Electronic Supplementary Information (ESI) for

Probing Photoinduced Electron Transfer Events in Phenylferrocene-corrole Dyad

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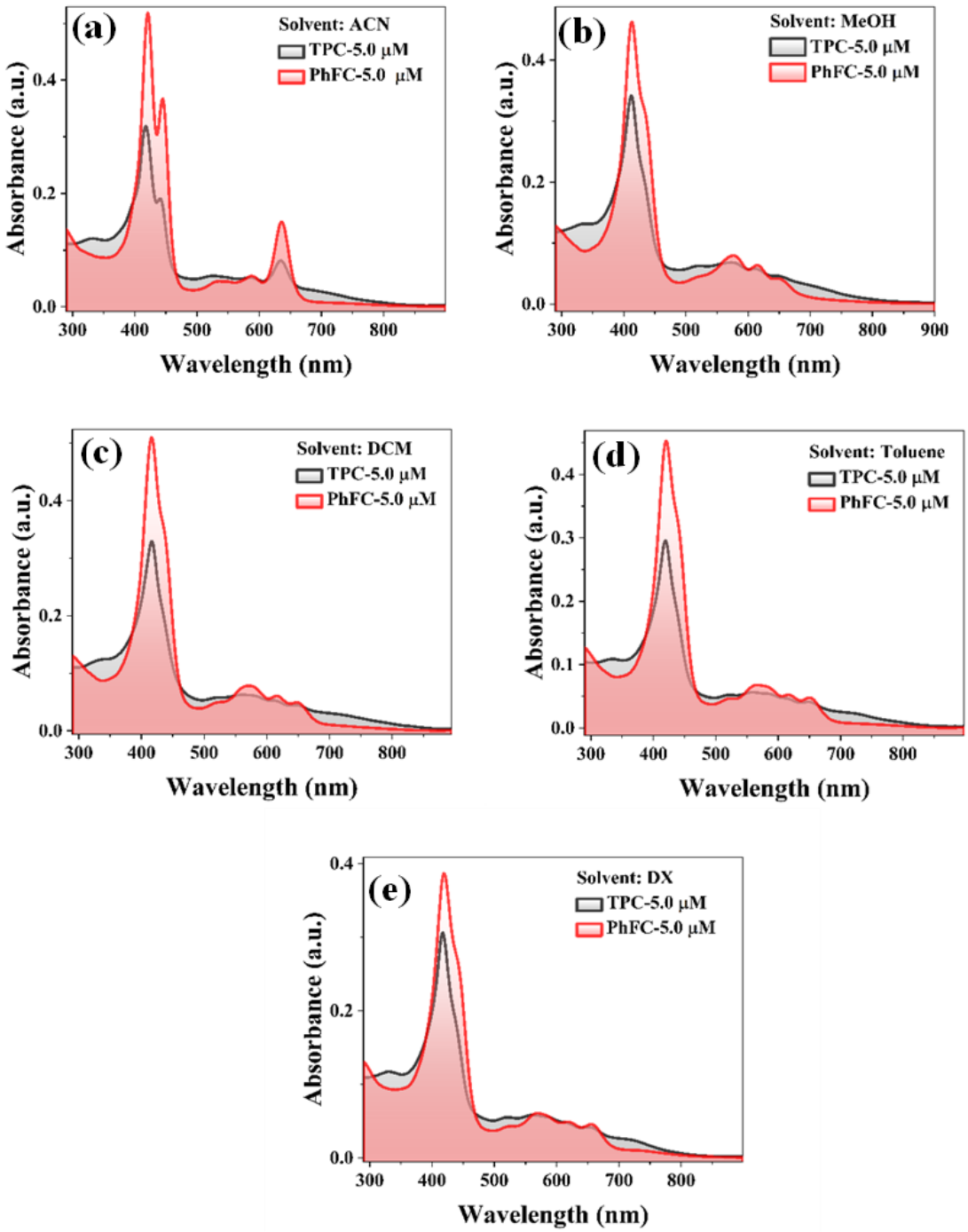

Figure S1. Absorption spectra of the TPC and PhFC dyad in (a) ACN, (b) MeOH, (c) DCM, (d) Toluene and (e) DX.

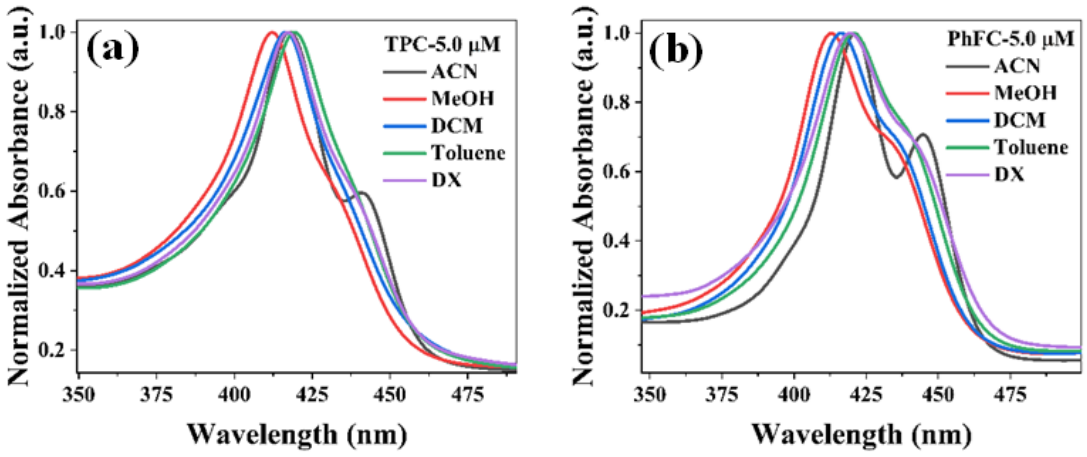

Figure S2. Normalized absorption spectra of the (a) TPC and (b) PhFC dyad in various organic solvents.

