

Electronic Supporting Information for

Sign Inversion in Magnetic Circularly Polarised Luminescence of Fused Aromatics with 1.6 T N-up/S-up Faraday Geometry

Hayato Toda ^a, Nobuyuki Hara ^a, Michiya Fujiki ^b and Yoshitane Imai ^{a*}

^a Department of Applied Chemistry, Faculty of Science and Engineering, Kindai University, 3-4-1 Kowakae, Higashi-Osaka, Osaka 577-8502, Japan. E-mail: y-imai@apch.kindai.ac.jp

^b Graduate School of Materials Science, Nara Institute of Science and Technology, Takayama, Ikoma, Nara 630-0192, Japan

1. UV-vis absorption spectra of NP, NP-1, NP-2, PHE, PHE-2, PHE-3, ANT, ANT-1, ANT-2, COR, and BP.

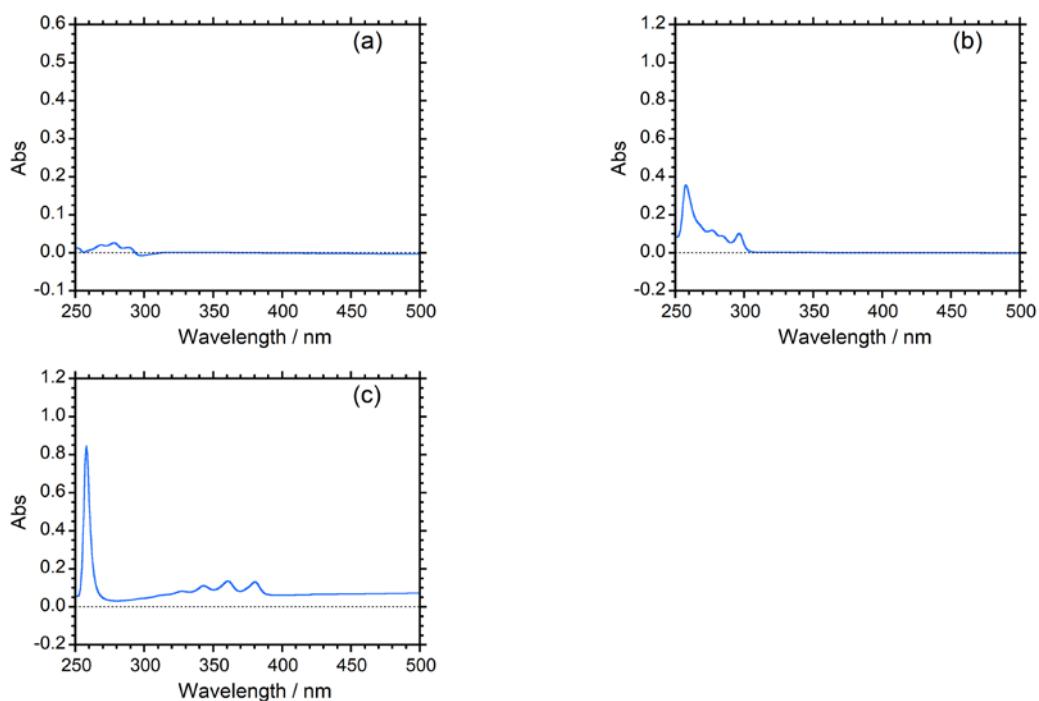


Fig. S1. UV-Vis spectra of (a) NP in DMSO (1.0×10^{-5} M), (b) PHE in DMSO (1.0×10^{-5} M) and (c) ANT in DMSO (1.0×10^{-5} M).

