

Phosphine Sulfide Based Bipolar Host Materials for Blue Phosphorescent Organic Light-Emitting Diodes

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1. NMR Spectra

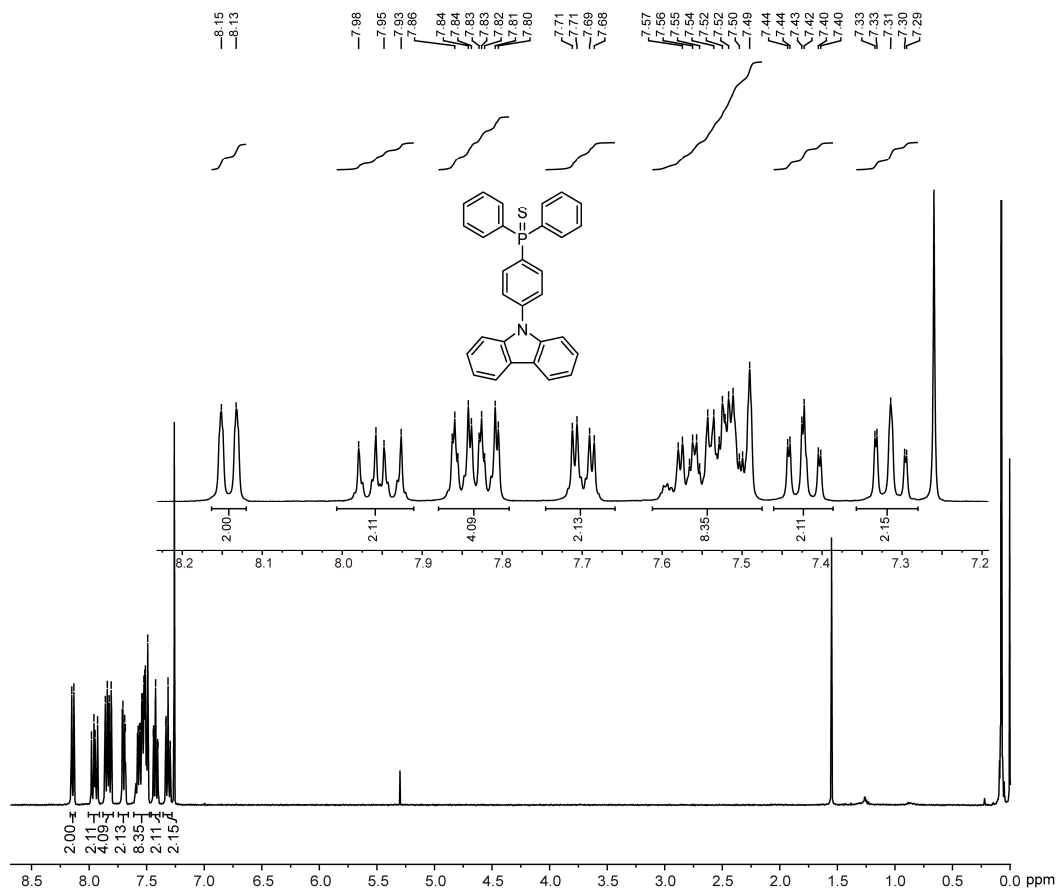


Figure S1. ^1H NMR spectrum of CzPhPS in CDCl_3 .

