

Supplementary Materials: Straightforward Synthesis of 2(5*H*)-Furanones as Promising Cross-Coupling Partners: Direct Furanone Annulation Utilizing Ti-Mediated Aldol Addition

Yuki Ban, Yuichiro Ashida, Hidefumi Nakatsuji, and Yoo Tanabe

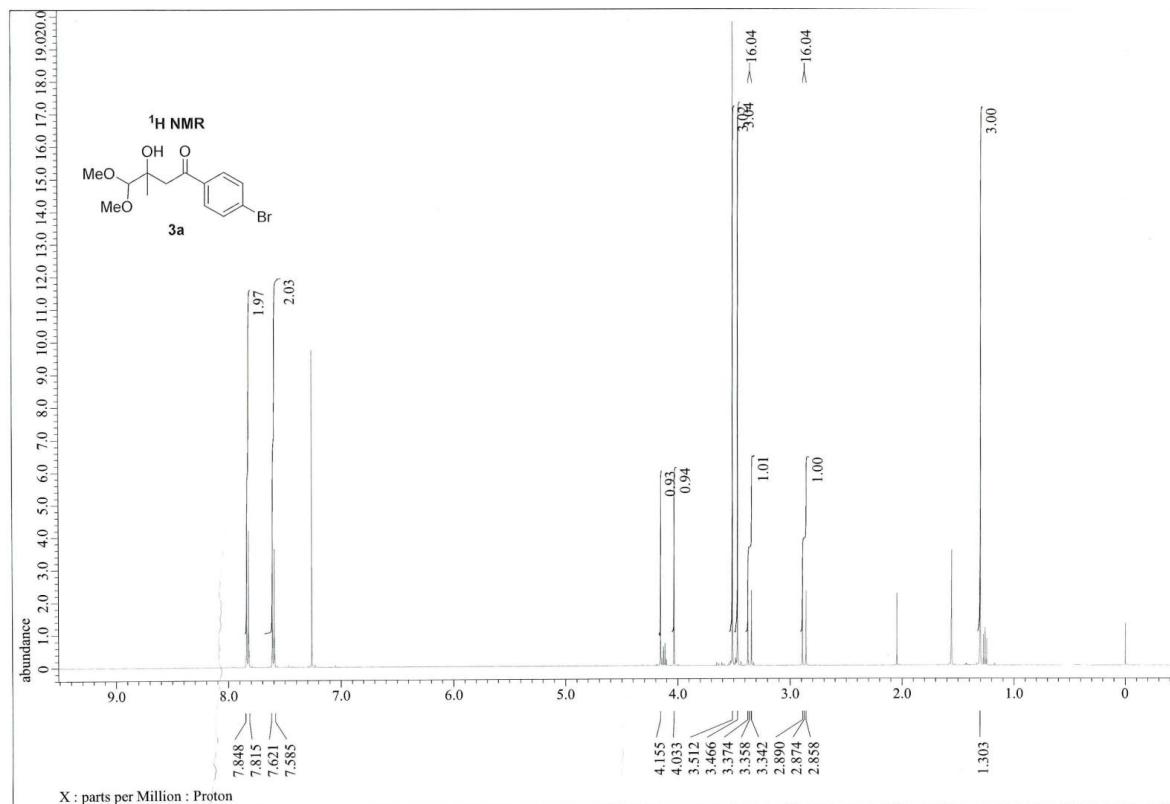


Figure S1. ¹H-NMR spectra of 1-(4-Bromophenyl)-3-hydroxy-4,4-dimethoxy-3-methylbutan-1-one.

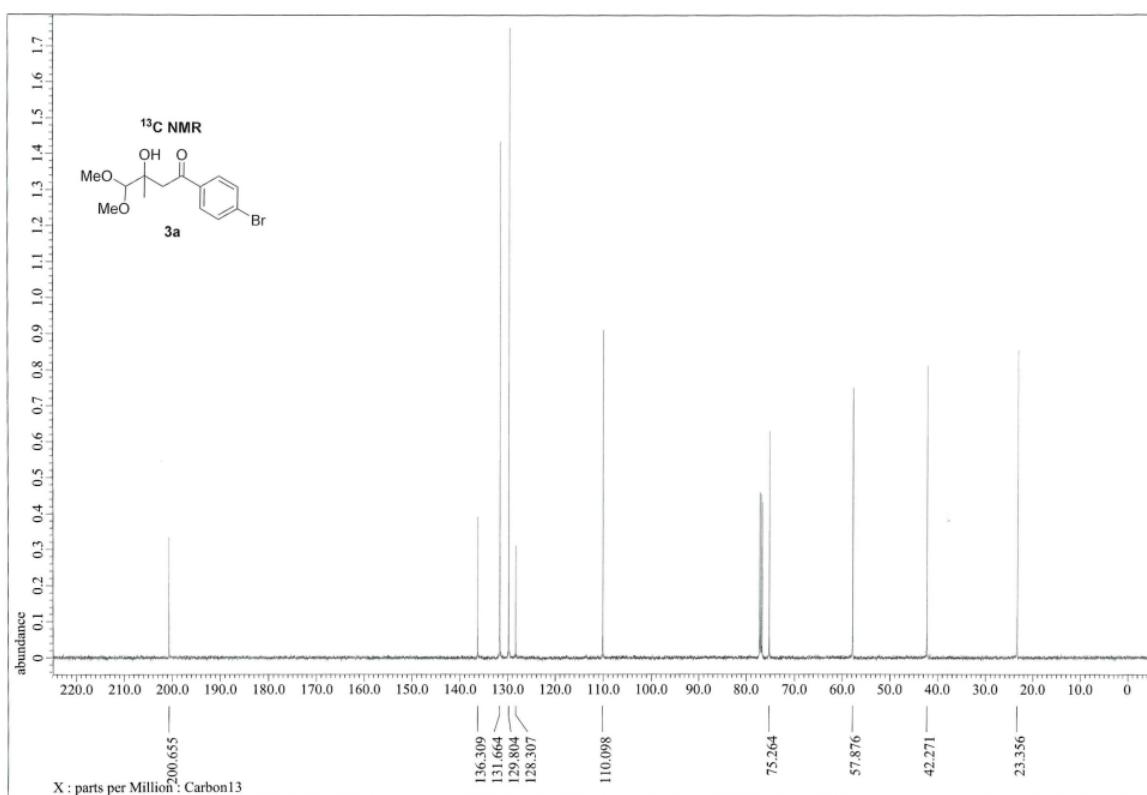


Figure S2. ^{13}C -NMR spectra of 1-(4-Bromophenyl)-3-hydroxy-4,4-dimethoxy-3-methylbutan-1-one.

