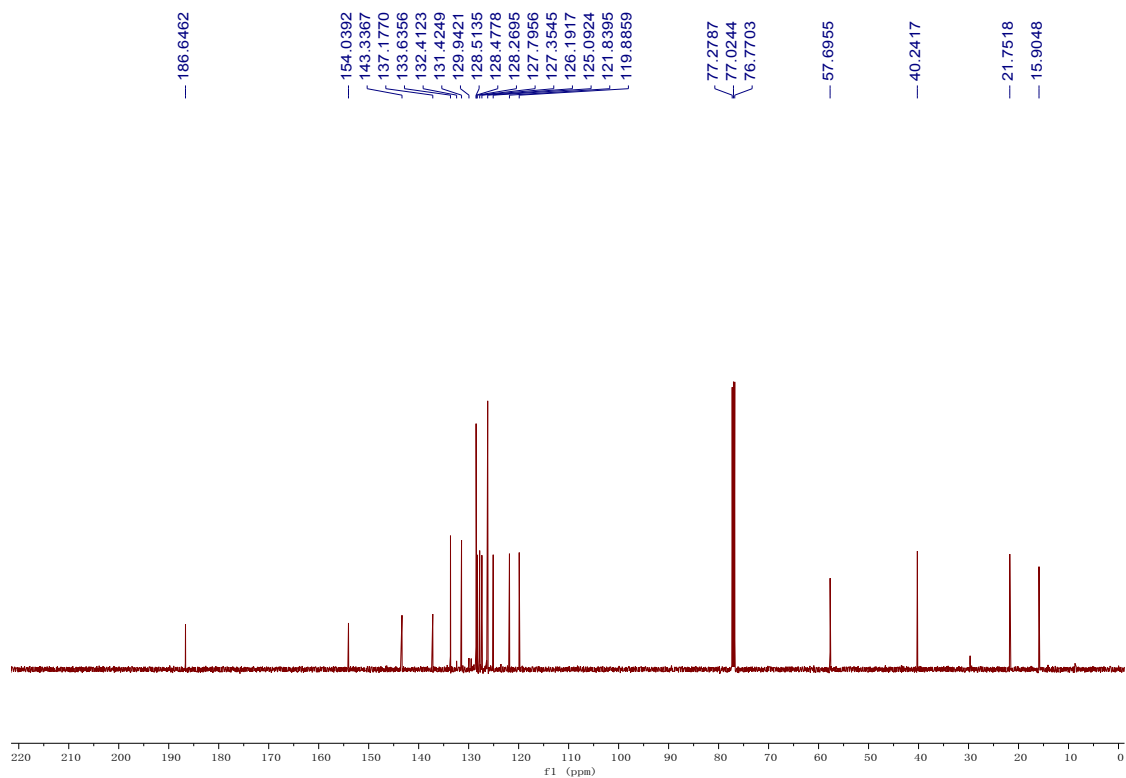
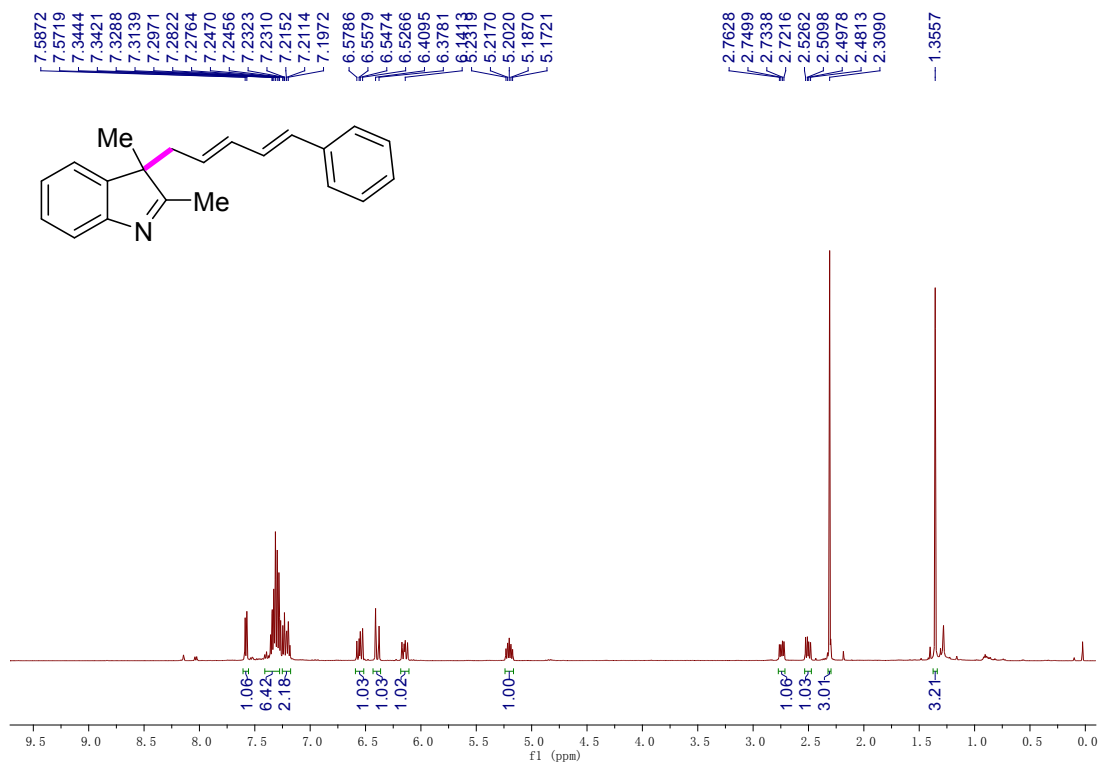


Supporting Information

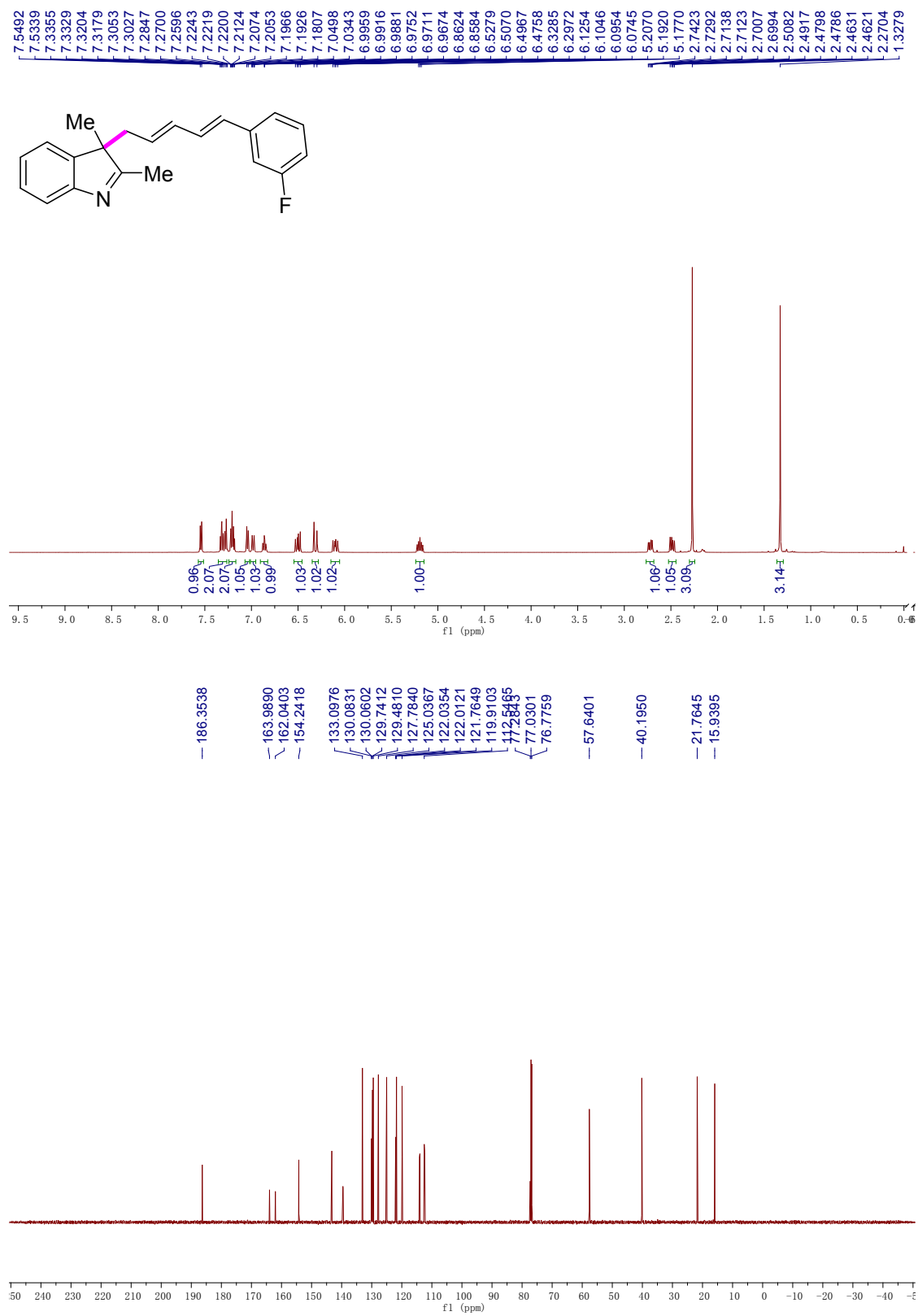
Palladium-catalyzed dearomative allylation of indoles with cyclopropyl acetylenes: access to indolenine derivatives

