

Supporting Information

A versatile hybrid polyphenylsilane host for highly efficient solution-processed blue and deep blue electrophosphorescence

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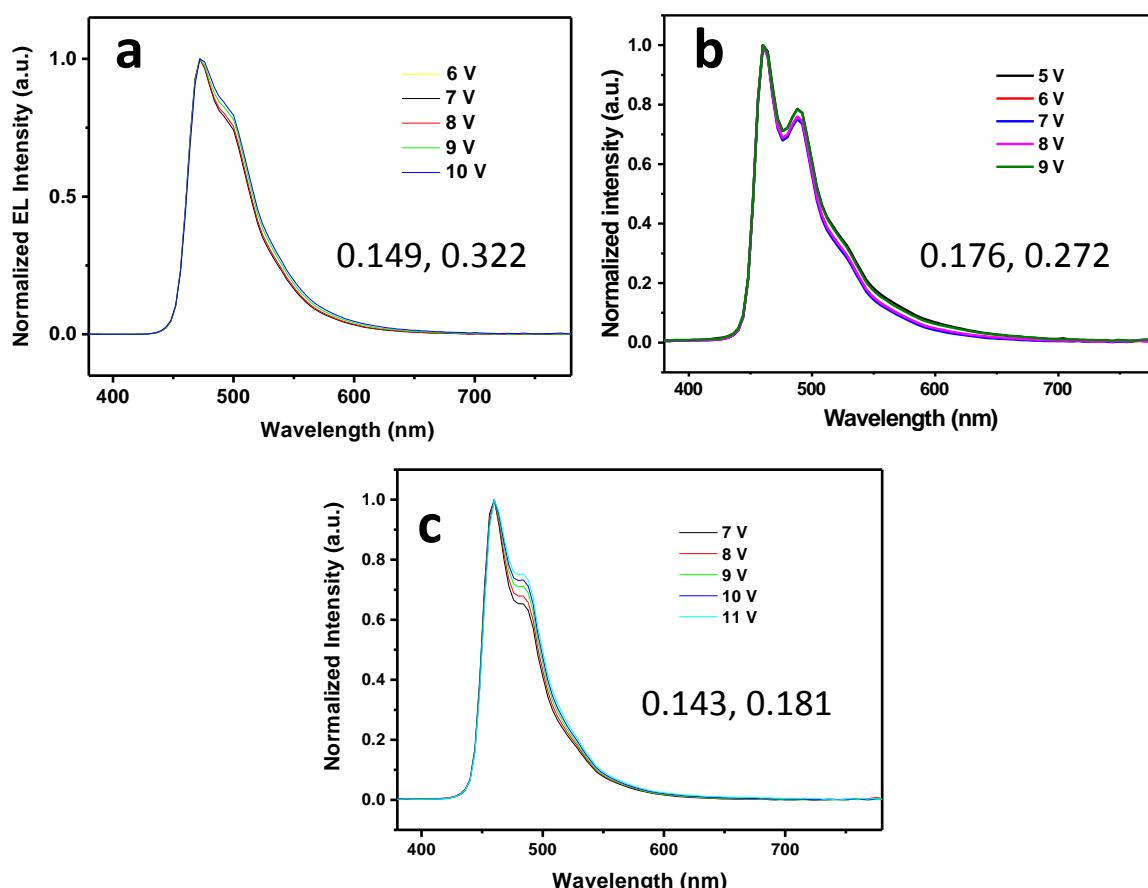


Figure S1. Electroluminescence spectra and Commission International de l'Eclairage (CIE) coordinates for a) device 5, b) device 6 and c) device 7.