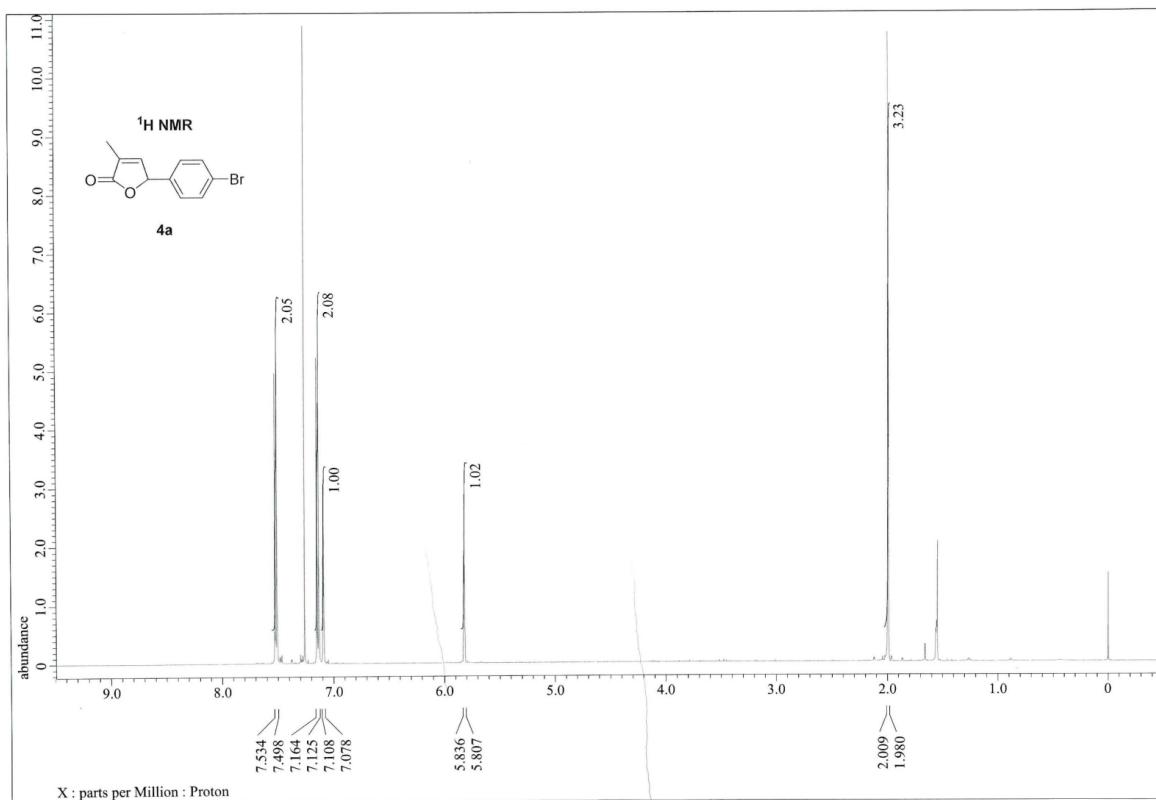


Figure S3. ^1H -NMR spectra of 5-(4-Bromophenyl)-3-methylfuran-2($5H$)-one.

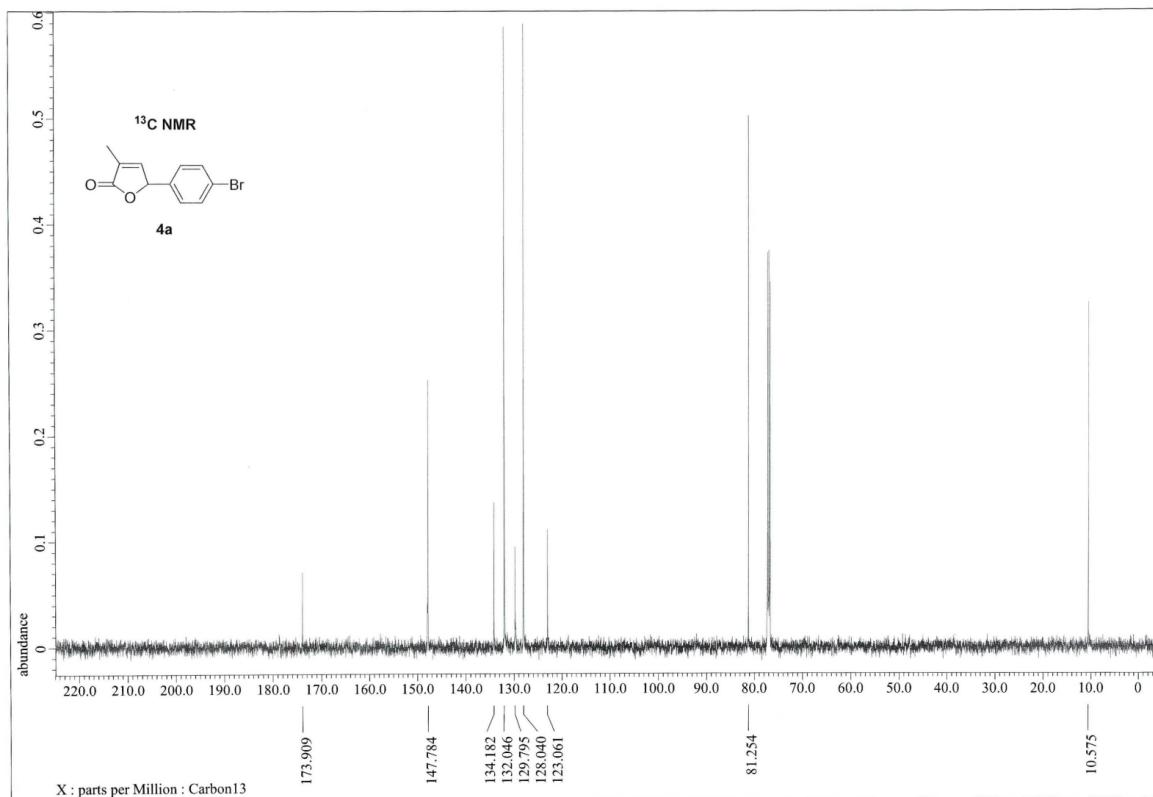


Figure S4. ¹³C-NMR spectra of 5-(4-Bromophenyl)-3-methylfuran-2(5*H*)-one.

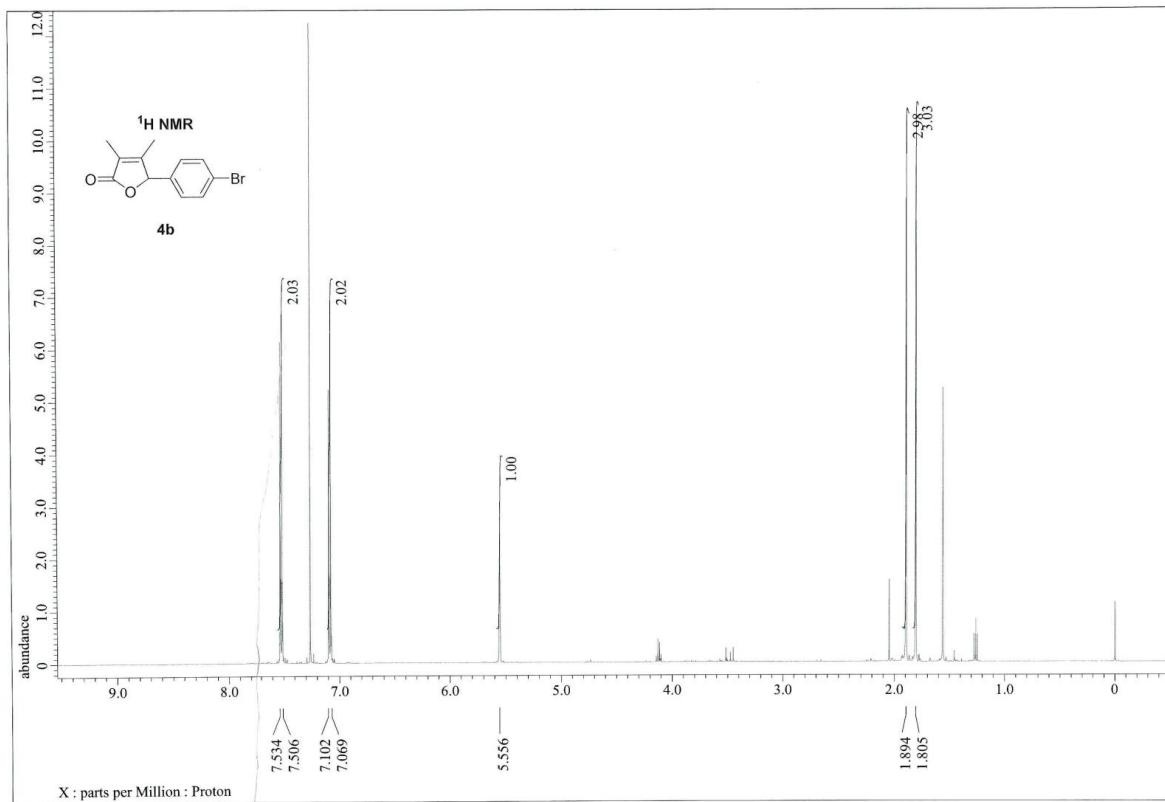


Figure S5. ¹H-NMR spectra of 5-(4-Bromophenyl)-3,4-dimethylfuran-2(5*H*)-one.