Chuan-Jun Lu,^{*a,b} Yu-Ting Chen,^a Hong Wang,^a Yu-Jin Li^a

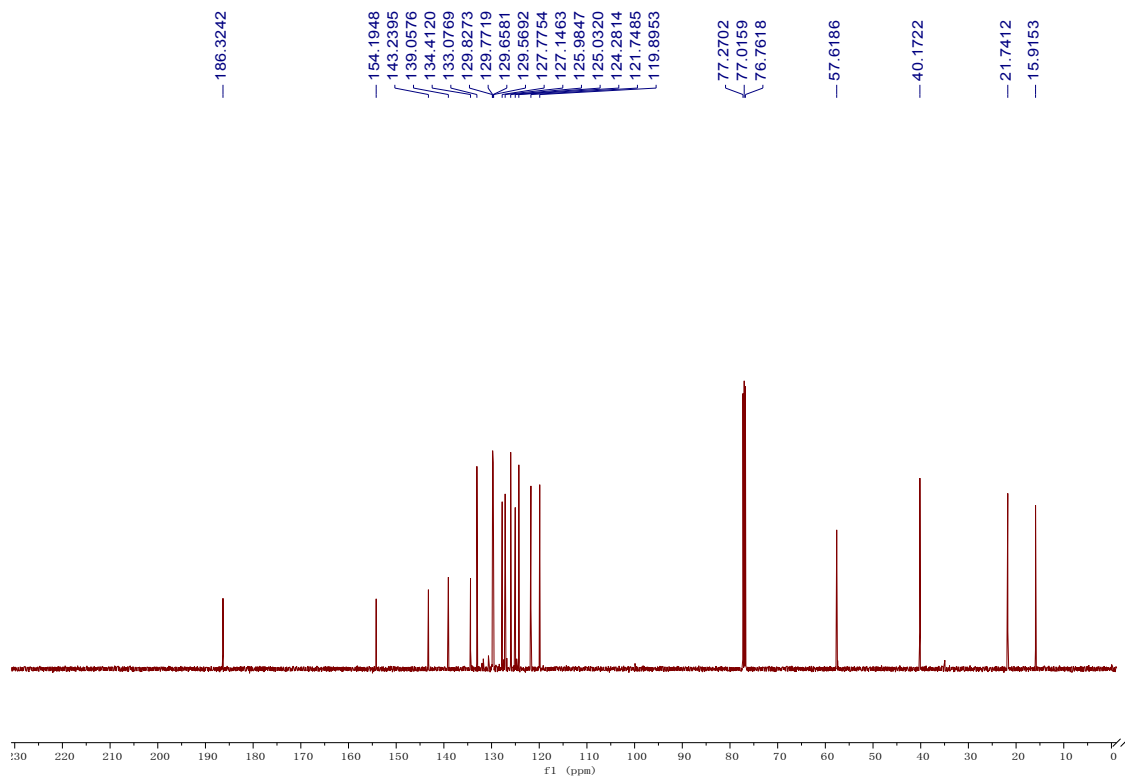
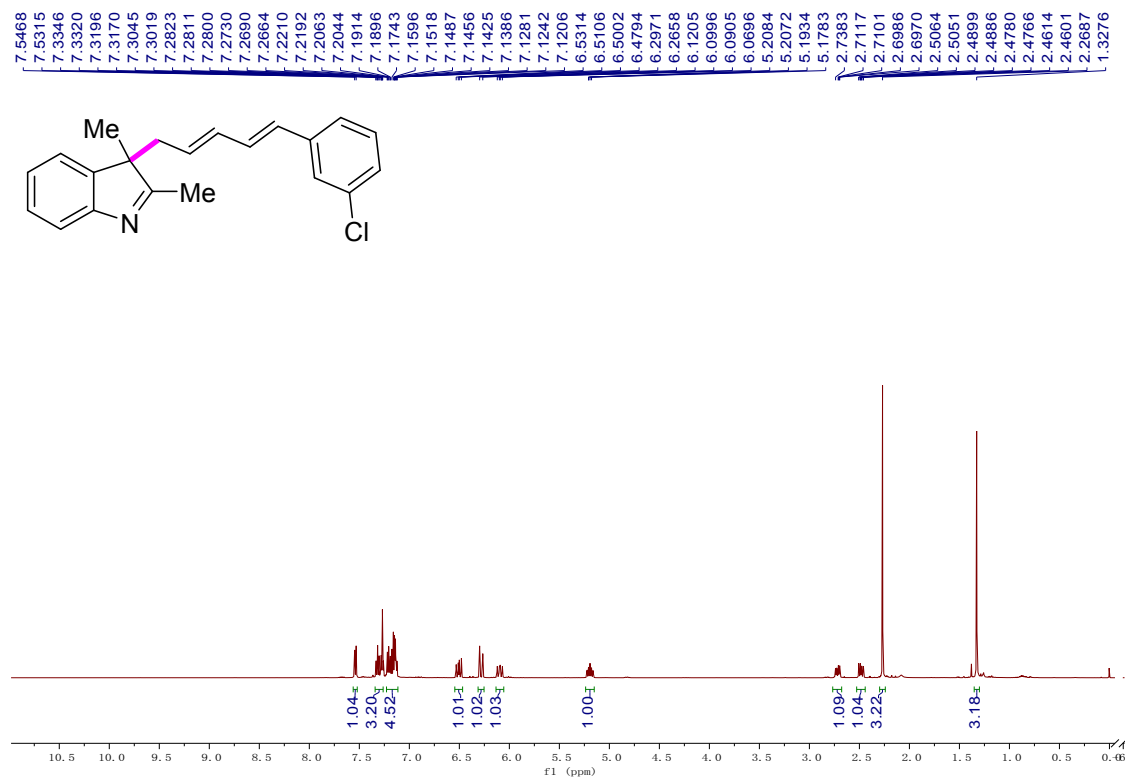
2,3-dimethyl-3-((2E,4E)-5-phenylpenta-2,4-dien-1-yl)-3H-indole (3aa)



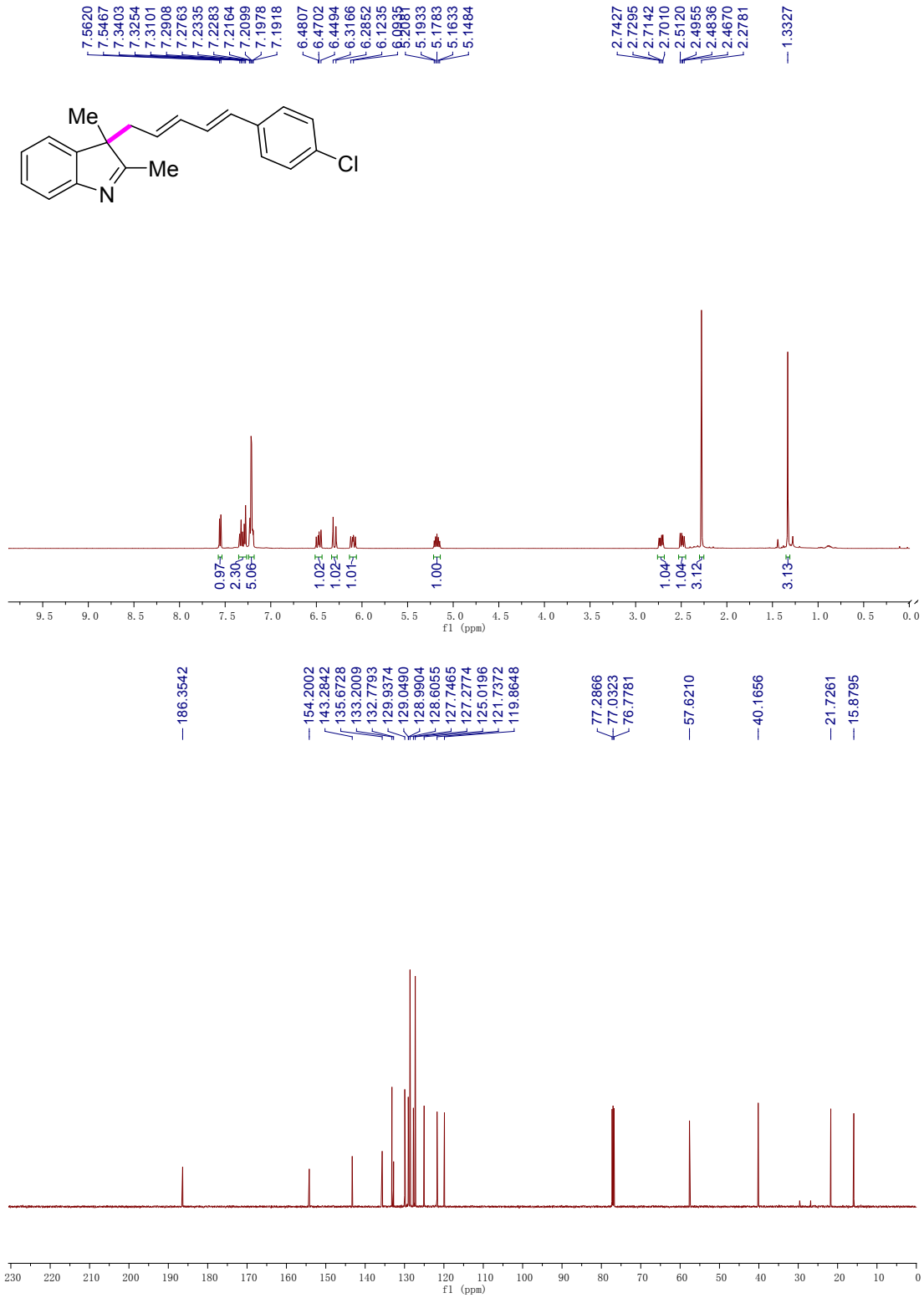
3-((2E, 4E)-5-(3-fluorophenyl)penta-2,4-dien-1-yl) -2,3-dimethyl-3H-indole (3ab)



3-((2E, 4E)-5-(3-chlorophenyl)penta-2,4-dien-1-yl)-2,3-dimethyl-1H-indole (3ac)

