Induced Circularly Polarized Luminescence for Revealing DNA Binding with Fluorescent Dyes

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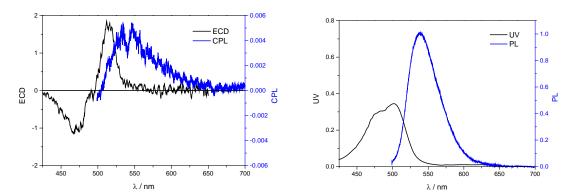
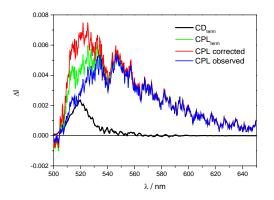


Fig. S1 ECD and CPL (left) and absorption and fluorescence (right) spectra of DNA/TO = 1:1 system ($C_{TO} = 1.0 \times 10^{-5}$ M) in 0.1 M NaCl and 0.01 M NaCac buffer (pH 7.0). ECD and absorption spectra were divided into 2 in order to report obtained results with CPL/PL spectra which were recorded in the 1 cm path length cell.



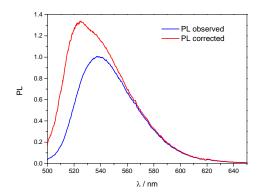
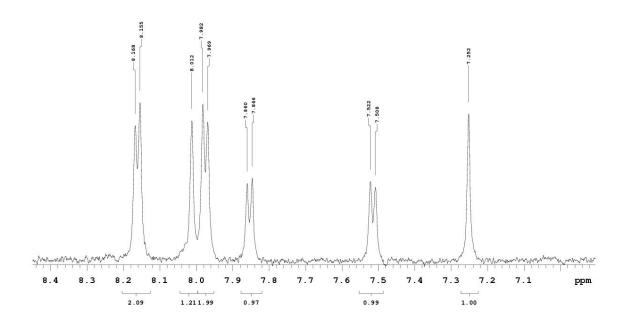


Fig. S2 Left: CD_{term} and CPL_{term} reported together with the corrected and observed CPL spectra (see main text or Ref. 1 or 2); Right: the observed and corrected PL spectra for DNA/TO = 1:1 system ($C_{TO} = 1.0 \times 10^{-5}$ M) in 0.1 M NaCl and 0.01 M NaCac buffer (pH 7.0).



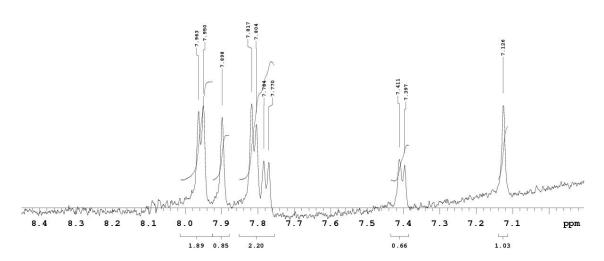


Fig. S3 Portion of the 1 H-NMR aromatic resonances of DAPI: top in CD₃OD; bottom in D₂O, displaying the expected sharp resonances of the dye.

References

- [1] E. Castiglioni, S. Abbate, F. Lebon, G. Longhi, Ultraviolet, Circular Dichroism, Fluorescence, and Circularly Polarized Luminescence Spectra of Regioregular Poly-[3-((S)-2-Methylbutyl)-Thiophene] in Solution, Chirality 24(9) (2012) 725-730.
- [2] G. Longhi, E. Castiglioni, J. Koshoubu, G. Mazzeo, S. Abbate, Circularly Polarized Luminescence: A Review of Experimental and Theoretical Aspects, Chirality 28(10) (2016) 696-707.