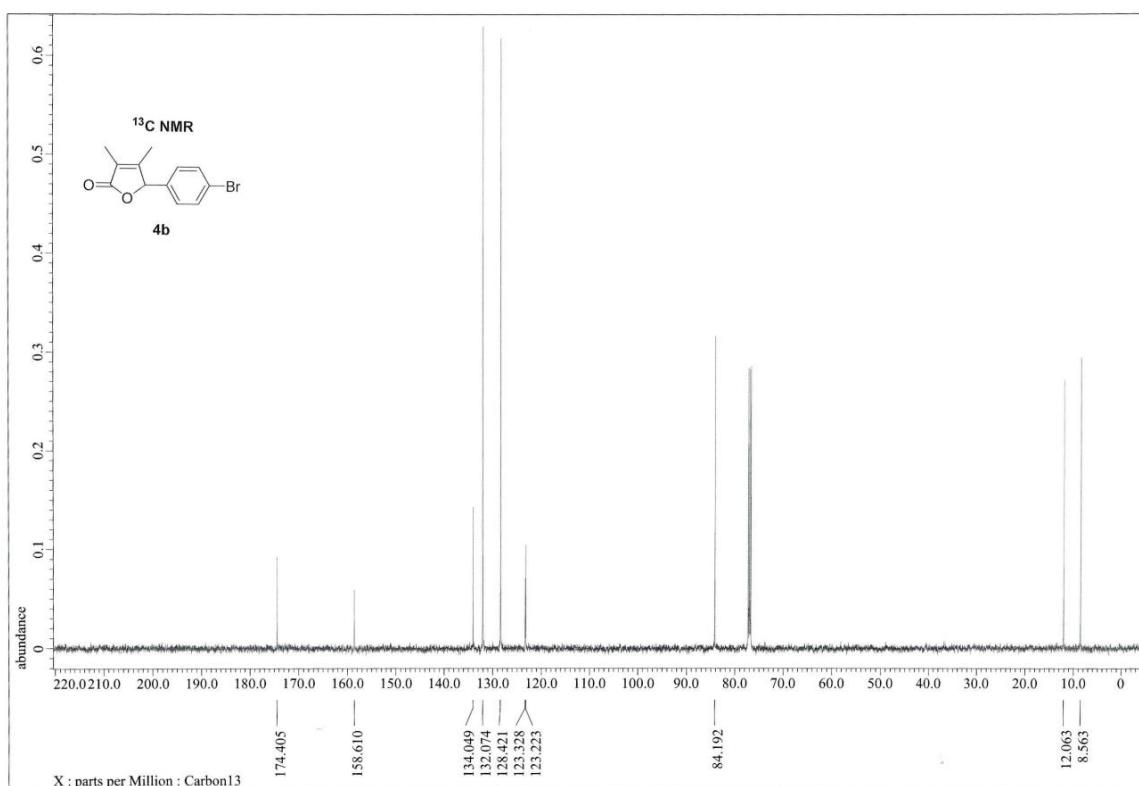


Figure S6. ¹³C-NMR spectra of 5-(4-Bromophenyl)-3,4-dimethylfuran-2(5H)-one.

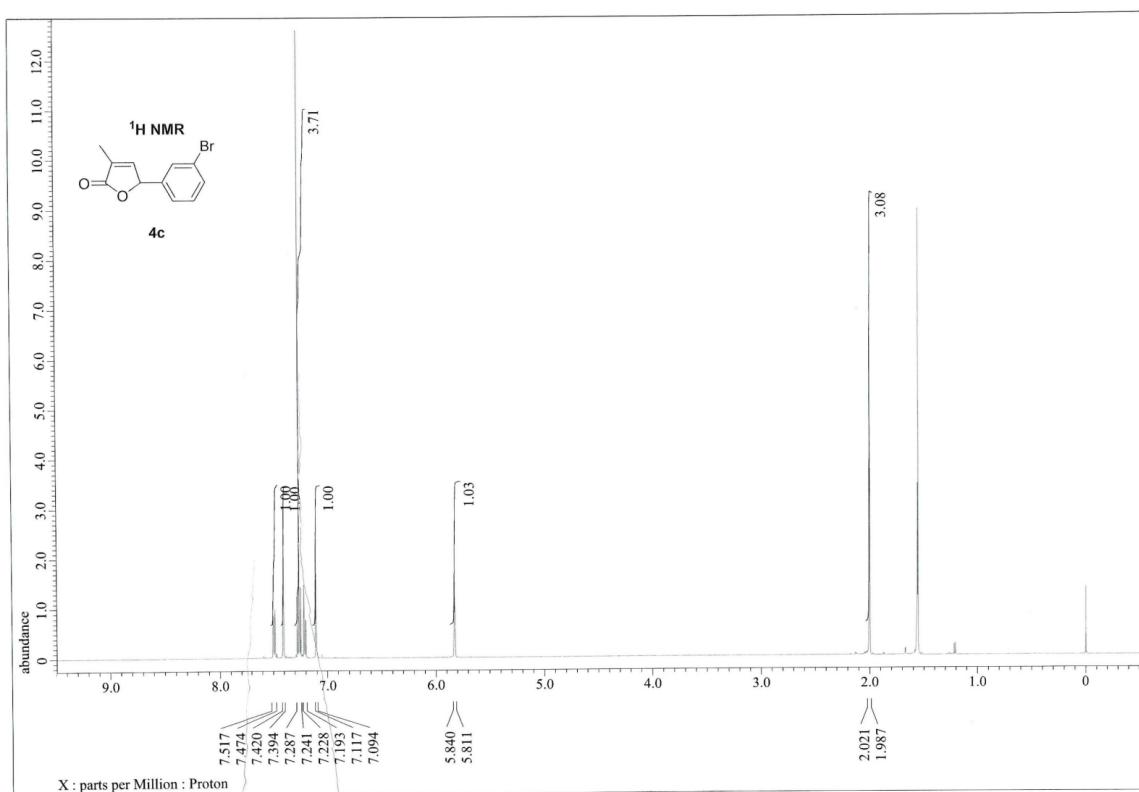


Figure S7. ¹H-NMR spectra of 5-(3-Bromophenyl)-3-methylfuran-2(5H)-one.