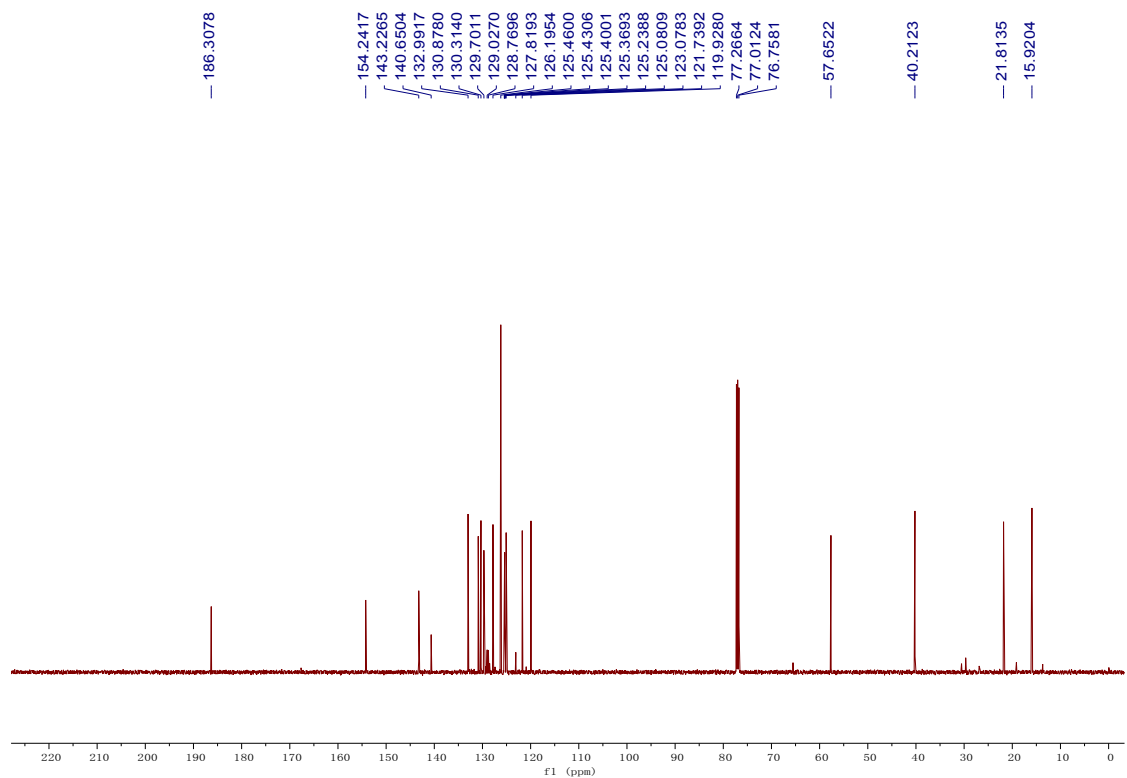
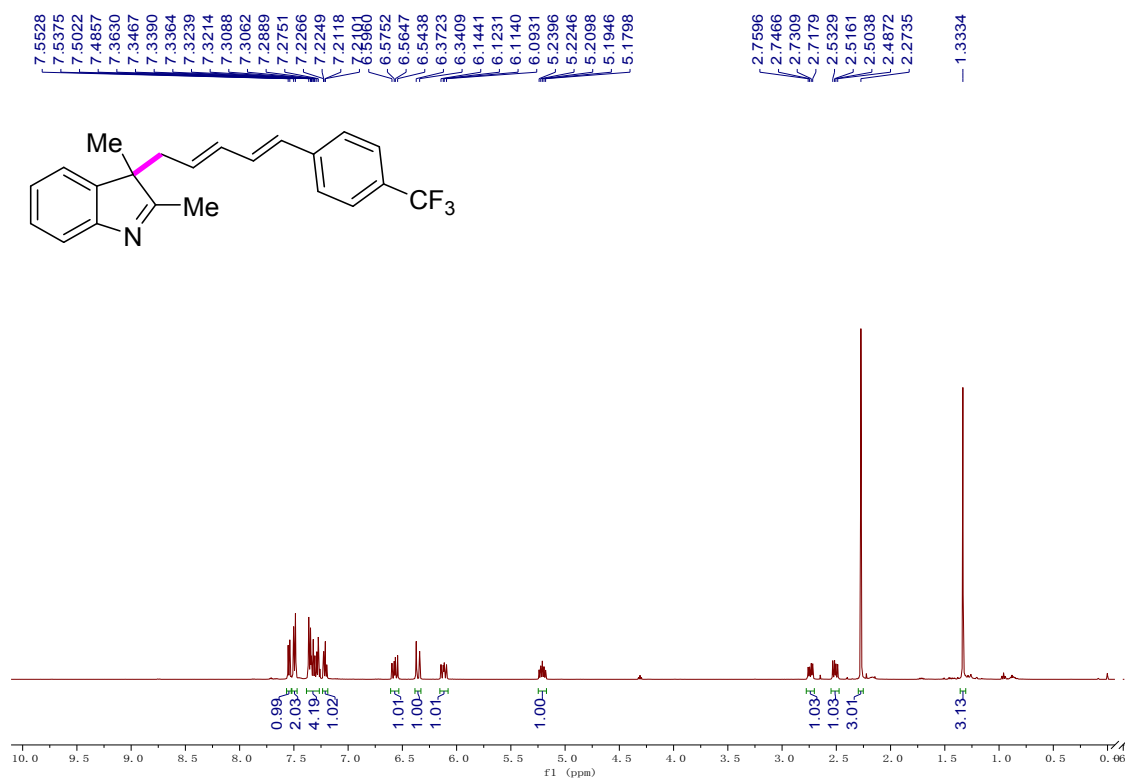


3-((2E, 4E)-5-(4-chlorophenyl)penta-2,4-dien-1-yl)-2,3-dimethyl-1H-indole (3ad)

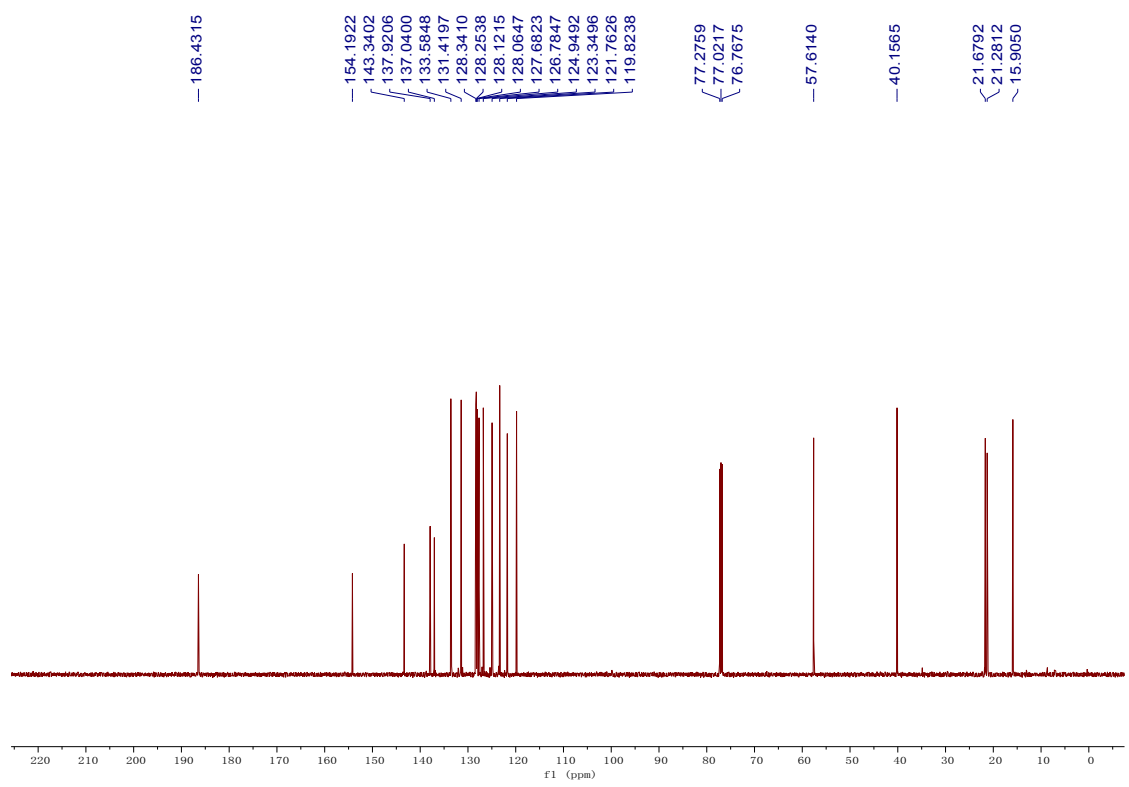
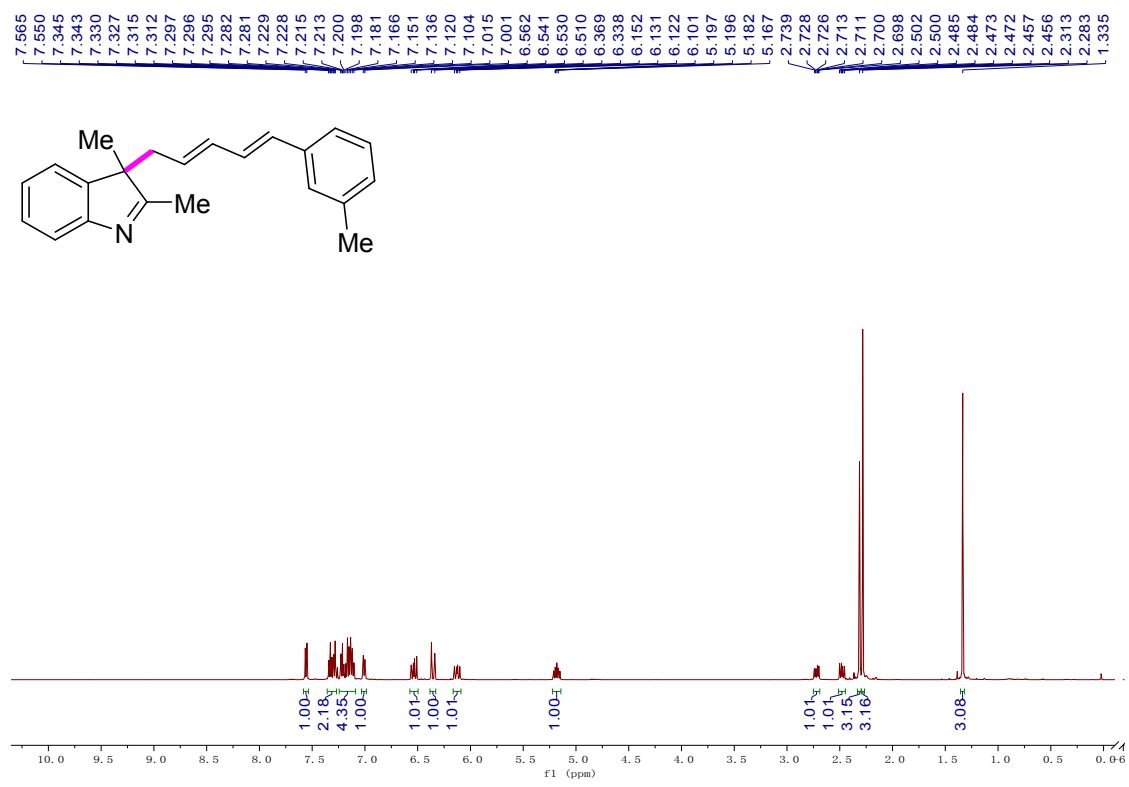