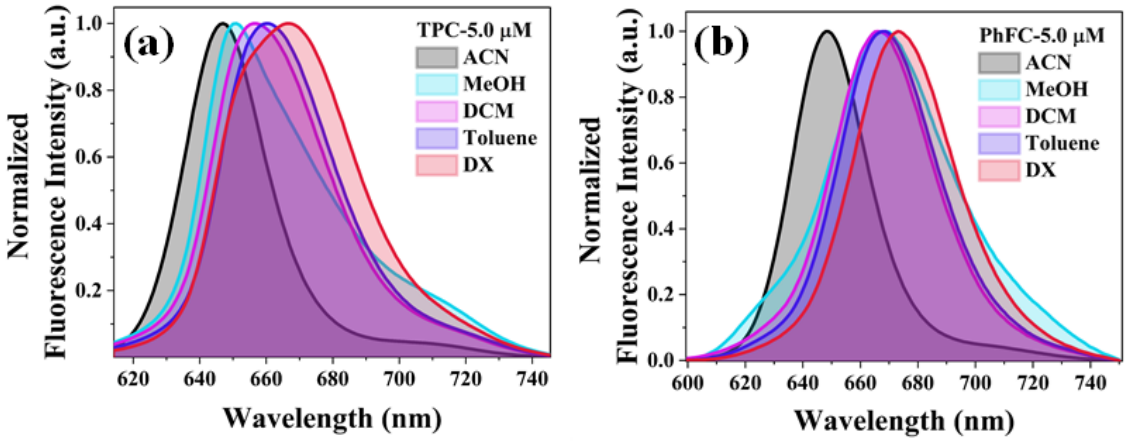

Figure S3. Normalized steady-state emission spectra of the (a) TPC and (b) PhFC dyad in various organic solvents at 420 nm excitation wavelength.

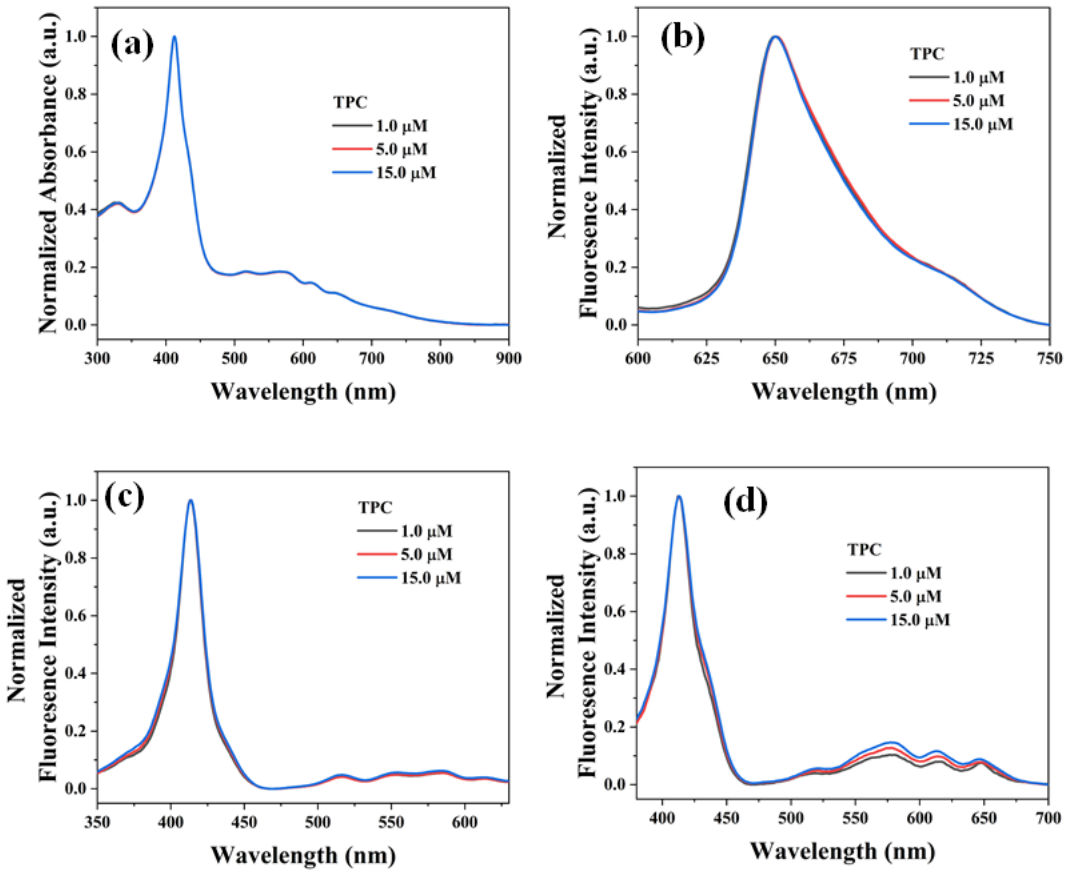

Figure S4. (a) Absorption spectra of the TPC in MeOH at different concentrations. Steady-state emission spectra of the TPC in DX at (b) 420 nm excitation wavelength. Excitation spectra of the TPC in DX at (c) 650 nm and (d) 715 nm emission wavelength.