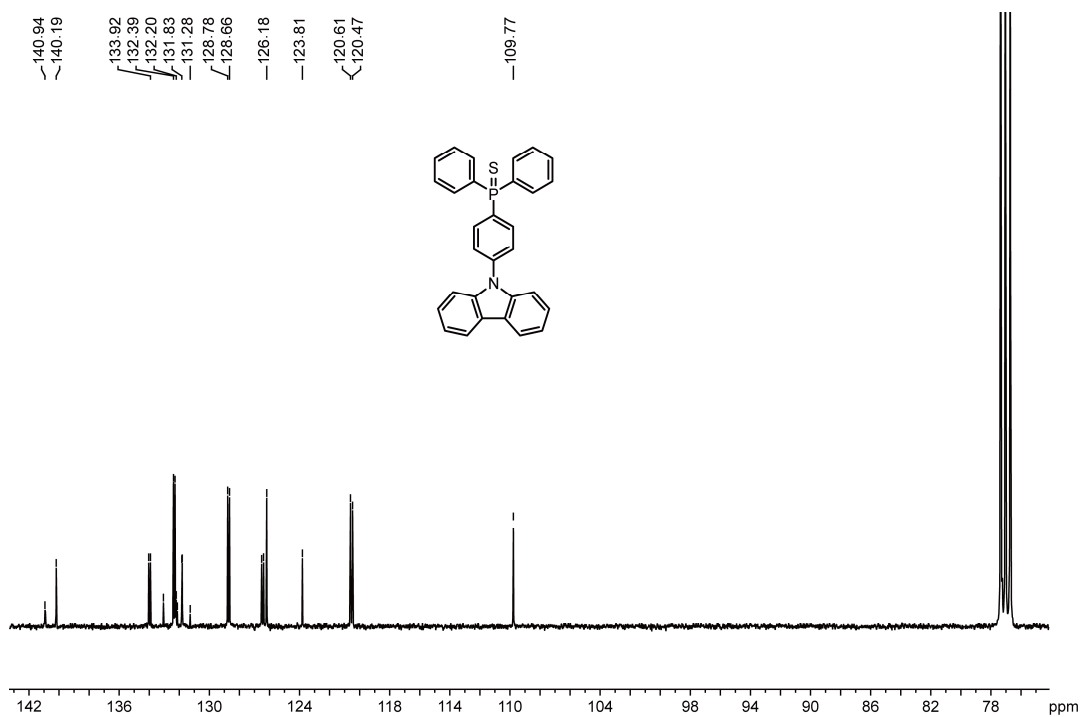


Figure S2. ^{13}C NMR spectrum of CzPhPS in CDCl_3 .