2,3-dimethyl-3-((2E,4E)-5-(4-(trifluoromethyl)phenyl)penta-2,4-dien-1-yl)-3H-

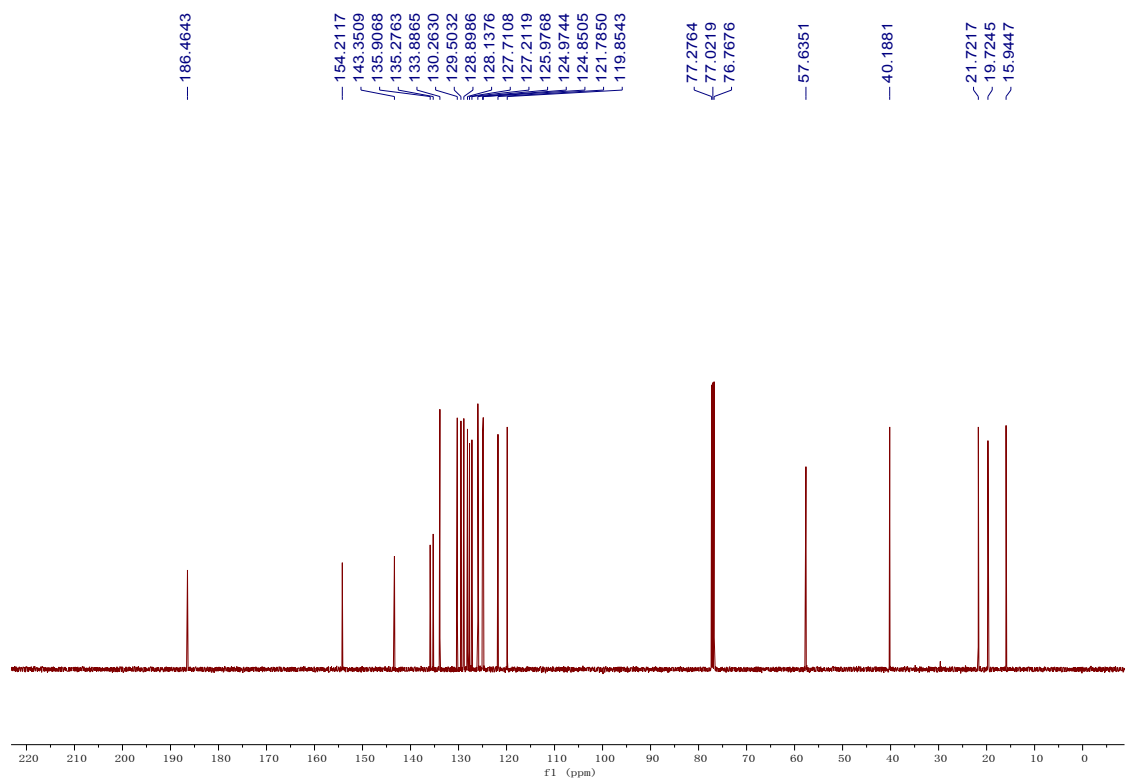
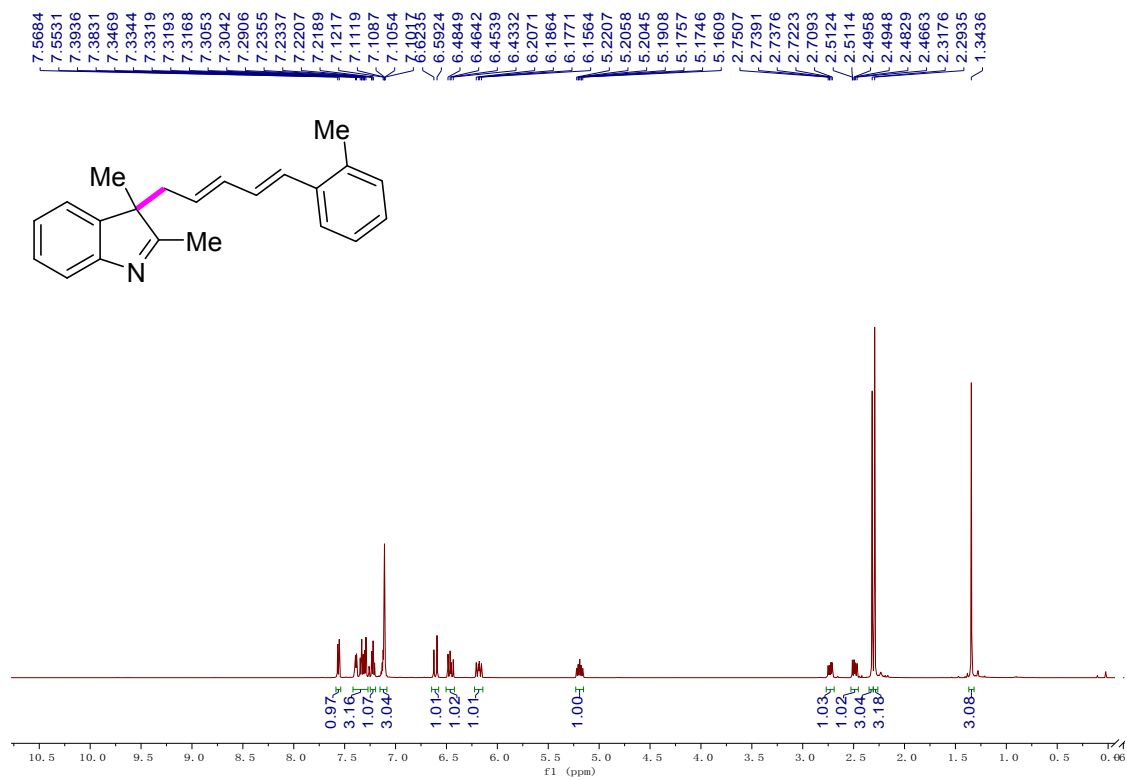
indole (3ae)



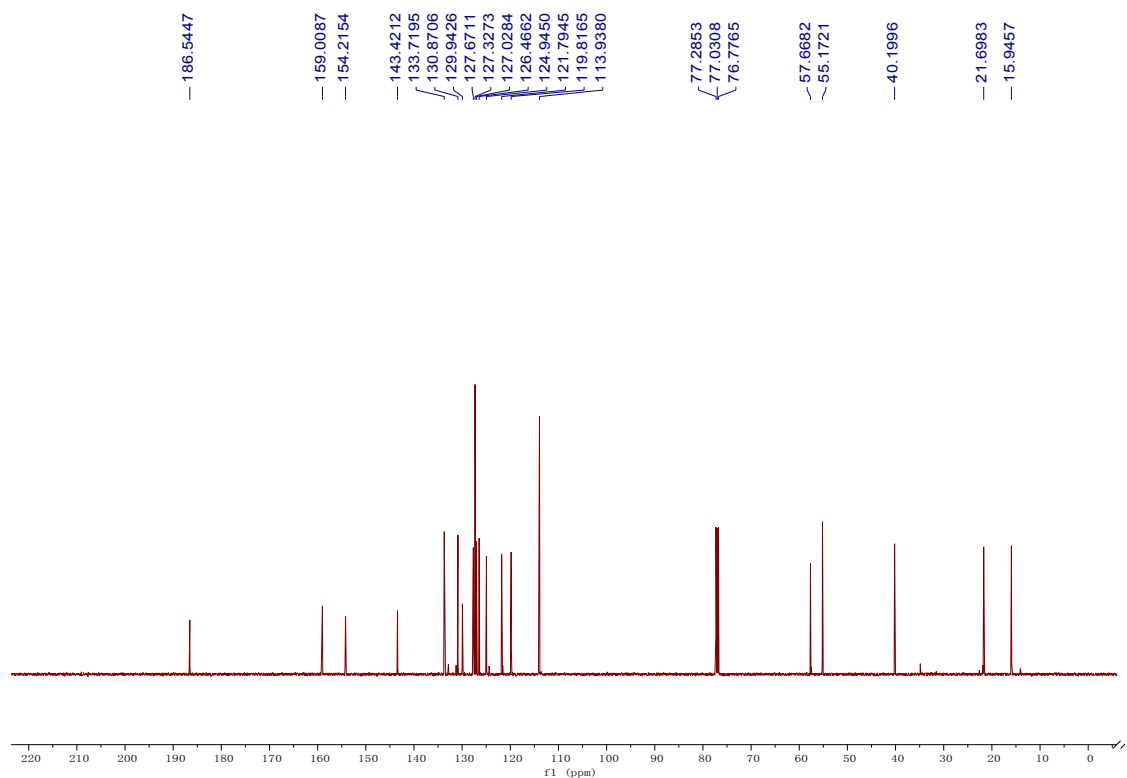
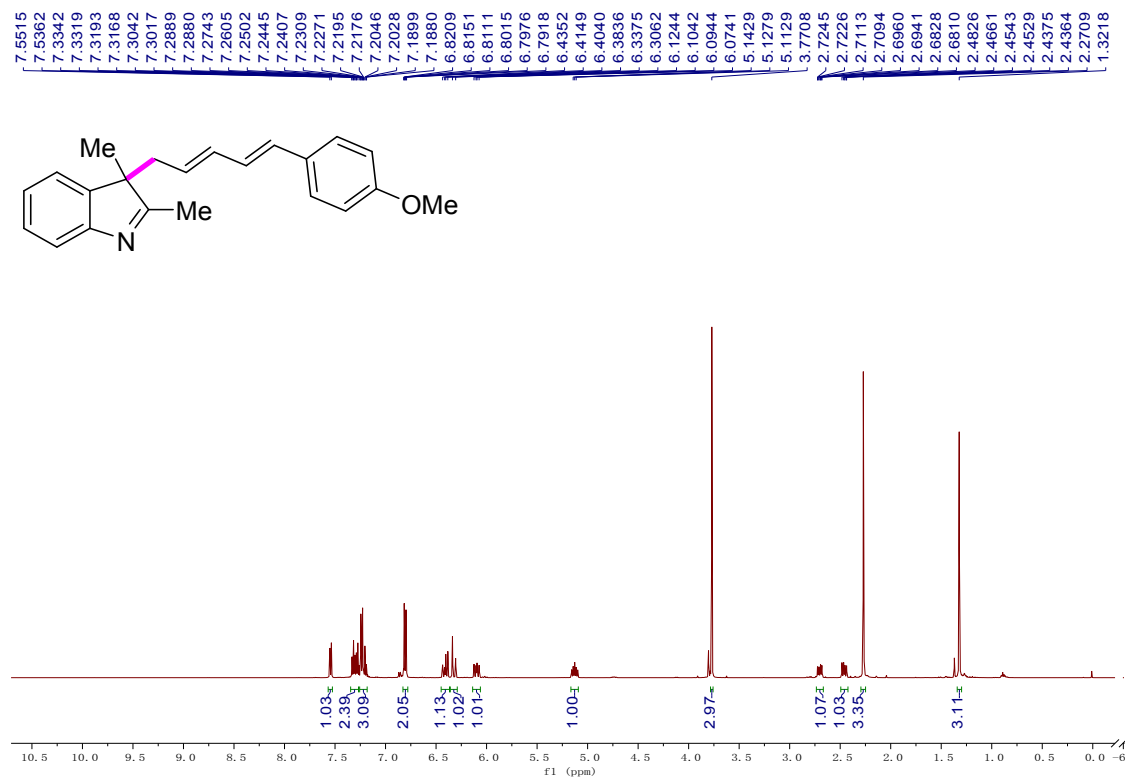
2,3-dimethyl-3-((2E,4E)-5-(m-tolyl)penta-2,4-dien-1-yl)-3H-indole (3ag)



