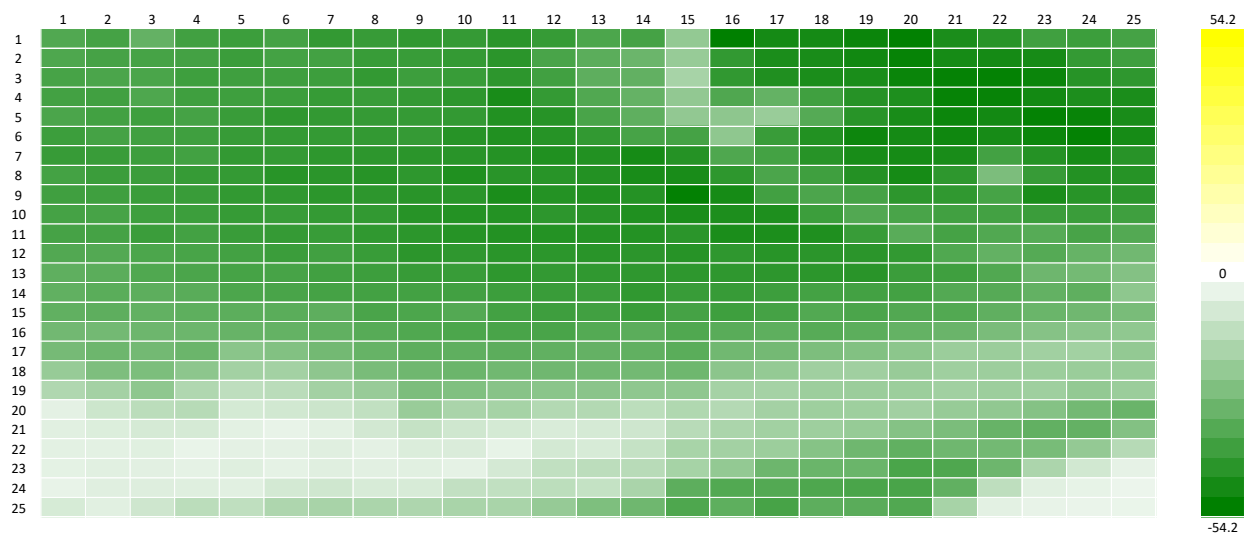


Fig. S22. ECD 2D map of a 11 months old film of 1 from DMF (25×25 grid array area of 0.2 mm step size at 391 nm; bottom side).

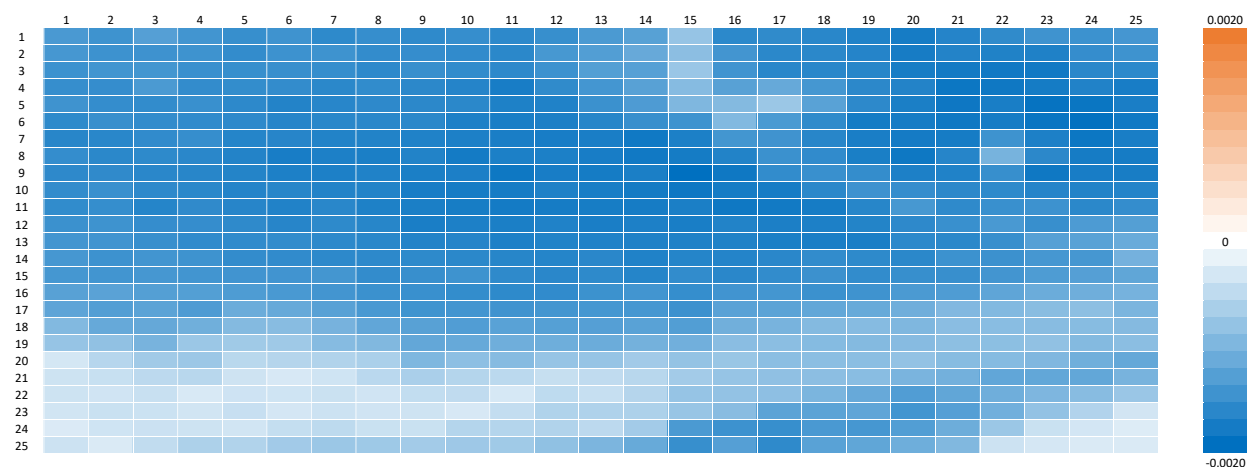


Fig. S23. Dissymmetry g-factor 2D map of a 11 months old film of 1 from DMF (25×25 grid array area of 0.2 mm step size at 391 nm; bottom side).

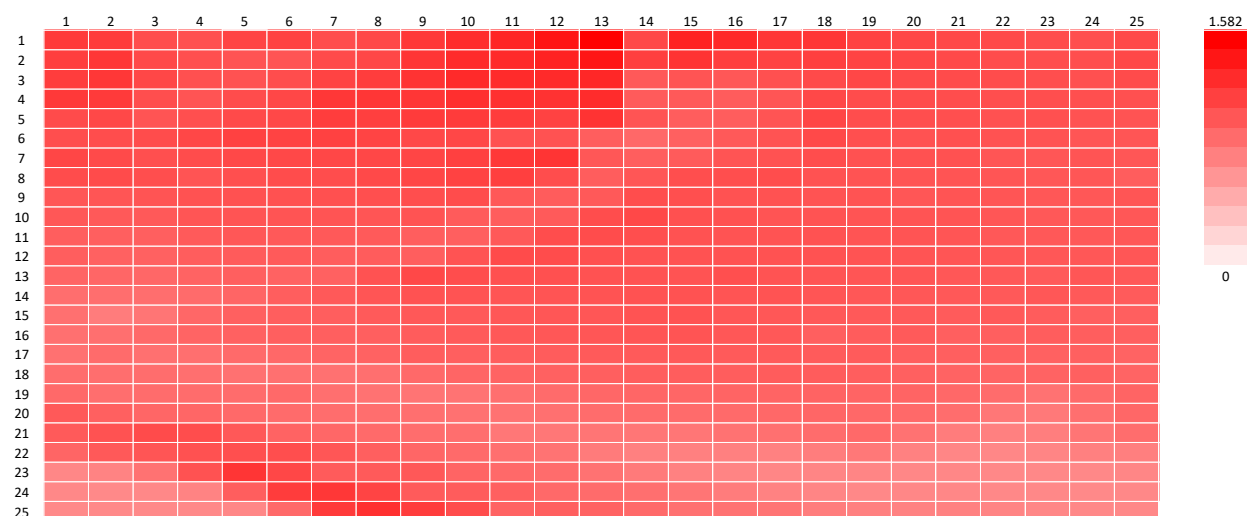


Fig. S24. UV-vis absorption 2D map of a 11 months old film of 1 from DMF (25×25 grid array area of 0.2 mm step size at 237 nm; top side).