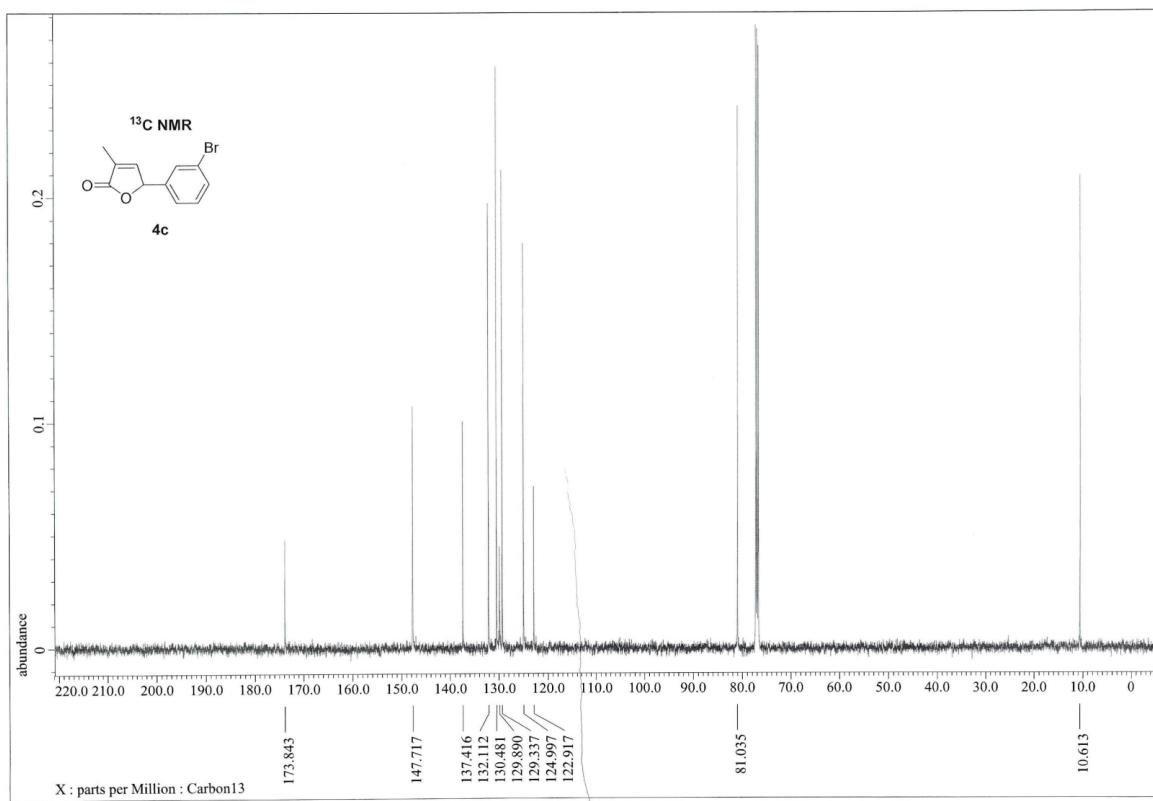


Figure S8. ^{13}C -NMR spectra of 5-(3-Bromophenyl)-3-methylfuran-2(5*H*)-one.

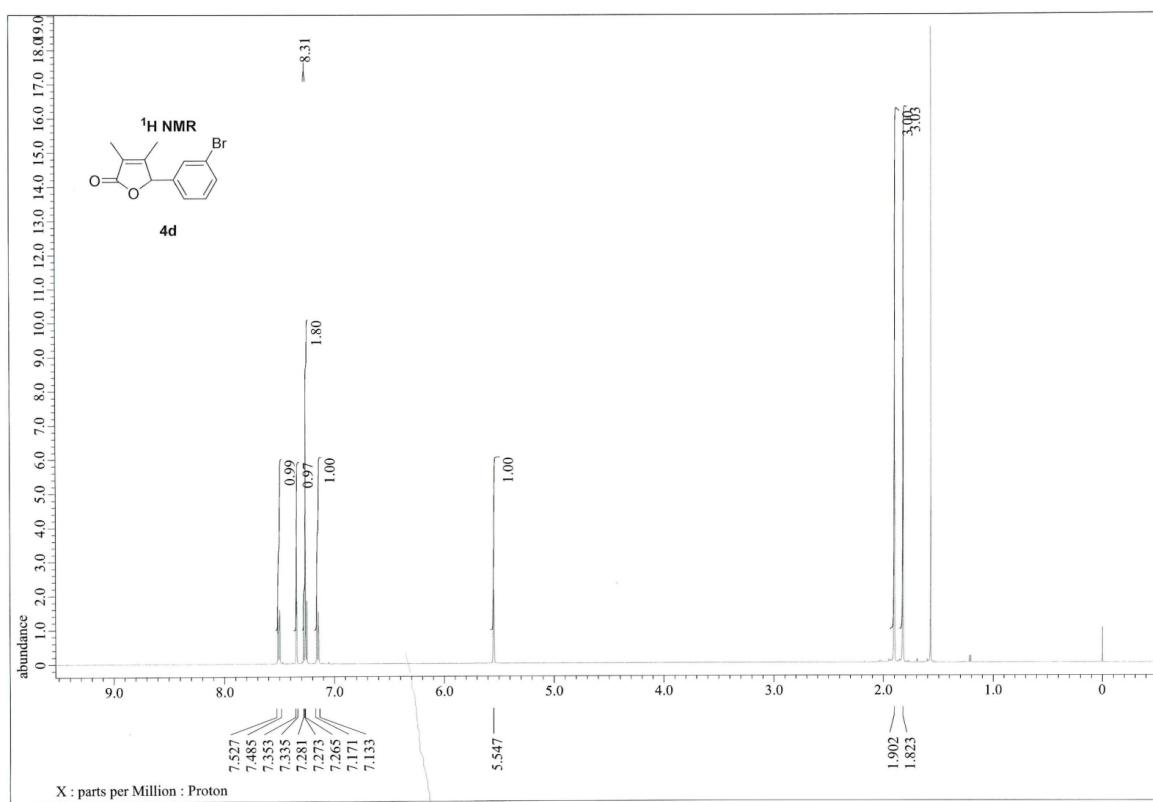


Figure S9. ^1H -NMR spectra of 5-(3-Bromophenyl)-3,4-dimethylfuran-2(5*H*)-one.

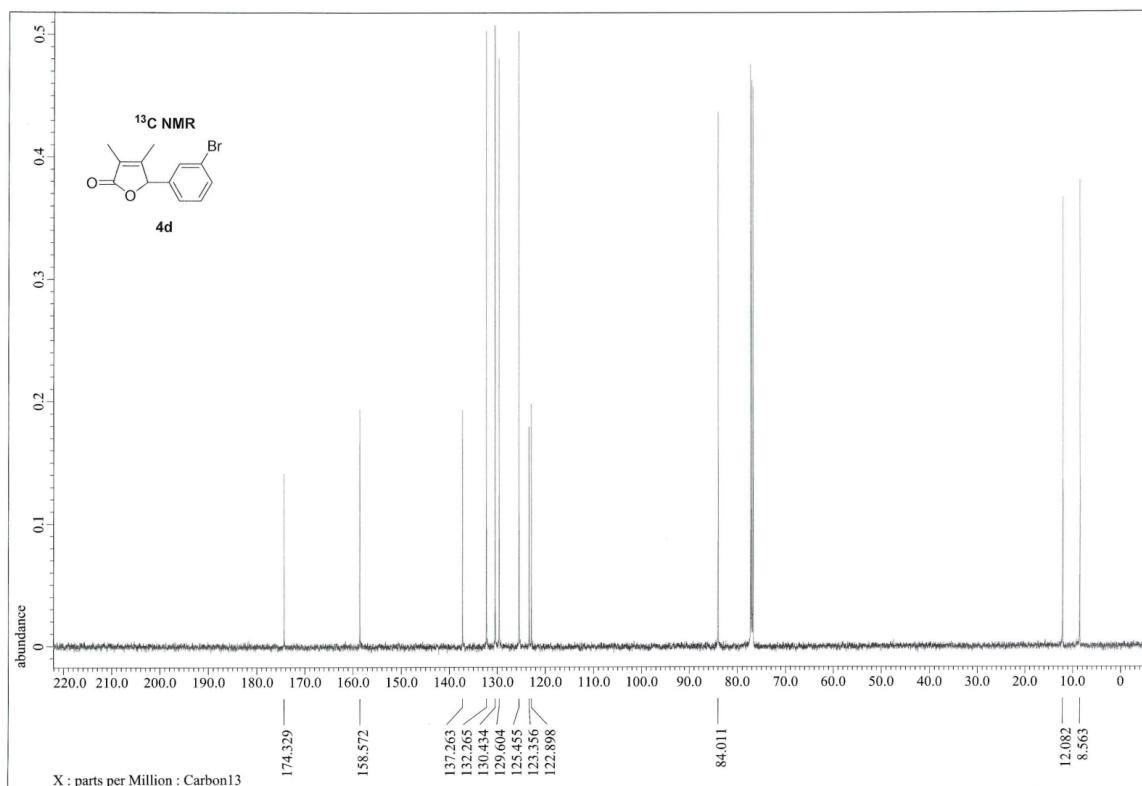


Figure S10. ¹³C-NMR spectra of 5-(3-Bromophenyl)-3,4-dimethylfuran-2(5H)-one.