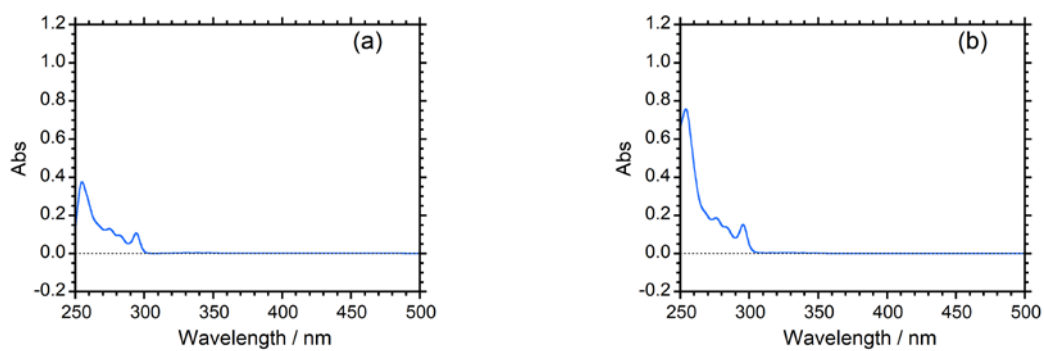


Fig. S2. UV-Vis spectra of (a) PHE in THF (1.0×10^{-5} M) and (b) PHE in CHCl₃ (1.0×10^{-5} M).

