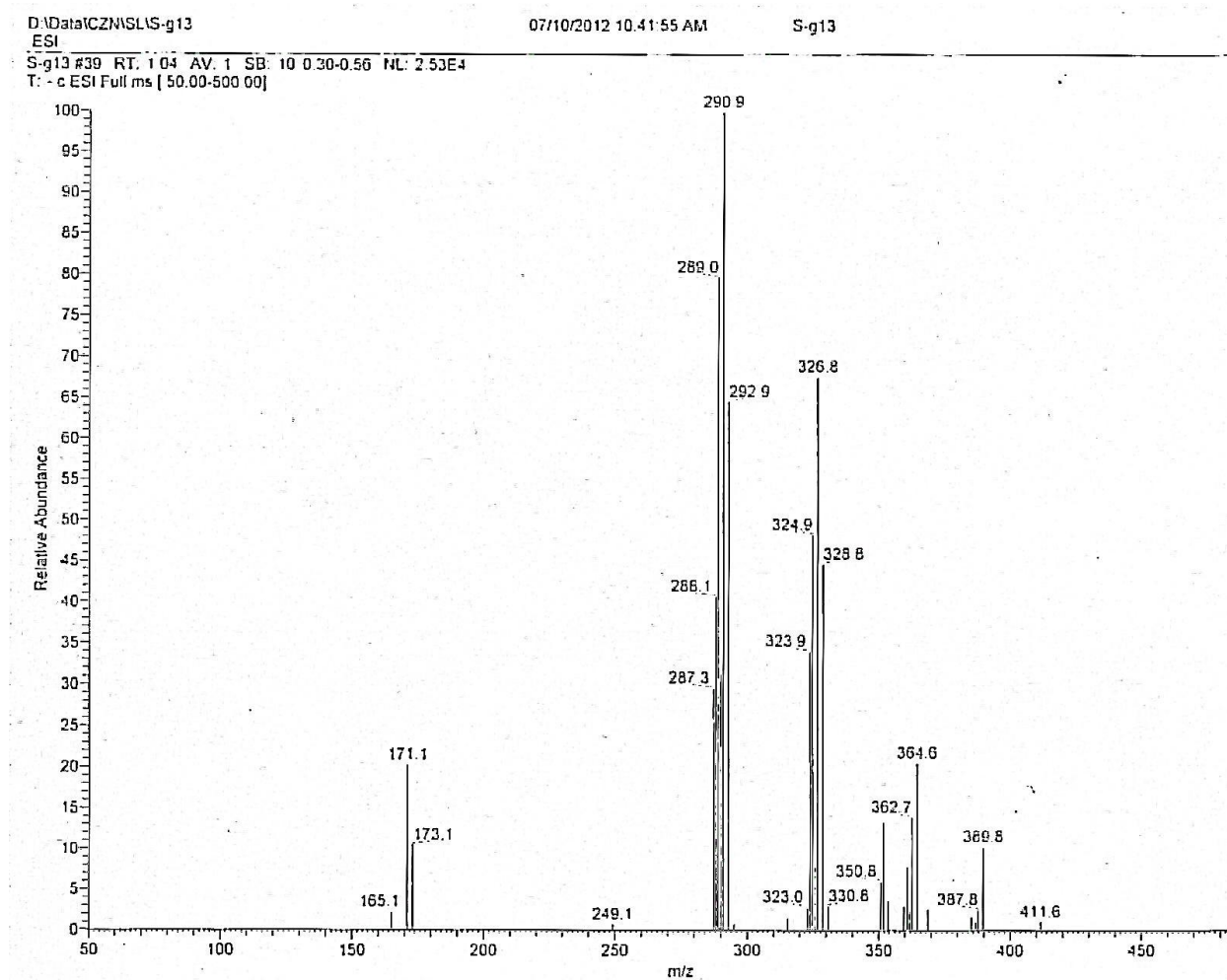


Supplementary Materials

1. Characterization of Palladium(II) Complex 2

Figure S1. ES-MS spectrum of Palladium(II) Complex 2.



2. Characterization of the Products

Figure S2. Copy of ^1H -NMR for 4,4'-dimethylbiphenyl.

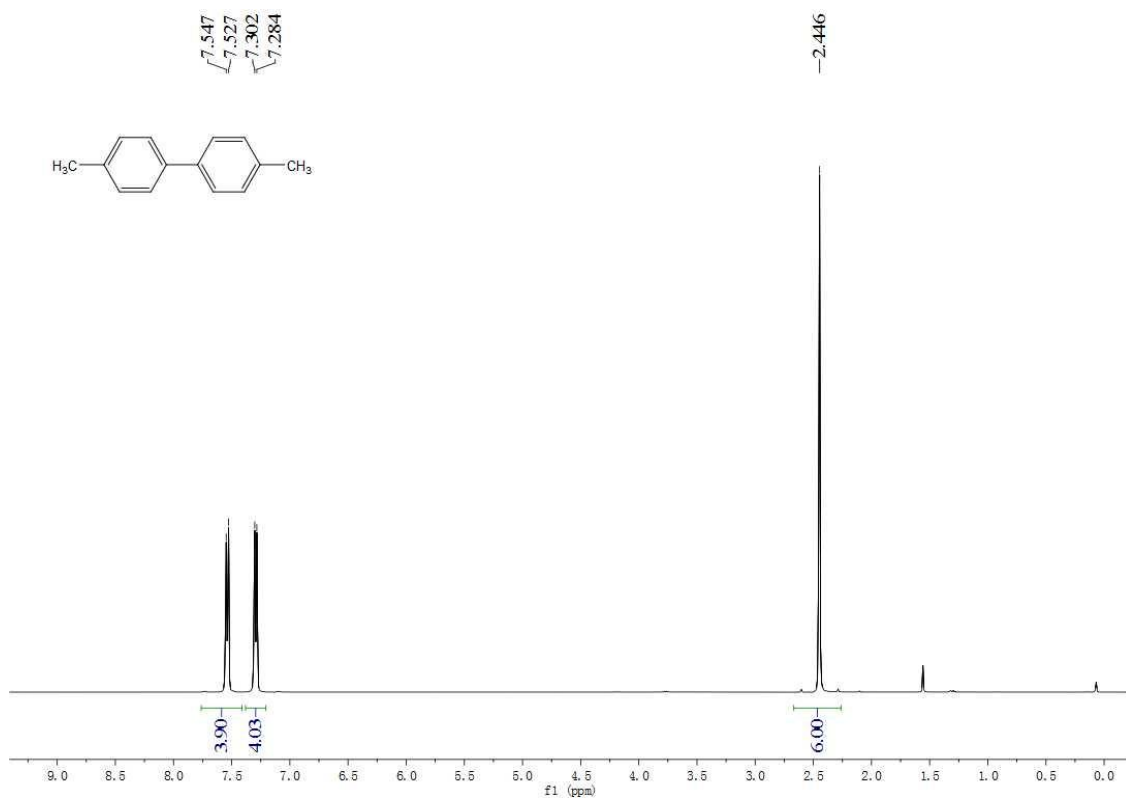


Figure S3. Copy of ^{13}C -NMR for 4,4'-dimethylbiphenyl.