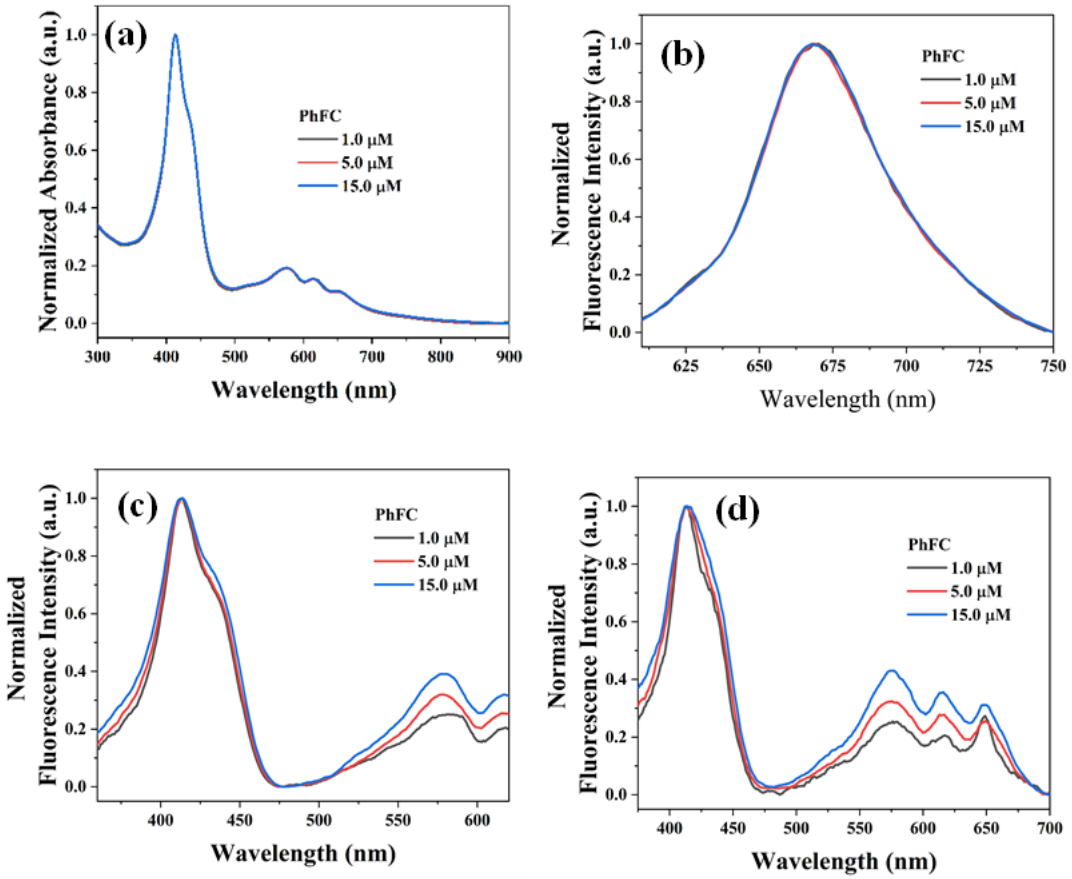

Figure S5. (a) Absorption spectra of the PhFC dyad in MeOH at different concentrations. Steady-state emission spectra of the PhFC dyad in DX at (b) 420 nm excitation wavelength. Excitation spectra of the PhFC dyad in DX at (c) 650 nm and (d) 715 nm emission wavelength.

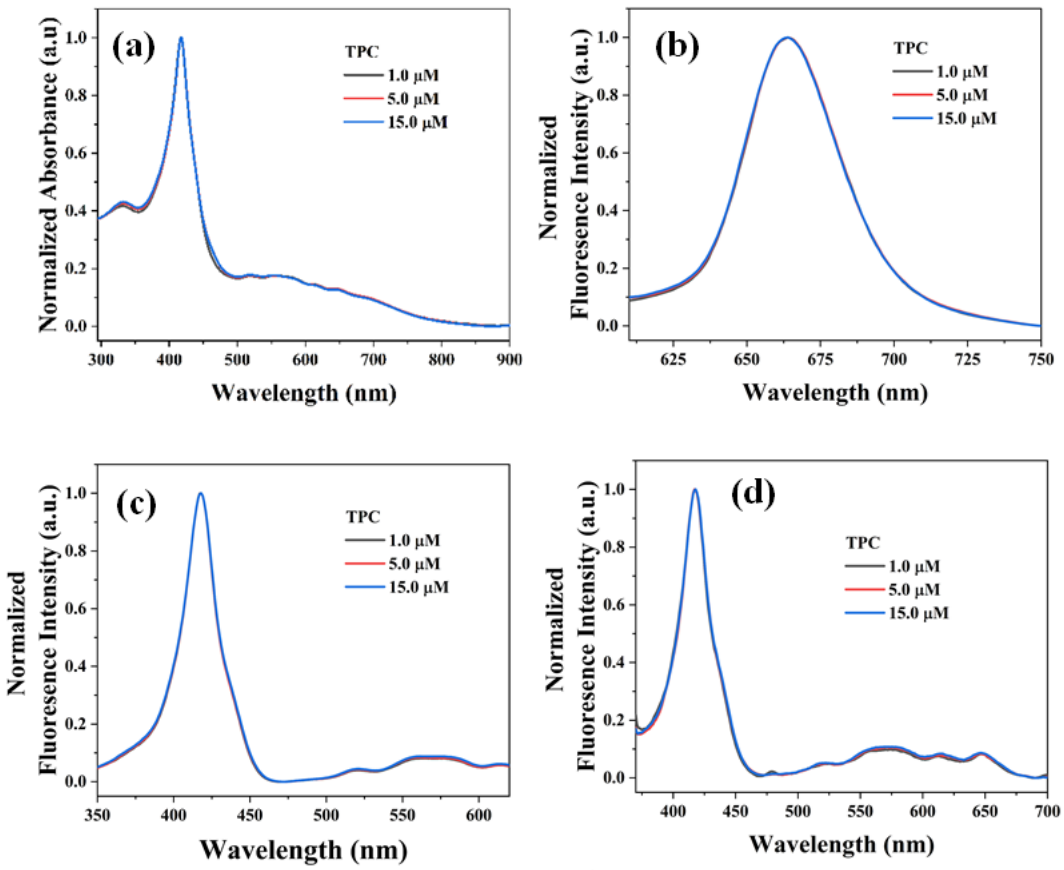

Figure S6. (a) Absorption spectra of the TPC in DCM at different concentrations. Steady-state emission spectra of the TPC in DX at (b) 420 nm excitation wavelength. Excitation spectra of the TPC in DX at (c) 650 nm and (d) 715 nm emission wavelength.