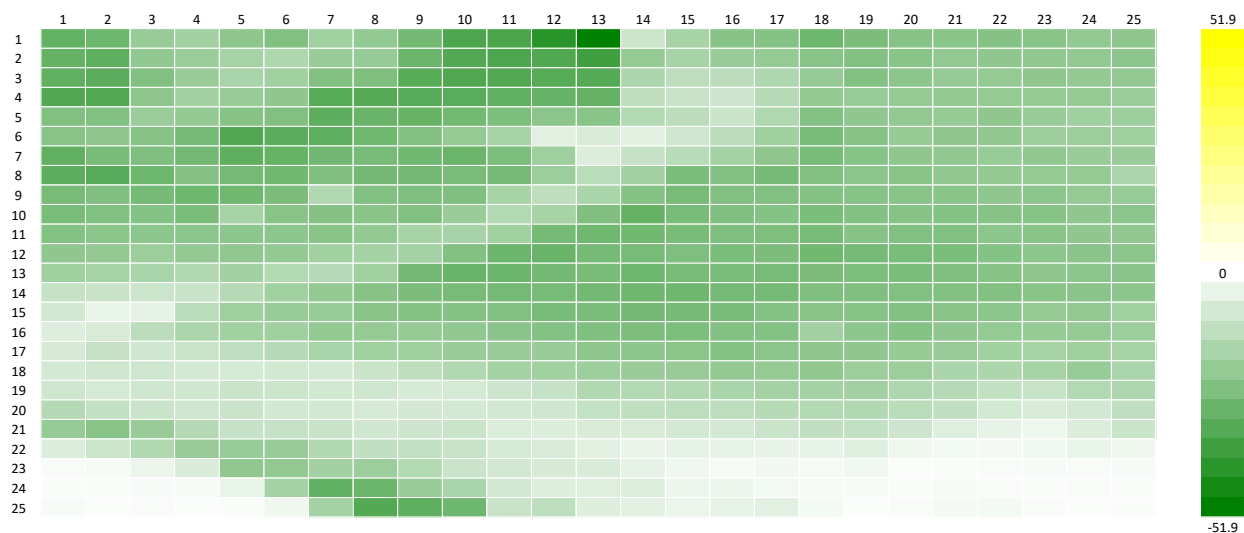


Fig. S25. ECD 2D map of a 11 months old film of 1 from DMF (25×25 grid array area of 0.2 mm step size at 237 nm; top side).

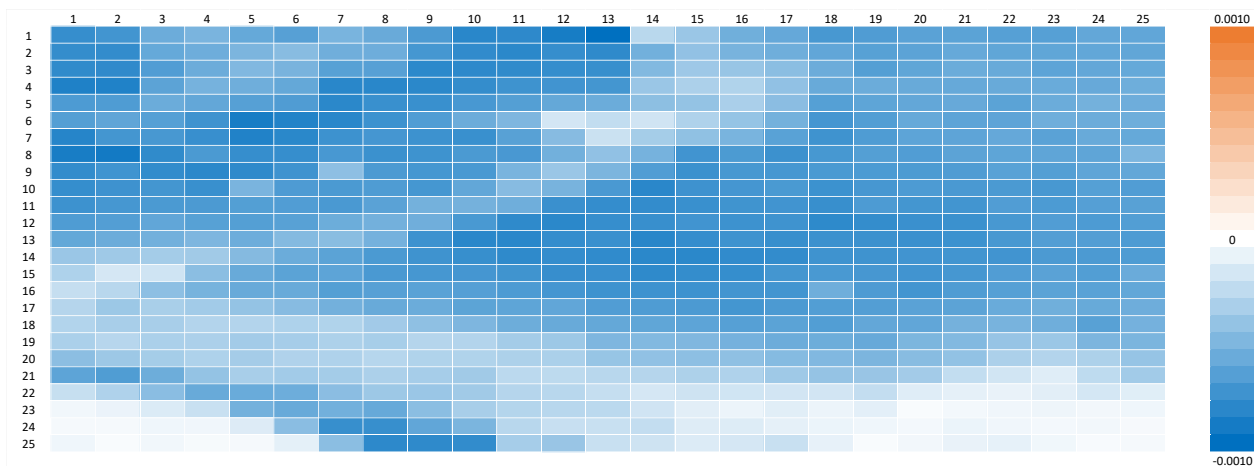


Fig. S26. Dissymmetry g-factor 2D map of a 11 months old film of 1 from DMF (25×25 grid array area of 0.2 mm step size at 237 nm; top side).

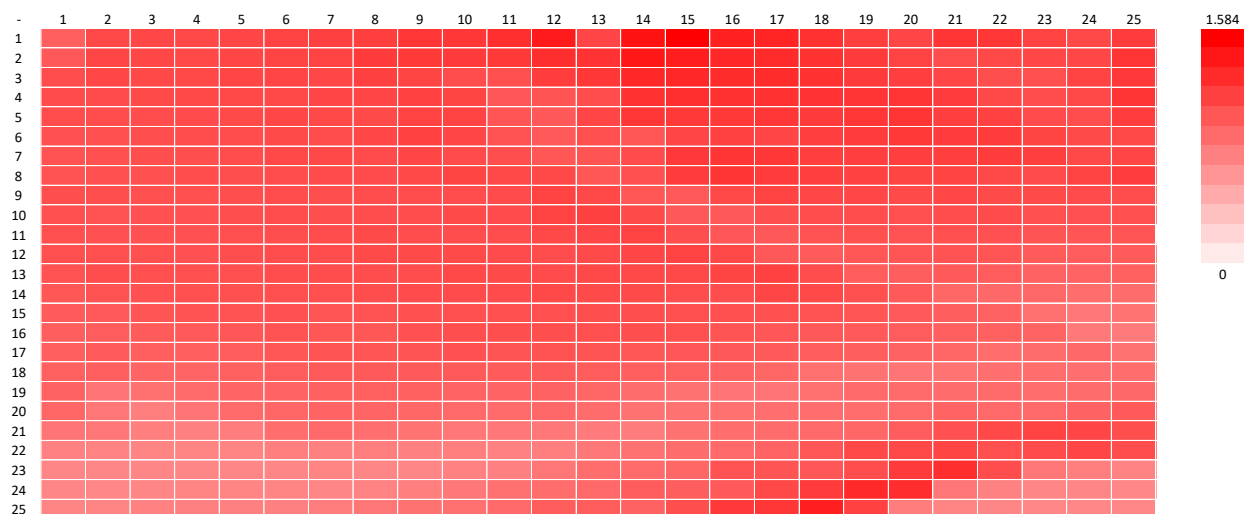


Fig. S27. UV-vis absorption 2D map of a 11 months old film of 1 from DMF (25×25 grid array area of 0.2 mm step size at 237 nm; bottom side).