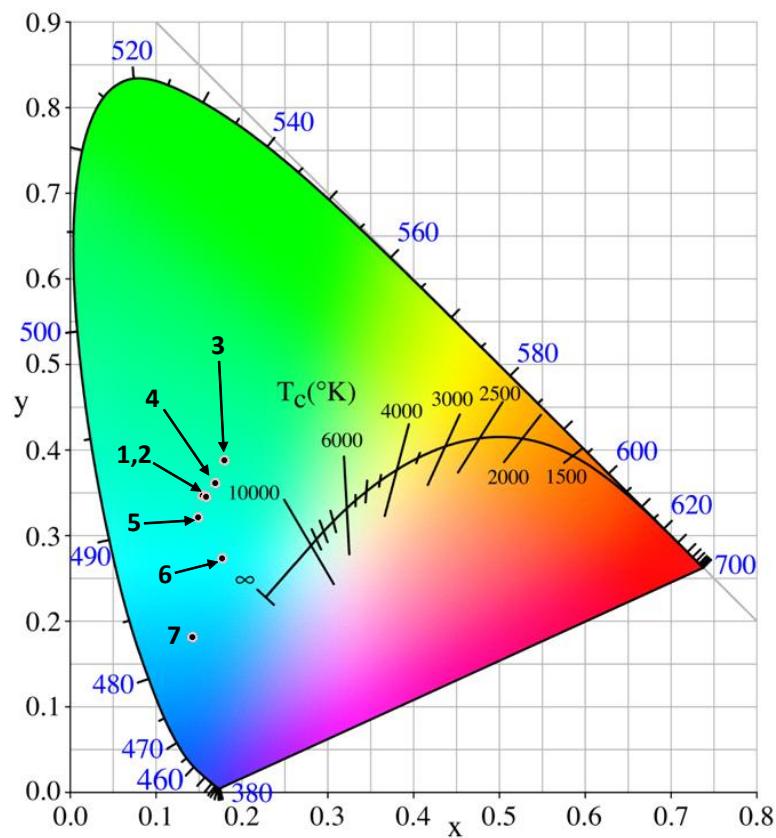


Figure S2. Emitting color in the chromaticity diagram for devices 1-7.

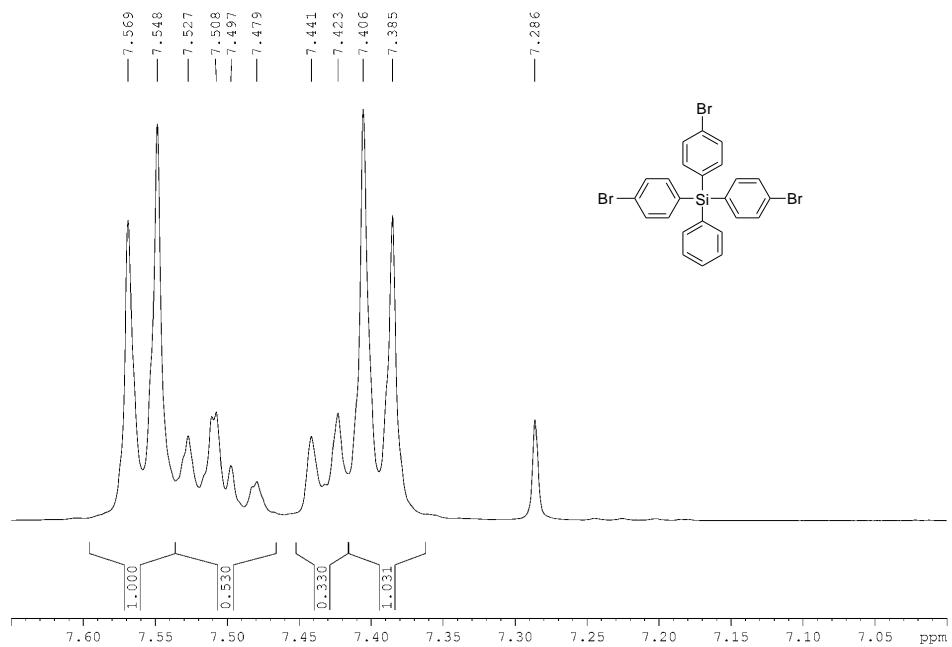


Figure S3. ¹H NMR spectrum of tris(4-bromophenyl)(phenyl)silane in CDCl₃.