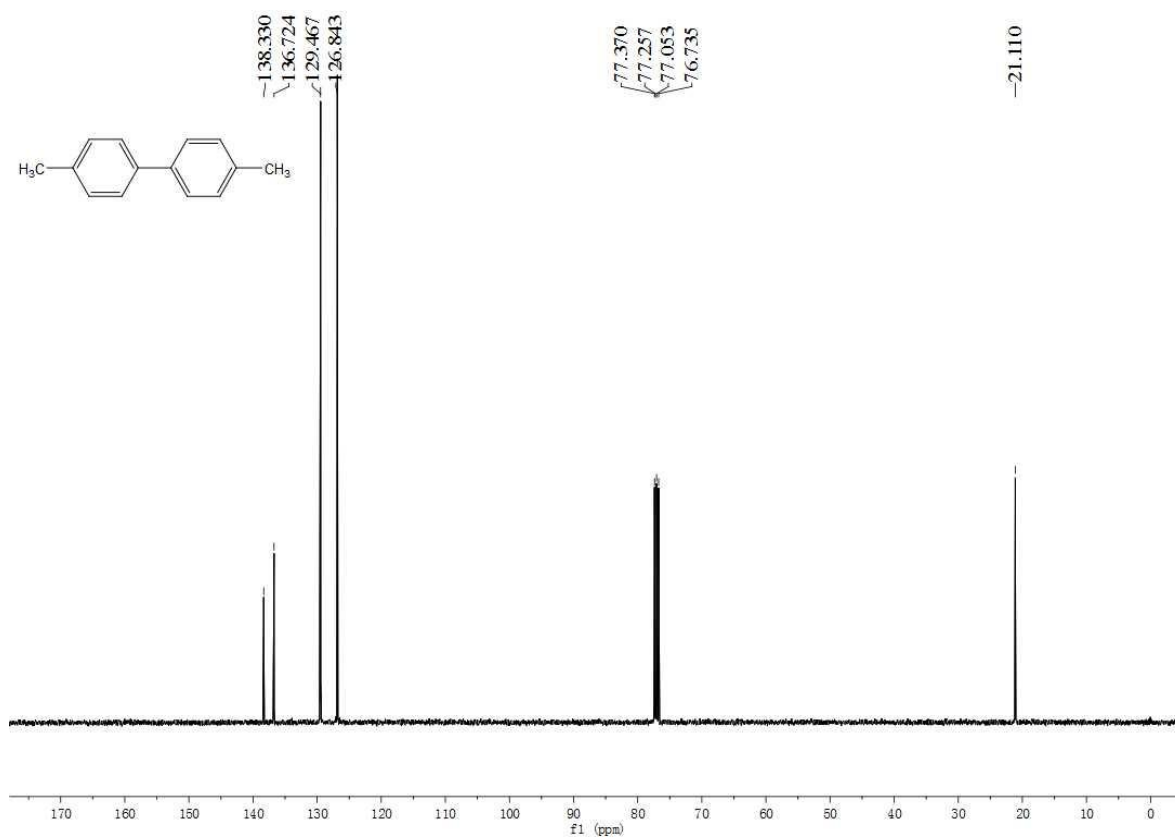


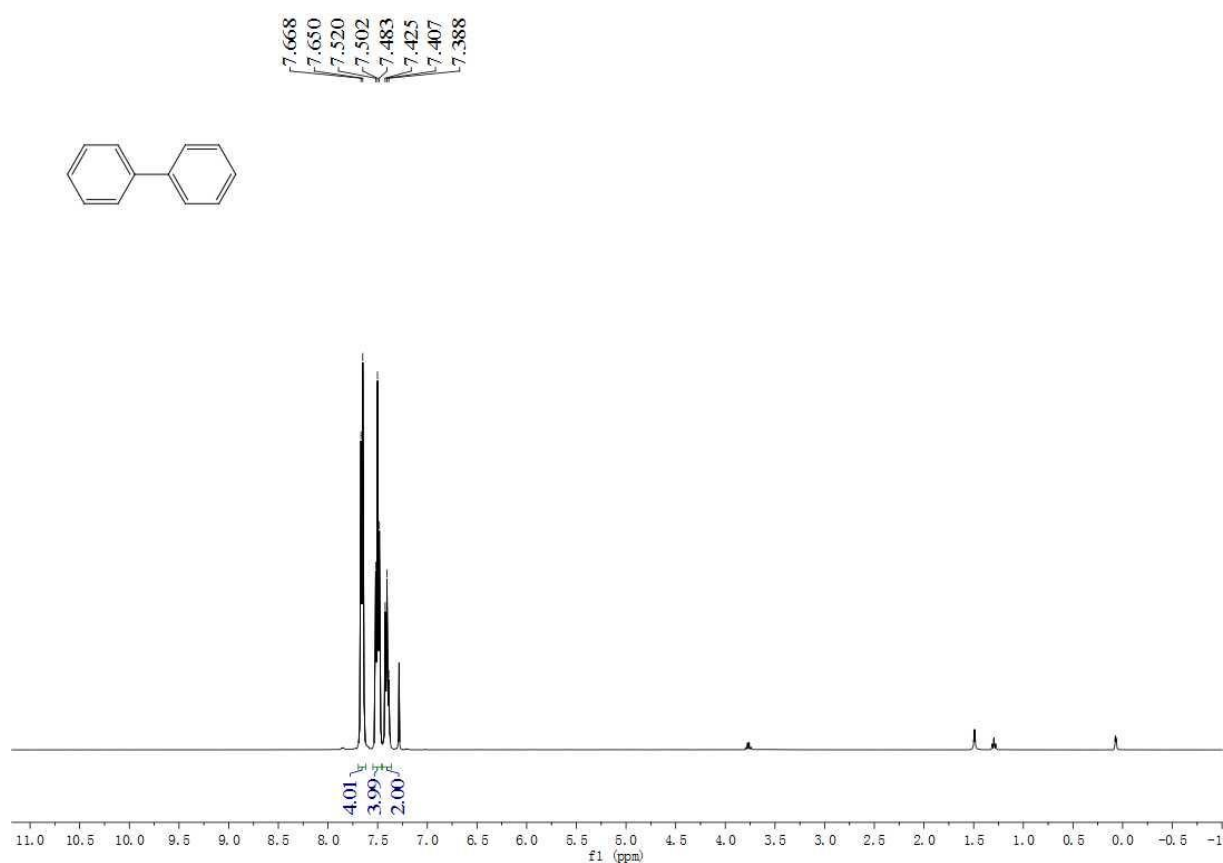
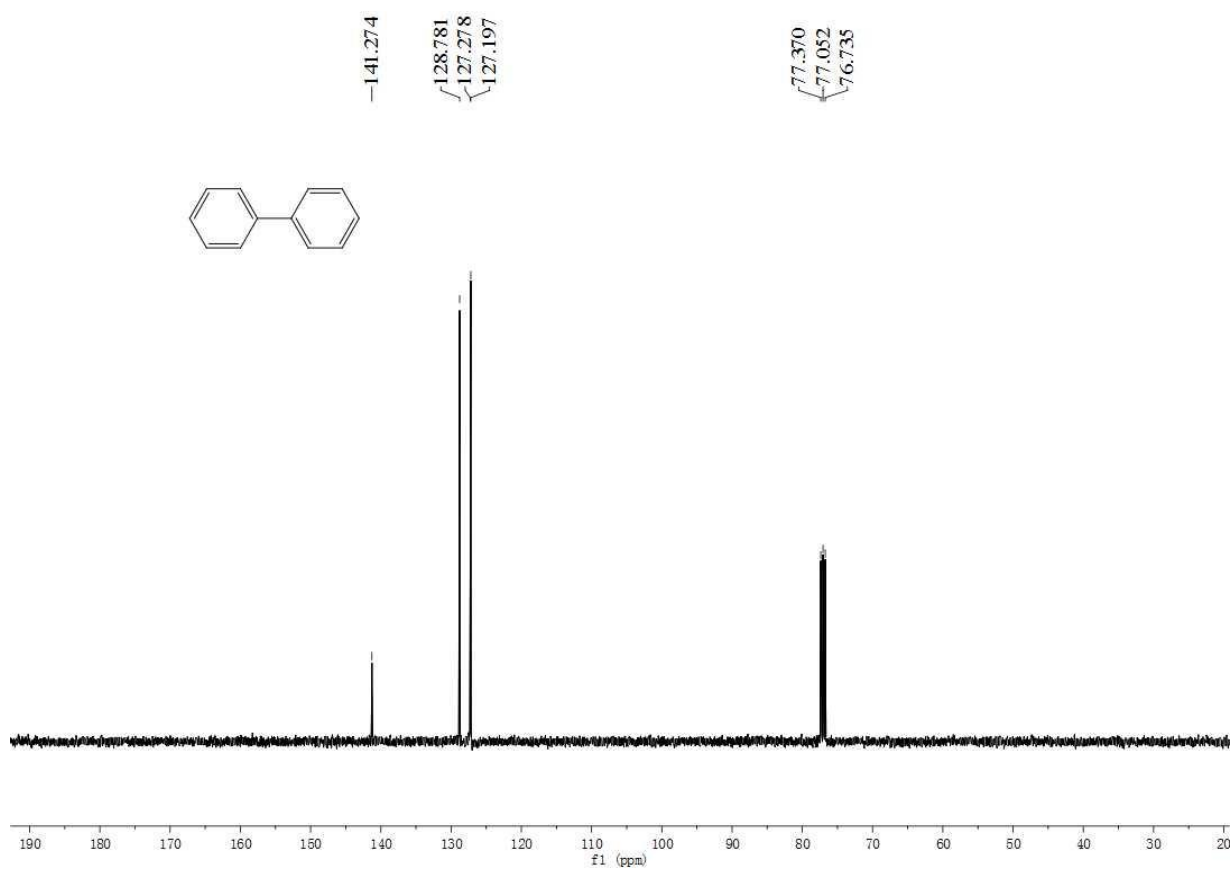
Figure S4. Copy of ^1H -NMR for biphenyl.**Figure S5.** Copy of ^{13}C -NMR for biphenyl.

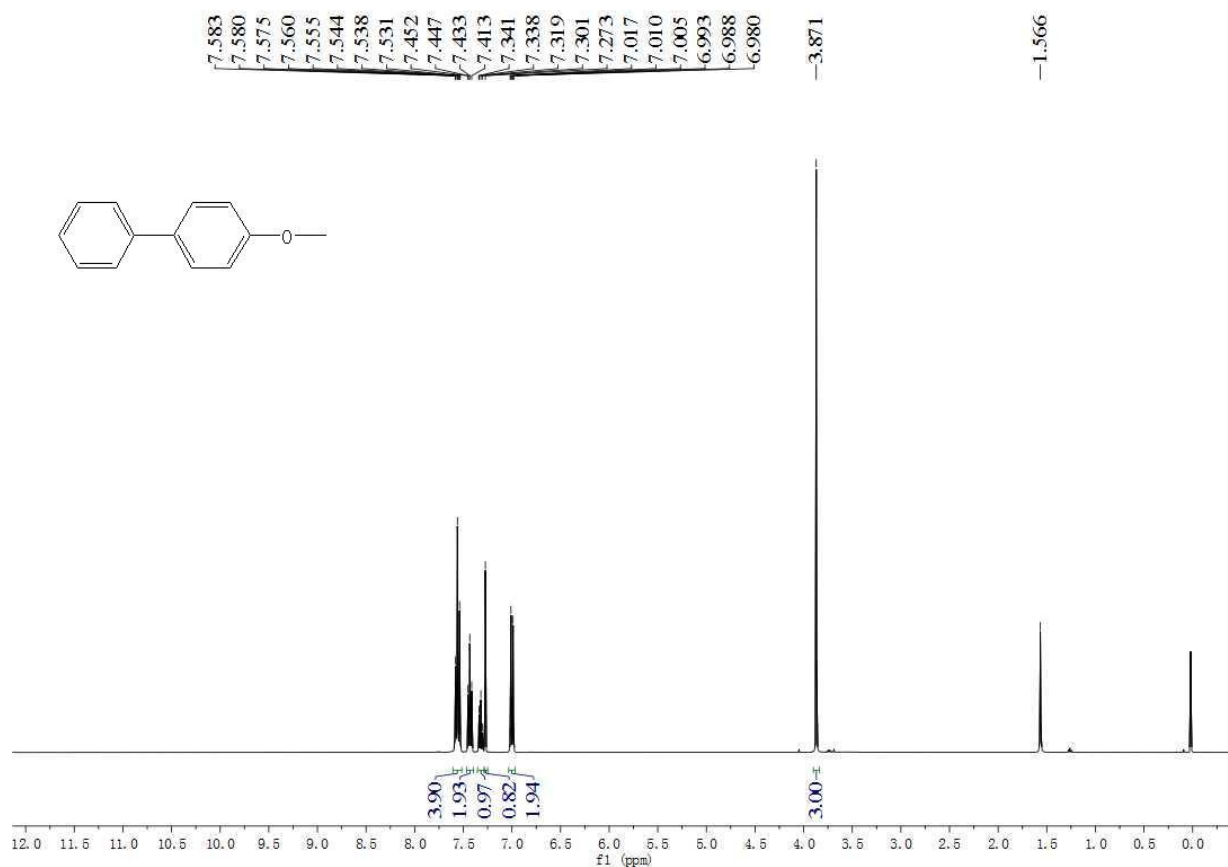
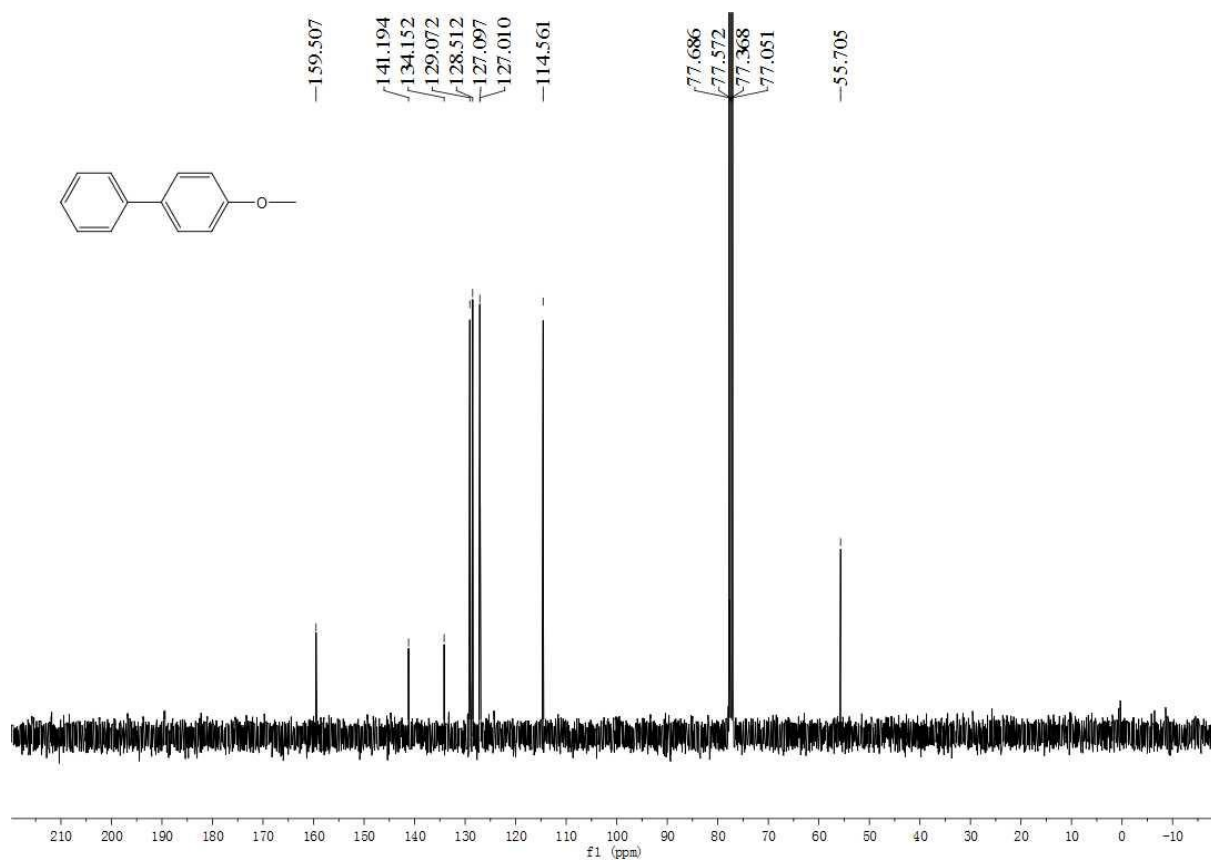
Figure S6. Copy of ^1H -NMR for 4-methoxybiphenyl.**Figure S7.** Copy of ^{13}C -NMR for 4-methoxybiphenyl.