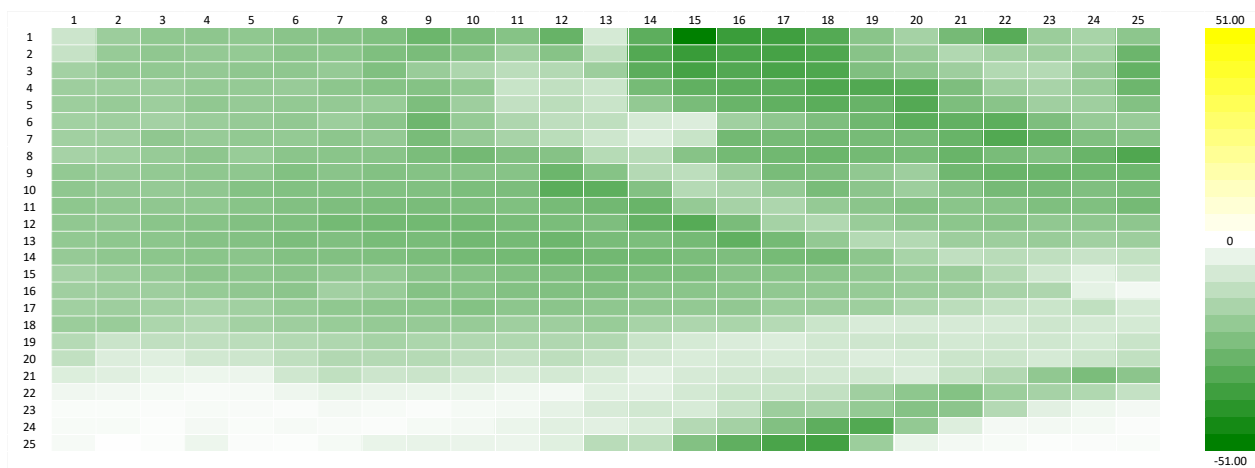


Fig. S28. ECD 2D map of a 11 months old film of 1 from DMF (25×25 grid array area of 0.2 mm step size at 237 nm; bottom side).

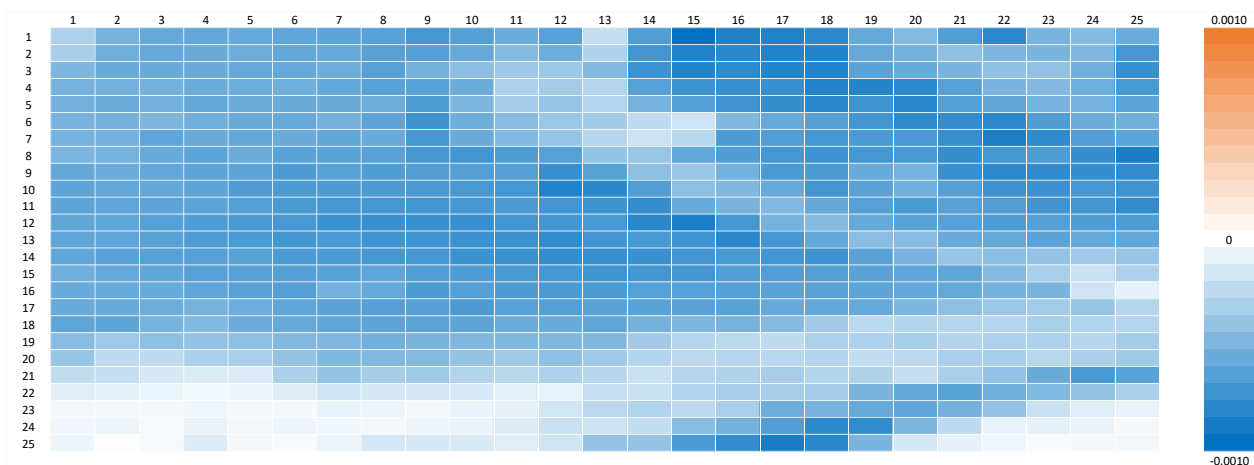


Fig. S29. Dissymmetry g-factor 2D map of a 11 months old film of 1 from DMF (25×25 grid array area of 0.2 mm step size at 237 nm; bottom side).

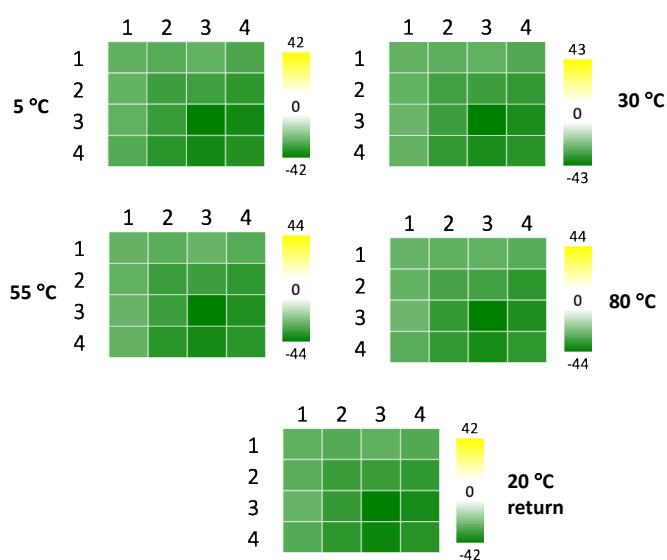


Fig. S30. VT ECD 2D CDi maps of top side of film of 1 at the specified temperatures (4×4 grid array area of 1 mm step size at 387 nm).