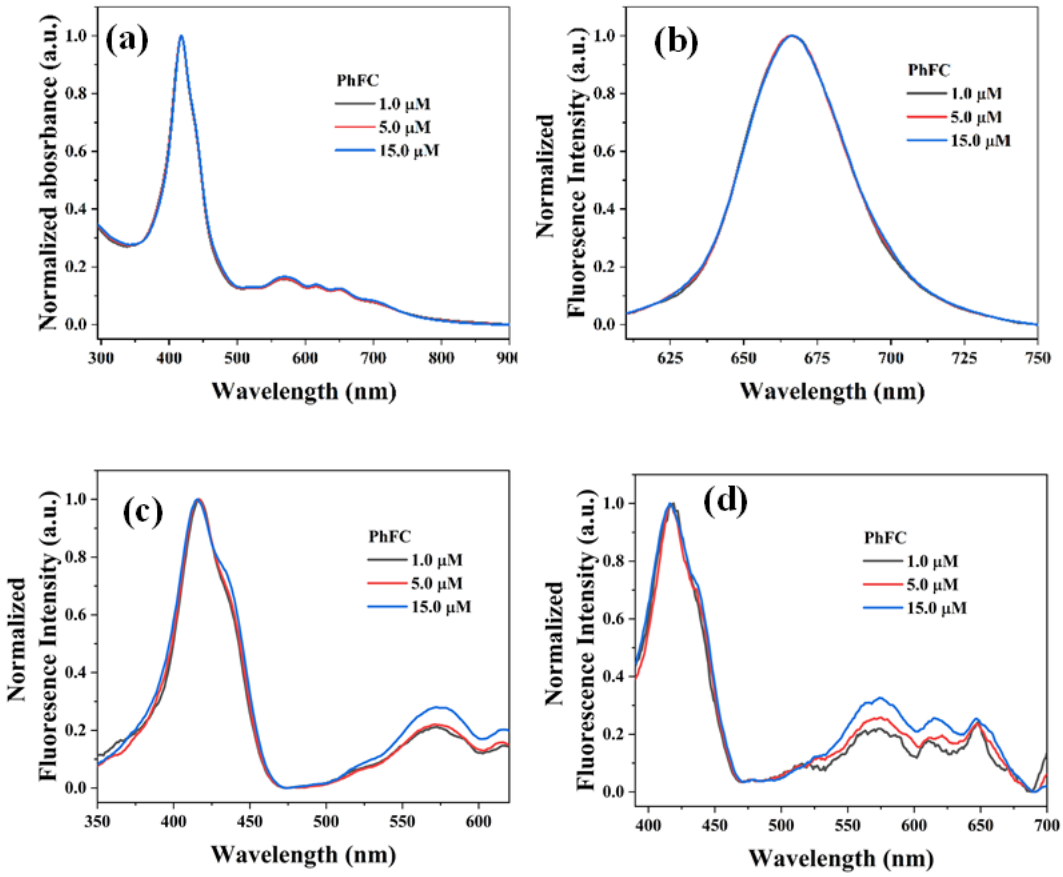

Figure S7. (a) Absorption spectra of the PhFC dyad in DCM at different concentrations. Steady-state emission spectra of the PhFC dyad in DX at (b) 420 nm excitation wavelength. Excitation spectra of the PhFC dyad in DX at (c) 650 nm and (d) 715 nm emission wavelength.

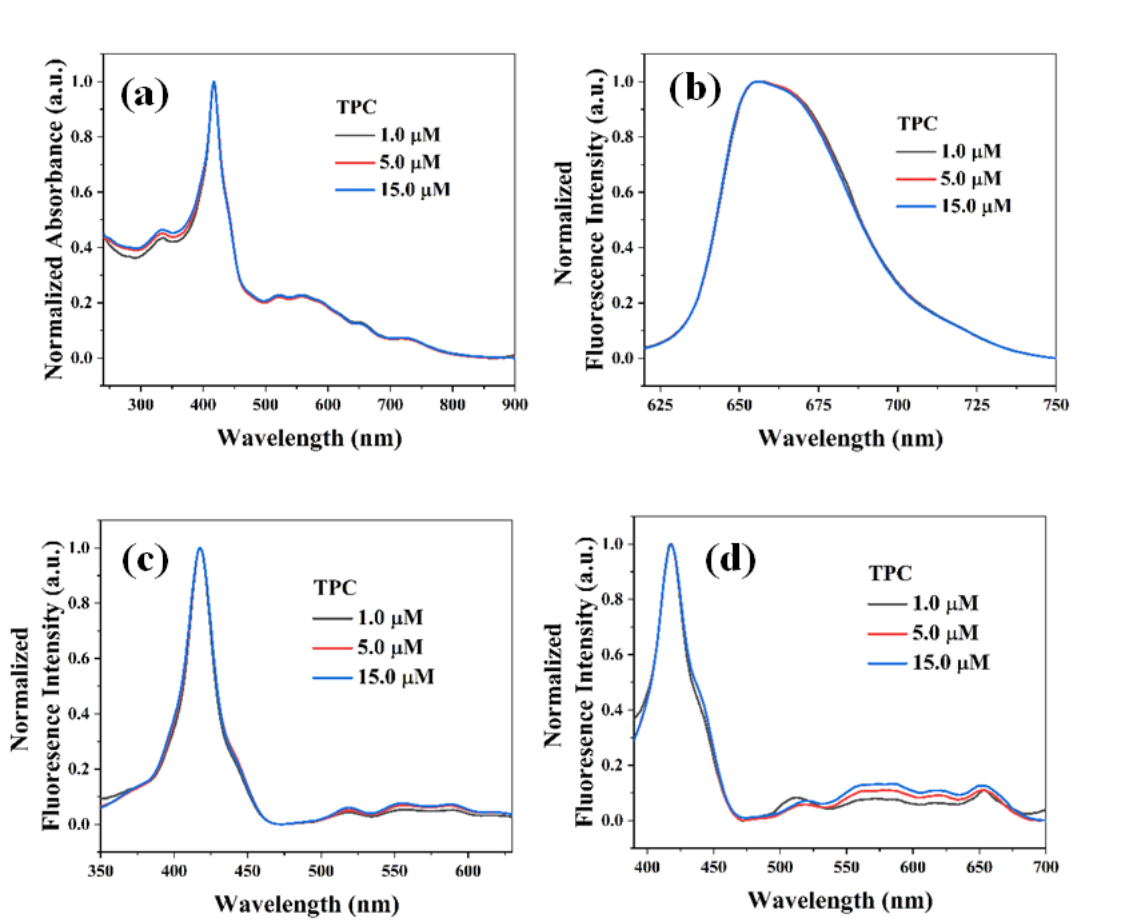

Figure S8. (a) Absorption spectra of the TPC in DX at different concentrations. Steady-state emission spectra of the TPC in DX at (b) 420 nm excitation wavelength. Excitation spectra of the TPC in DX at (c) 650 nm and (d) 715 nm emission wavelength.