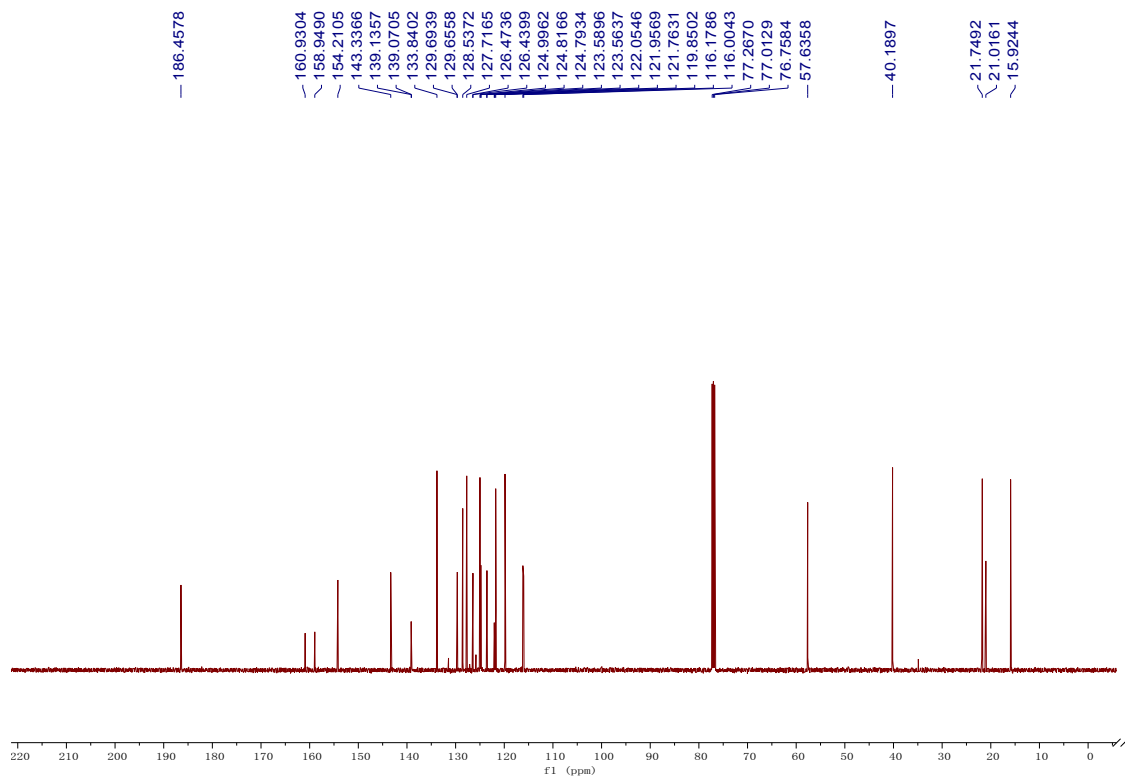
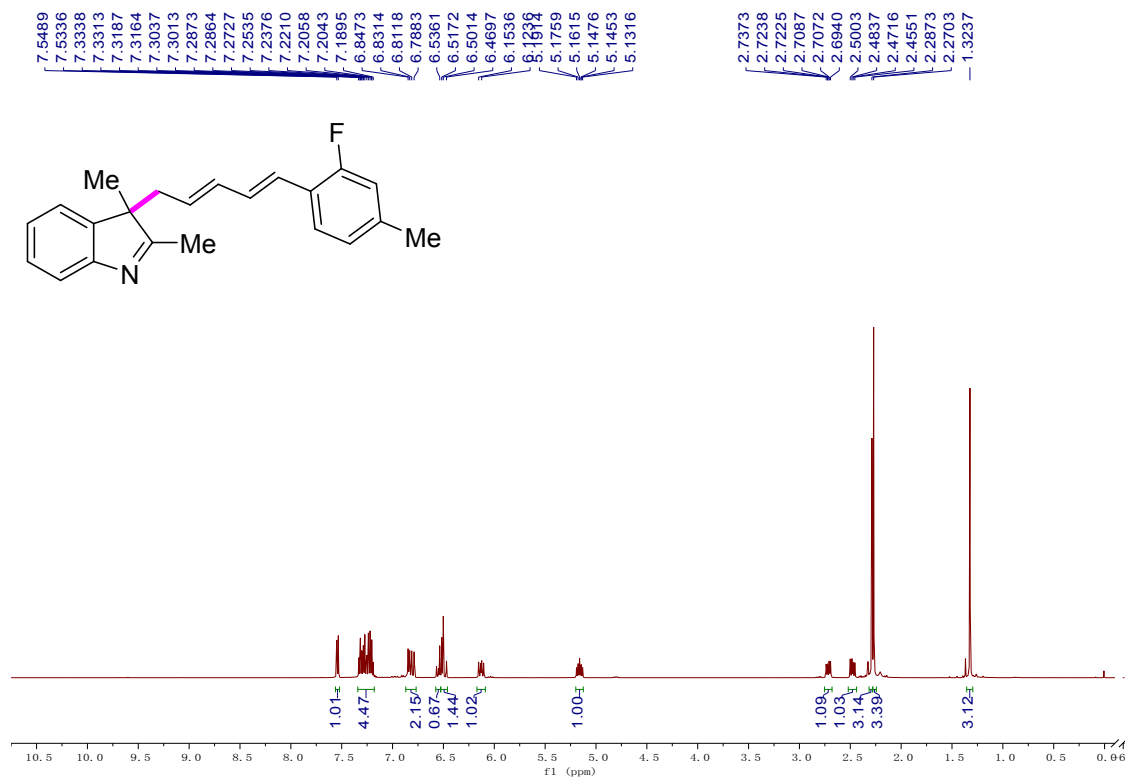
2,3-dimethyl-3-((2E,4E)-5-(o-tolyl)penta-2,4-dien-1-yl)-3H-indole (3ah)



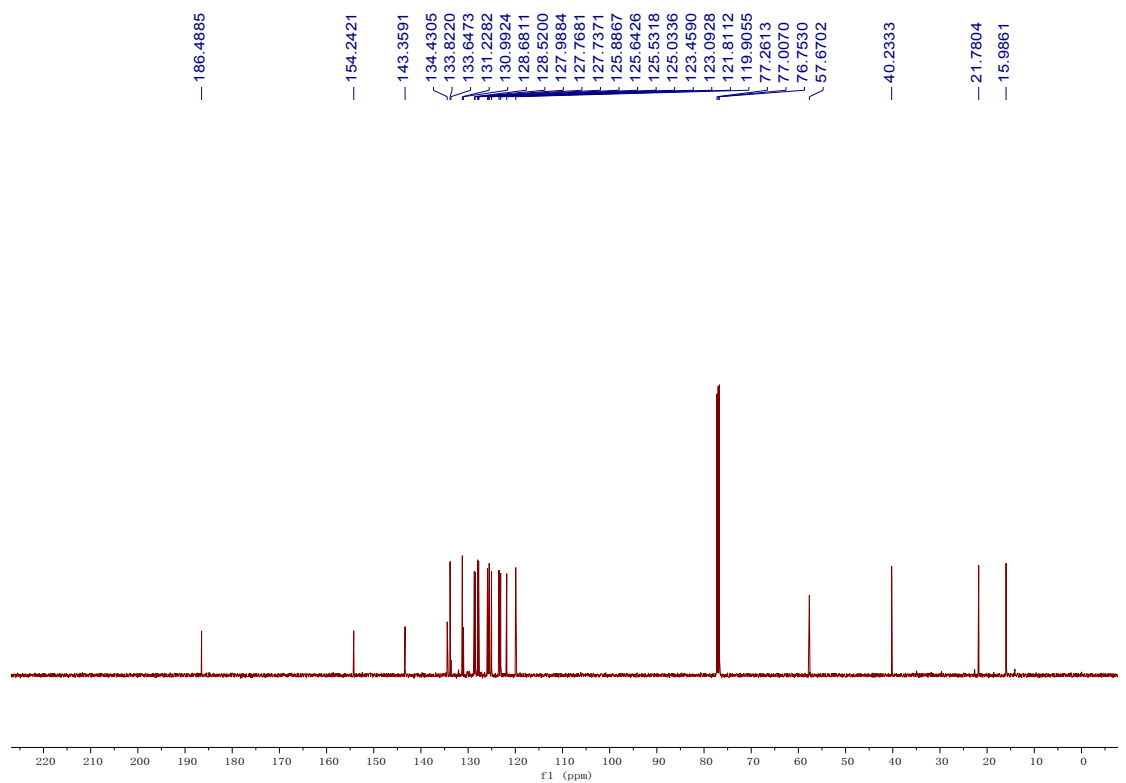
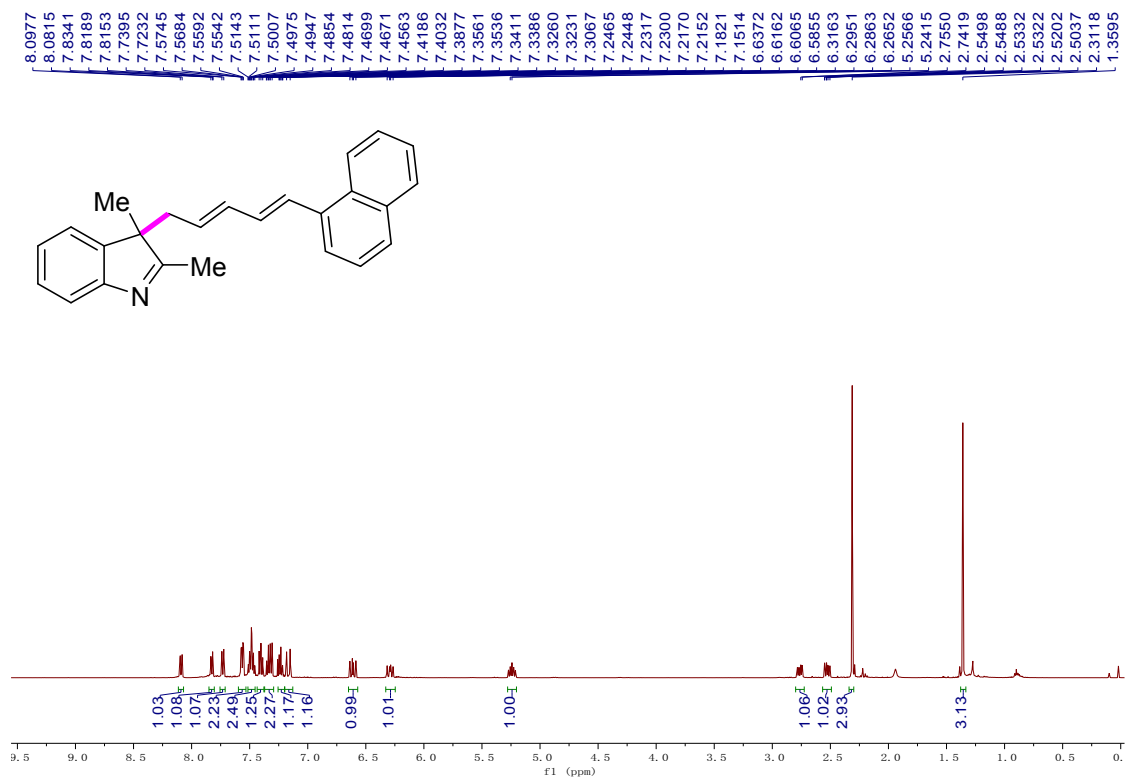
3-((2E,4E)-5-(4-methoxyphenyl)penta-2,4-dien-1-yl)-2,3-dimethyl-1H-indole (3ai)