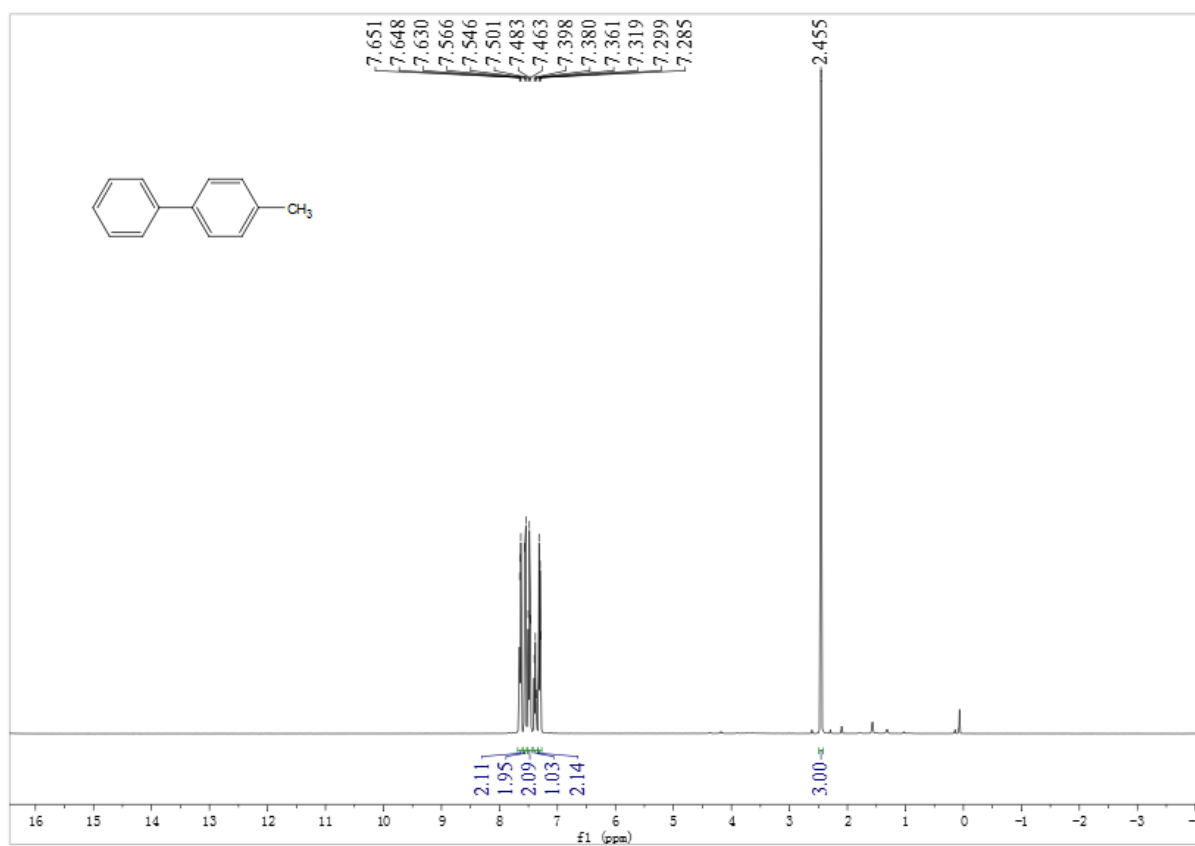
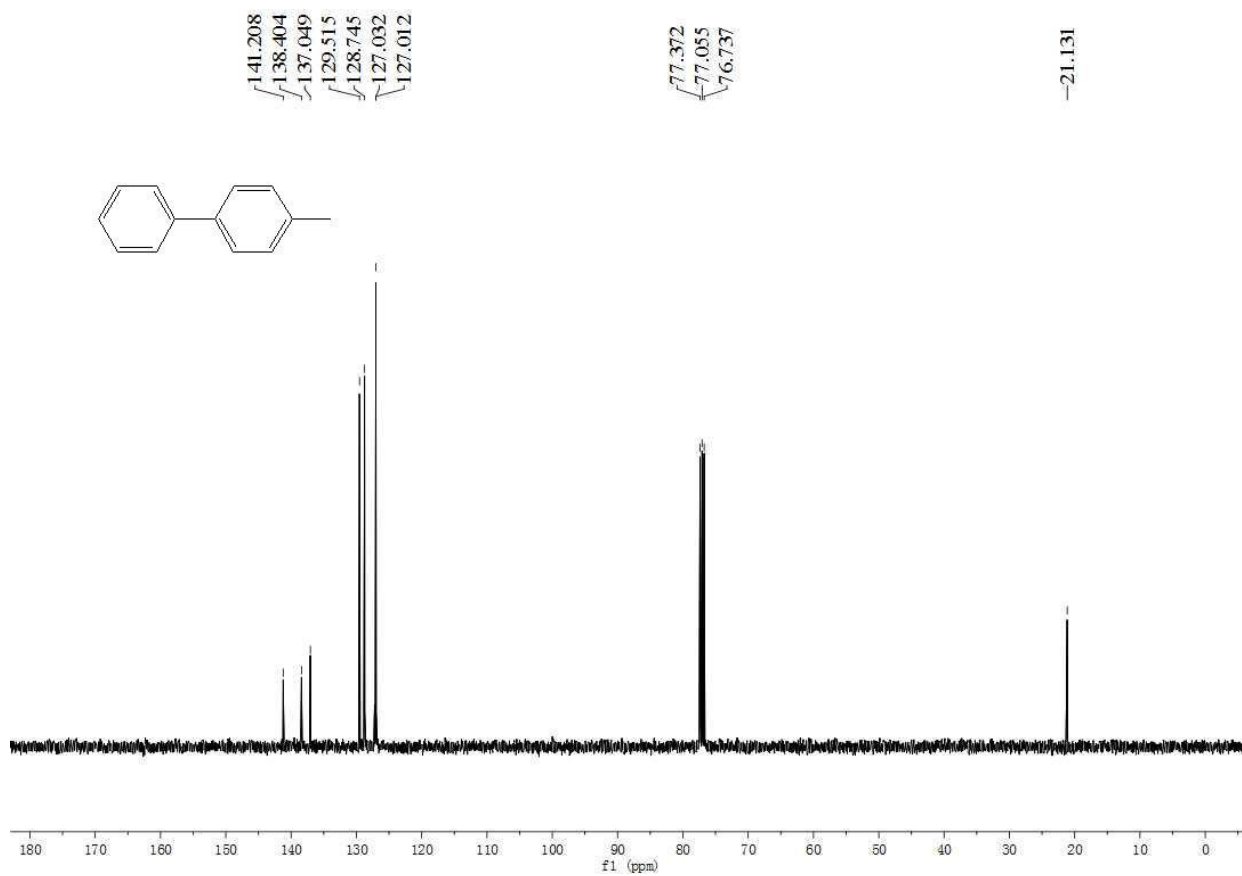
Figure S8. Copy of ^1H -NMR for 4-methylbiphenyl.**Figure S9.** Copy of ^{13}C -NMR for 4-methylbiphenyl.