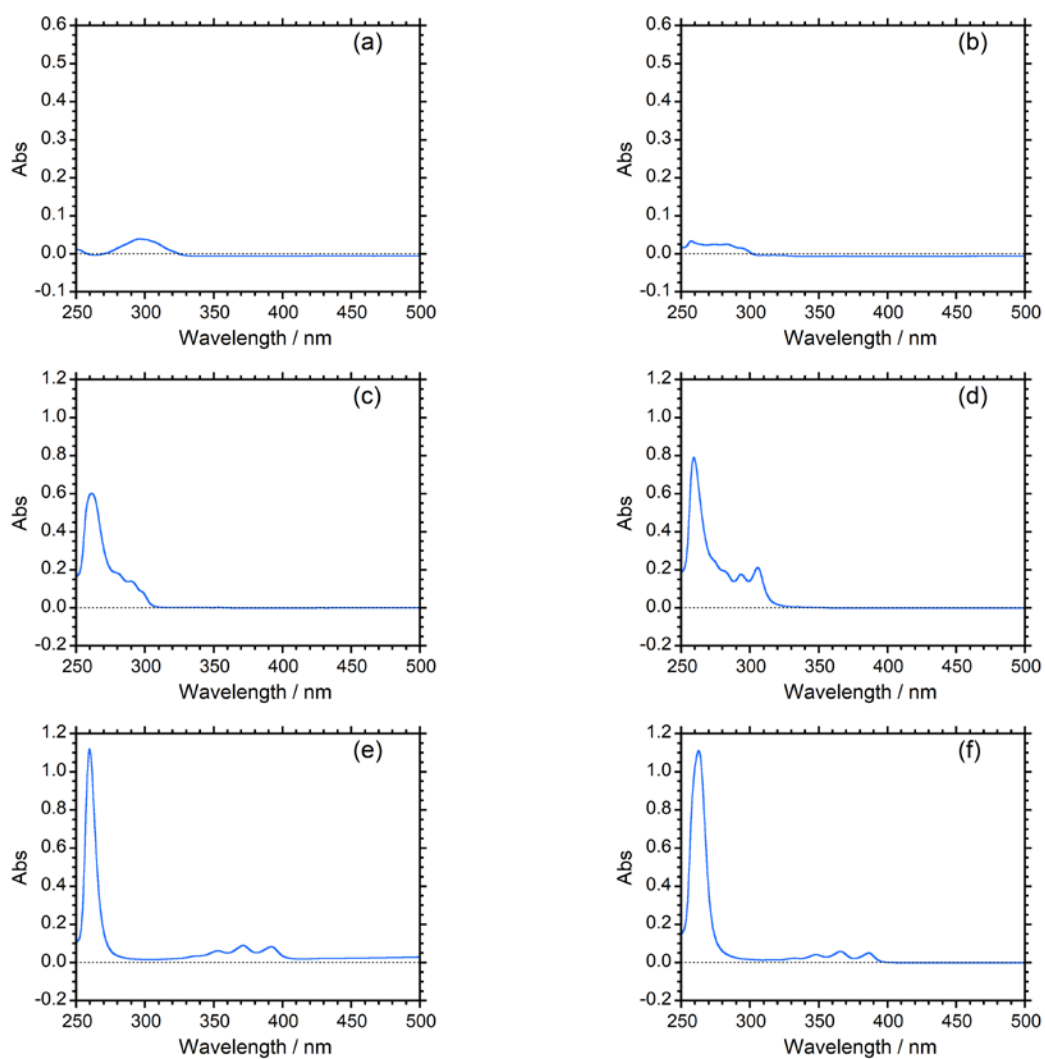


Fig. S3. UV-Vis spectra of (a) **NP-1** in DMSO (1.0×10^{-5} M), (b) **NP-2** in DMSO (1.0×10^{-5} M), (c) **PHE-2** in DMSO (1.0×10^{-5} M), (d) **PHE-3** in DMSO (1.0×10^{-5} M), (e) **ANT-1** in