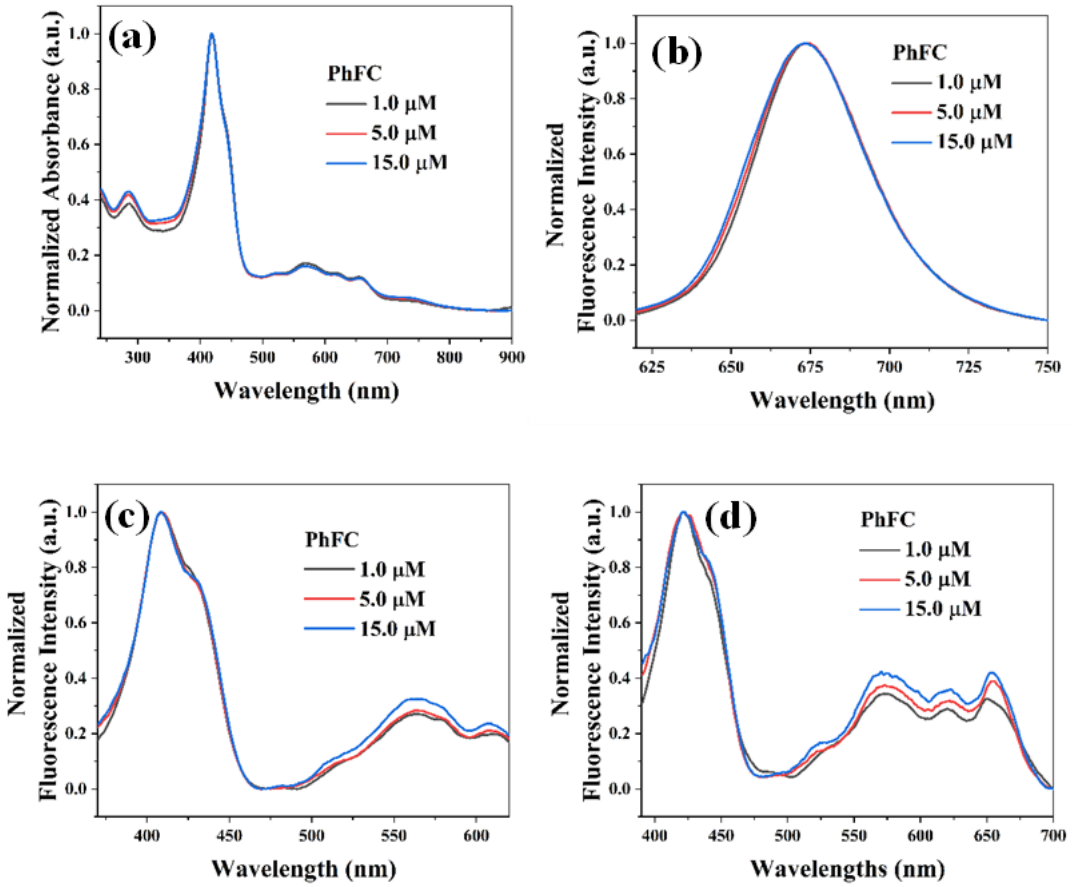

Figure S9. (a) Absorption spectra of the PhFC dyad in DX at different concentrations. Steady-state emission spectra of the PhFC dyad in DX at (b) 420 nm excitation wavelength. Excitation spectra of the PhFC dyad in DX at (c) 650 nm and (d) 715 nm emission wavelength.

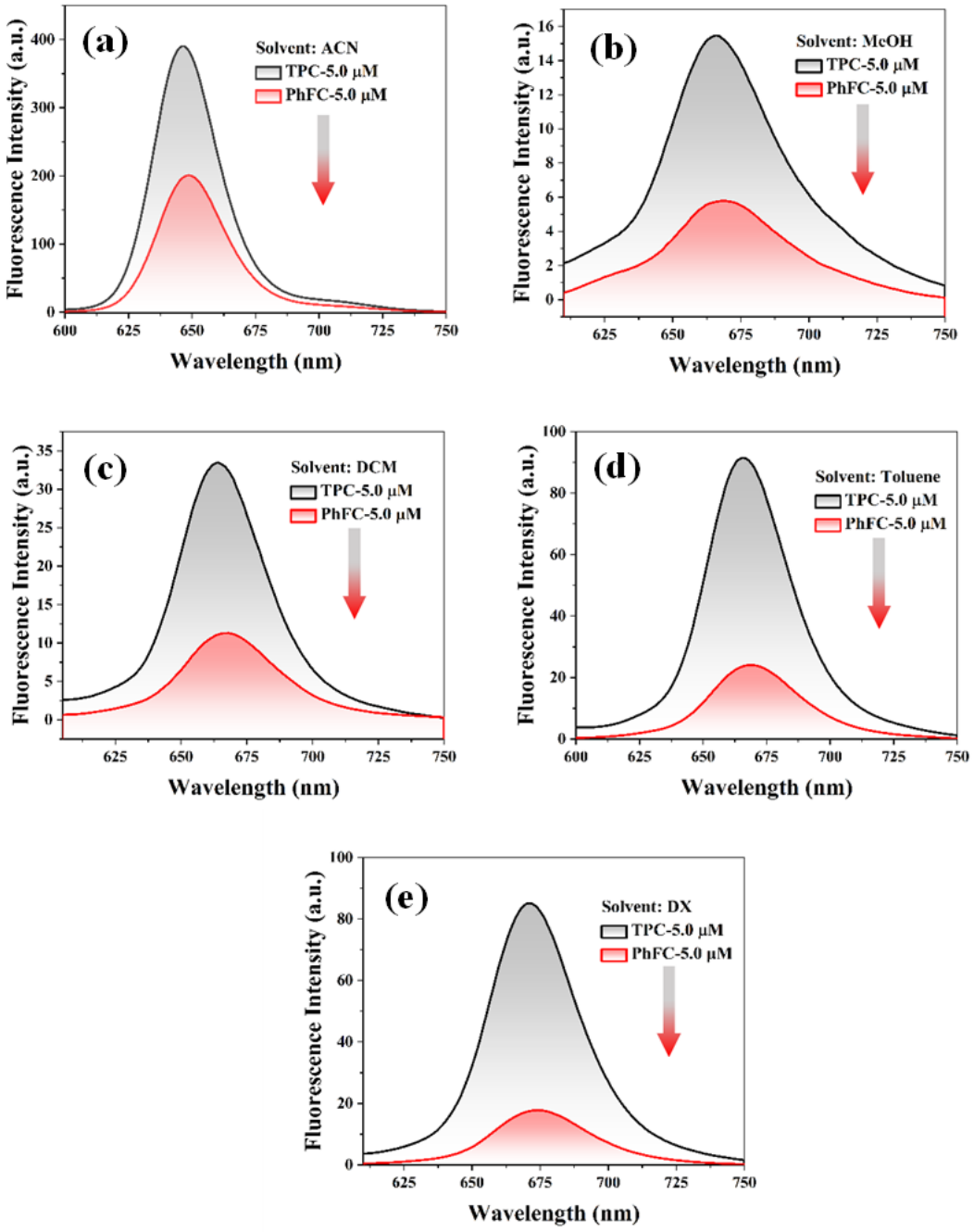

Figure S10. Steady-state emission spectra of the TPC and PhFC dyad in (a) ACN, (b) MeOH, (c) DCM, (d) Toluene and (e) DX at 445 nm excitation wavelength.