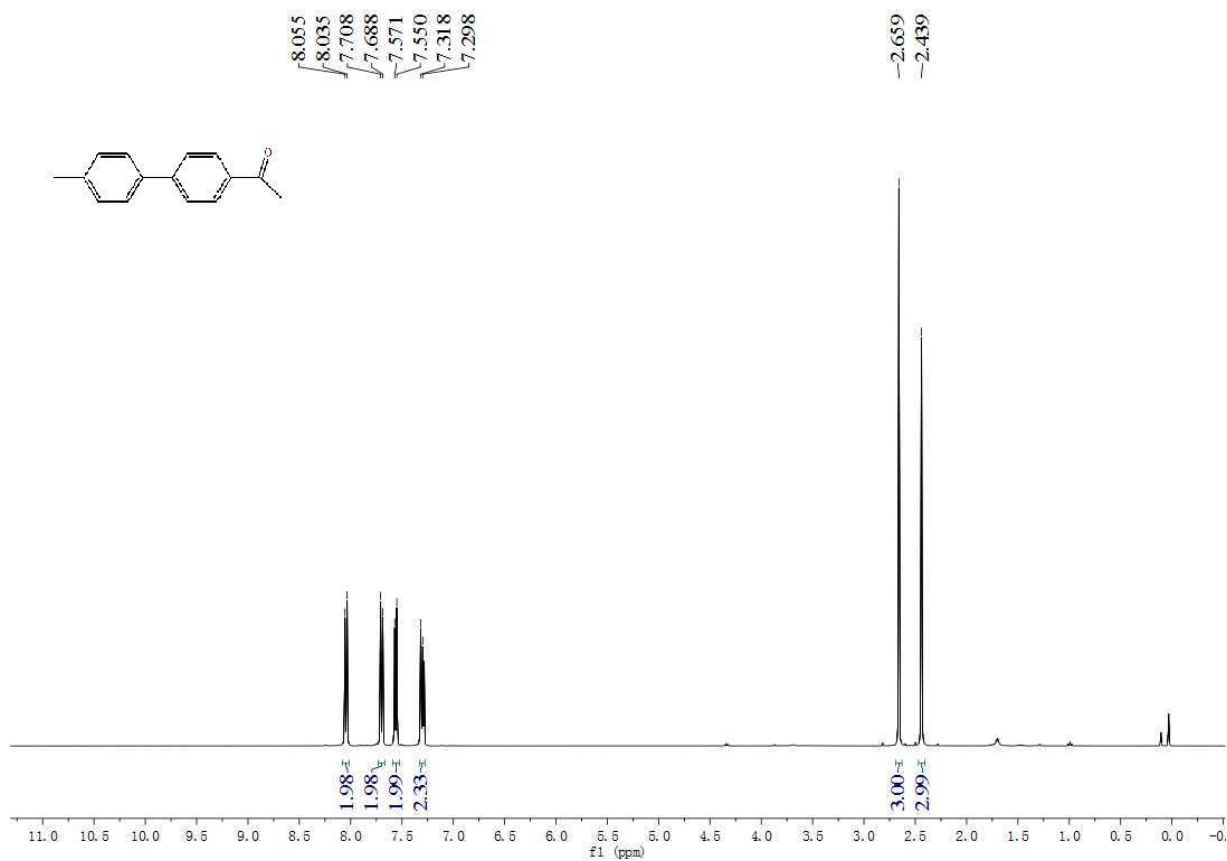
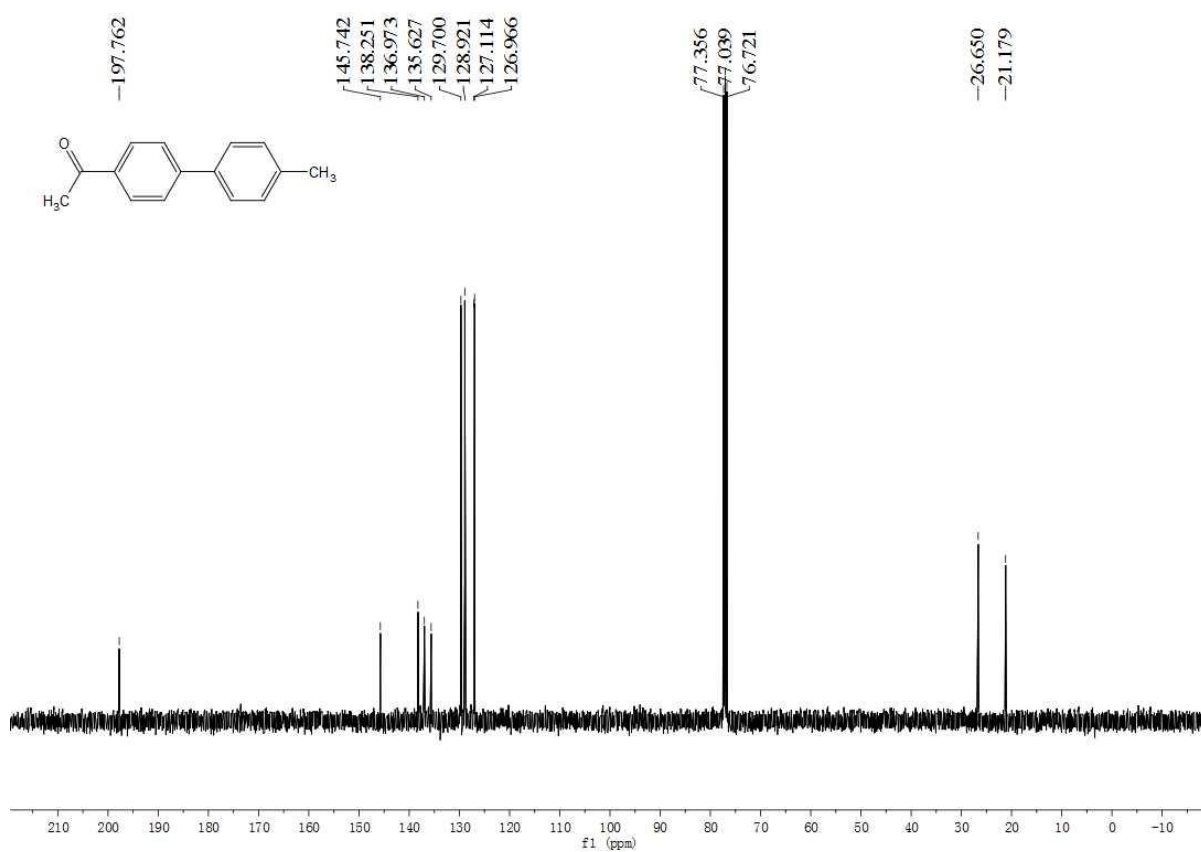
Figure S10. Copy of ^1H -NMR for 4-acetyl-4'-methylbiphenyl.**Figure S11.** Copy of ^{13}C -NMR for 4-acetyl-4'-methylbiphenyl.

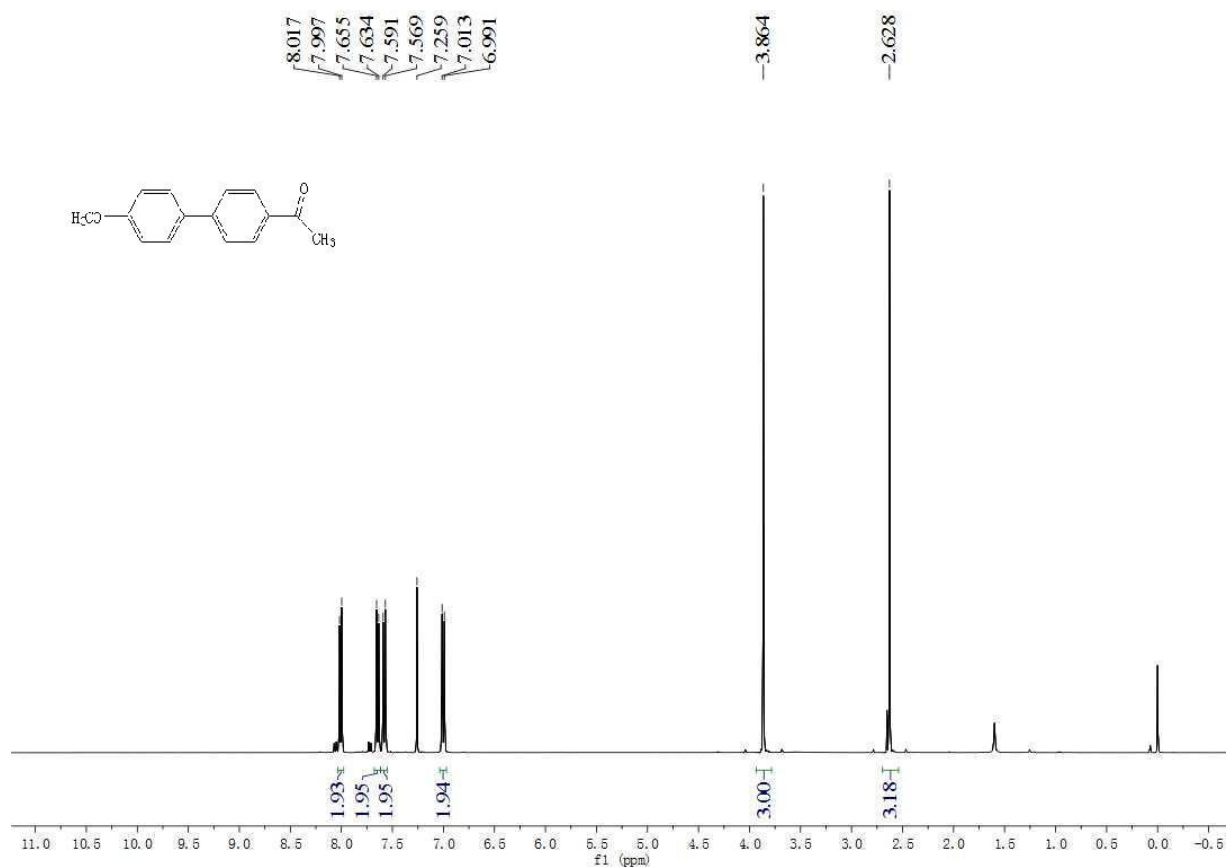
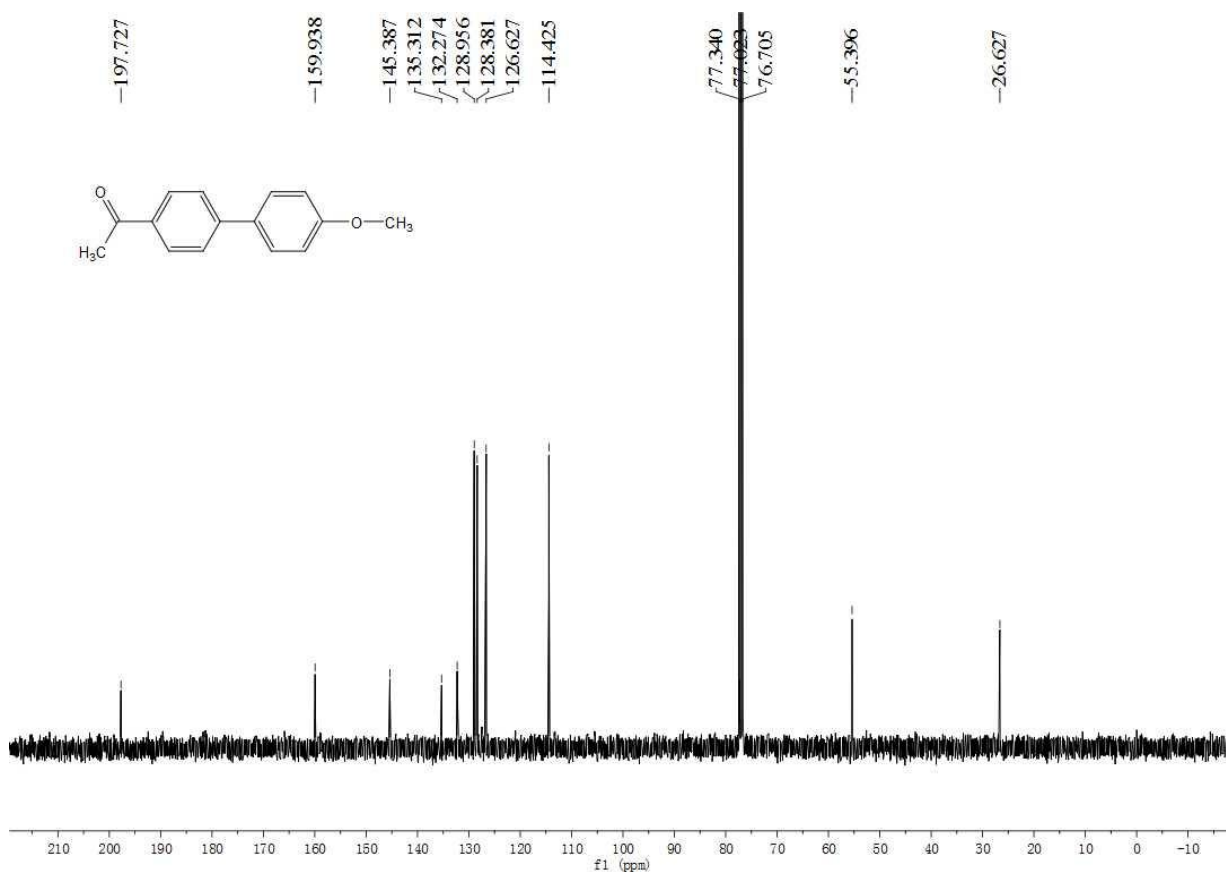
Figure S12. Copy of ^1H -NMR for 4-acetyl-4'-methoxybiphenyl.**Figure S13.** Copy of ^{13}C -NMR for 4-acetyl-4'-methoxybiphenyl.