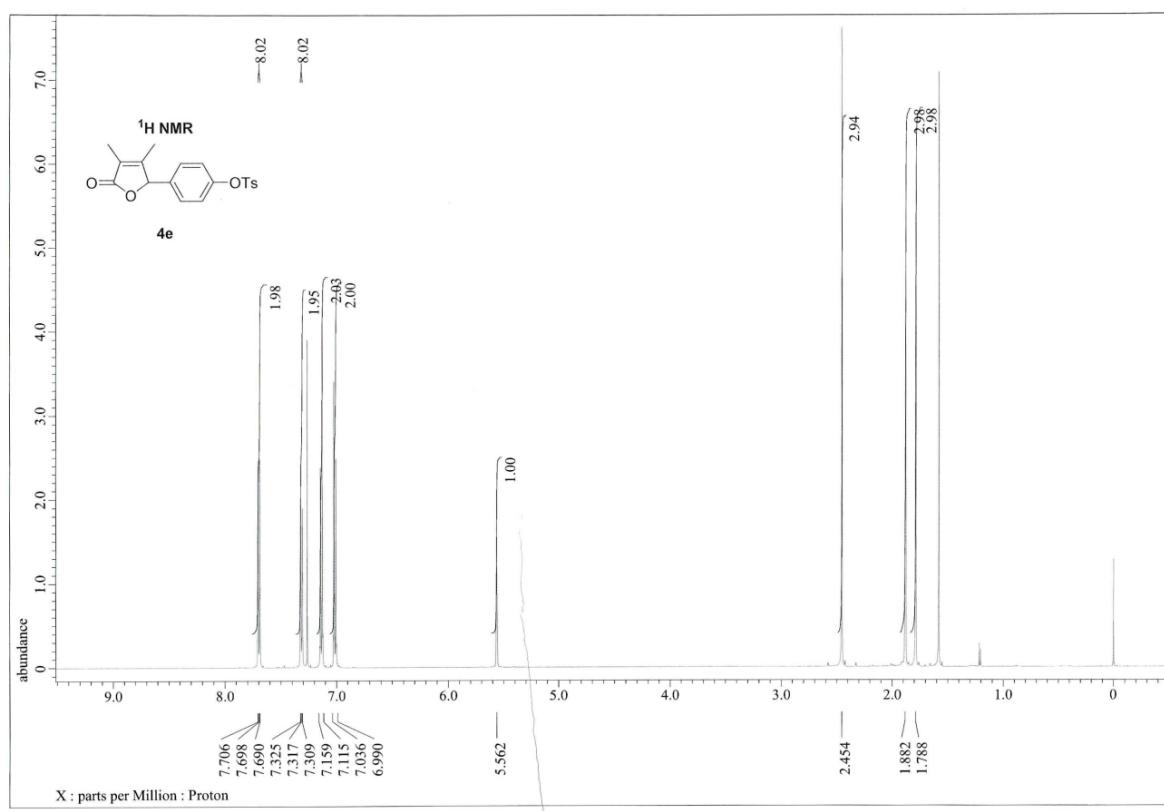


Figure S11. ¹H-NMR spectra of 5-(4-Tosyloxyphenyl)-3,4-dimethylfuran-2(5H)-one.

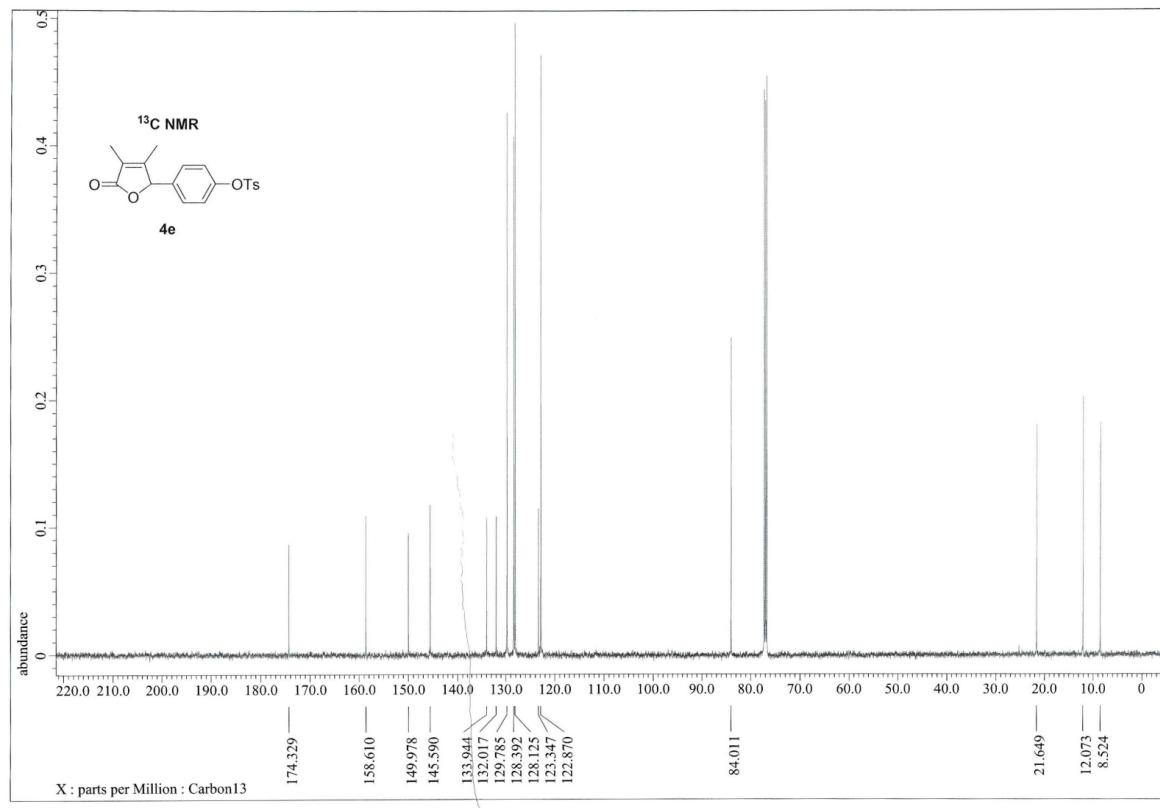


Figure S12. ¹³C-NMR spectra of 5-(4-Tosyloxyphenyl)-3,4-dimethylfuran-2(5H)-one.