DMSO (1.0×10^{-5} M) and (f) **ANT-2** in DMSO (1.0×10^{-5} M).

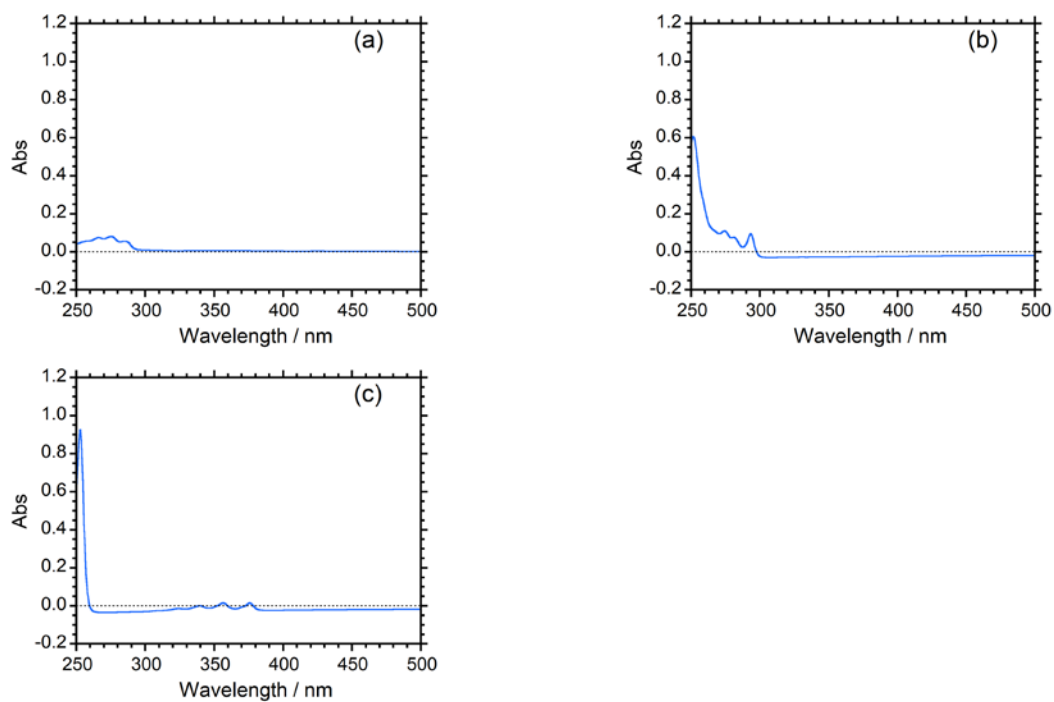


Fig. S4. UV-Vis spectra of (a) **NP** in CHX (1.0×10^{-5} M), (b) **PHE** in CHX (1.0×10^{-5} M) and (c) **ANT** in CHX (1.0×10^{-5} M)