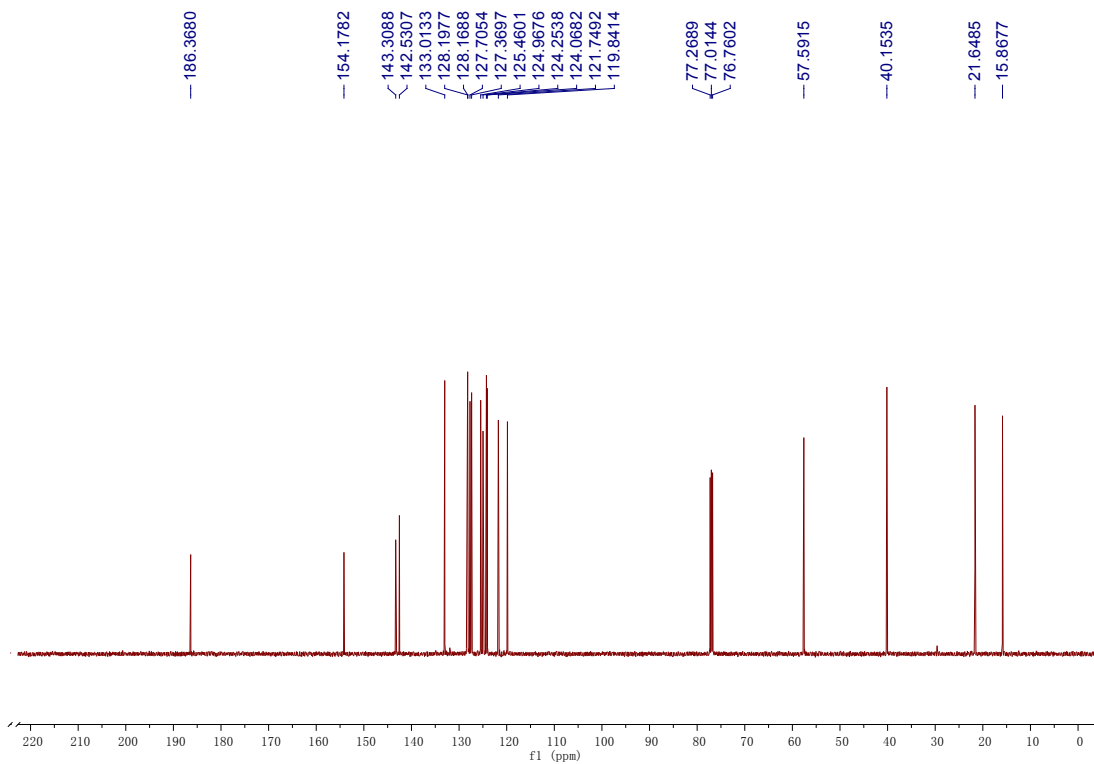
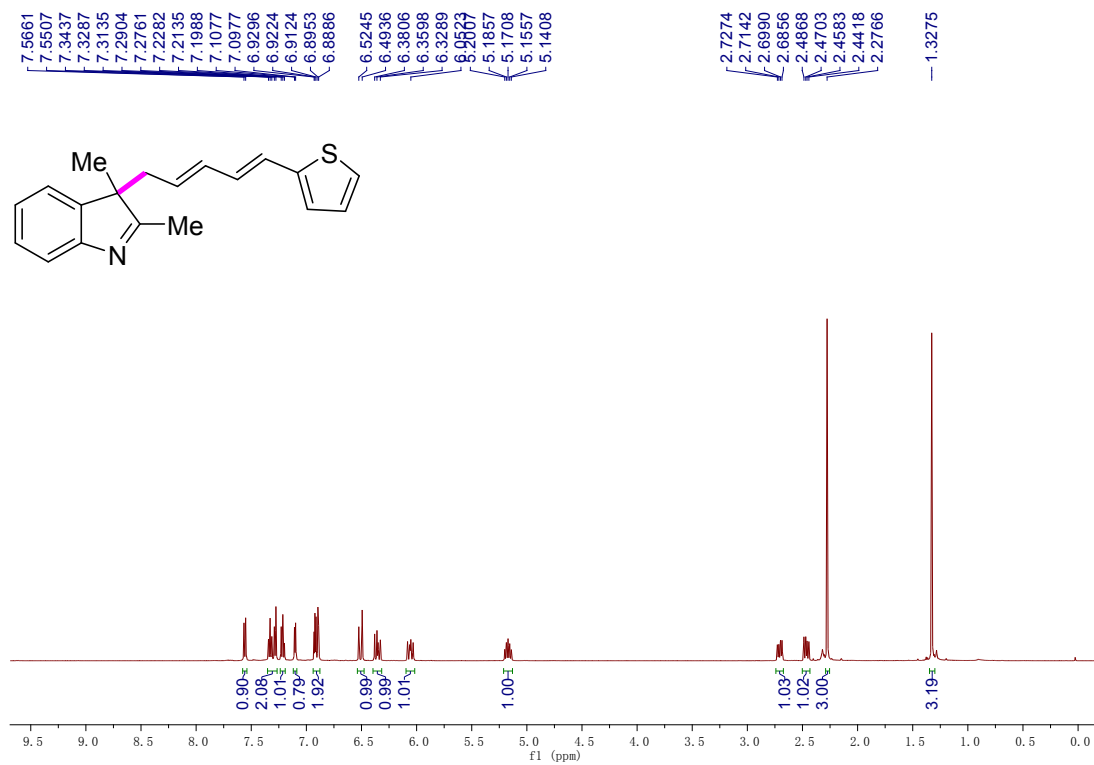
3-((2E,4E)-5-(2-Fluoro-4-methylphenyl)penta-2,4-dien-1-yl)-2,3-dimethyl-3H-indole (3j)



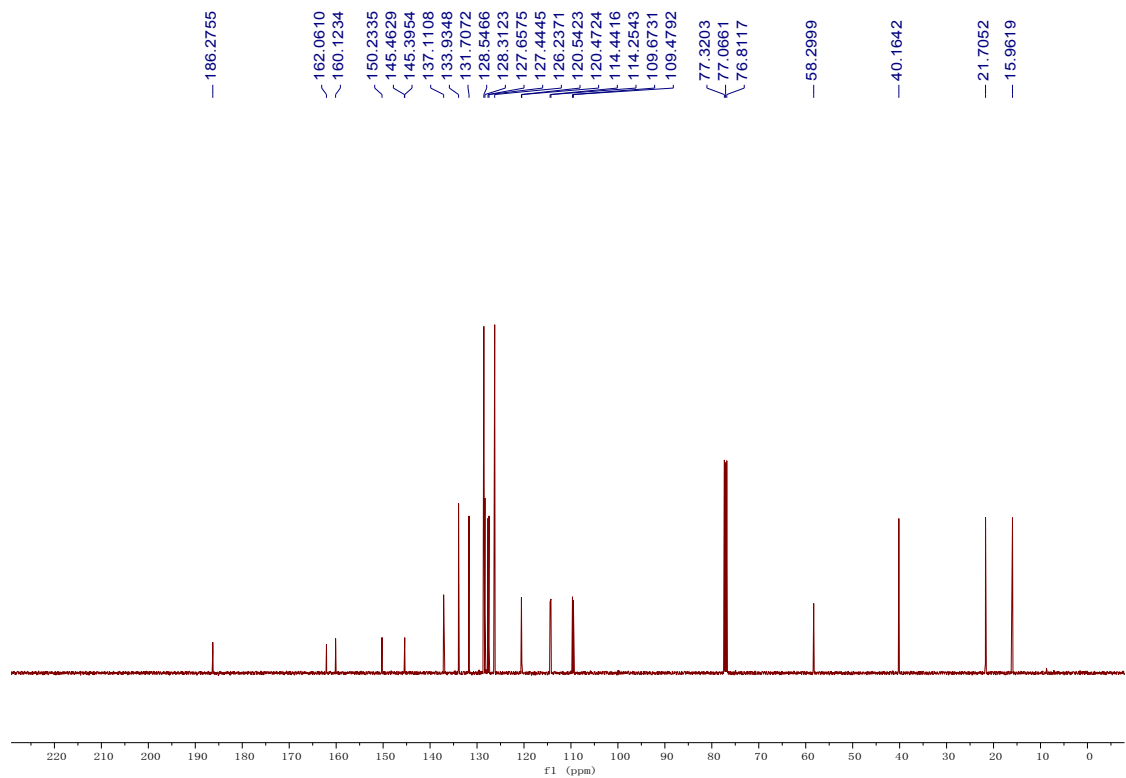
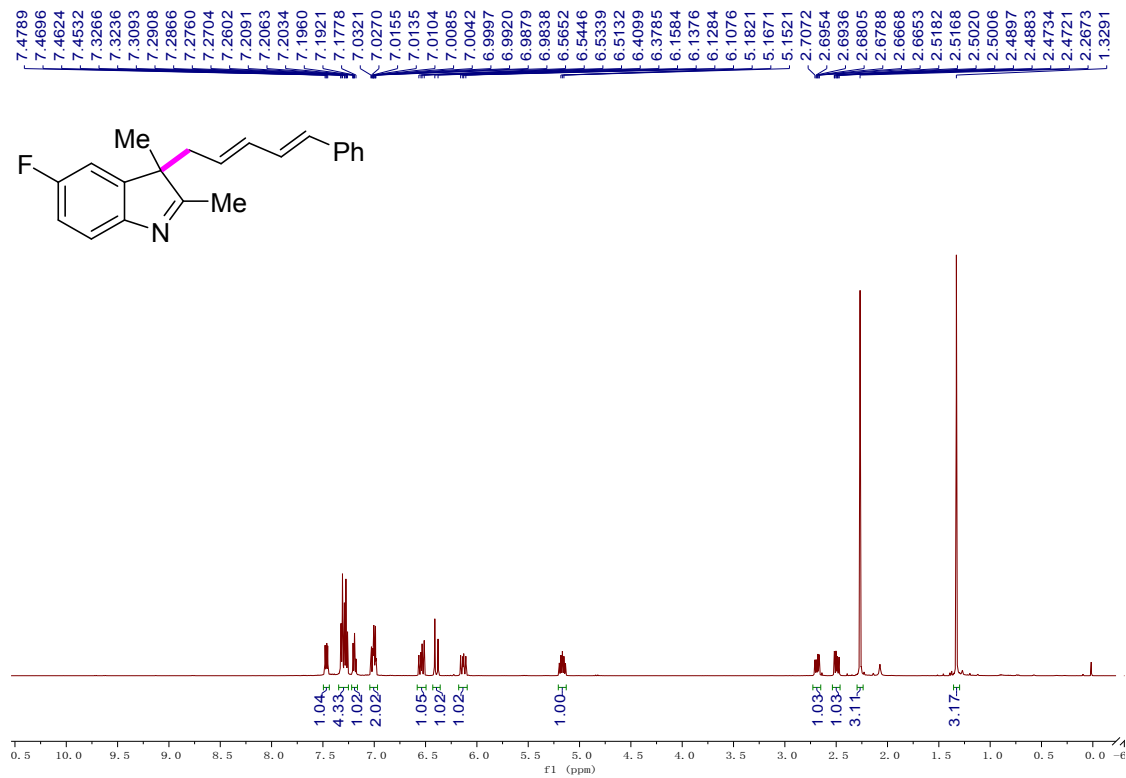
2,3-dimethyl-3-((2E,4E)-5-(naphthalen-2-yl)penta-2,4-dien-1-yl)-3H-indole (3ak)