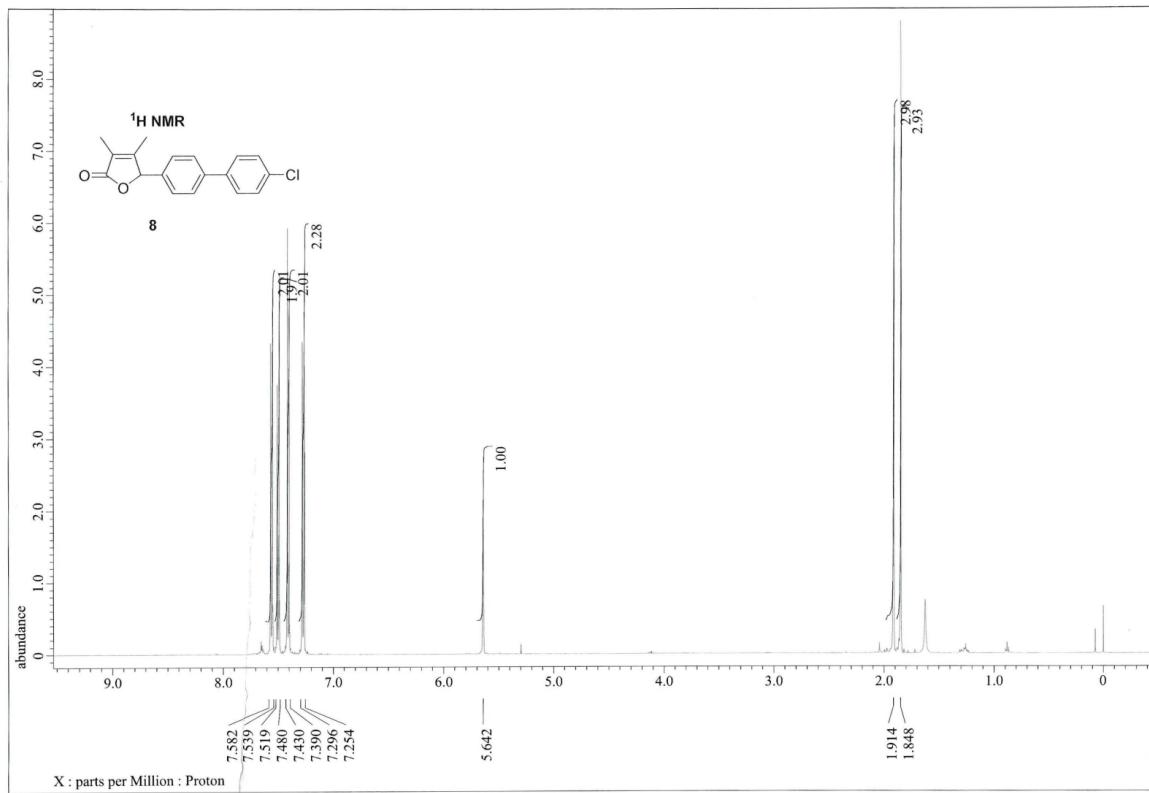


Figure S13. ¹H-NMR spectra of 5-(4'-Chloro-[1,1'-biphenyl]-4-yl)-3,4-dimethylfuran-2(5H)-one.

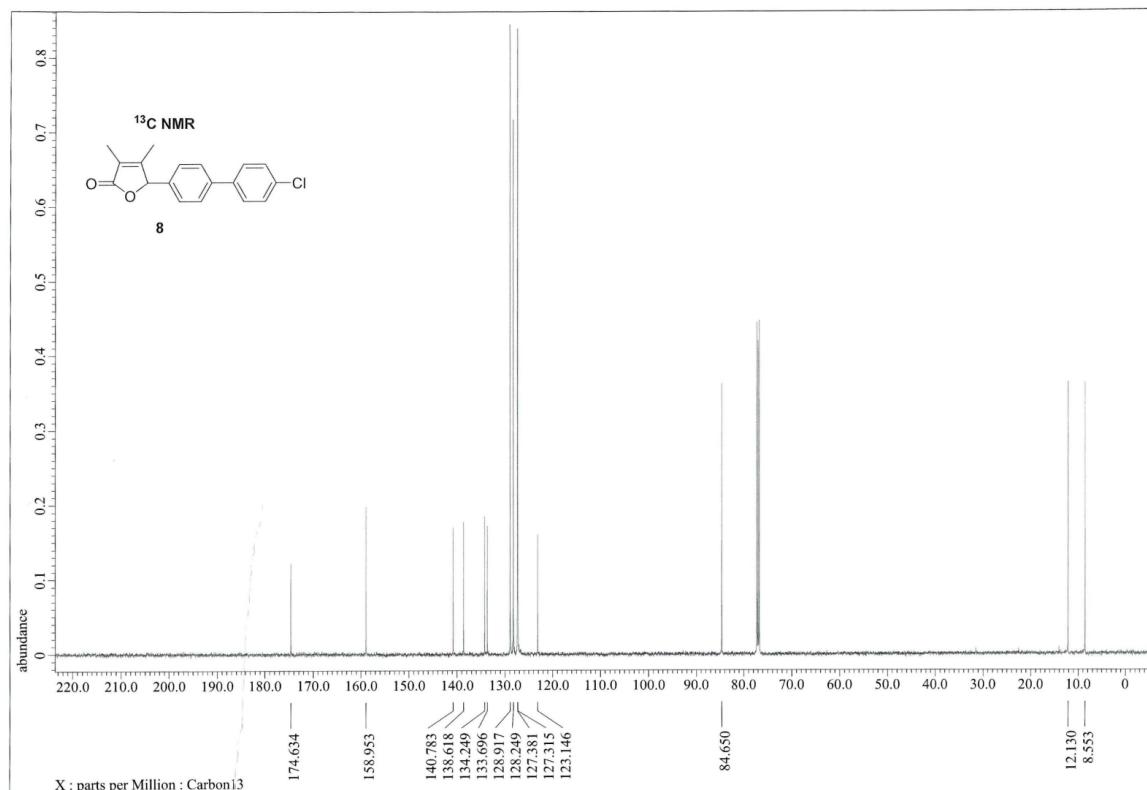


Figure S14. ¹³C-NMR spectra of 5-(4'-Chloro-[1,1'-biphenyl]-4-yl)-3,4-dimethylfuran-2(5H)-one.

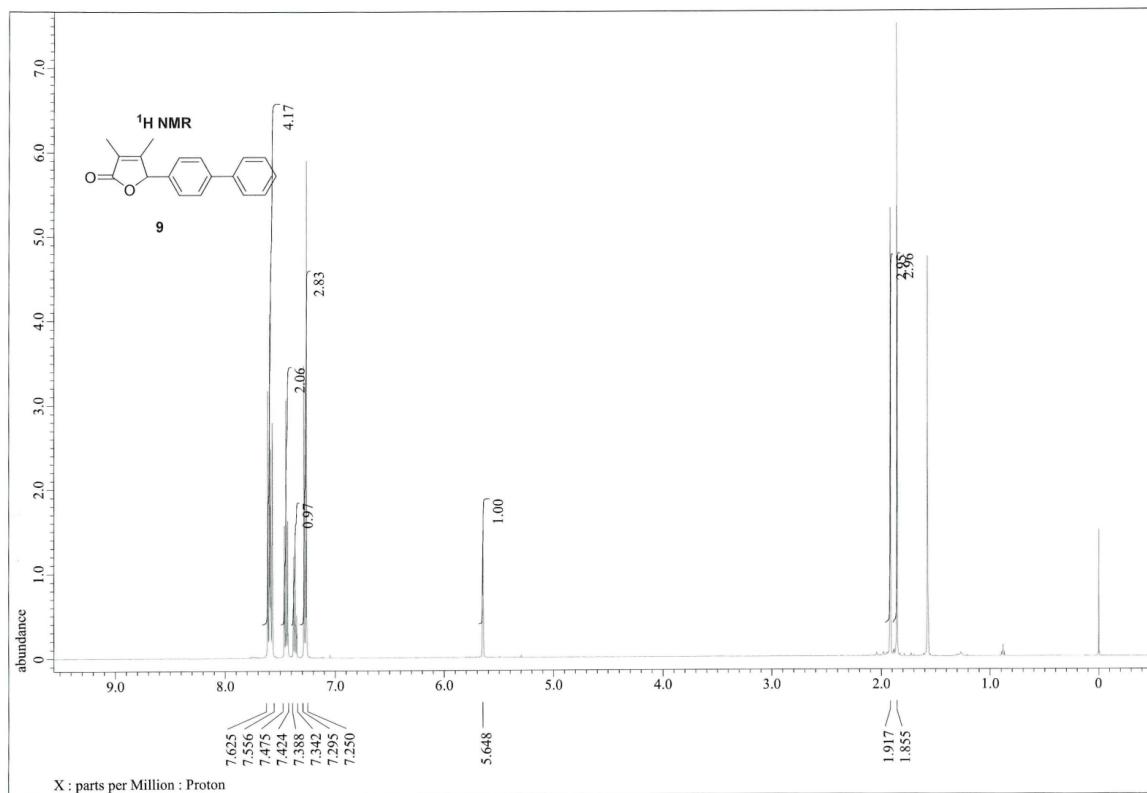


Figure S15. ¹H-NMR spectra of 5-(1,1'-Biphenyl-4-yl)-3,4-dimethylfuran-2(5H)-one.