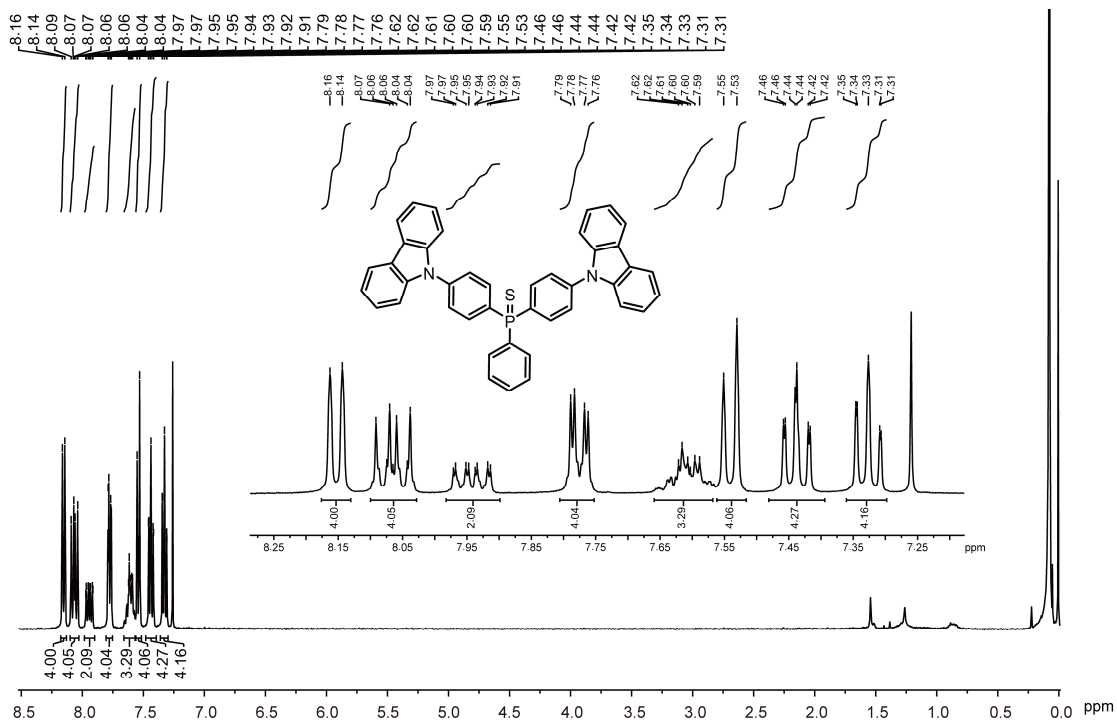


Figure S3. ¹H NMR spectrum of DCzPhPS in CDCl₃.

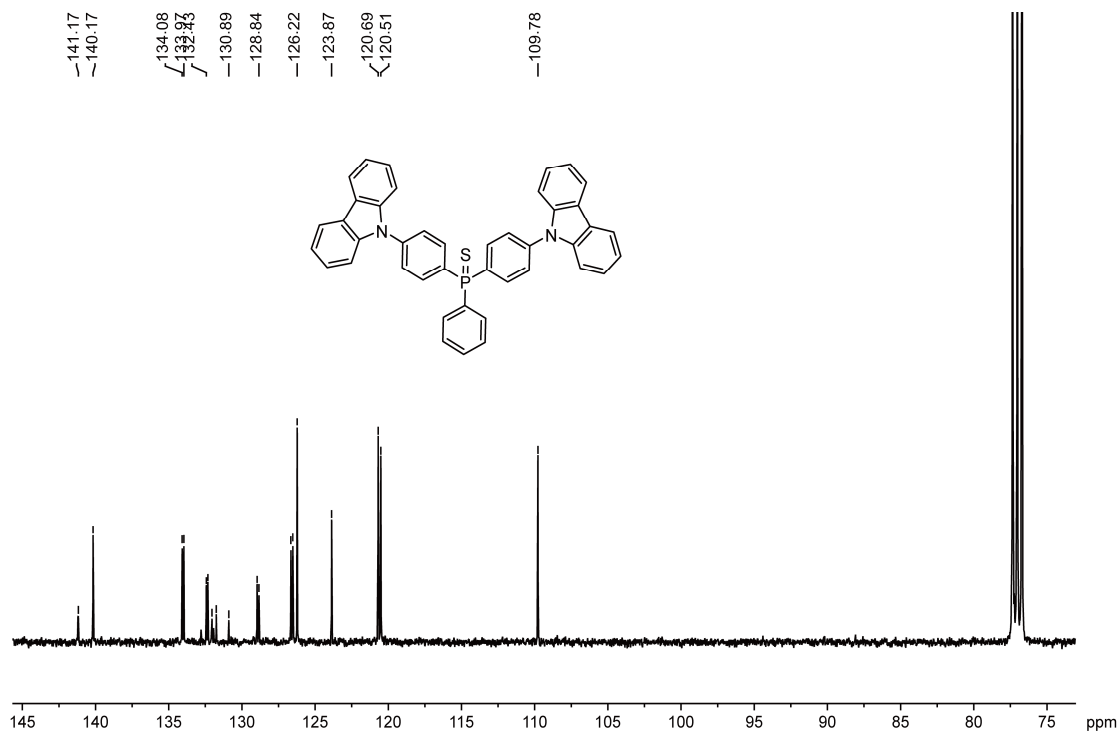


Figure S4. ¹³C NMR spectrum of DCzPhPS in CDCl₃.