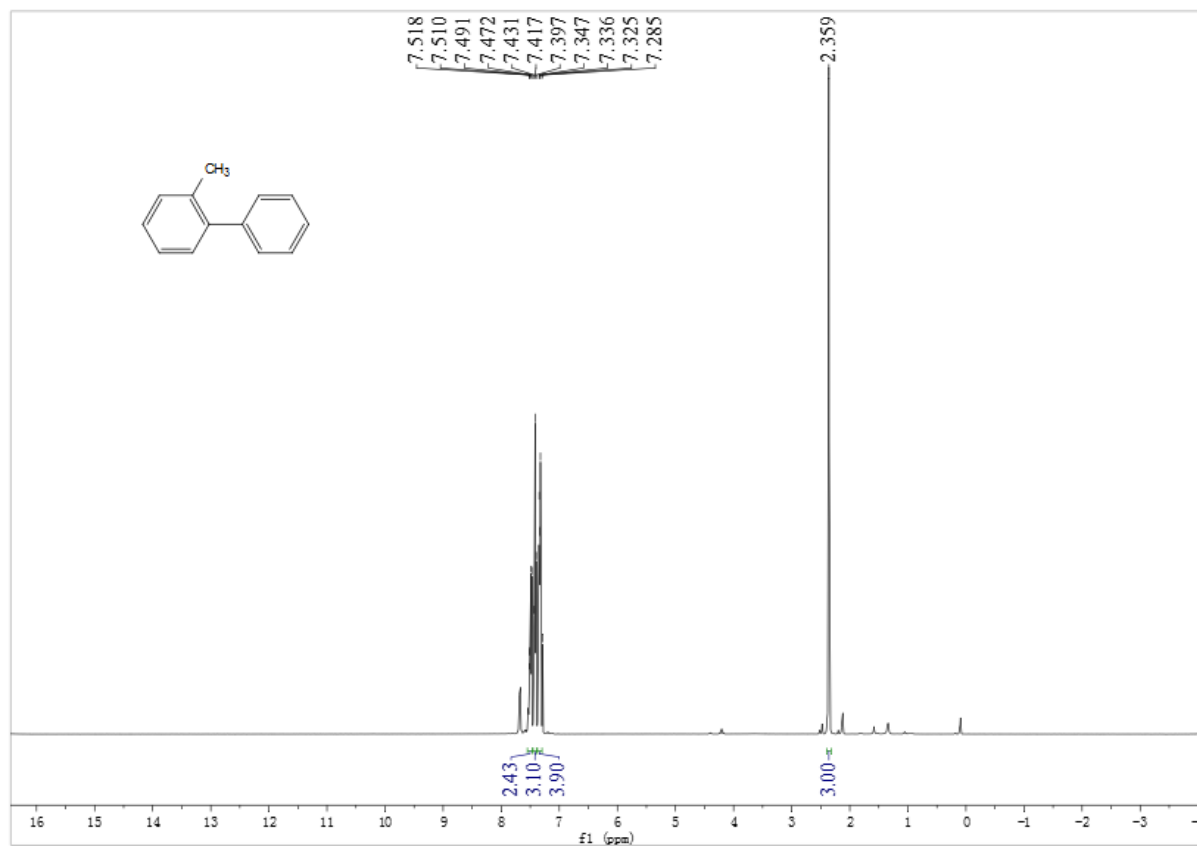
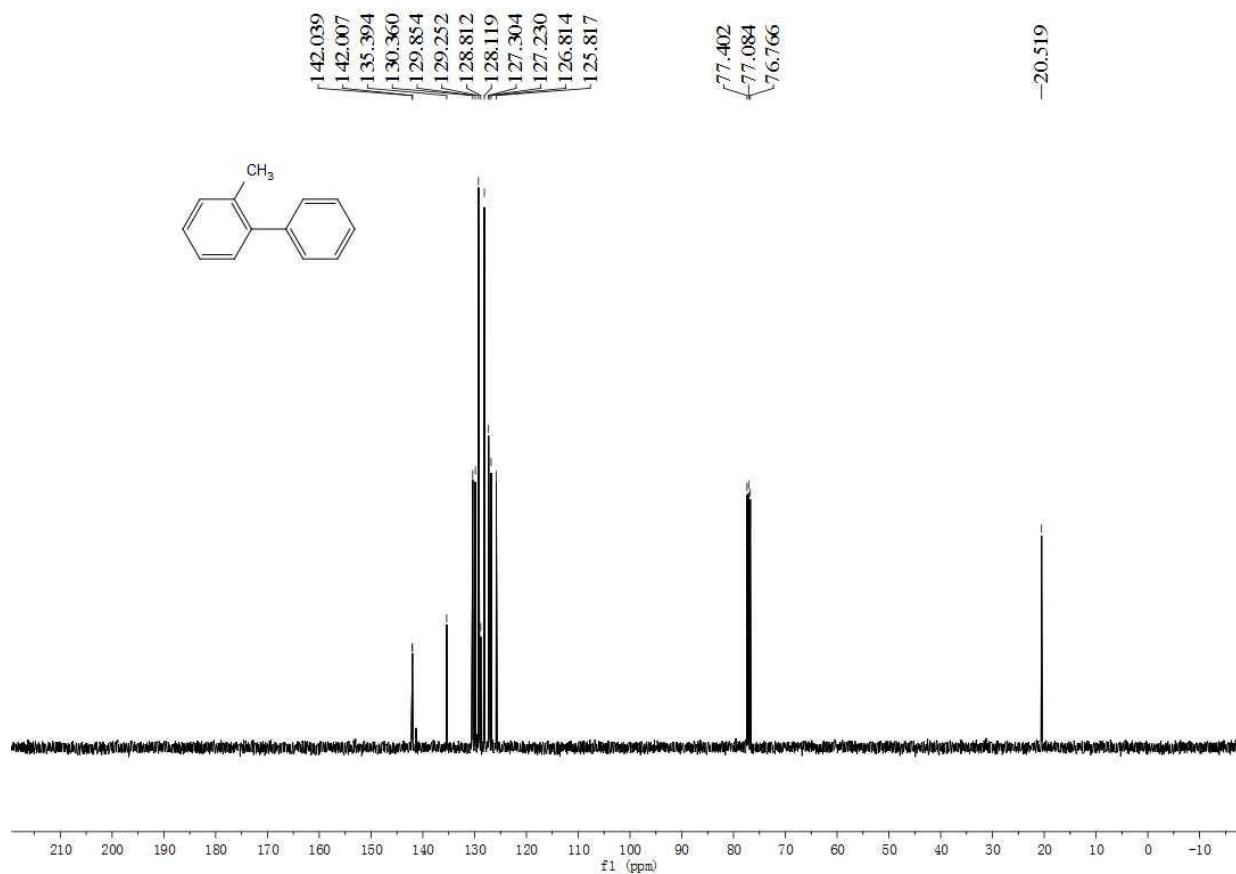
Figure S14. Copy of ^1H -NMR for 2-methylbiphenyl.**Figure S15.** Copy of ^{13}C -NMR for 2-methylbiphenyl.

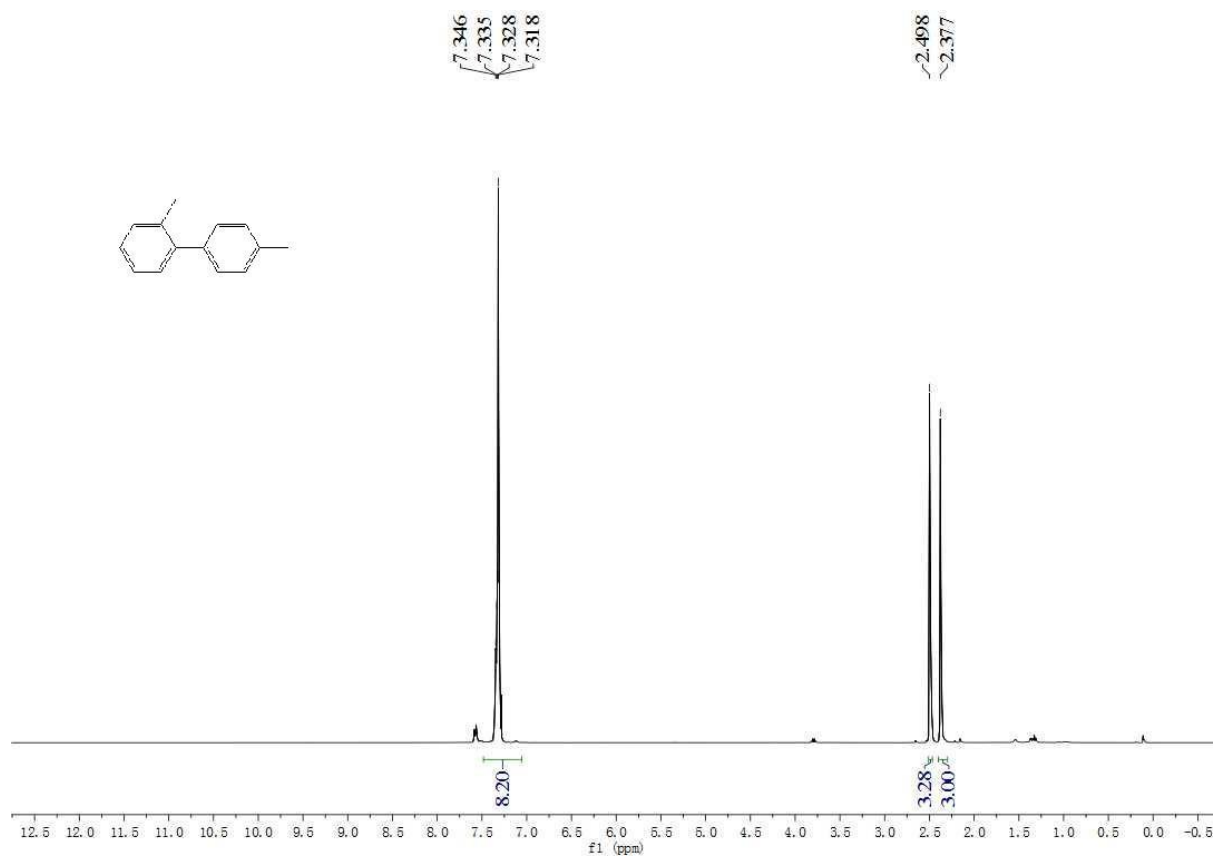
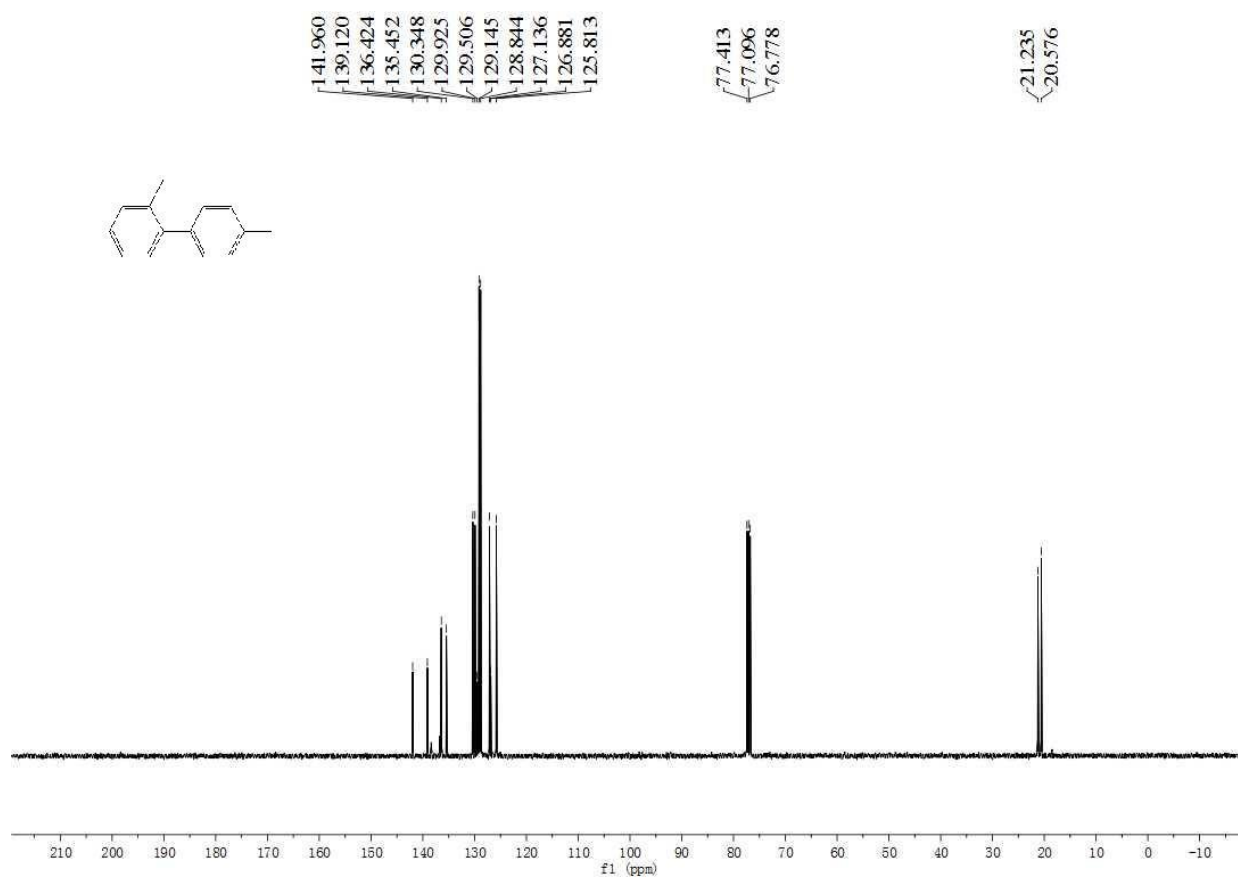
Figure S16. Copy of ^1H -NMR for 2,4'-dimethylbiphenyl.**Figure S17.** Copy of ^{13}C -NMR for 2,4'-dimethylbiphenyl.