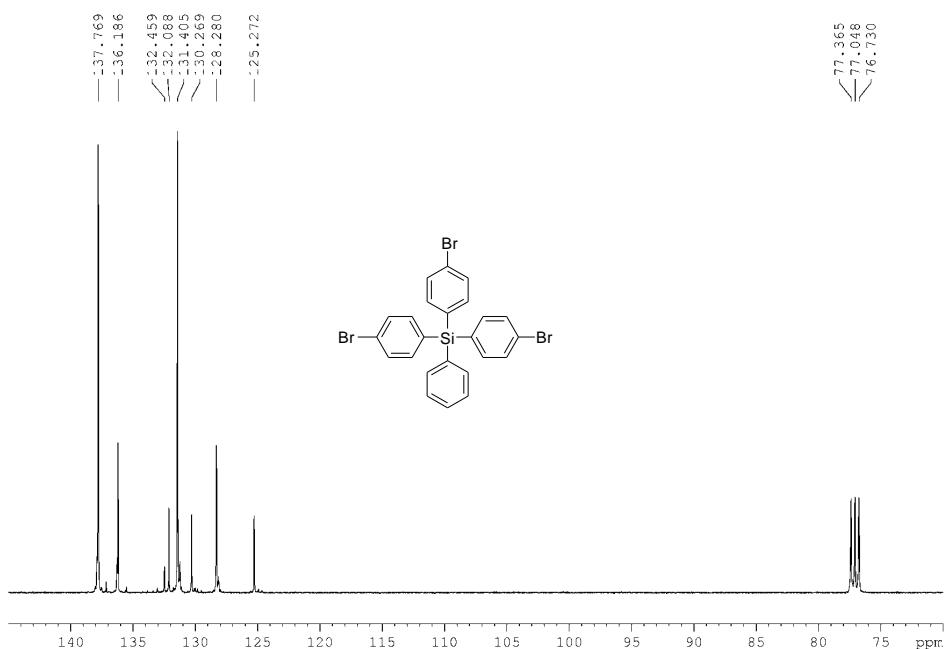


Figure S4. ^{13}C NMR spectrum of tris(4-bromophenyl)(phenyl)silane in CDCl_3 .

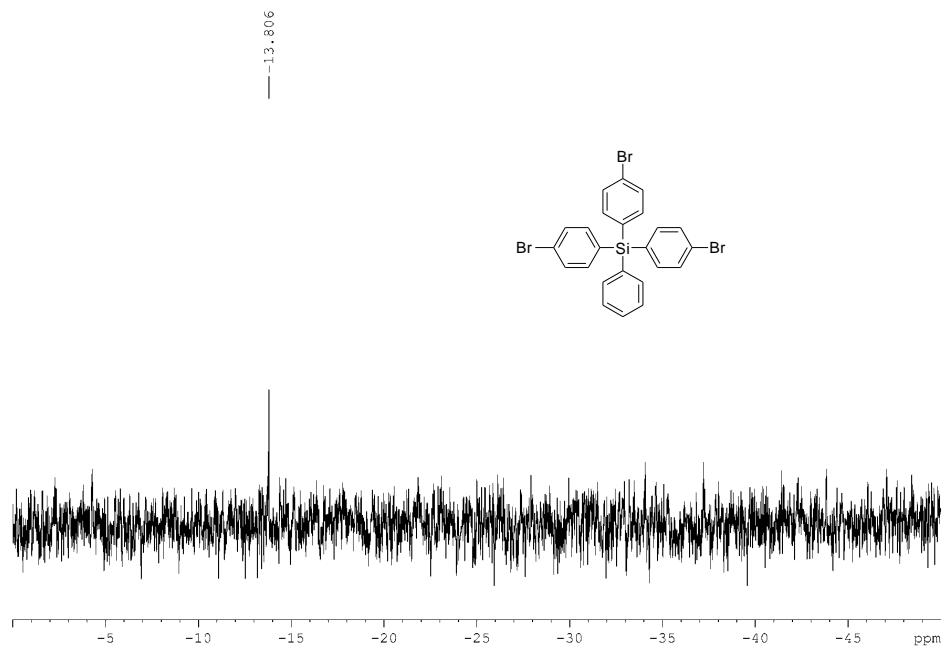


Figure S5. ^{29}Si NMR spectrum of tris(4-bromophenyl)(phenyl)silane in CDCl_3 .