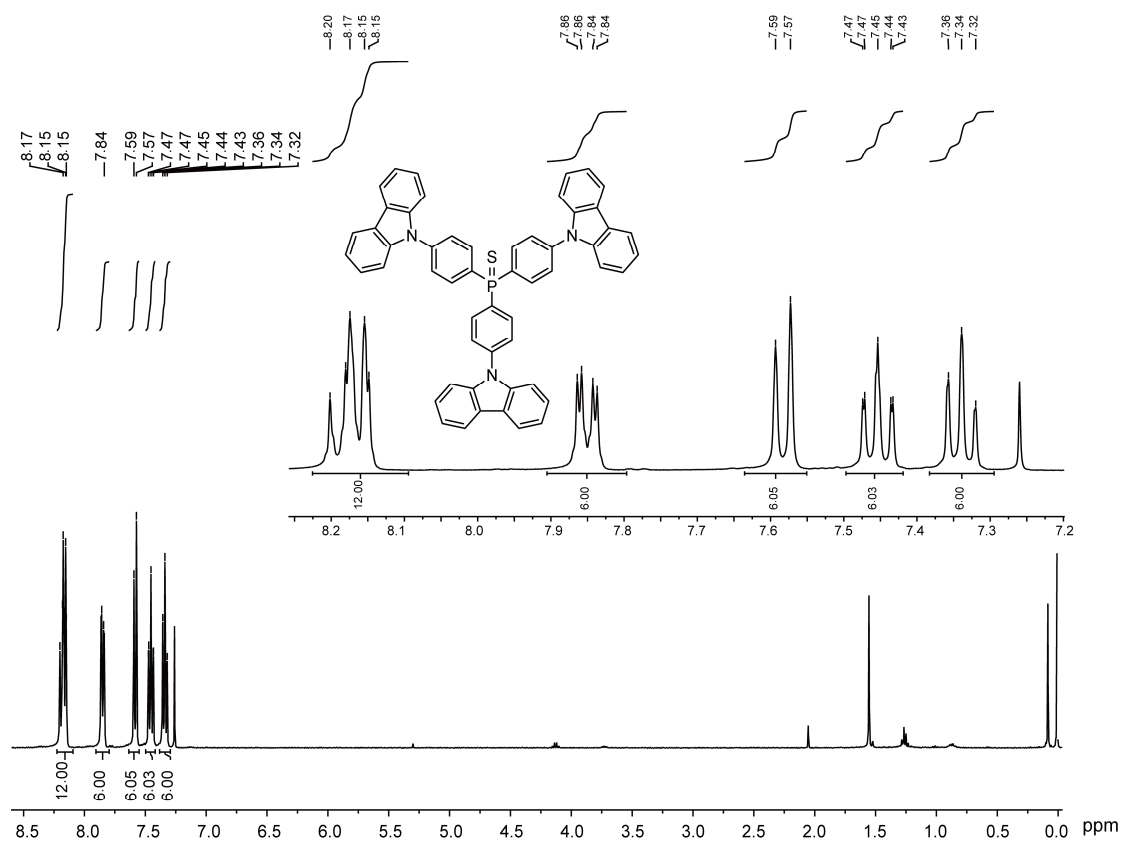


Figure S5. ¹H NMR spectrum of TCzPhPS in CDCl₃.