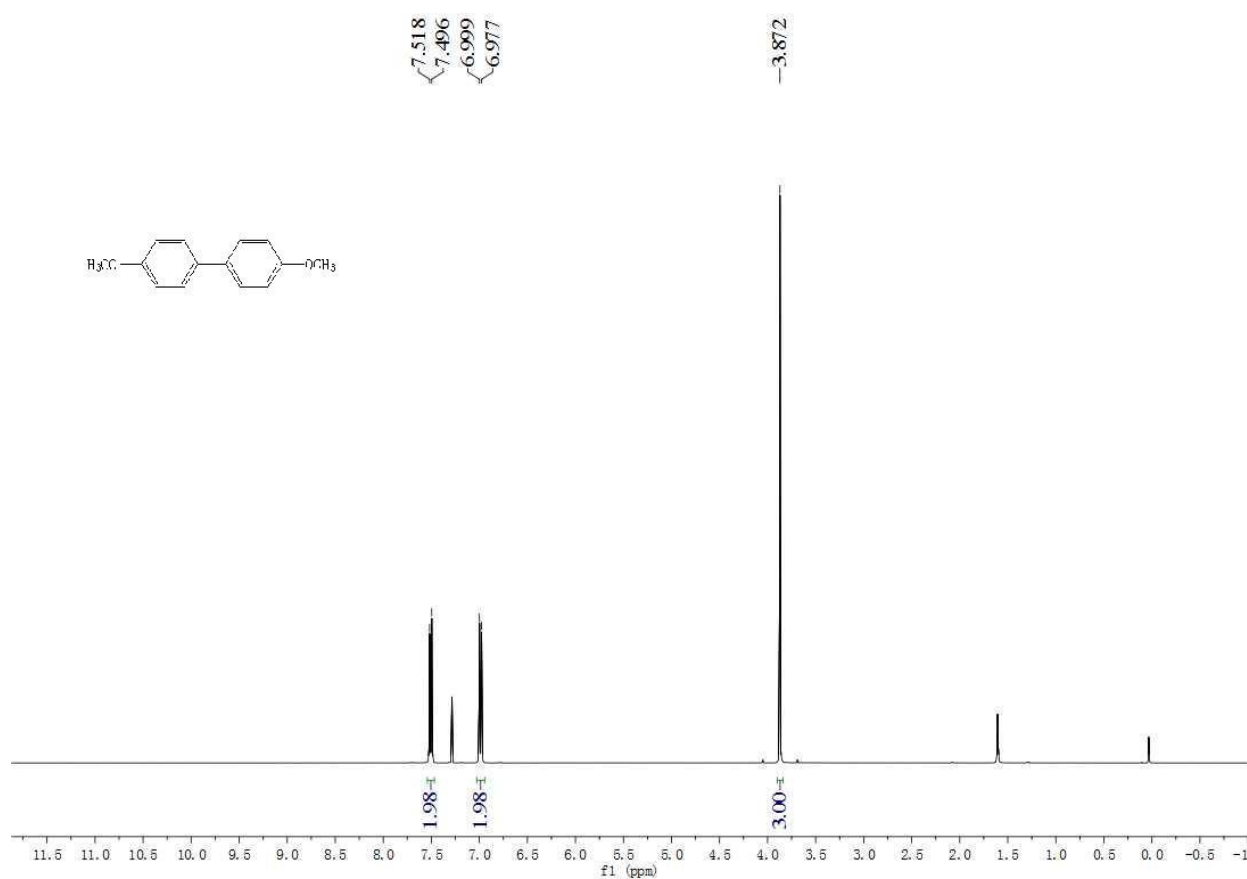
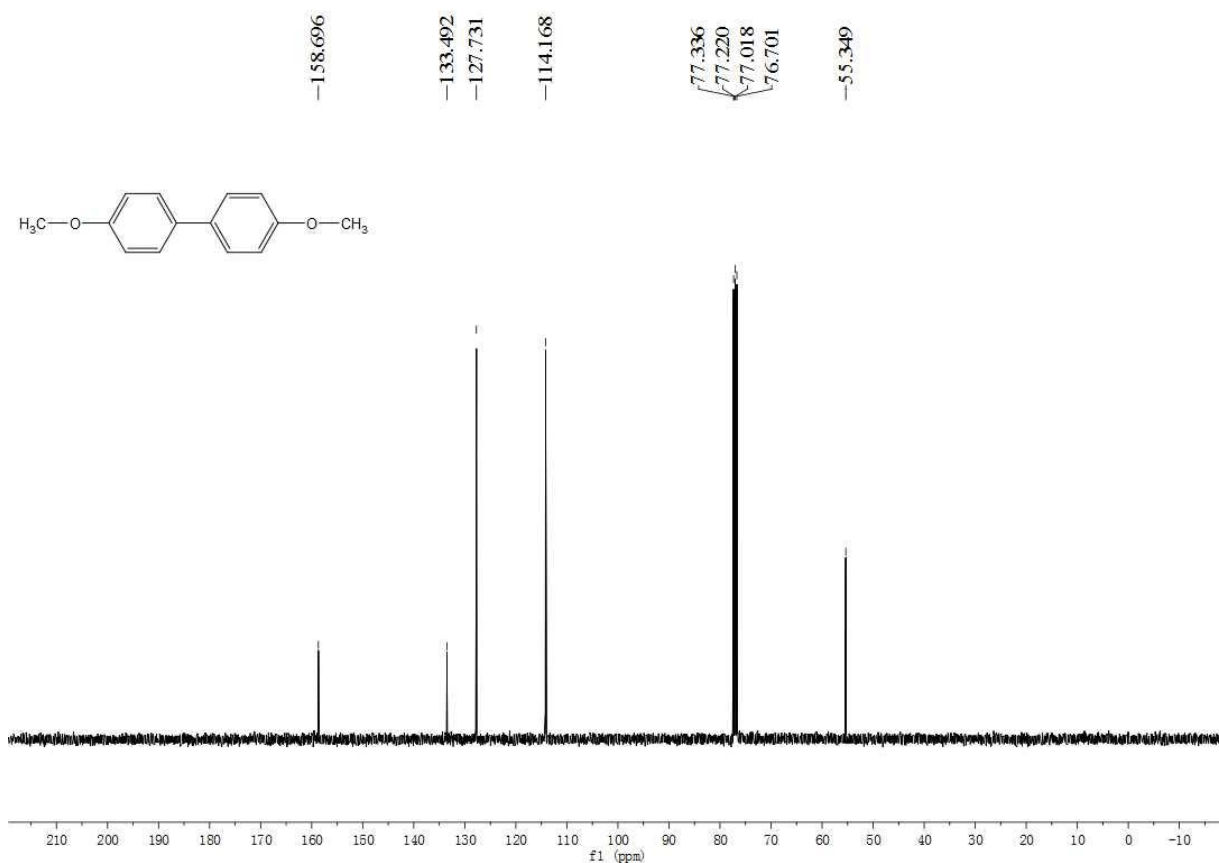
Figure S18. Copy of ^1H -NMR for 4,4'-dimethoxybiphenyl.**Figure S19.** Copy of ^{13}C -NMR for 4,4'-dimethoxybiphenyl.