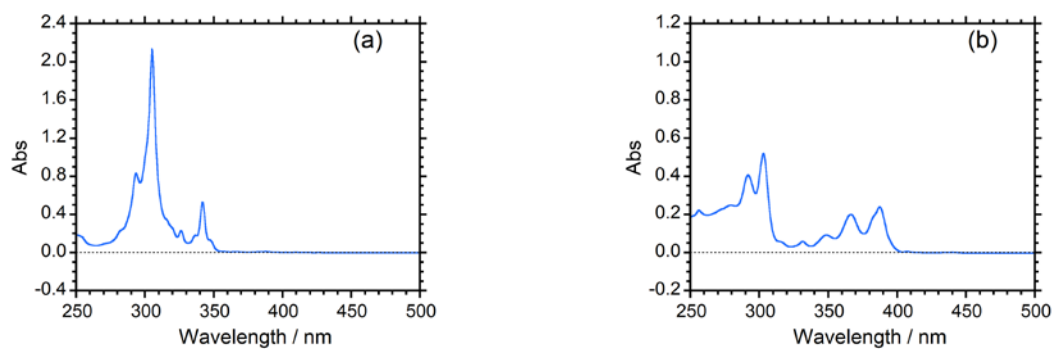


Fig. S5. UV-Vis spectra of (a) **COR** in DMSO (1.0×10^{-5} M) and (b) **BP** in DMSO (1.0×10^{-5} M).

2. MCPL, CPL and PL spectra of PHE in THF, CHCl₃, and PMMA

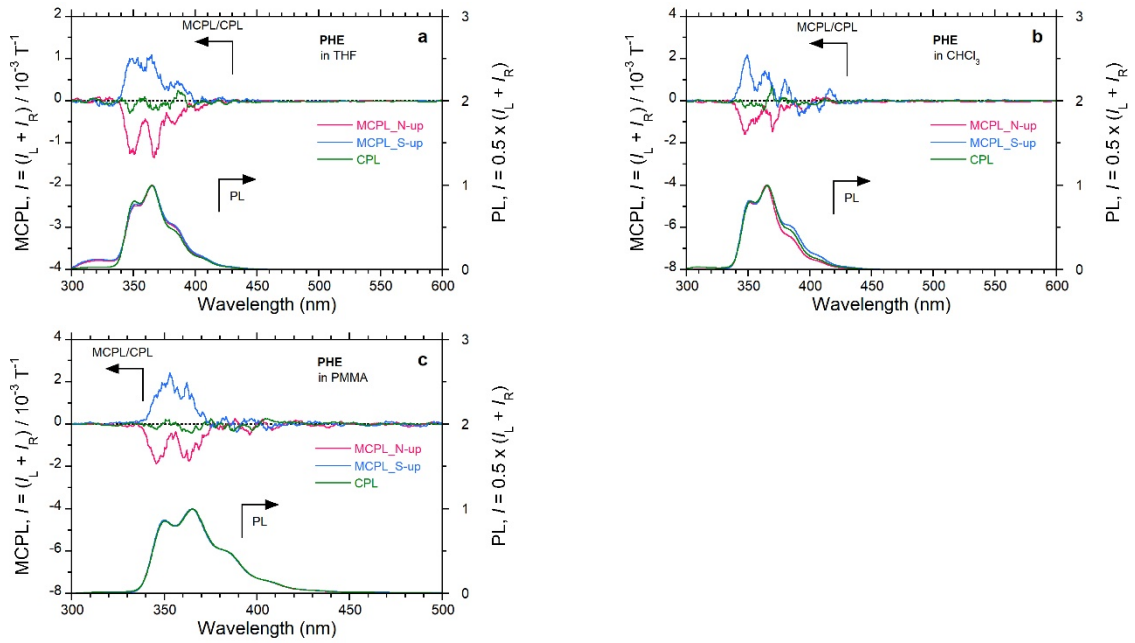
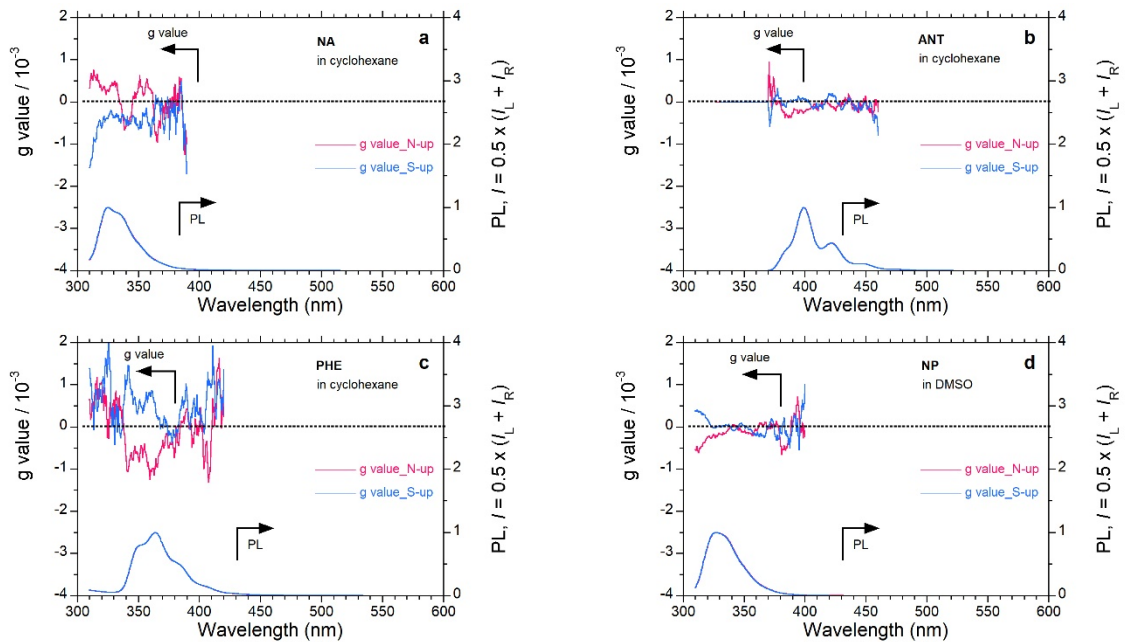


