Chiral binaphthyl-linked BODIPY analogues: synthesis and spectroscopic properties

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I. Materials and instrumentations

All reagents were obtained from commercial suppliers and used without further purification unless otherwise indicated. All air and moisture-sensitive reactions were carried out under nitrogen atmosphere in oven-dried glassware. Glassware was dried in an oven at 120 °C and cooled under a stream of inert gas before use. Both dichloromethane and triethylamine were distilled over calcium hydride. ¹H NMR spectra were recorded on a Bruker DRX400 spectrometer and referenced to the residual proton signals of the solvent. HR-MS were recorded on a Bruker Daltonics microTOF-Q II spectrometer. All the solvents employed for the spectroscopic measurements were of UV spectroscopic grade (Aldrich).

II. Supplementary Figures



Figure S1. Absorption spectra of (*R*)-2 (*R*)-4 in hexane (Top) and CH₂Cl₂ (Bottom).



Figure S2. Theoretical CD spectra of (R)-**2** (top) and (R)-**4** (bottom) calculated using the CAM-B3LYP-TDDFT method. Rotational strengths (R) are given incgs (10⁻⁴⁰ erg esu cm/Gauss).

III. ¹H NMR



S5



LZF-WYP-SNB PROTON CDC13 {D:\20151220} root 46





S7