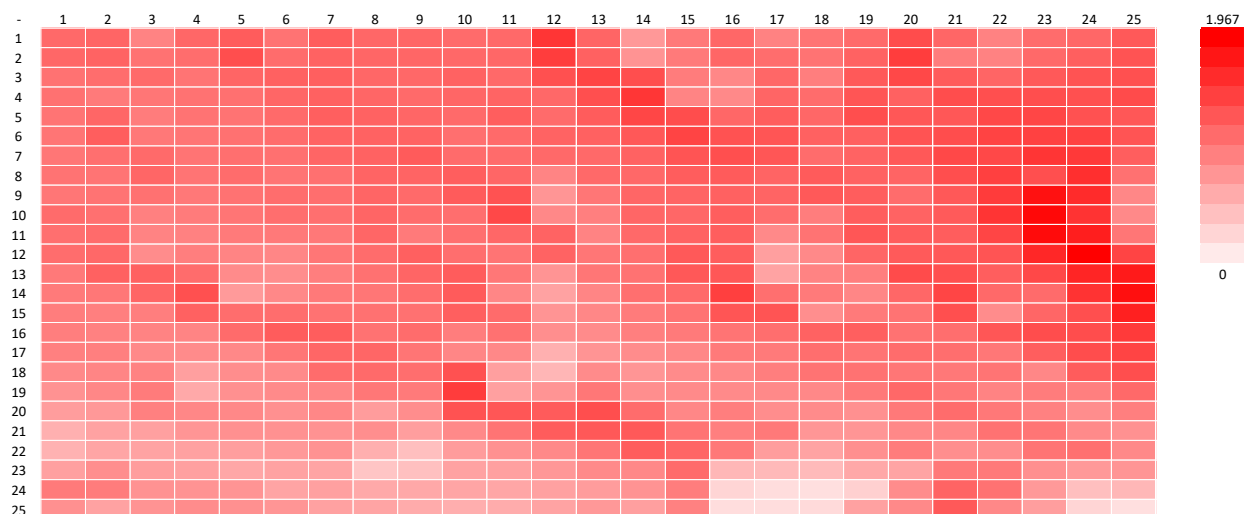


Fig. S31. UV-vis absorption 2D map of film of 1 from TCE (25×25 grid array area of 0.2 mm step size at 391 nm; top side).

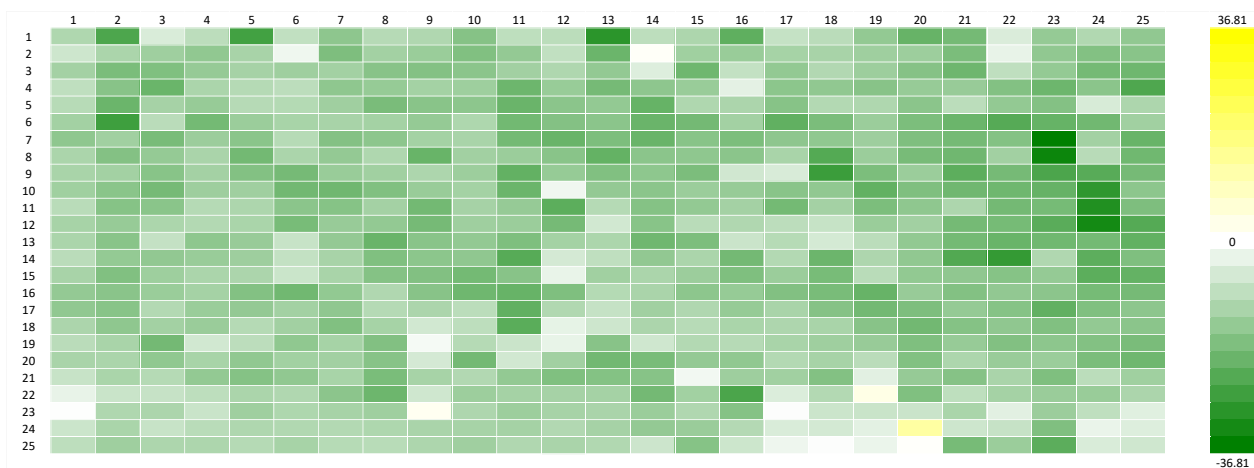


Fig. S32. ECD 2D map of film of 1 from TCE (25×25 grid array area of 0.2 mm step size at 391 nm; top side).

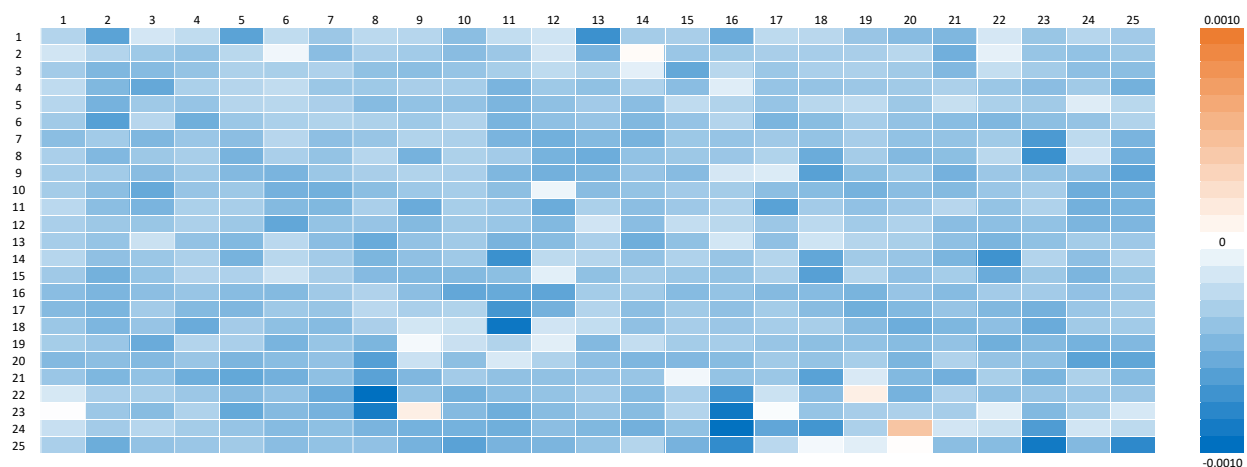


Fig. S33. Dissymmetry g-factor 2D map of film of 1 from TCE (25×25 grid array area of 0.2 mm step size at 391 nm; top side).