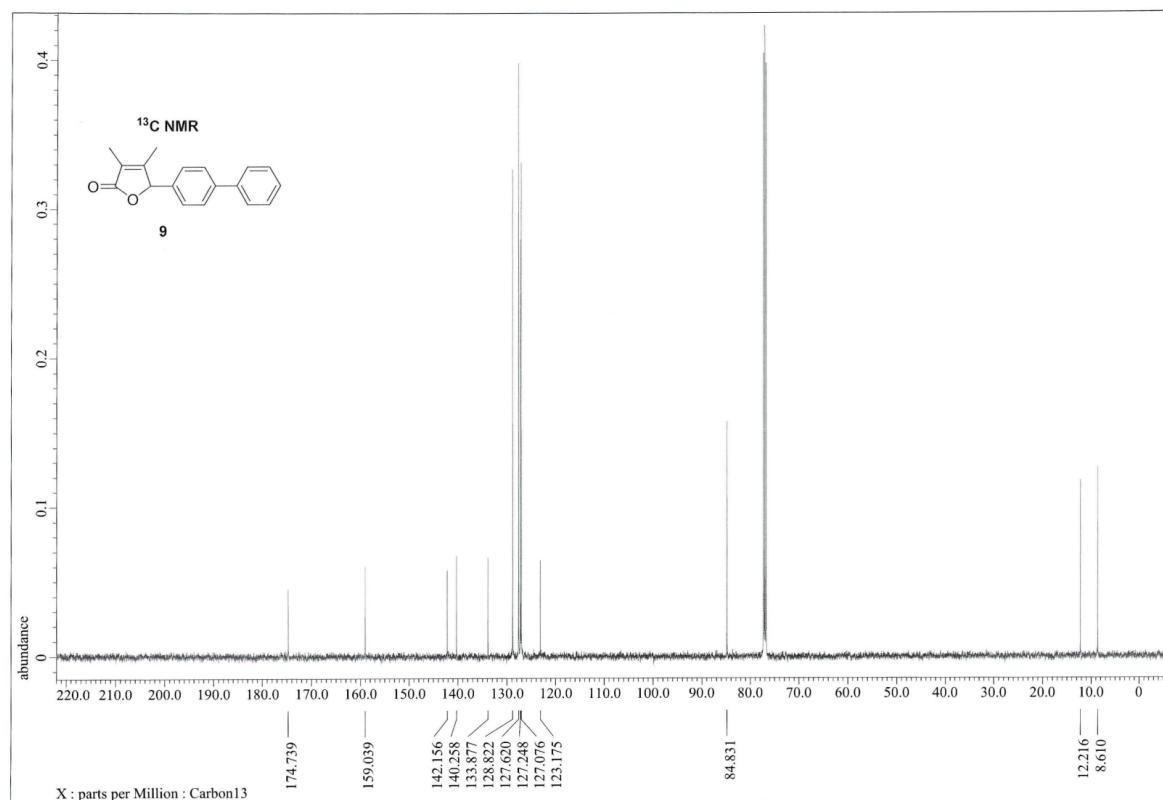


Figure S16. ¹³C-NMR spectra of 5-(1,1'-Biphenyl-4-yl)-3,4-dimethylfuran-2(5H)-one.

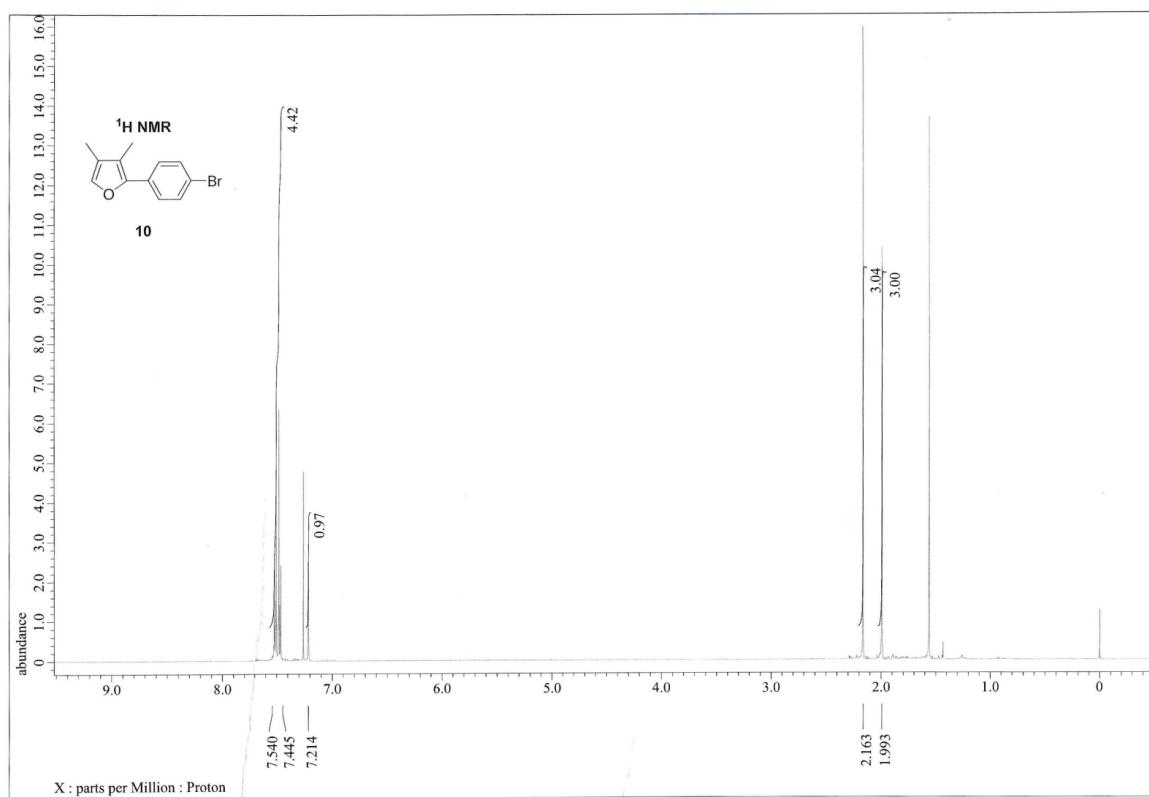


Figure S17. ¹H-NMR spectra of 2-(4-Bromophenyl)-3,4-dimethylfuran.