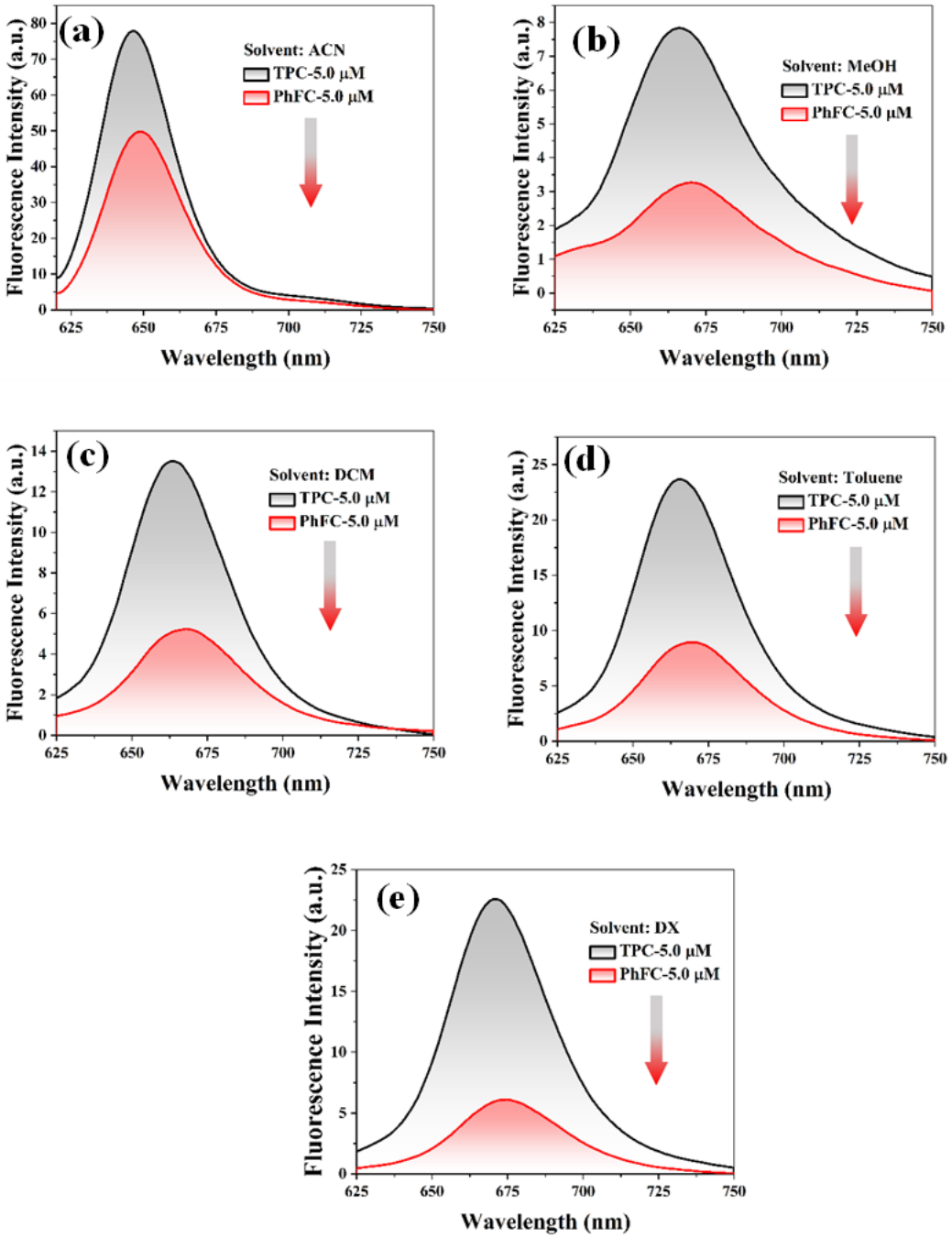

Figure S11. Steady-state emission spectra of the TPC and PhFC dyad in (a) ACN, (b) MeOH, (c) DCM, (d) Toluene and (e) DX at 610 nm excitation wavelength.

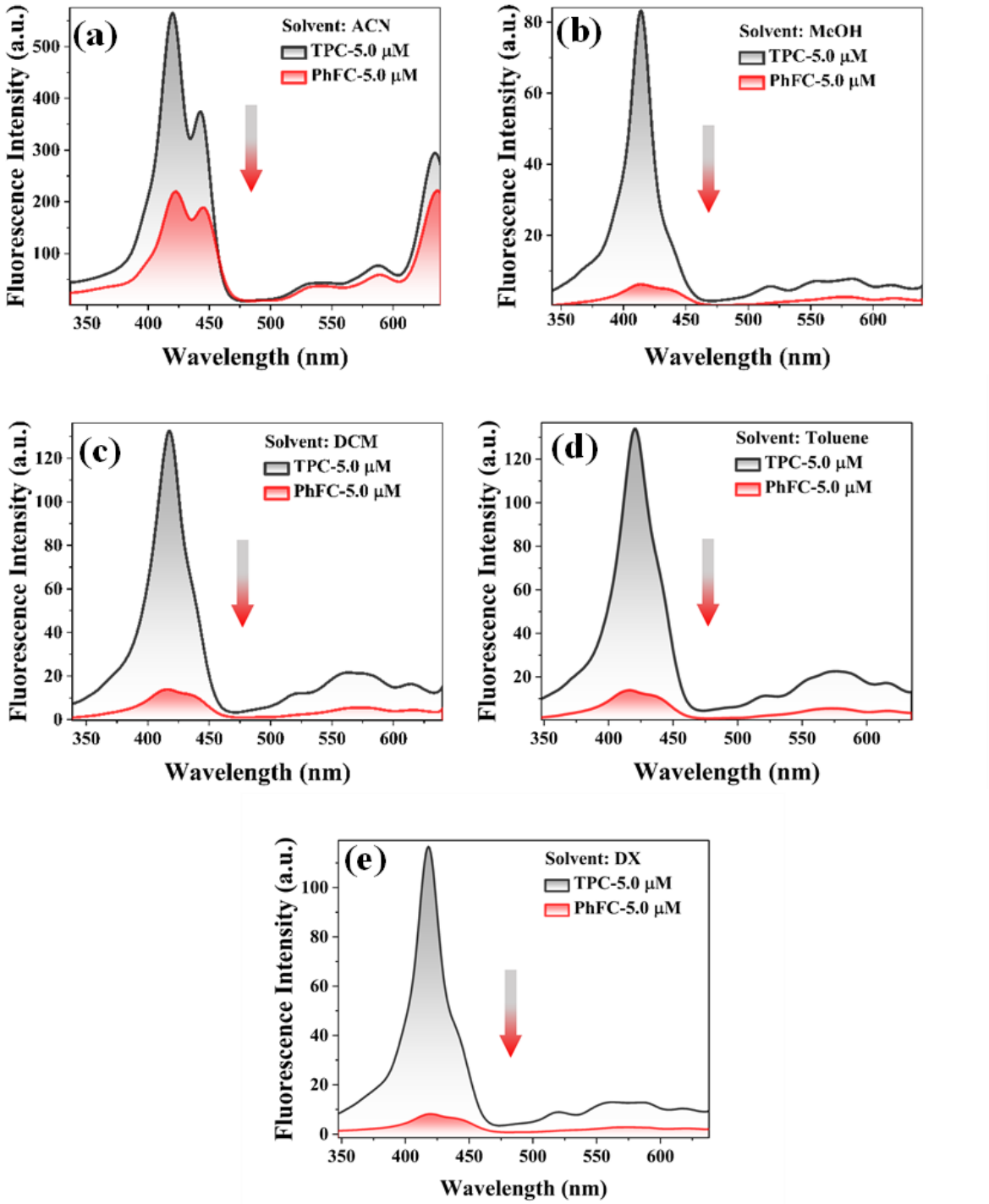

Figure S12. Excitation spectra of the TPC and PhFC dyad in (a) ACN, (b) MeOH, (c) DCM, (d) Toluene and (e) DX at 650 nm emission wavelength.