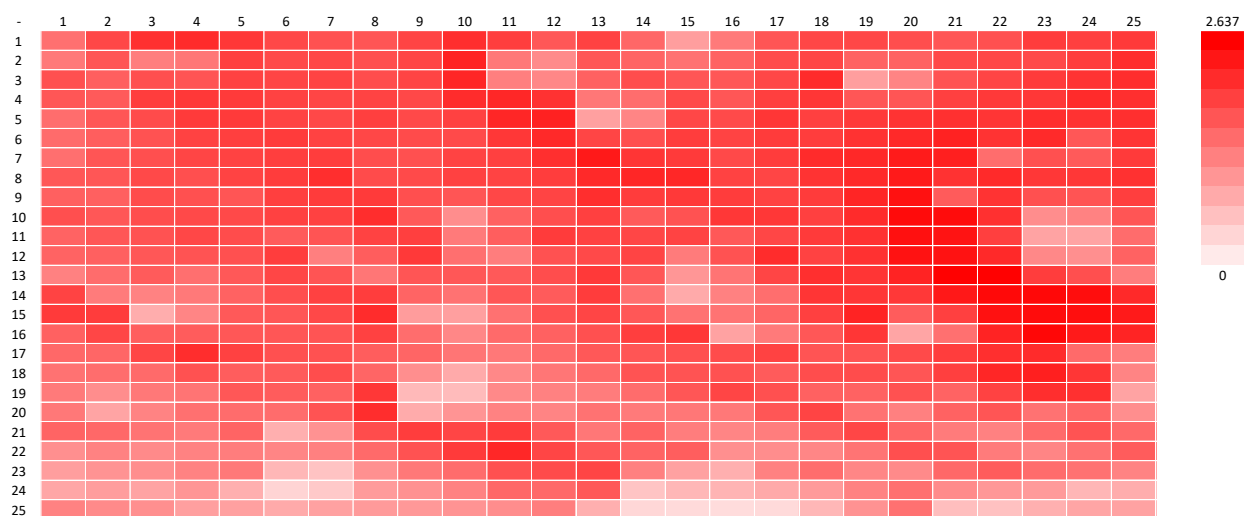


Fig. S34. UV-vis absorption 2D map of film of 1 from TCE (25×25 grid array area of 0.2 mm step size at 237 nm; top side).

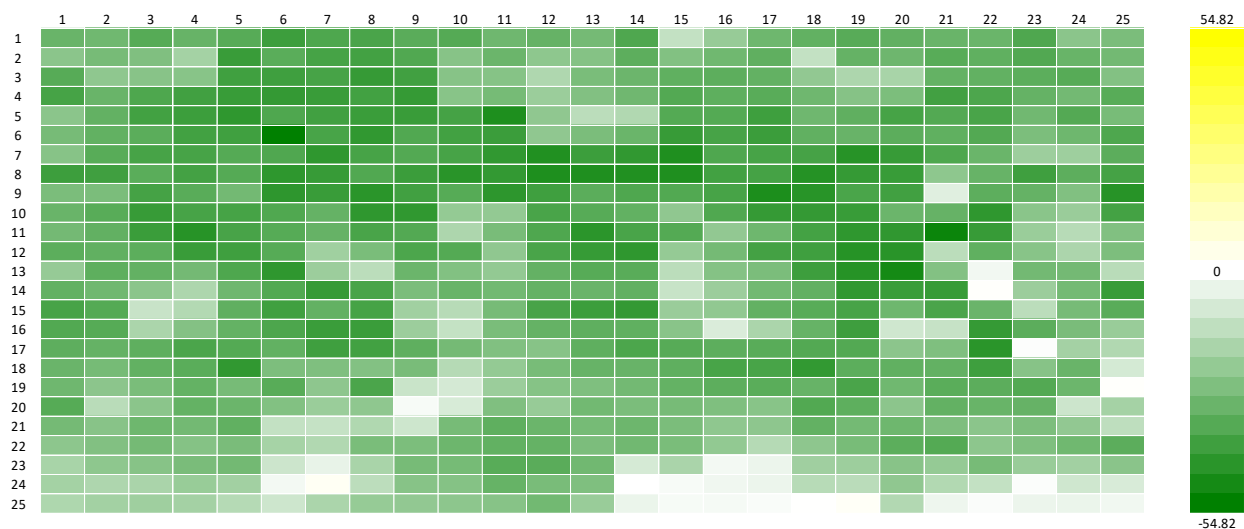


Fig. S35. ECD 2D map of film of 1 from TCE (25×25 grid array area of 0.2 mm step size at 237 nm; top side).

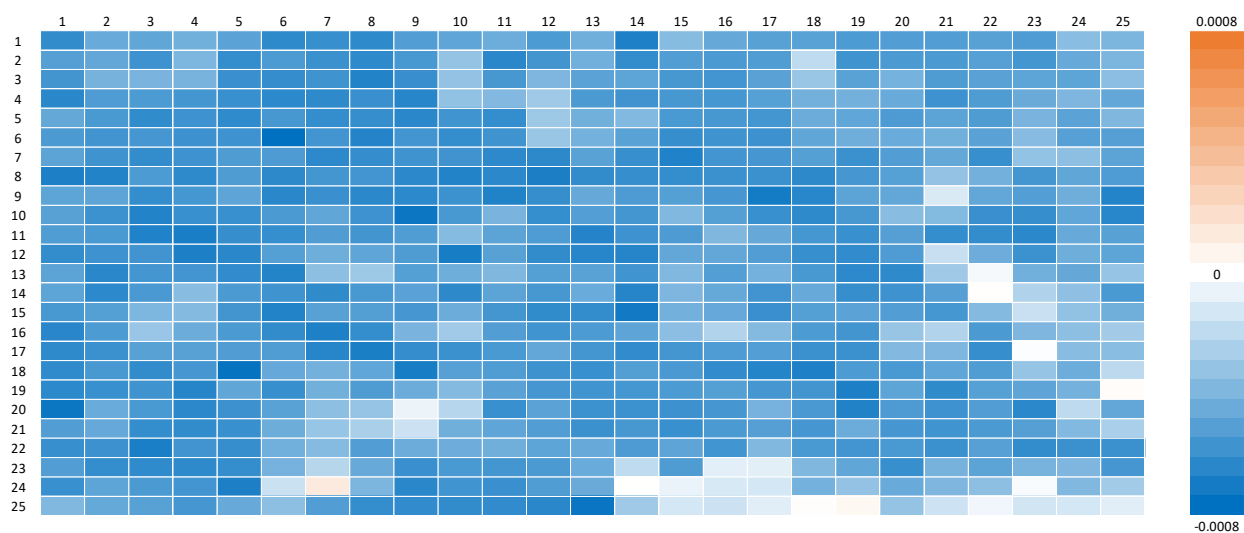


Fig. S36. Dissymmetry g-factor 2D map of film of 1 from TCE (25×25 grid array area of 0.2 mm step size at 237 nm; top side).