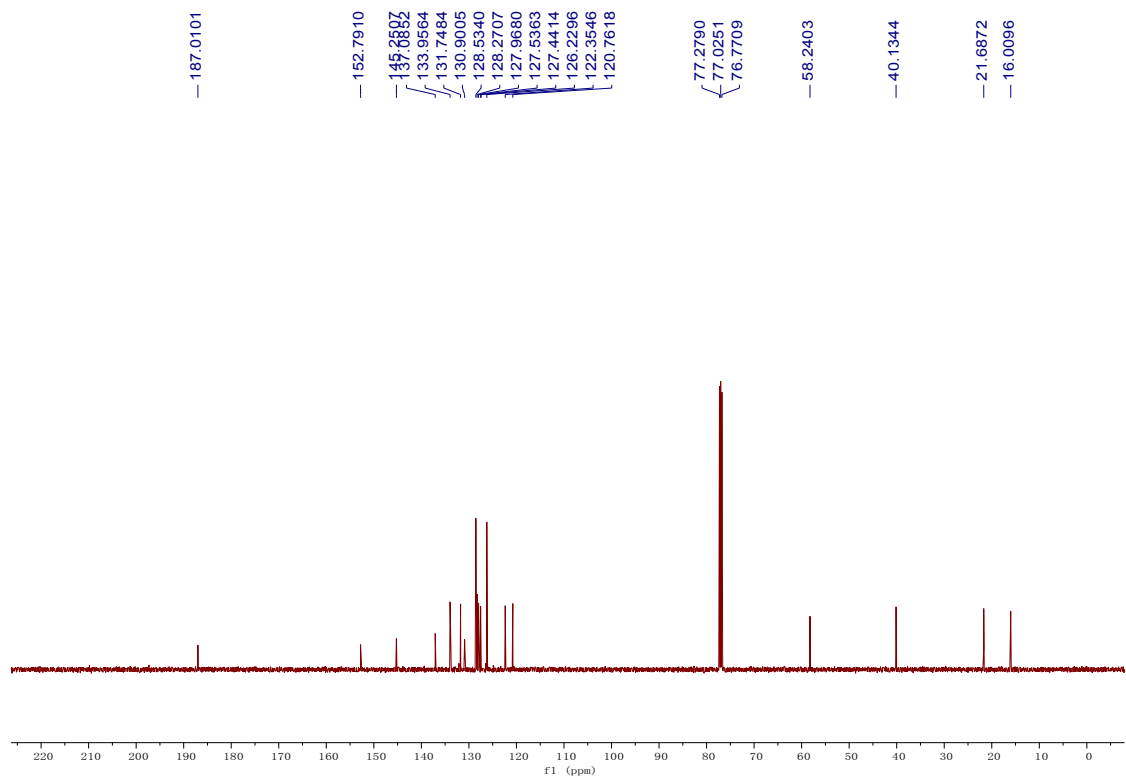
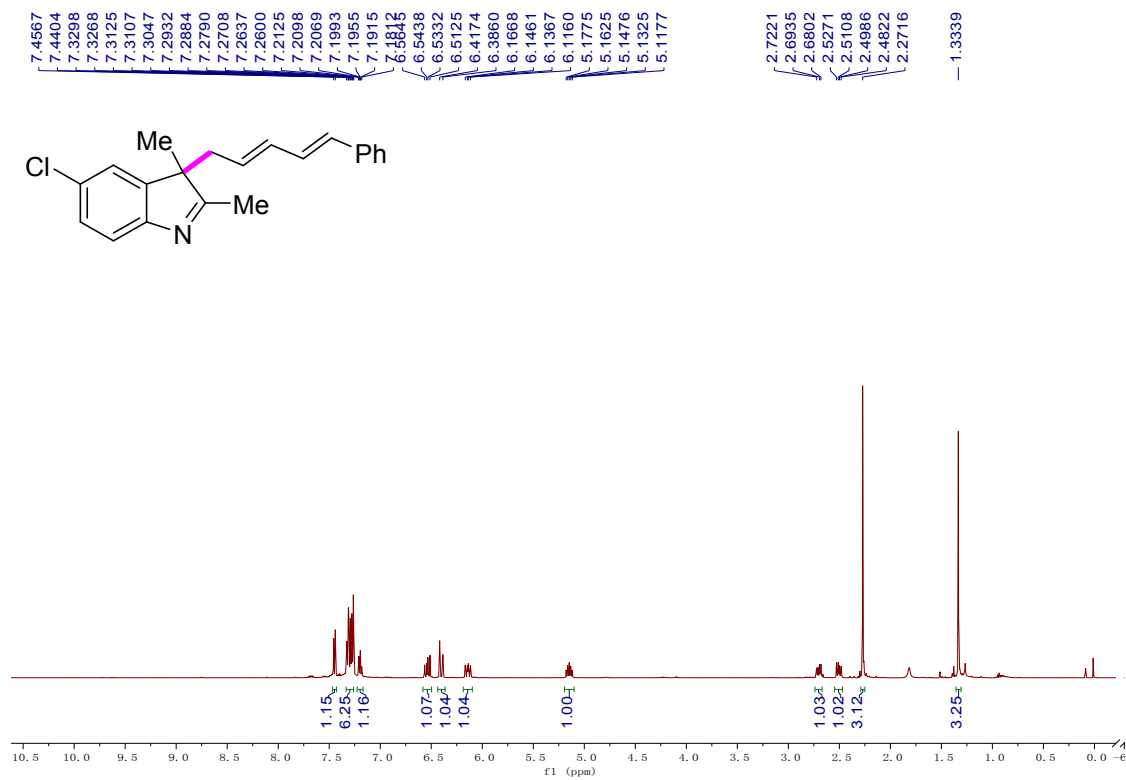
2, 3-dimethyl-3-((2E,4E)-5-(thiophen-3-yl)penta-2,4-dien-1-yl)-3H- indole (3a)



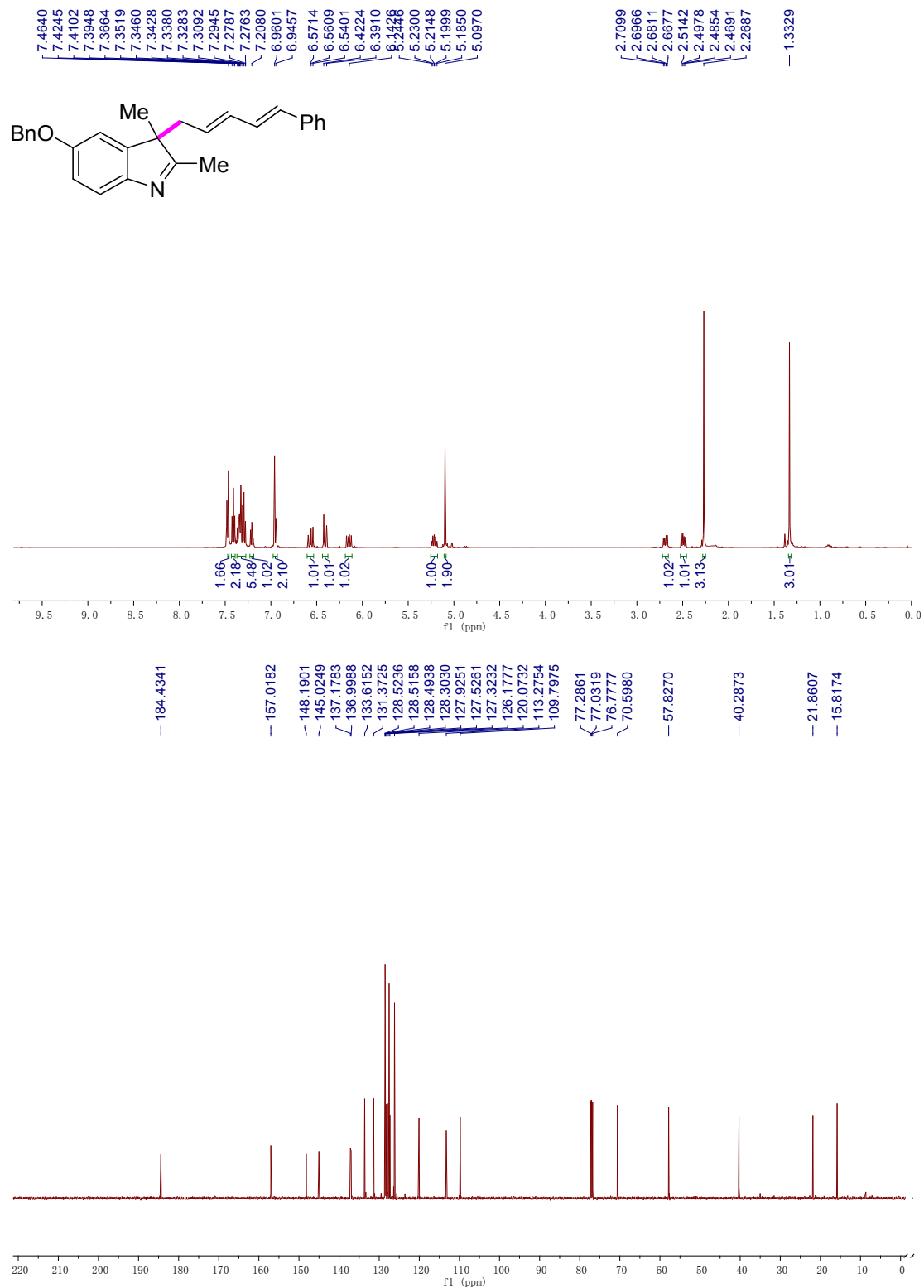
5-fluoro-2,3-dimethyl-3-((2E,4E)-5-phenylpenta-2,4-dien-1-yl)-3H-indole (3am)