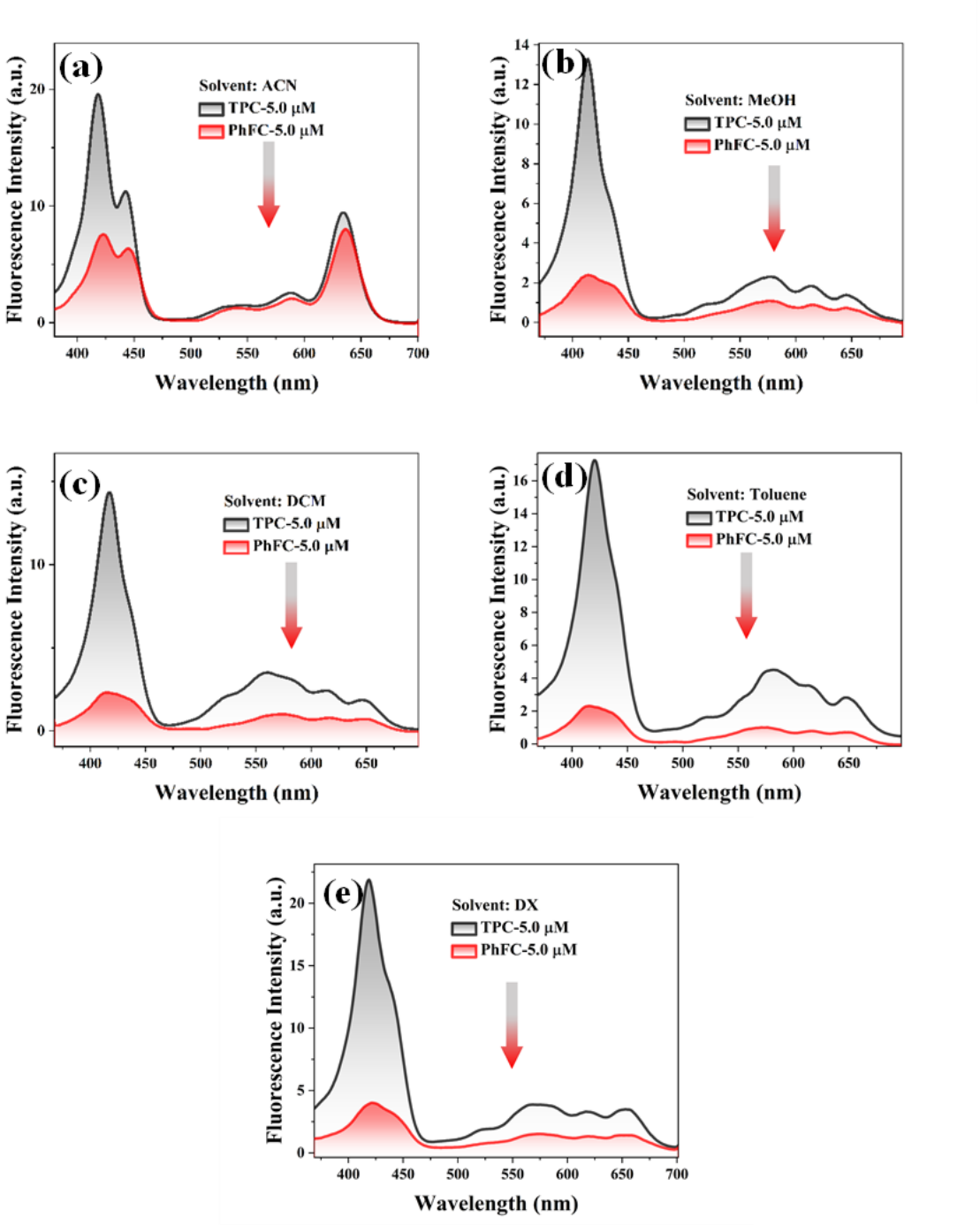

Figure S13. Excitation spectra of the TPC and PhFC dyad in (a) ACN, (b) MeOH, (c) DCM, (d) Toluene and (e) DX at 715 nm emission wavelength.

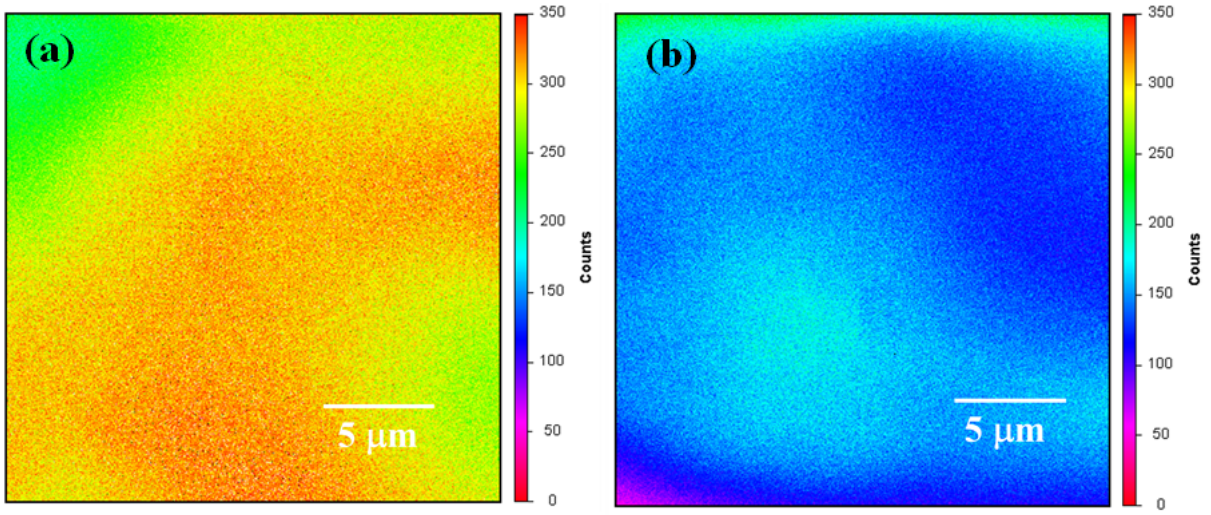

Figure S14. Confocal laser scanning microscopy (CLSM) images of both the (a) TPC and (b) PhFC dyad at 405 nm excitation and 679/41 nm emission.