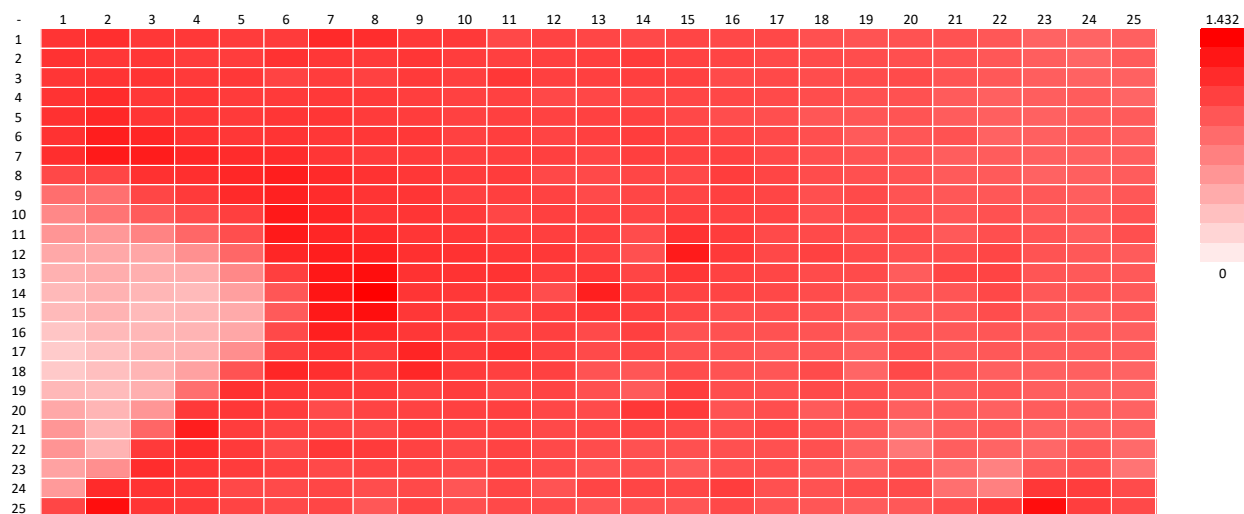


Fig. S37. UV-vis absorption 2D map of 2 of film from TCE (25×25 grid array area of 0.2 mm step size at 391 nm; top side).

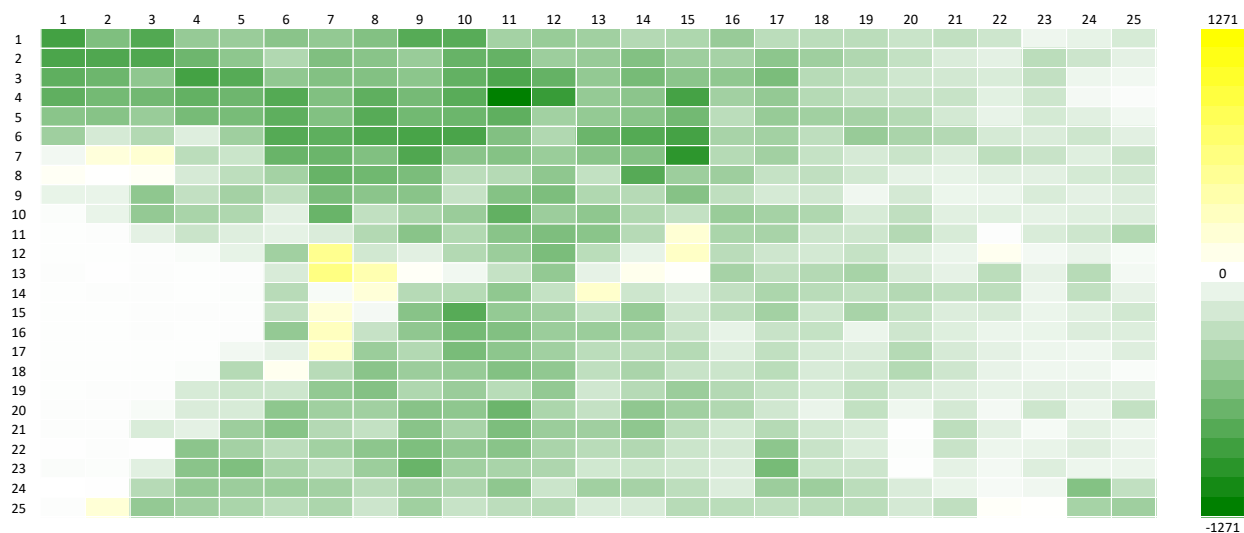


Fig. S38. ECD 2D map of 2 of film from TCE (25×25 grid array area of 0.2 mm step size at 391 nm; top side).

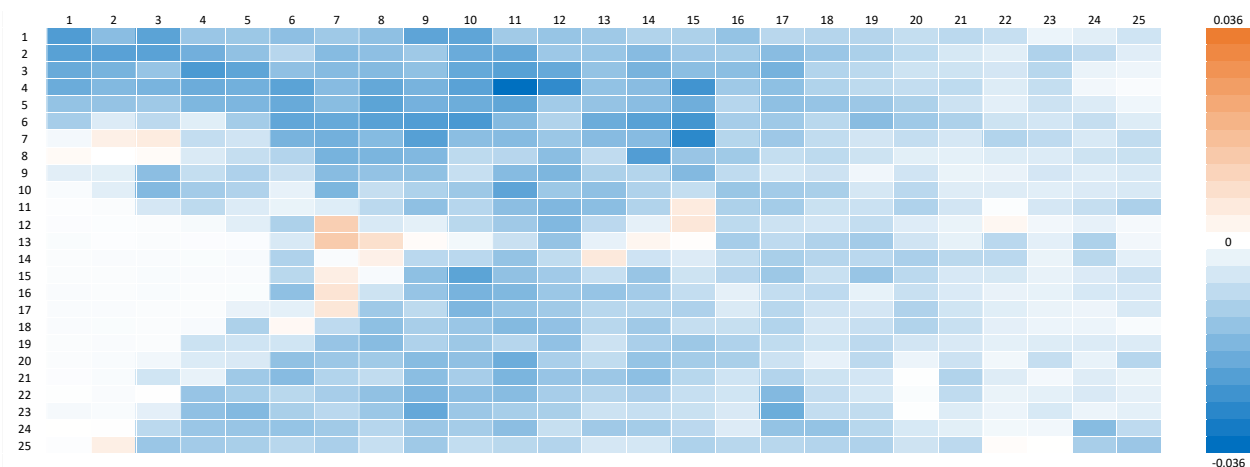


Fig. S39. Dissymmetry g-factor 2D map of 2 of film from TCE (25×25 grid array area of 0.2 mm step size at 391 nm; top side).