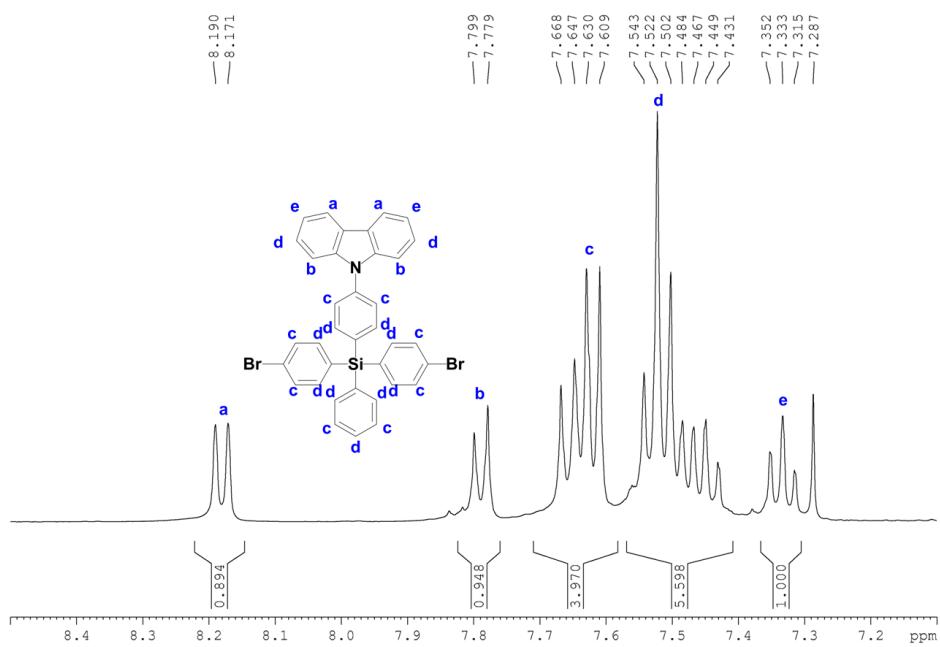


Figure S6. ¹H NMR spectrum of 9-(4-(bis(4-bromophenyl)(phenyl)silyl)phenyl)-9*H*-carbazole in CDCl₃.

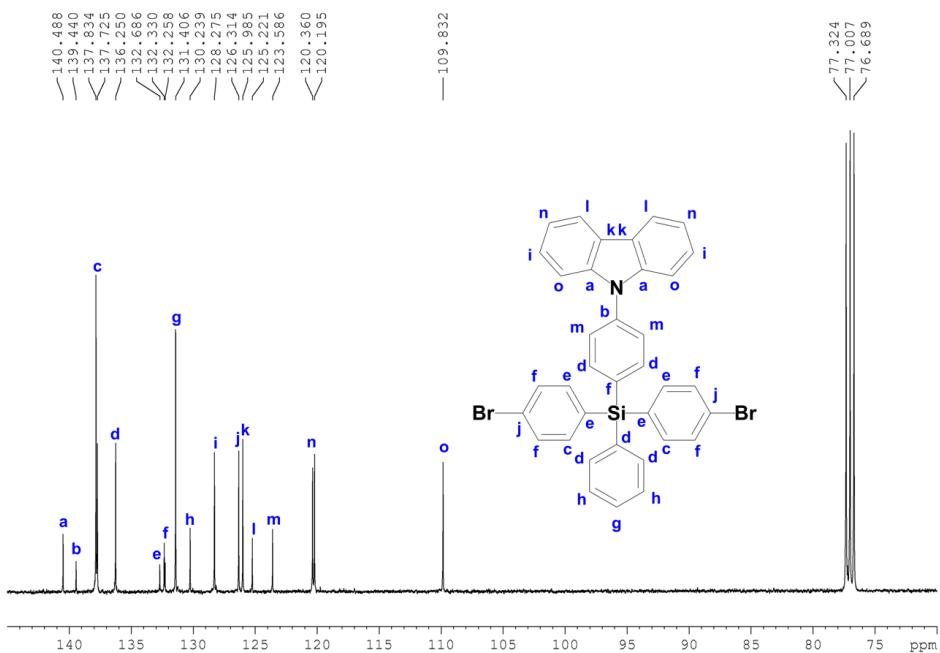


Figure S7. ¹³C NMR spectrum of 9-(4-(bis(4-bromophenyl)(phenyl)silyl)phenyl)-9*H*-carbazole in CDCl₃.