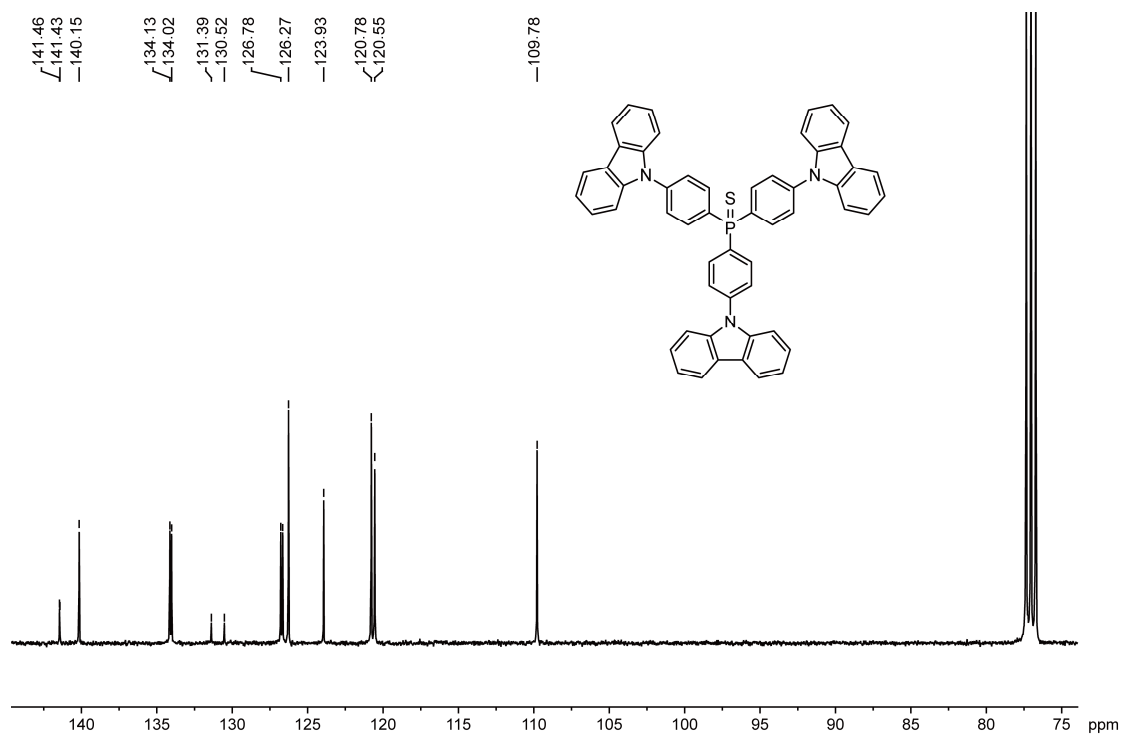


Figure S6. ¹³C NMR spectrum of TCzPhPS in CDCl₃.

2. Mass Spectra

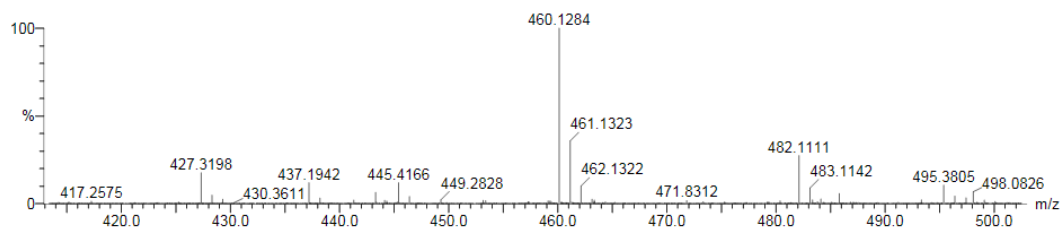


Figure S7. HRMS spectrum of CzPhPS.

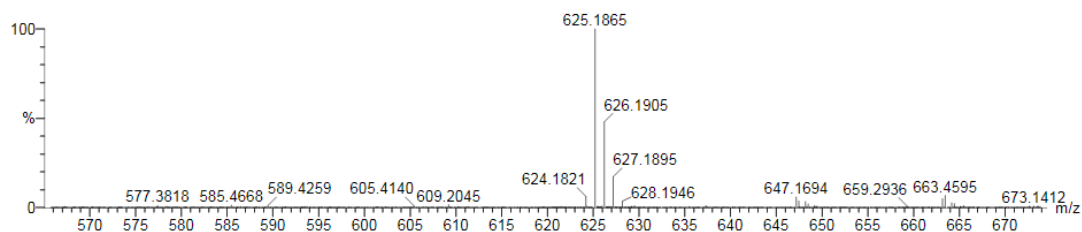


Figure S8. HRMS spectrum of DCzPhPS.