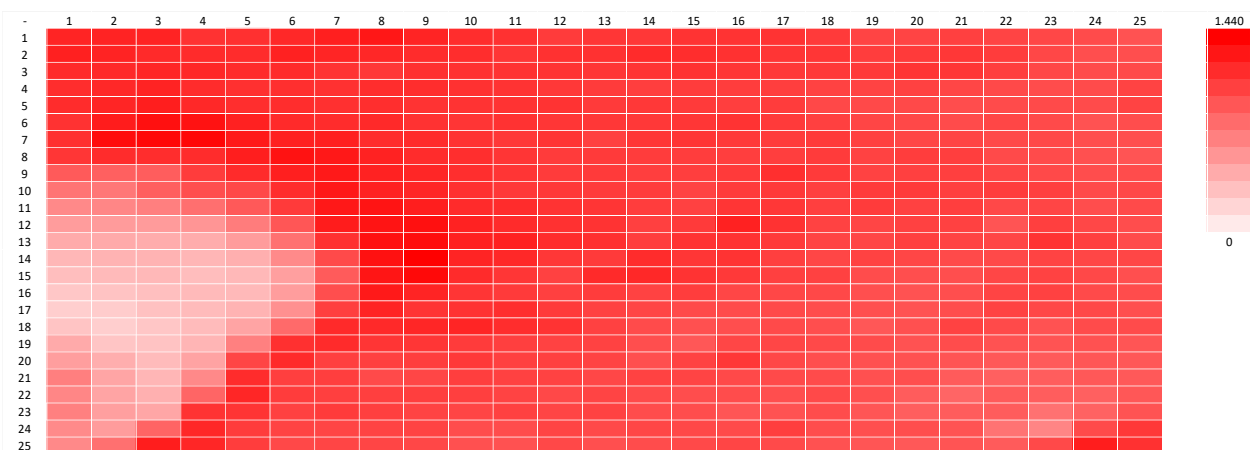


Fig. S40. UV-vis absorption 2D map of 2 of film from TCE (25×25 grid array area of 0.2 mm step size at 311 nm; top side).

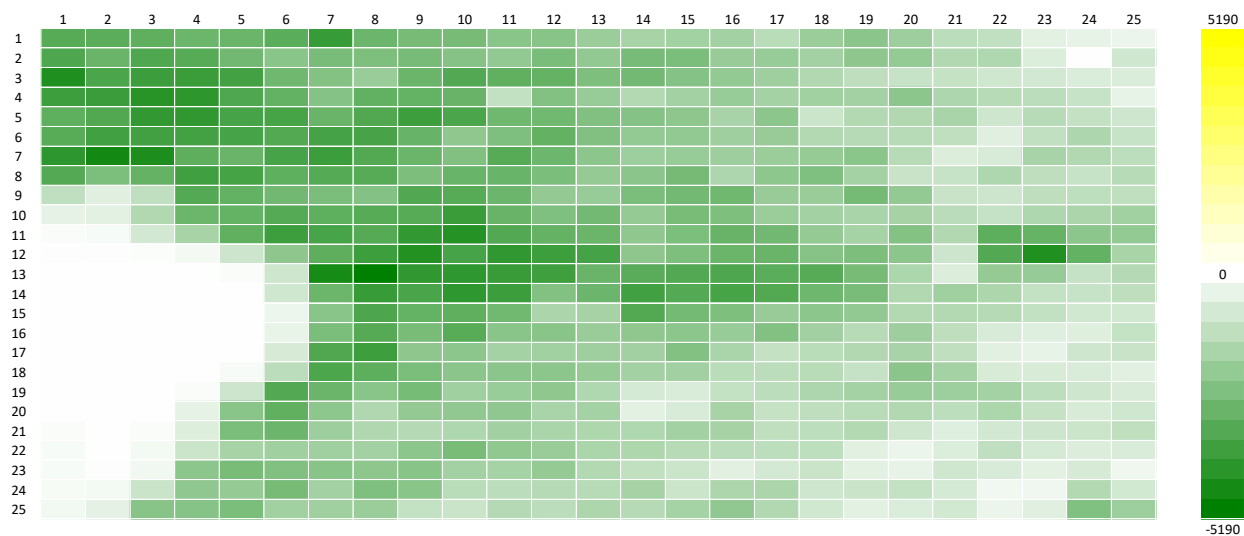


Fig. S41. ECD 2D map of 2 of film from TCE (25×25 grid array area of 0.2 mm step size at 311 nm; top side).

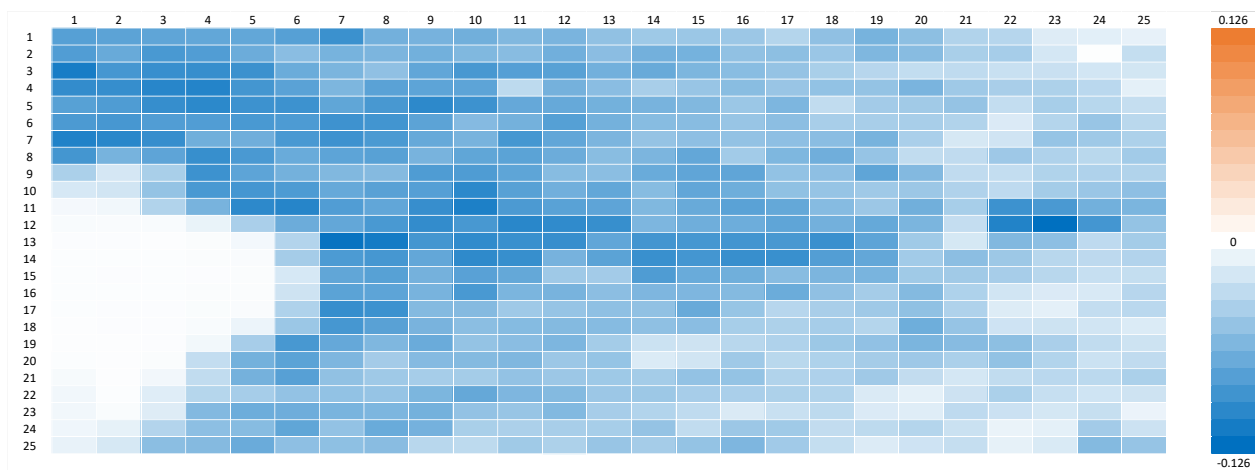


Fig. S42. Dissymmetry g-factor 2D map of 2 of film from TCE (25×25 grid array area of 0.2 mm step size at 311 nm; top side).