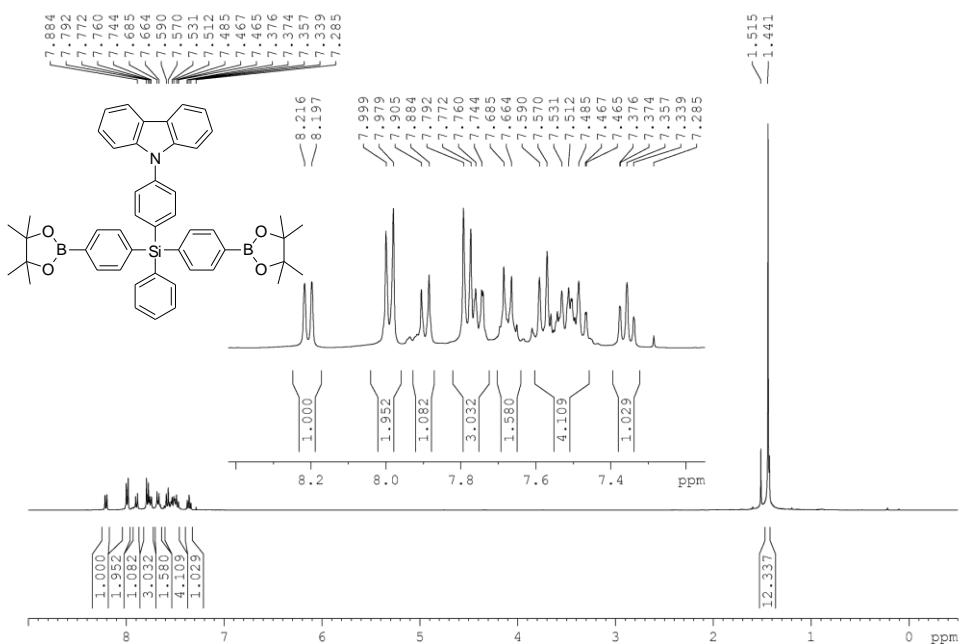


Figure S8. ^1H NMR spectrum of 9-(4-(phenylbis(4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl)silyl)phenyl)-9H-carbazole in CDCl_3 .

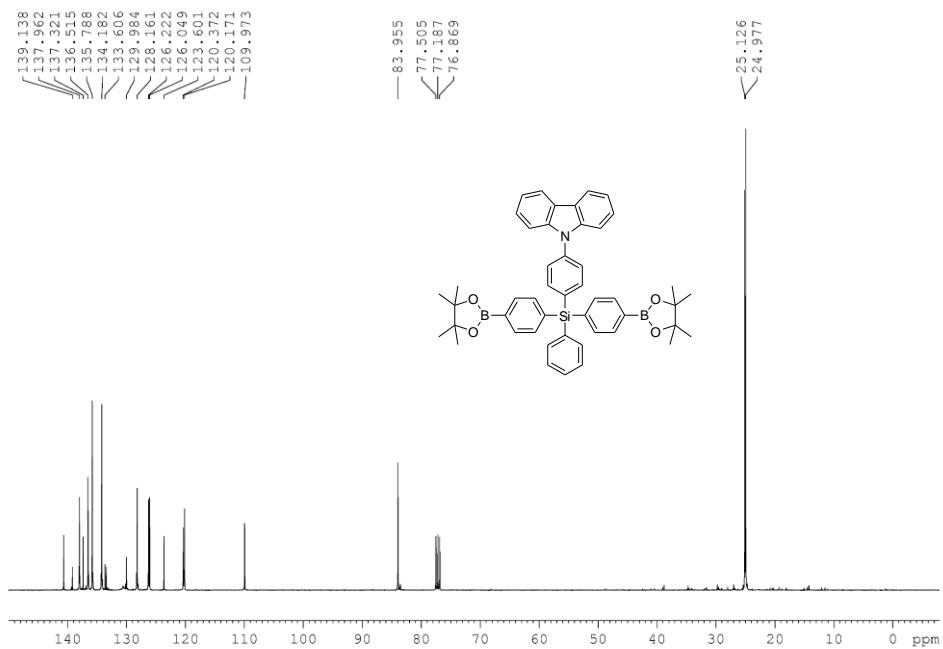


Figure S9. ^{13}C spectrum of 9-(4-(phenylbis(4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl)silyl)phenyl)-9H-carbazole in CDCl_3 .