Fig. S6. MCPL and PL spectra of PHE in (a) THF, (b) CHCl₃, and (c) PMMA excited at 270 nm at $H_0 = 1.6$ T (red and blue lines at N-up and S-up geometry, respectively, associated with CPL spectra at $H_0 = 0.0$ T (green line) and the corresponding PL spectra.

3. G values and PL spectra of NP, NP-2, ANT, ANT-2, PHE, PHE-3, COR, and BP



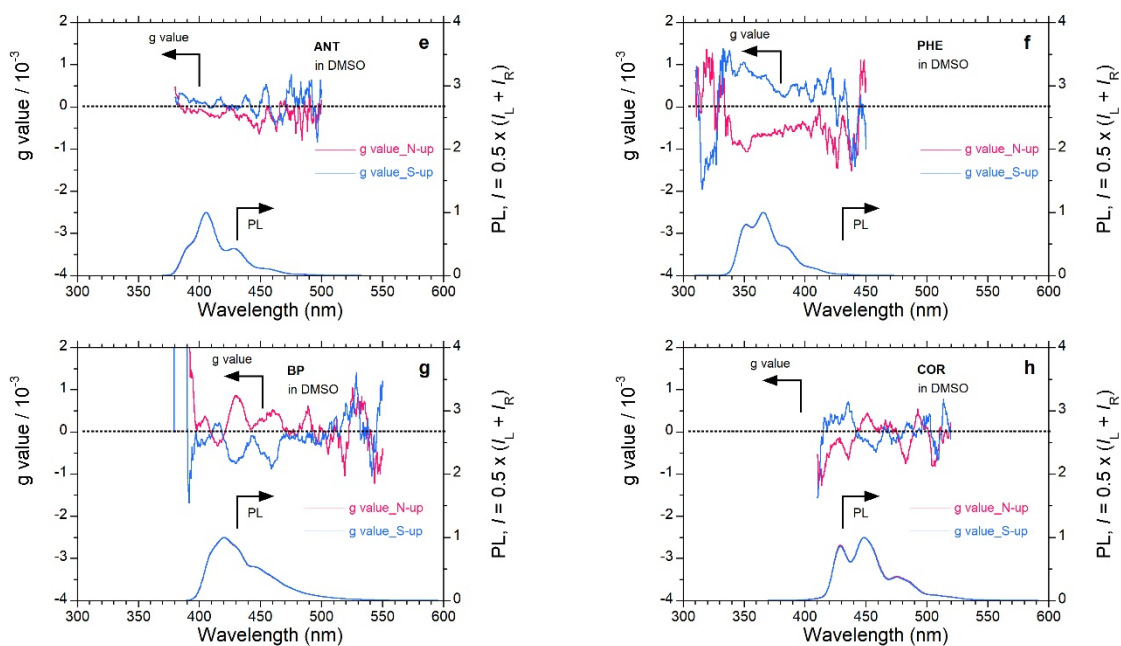


Fig. S7. G values and PL spectra of (a) NP in CHX, (b) ANT in CHX, (c) PHE in CHX, (d) NP in DMSO, (e) ANT in DMSO, (f) PHE in DMSO, (g) BP in DMSO and (h) COR in DMSO.

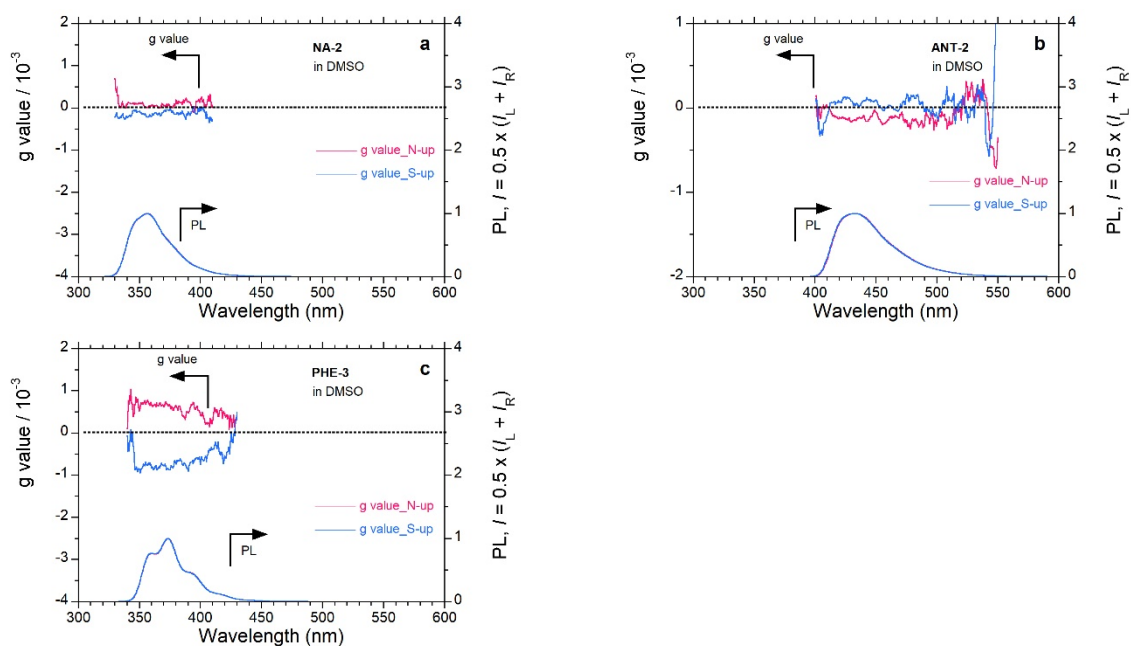


Fig. S8. G values and PL spectra of (a) NP-2 in DMSO, (b) ANT-2 in DMSO and (c) PHE-3 in DMSO.