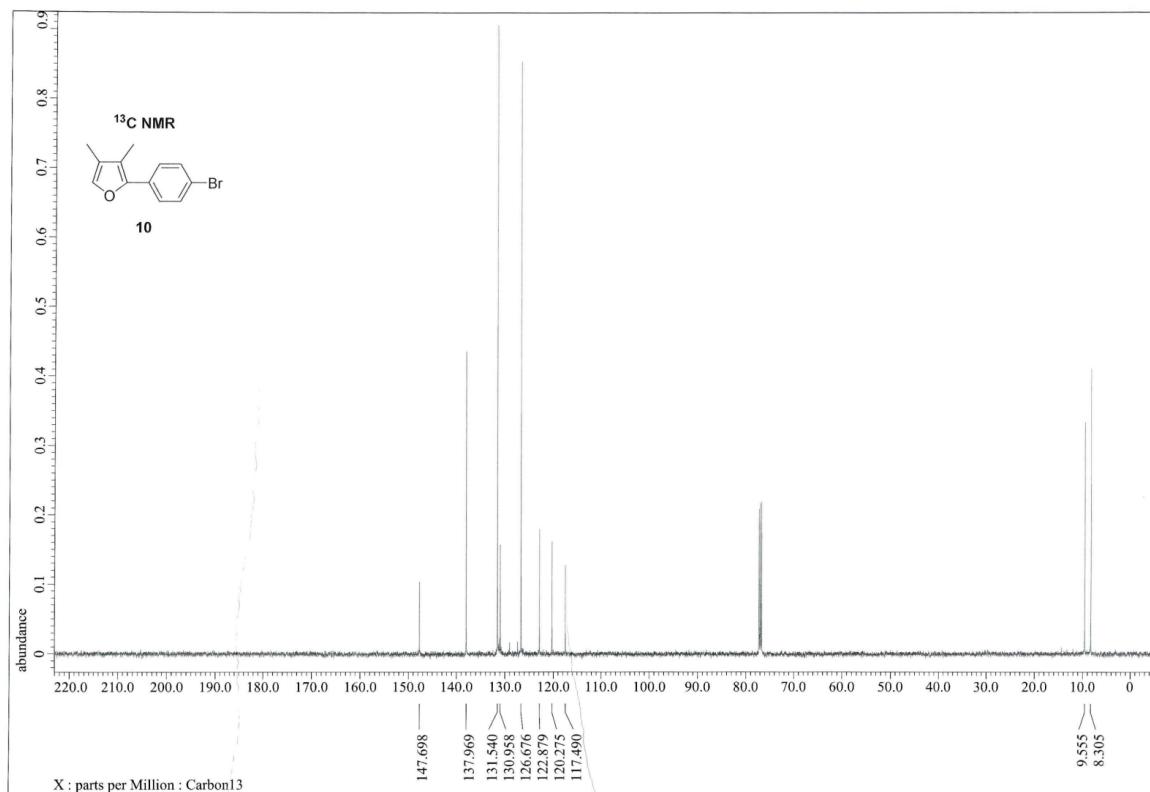


Figure S18. ¹³C-NMR spectra of 2-(4-Bromophenyl)-3,4-dimethylfuran.

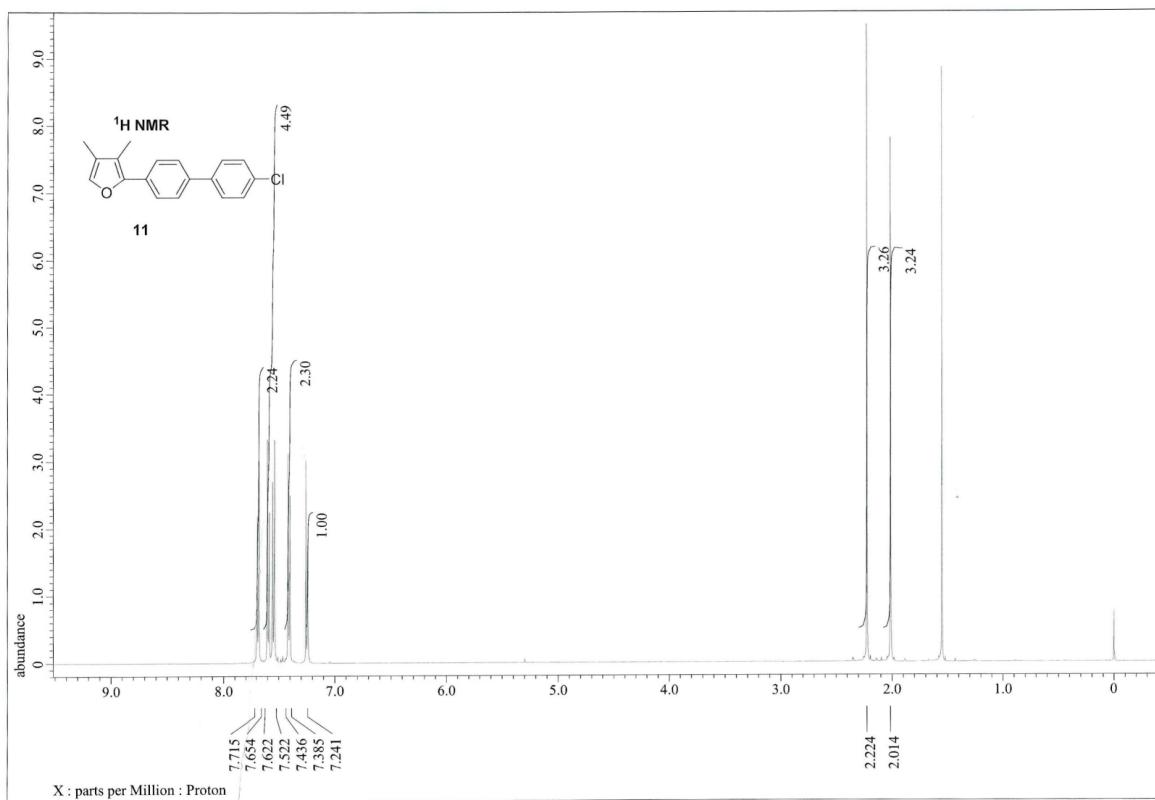


Figure S19. ¹H-NMR spectra of 2-(4'-Chloro-[1,1'-biphenyl]-4-yl)-3,4-dimethylfuran.

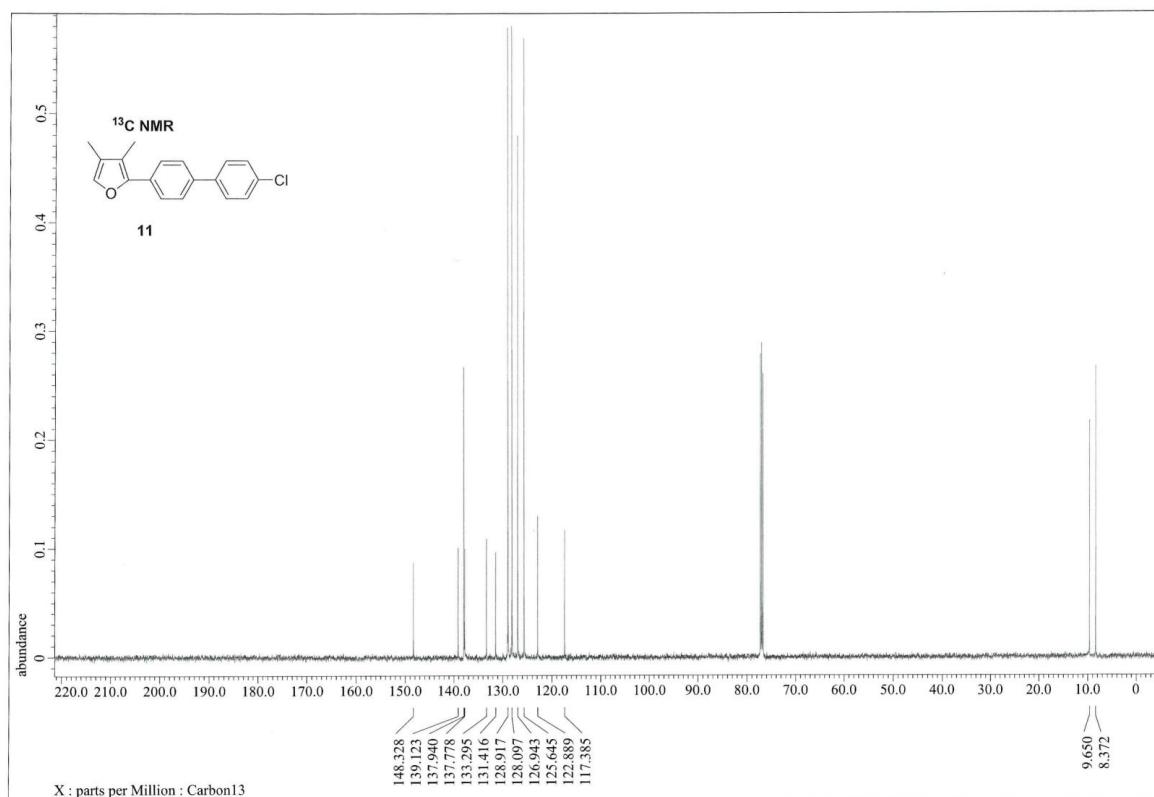


Figure S20. ¹³C-NMR spectra of 2-(4'-Chloro-[1,1'-biphenyl]-4-yl)-3,4-dimethylfuran.