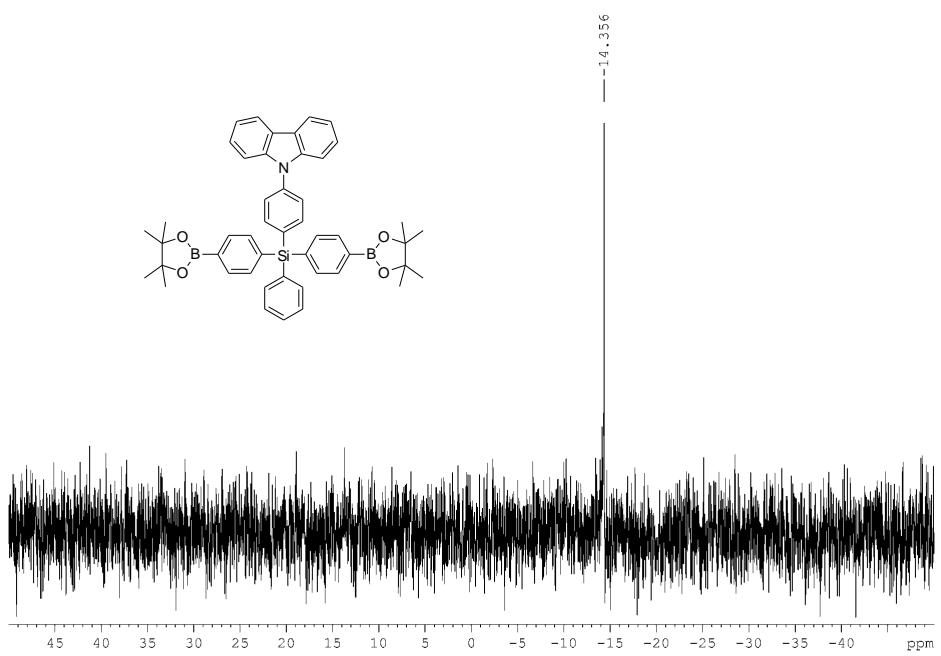


Figure S10. ^{29}Si NMR spectrum of 9-(4-(phenylbis(4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl)silyl)phenyl)-9H-carbazole in CDCl_3 .

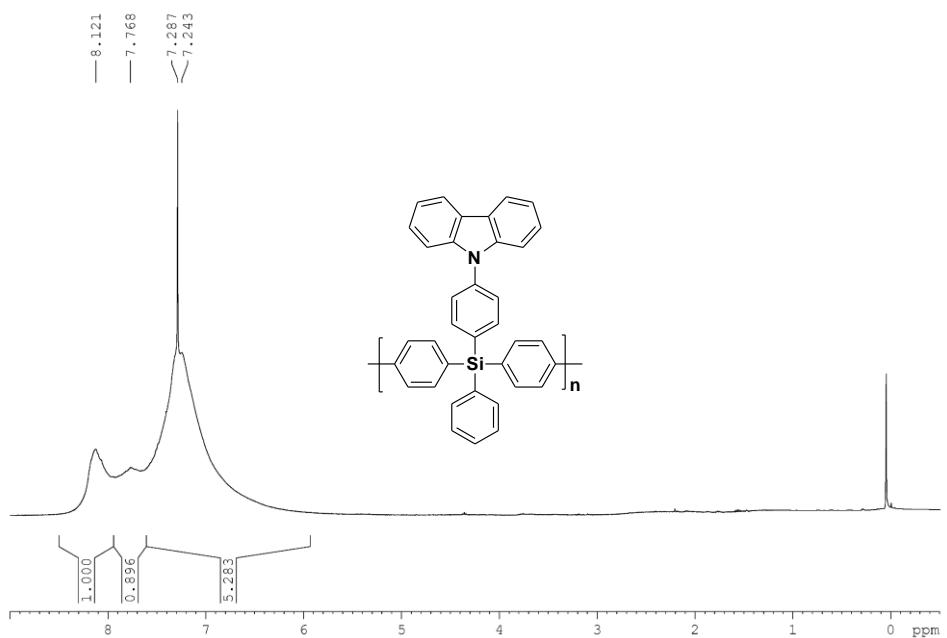


Figure S11. ^1H NMR spectrum of PCzSiPh in CDCl_3 .