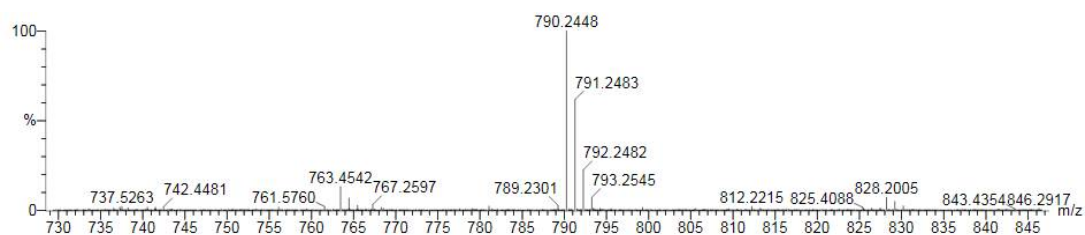


Figure S9. HRMS spectrum of TCzPhPS.

3. Phosphorescence Spectra

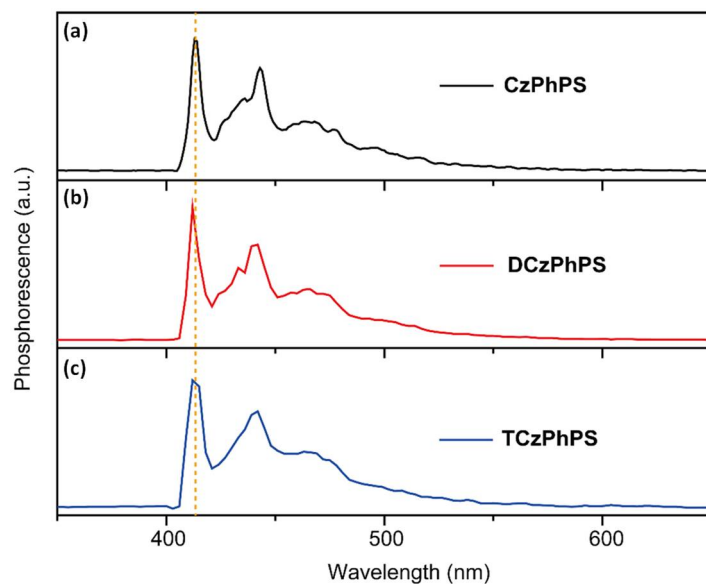


Figure S10. Phosphorescence spectra of (a) CzPhPS, (b) DCzPhPS, and (c) TCzPhPS measured at 77 K in THF with a delay time of 20 ms.

4. Absorption and Photoluminescence Spectra

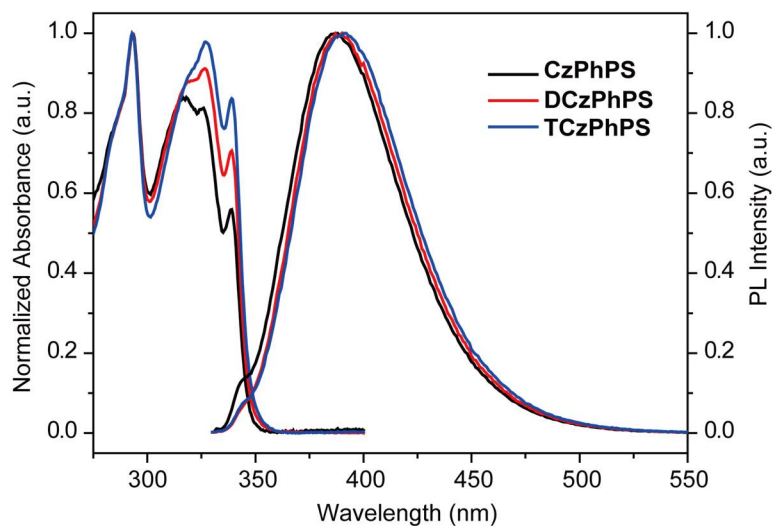


Figure S11. Absorption and PL spectra of **CzPhPS**, **DCzPhPS**, and **TCzPhPS** in dichloromethane solution.