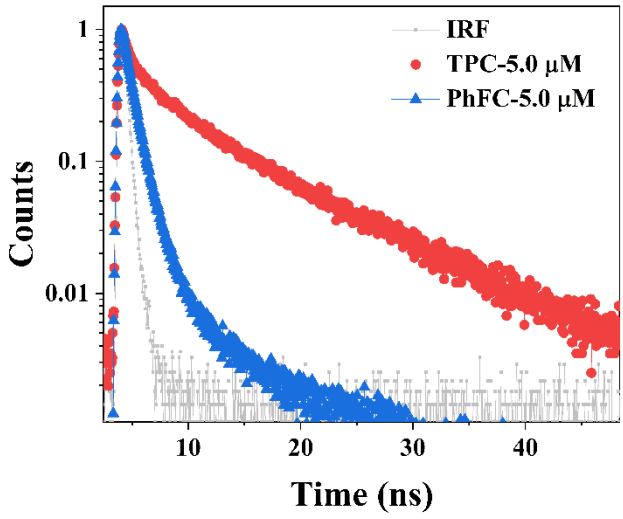

Figure S15: Single-pixel fluorescence decay of both the TPC and the PhFC dyad at 405 nm excitation and 679/41 nm emission.

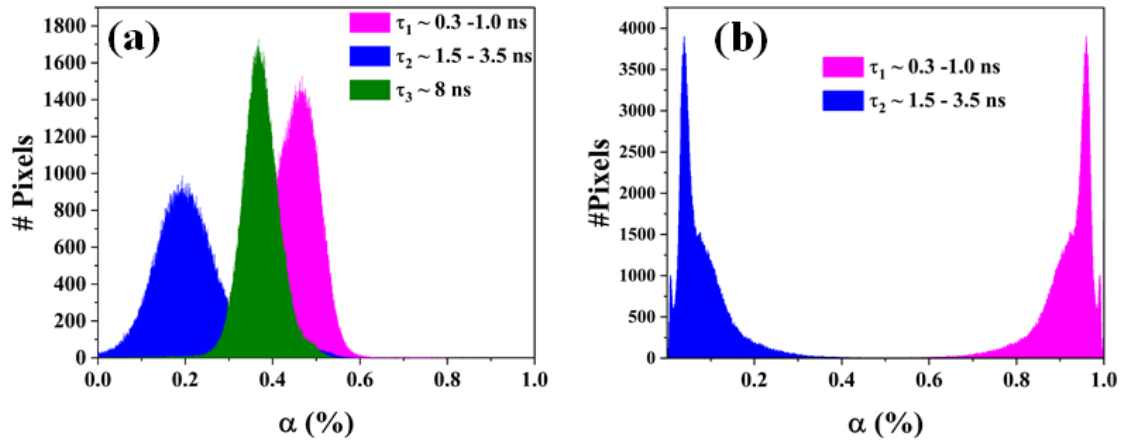

Figure S16. Amplitude percentage (α) of individual lifetime components (a) TPC and (b) PhFC dyad from FLIM images.

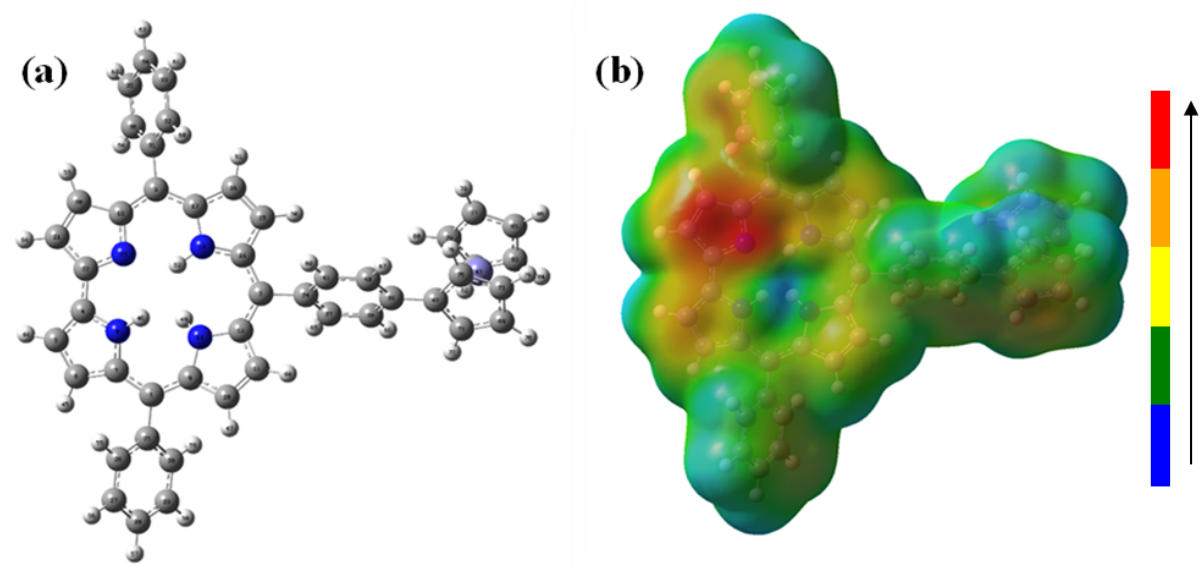

Figure S17. Gaussian optimized structure (a) and ESP map (b) of PhFC dyad.

Table S1. UV-Vis absorption data of the investigated compounds in different organic solvents

Solvents	**TPC; λ_{max} (nm), (log ε, M^{-1} cm^{-1})**	**PhFC; λ_{max} (nm), (log ε, M^{-1} cm^{-1})**
ACN	418 (4.80), 441 (4.58),527 (4.04), 586 (4.01), 635 (4.21)	421 (5.07), 445 (4.86), 536 (3.95), 588 (4.03), 637 (4.47)
MeOH	412 (4.83), 518 (4.09), 573(4.13), 612 (4.04), 644 (3.96)	413 (4.96), 520 (3.95), 576 (4.20), 615 (4.10), 647 (3.92)
DCM	417 (4.81), 524 (4.06), 561 (4.09),609 (4.02), 647 (3.95)	416 (5.00), 523 (4.95), 571 (4.19), 616 (4.08), 648 (3.99)
Toluene	419 (4.77), 522 (4.01), 559 (4.09), 614 (3.97), 648 (3.91)	421 (4.95), 526 (3.97), 567 (4.13), 617 (4.02), 650 (3.98)
DX	417 (4.78), 521 (4.04), 562 (4.07), 615 (3.98), 652 (3.92)	419 (4.88), 528 (3.93), 570 (4.08), 618 (3.99), 656 (3.96)

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