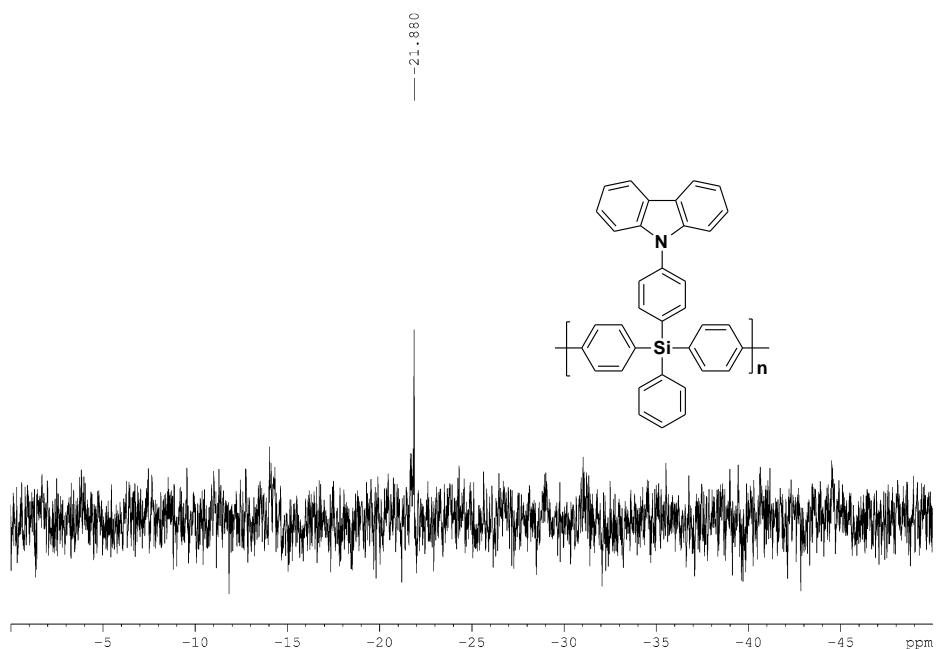


Figure S12. ^{29}Si NMR spectrum of PCzSiPh in CDCl_3 .

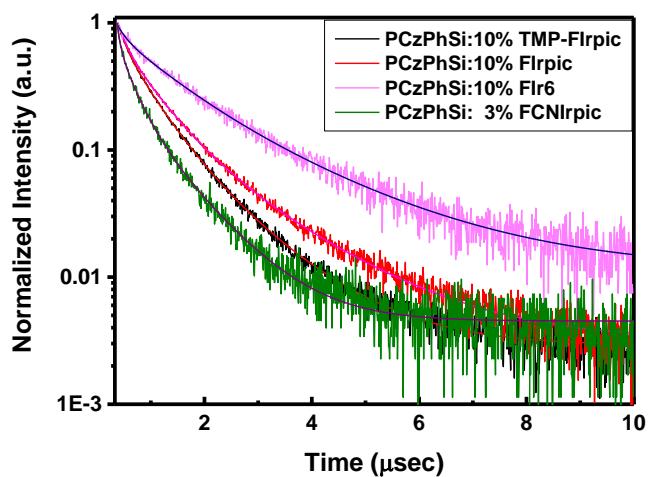


Figure S13. Transient photoluminescence decays of PCzPhSi:10 wt% TMP-FIrpic, PCzPhSi:10 wt% FIrpic, PCzPhSi:10 wt% FIr6, and PCzPhSi:3 wt% FCNlIrpic films excited at 340 nm. The solid lines are fits to the transients.