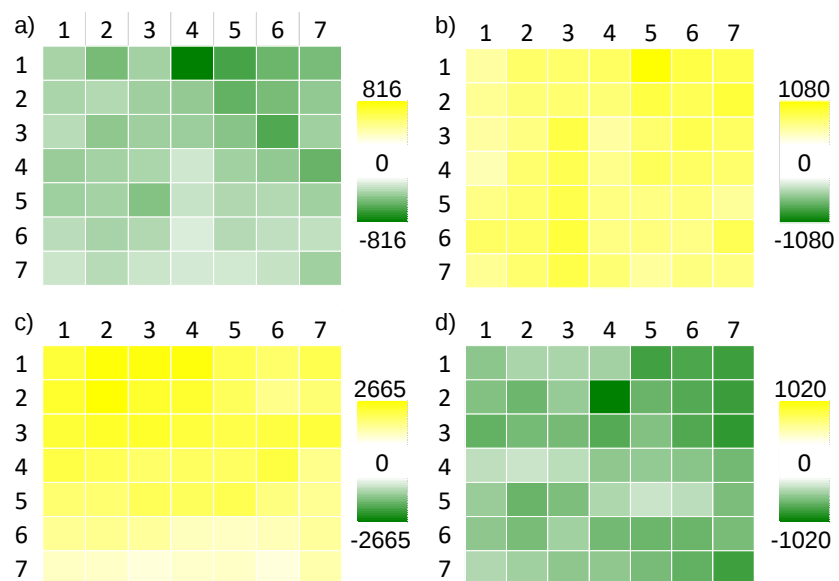


Fig. S43. ECD 2D CDi maps of film of 3 from TCE (7×7 grid array area of 0.2 mm step size) a) top side at 391 nm, b) bottom side at 391 nm, c) top side at 311 nm, d) bottom side at 311 nm.

4. 3D map of film of 1

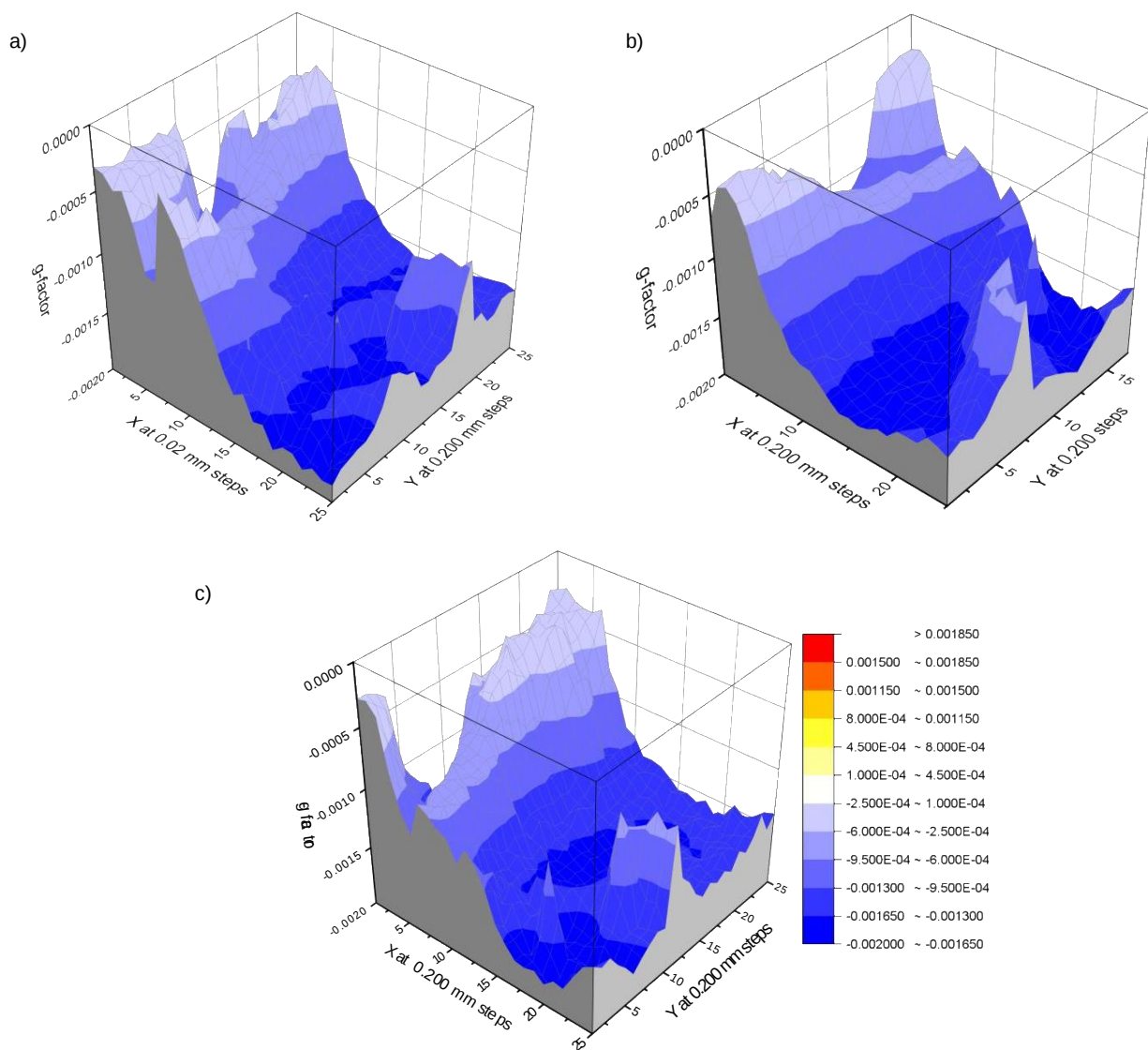


Fig. S44. 3D g-factor maps of film of 1 from DMF at 391 nm: a) top, b) bottom, c) bottom flipped along the y axis, indicating good degree of homogeneity and lack of LDLB contributions.

5. Thickness of film of 1

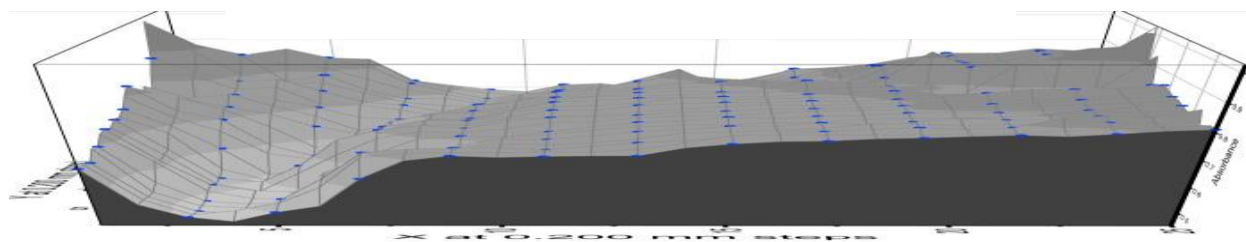


Fig. S45. Thickness-related measured by absorption of film of 1 from DMF; x- and y-axes are represented at 0.2 mm steps, while the z-axis is represented in Absorbance units.