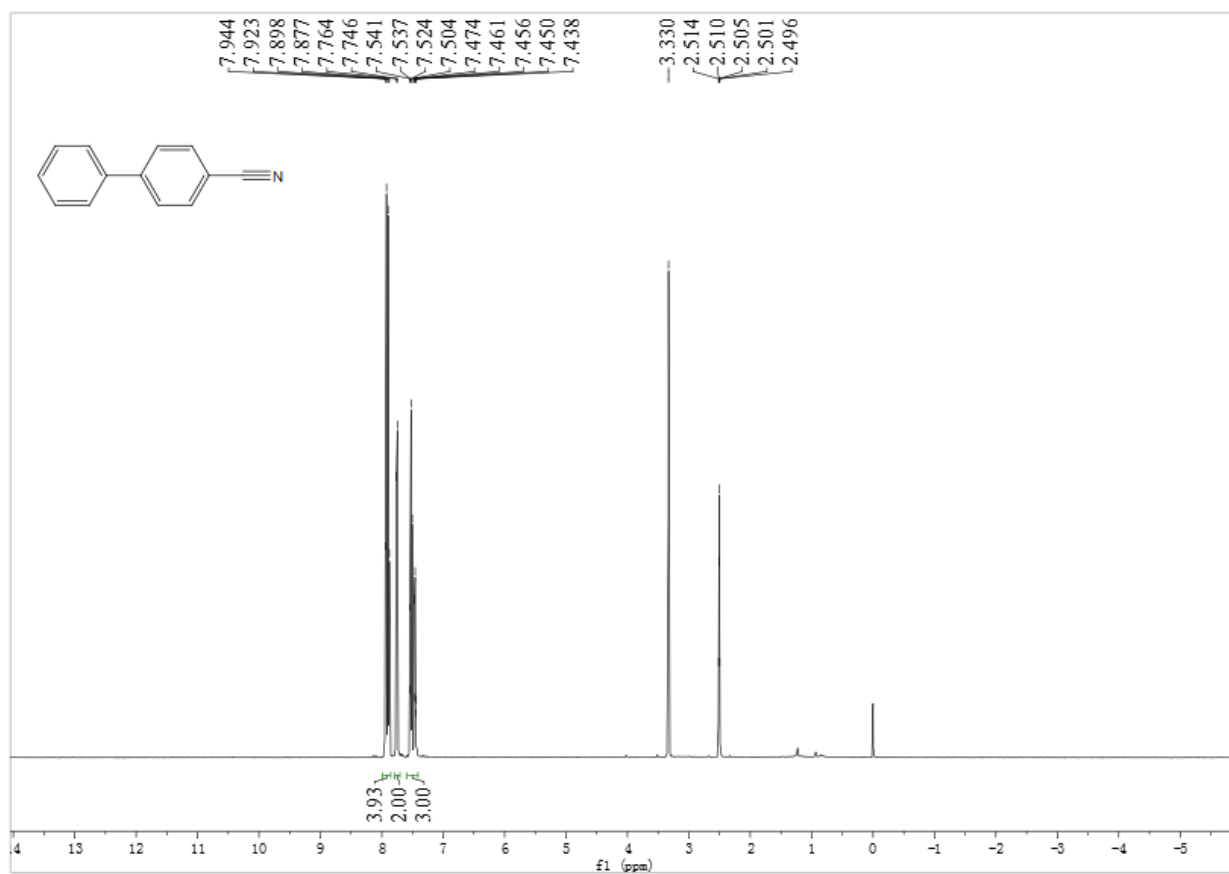
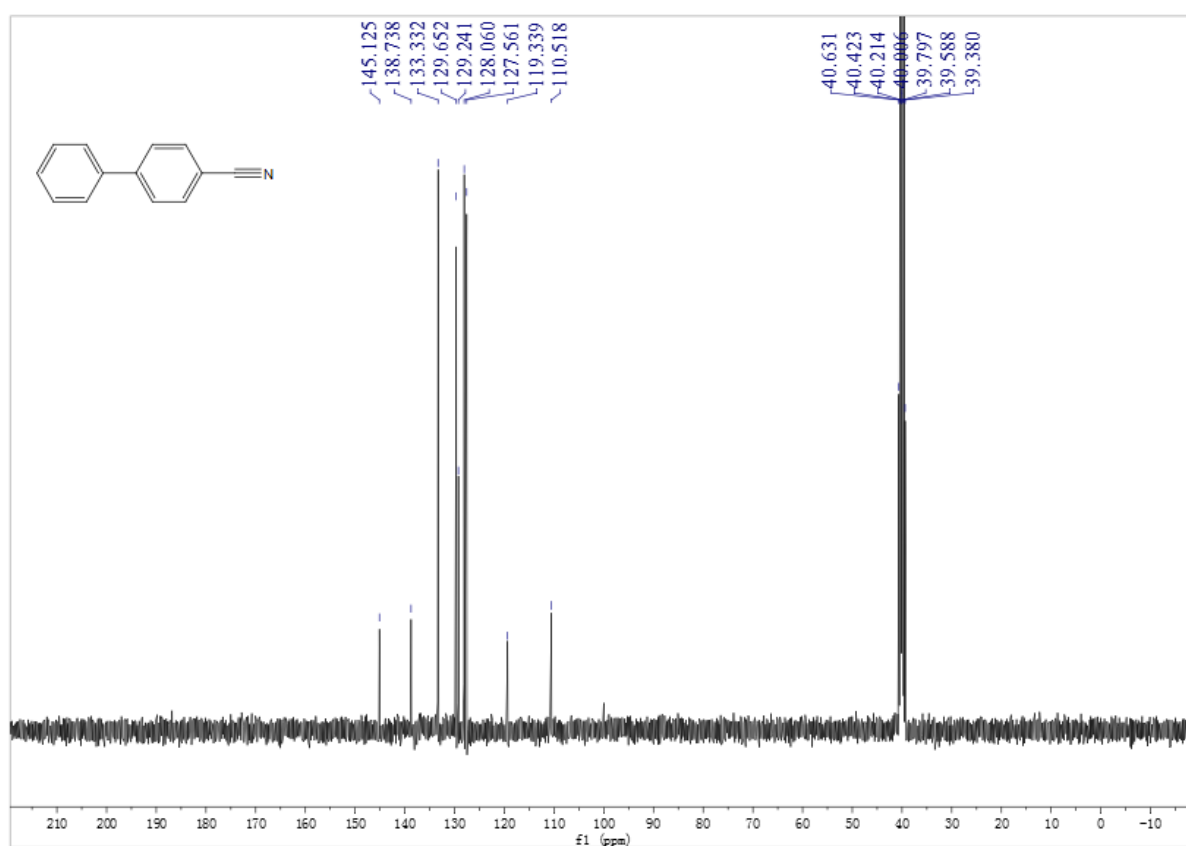
Figure S20. Copy of ^1H -NMR for 4-cyanobiphenyl.**Figure S21.** Copy of ^{13}C -NMR for 4-cyanobiphenyl.

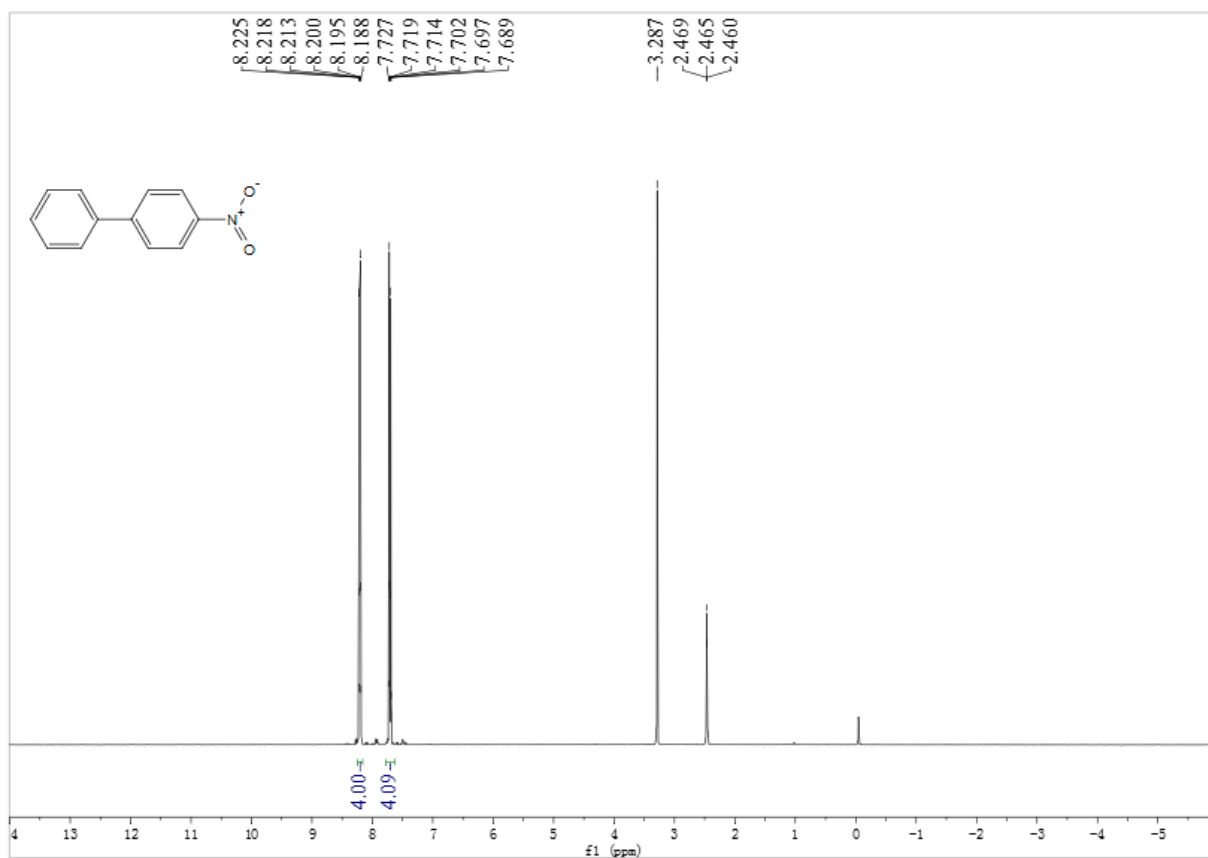
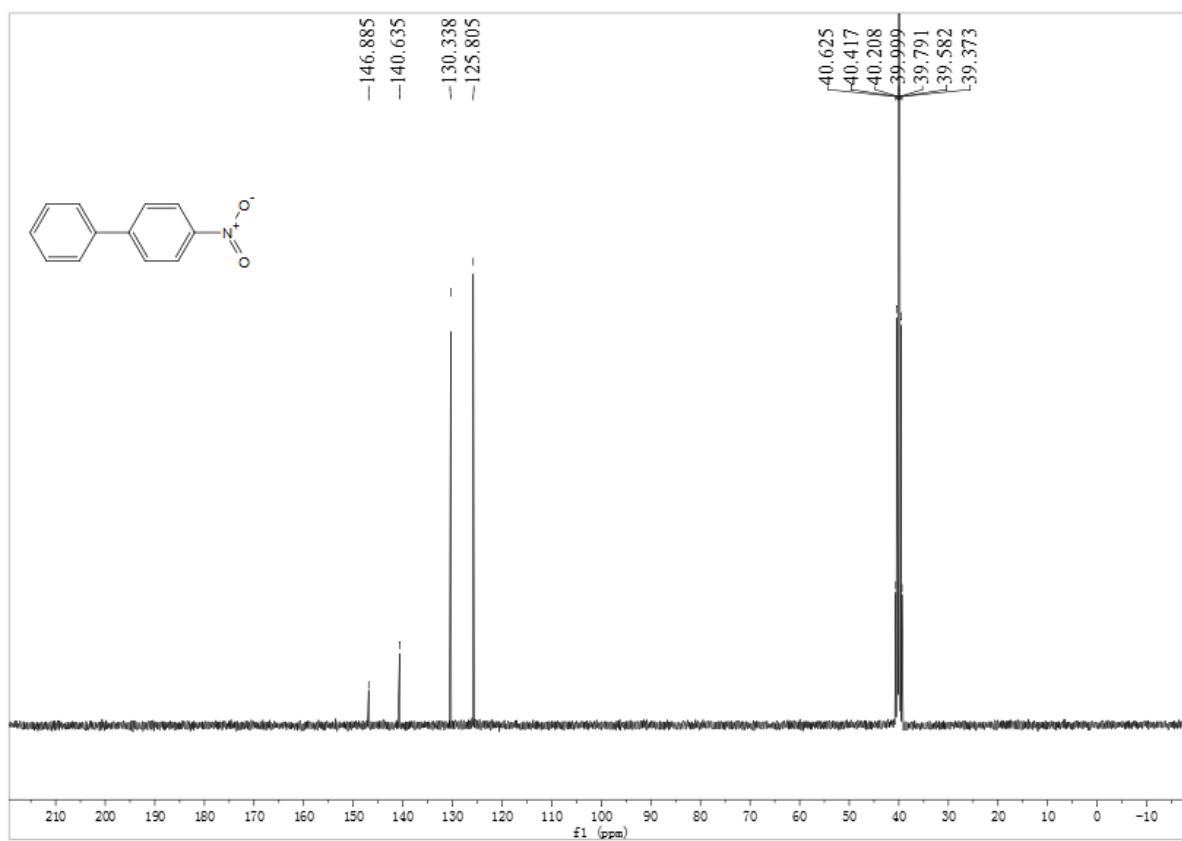
Figure S22. Copy of ^1H -NMR for 4-nitrobiphenyl.**Figure S23.** Copy of ^{13}C -NMR for 4-nitrobiphenyl.

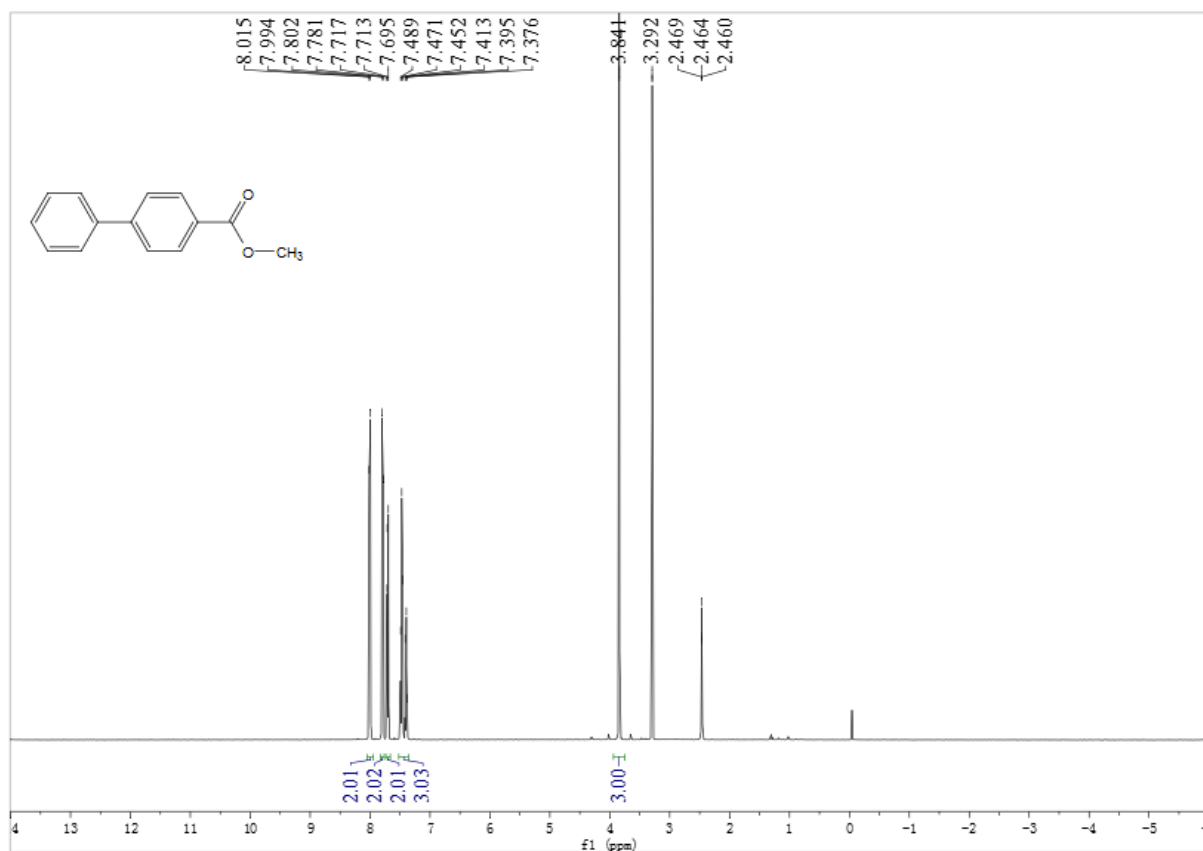
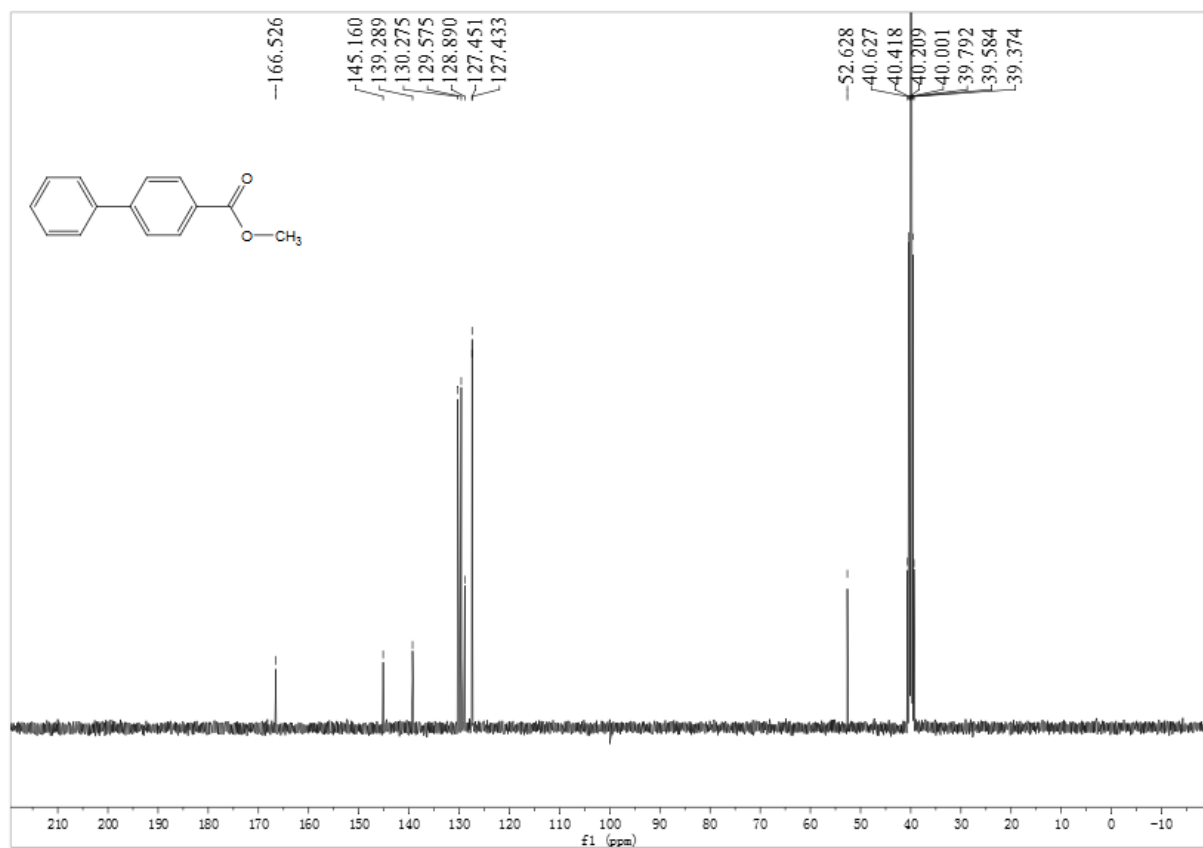
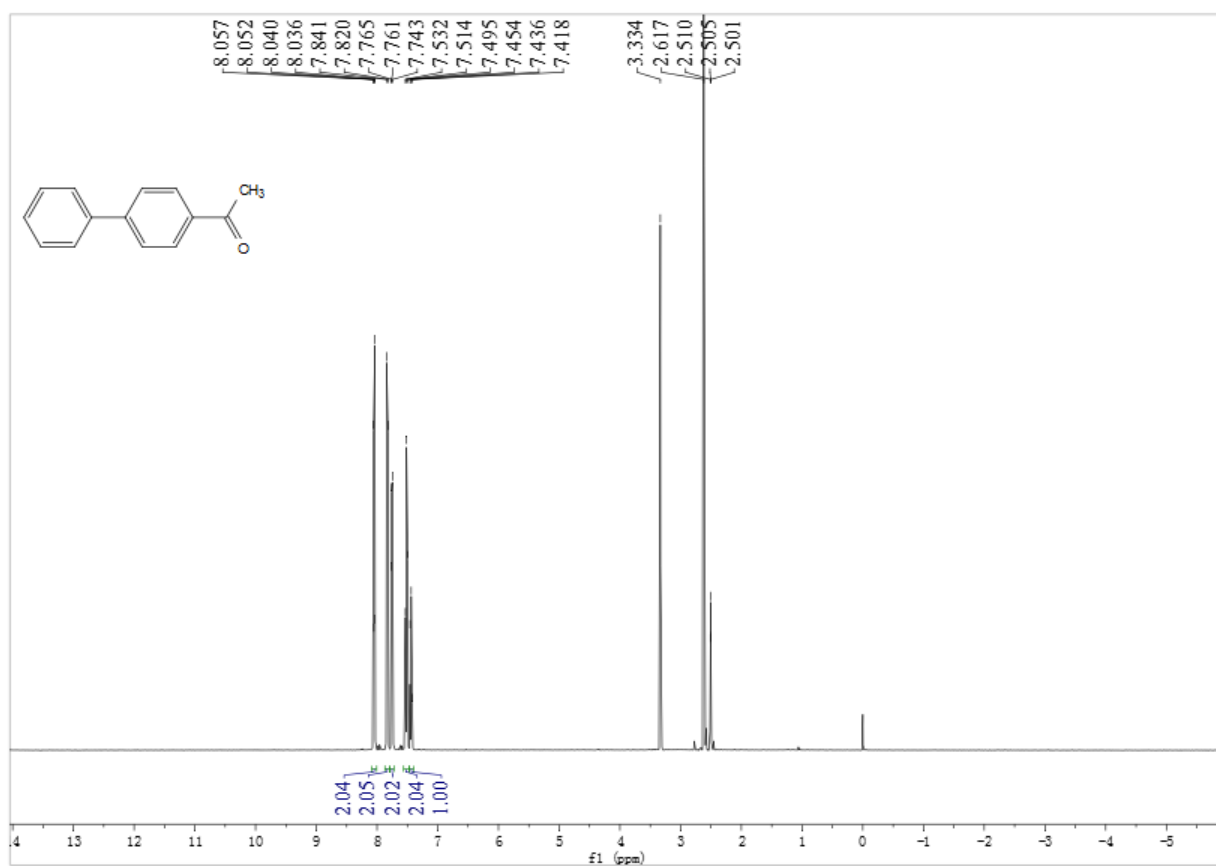
Figure S24. Copy of ^1H -NMR for Methyl biphenyl-4-carboxylate.**Figure S25.** Copy of ^{13}C -NMR for Methyl biphenyl-4-carboxylate.

Figure S26. Copy of ^1H -NMR for 4-acetylbiphenyl.**Figure S27.** Copy of ^{13}C -NMR for 4-acetylbiphenyl.