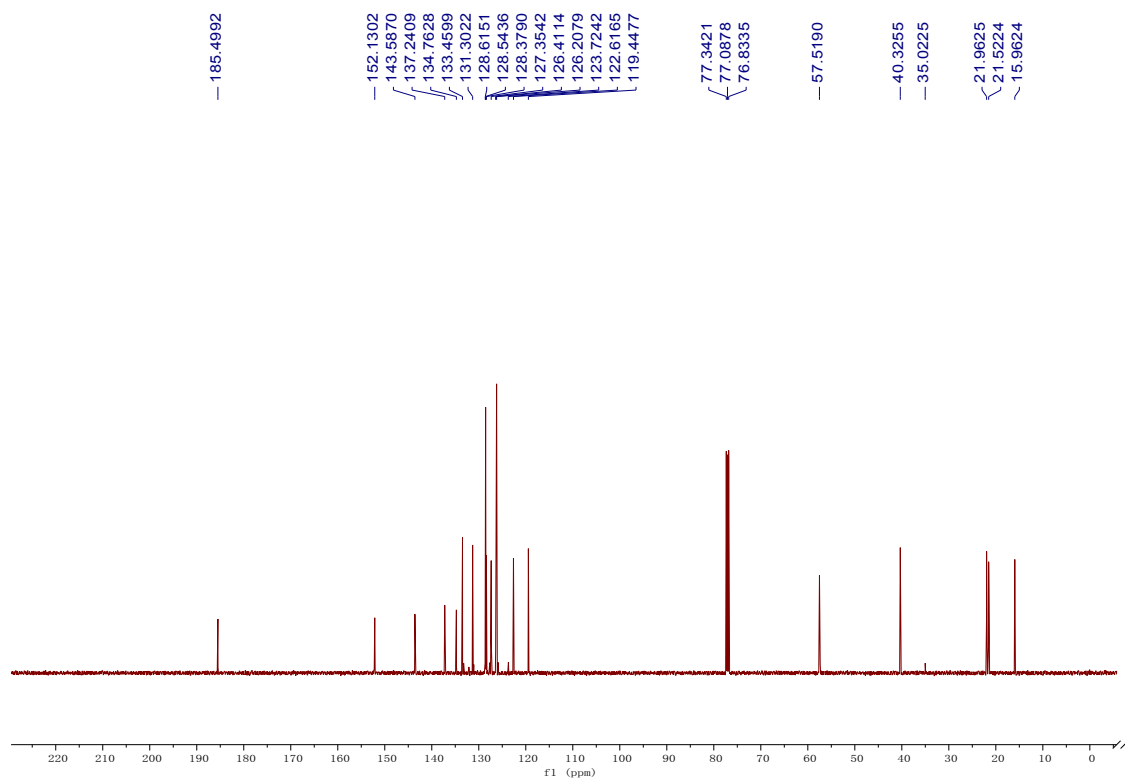
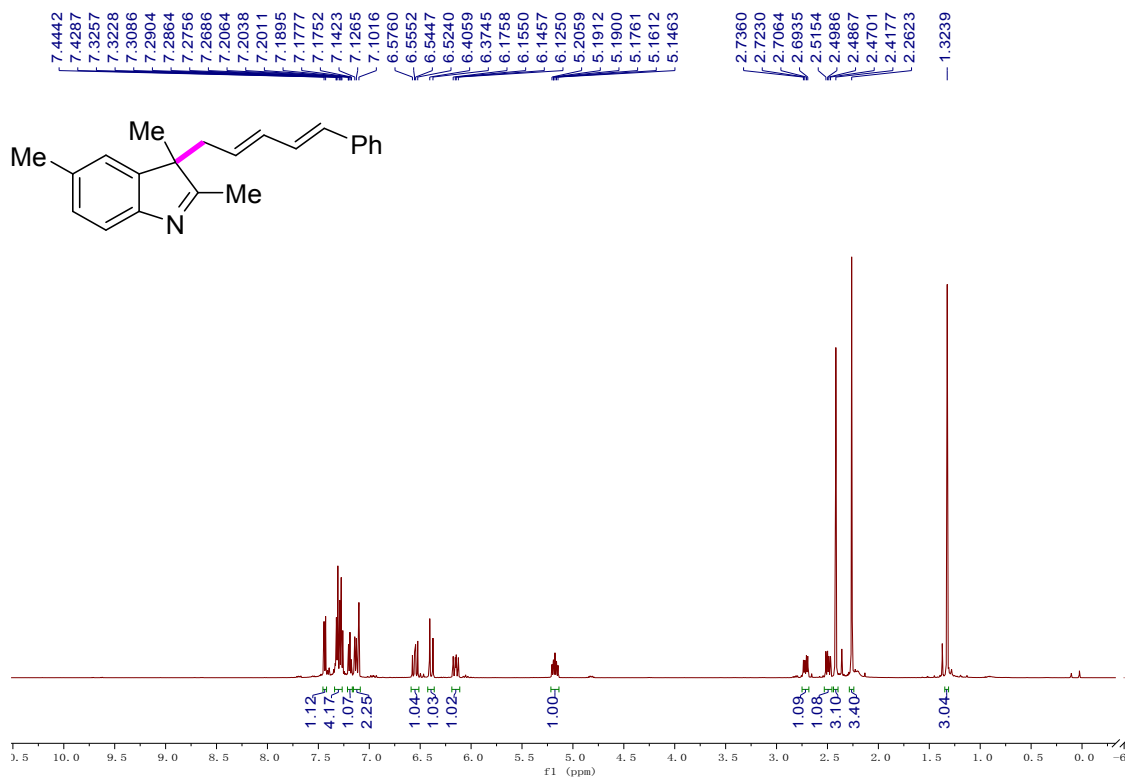
5-chloro-2,3-dimethyl-3-((2E,4E)-5-phenylpenta-2,4-dien-1-yl)-3H-indole (3an)



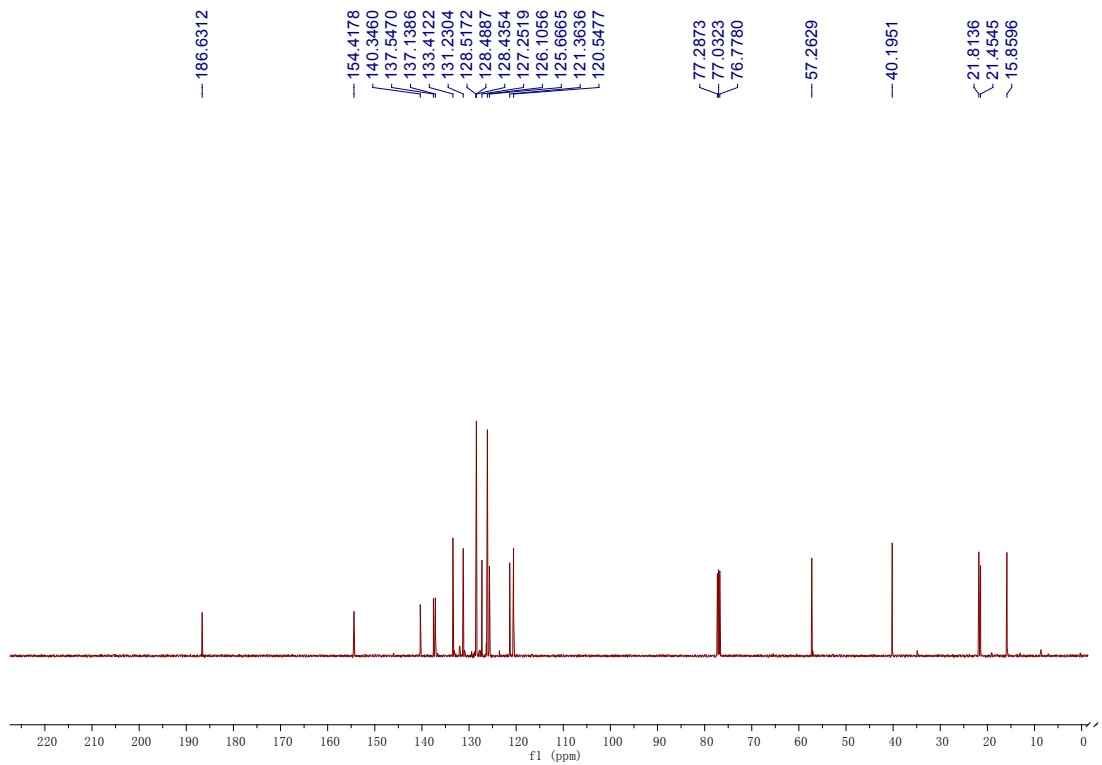
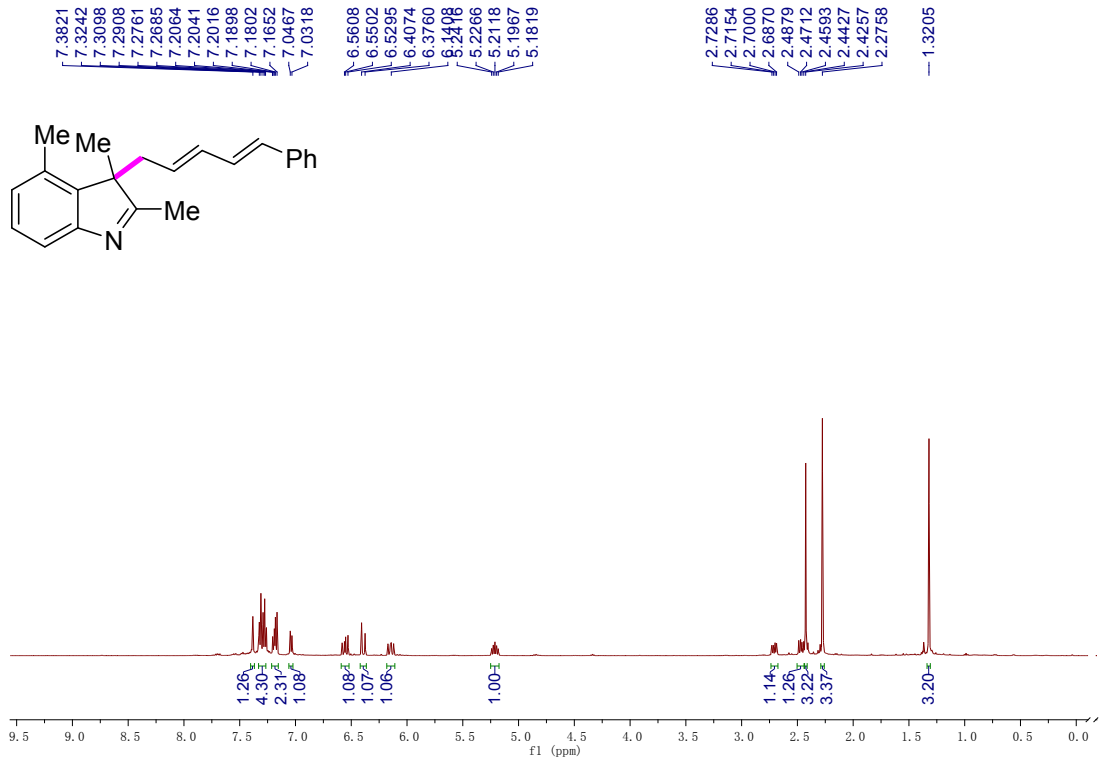
5-benzyloxy-2,3-dimethyl-3-((2E,4E)-5-phenylpenta-2,4-dien-1-yl)-3H-indole (3ao)



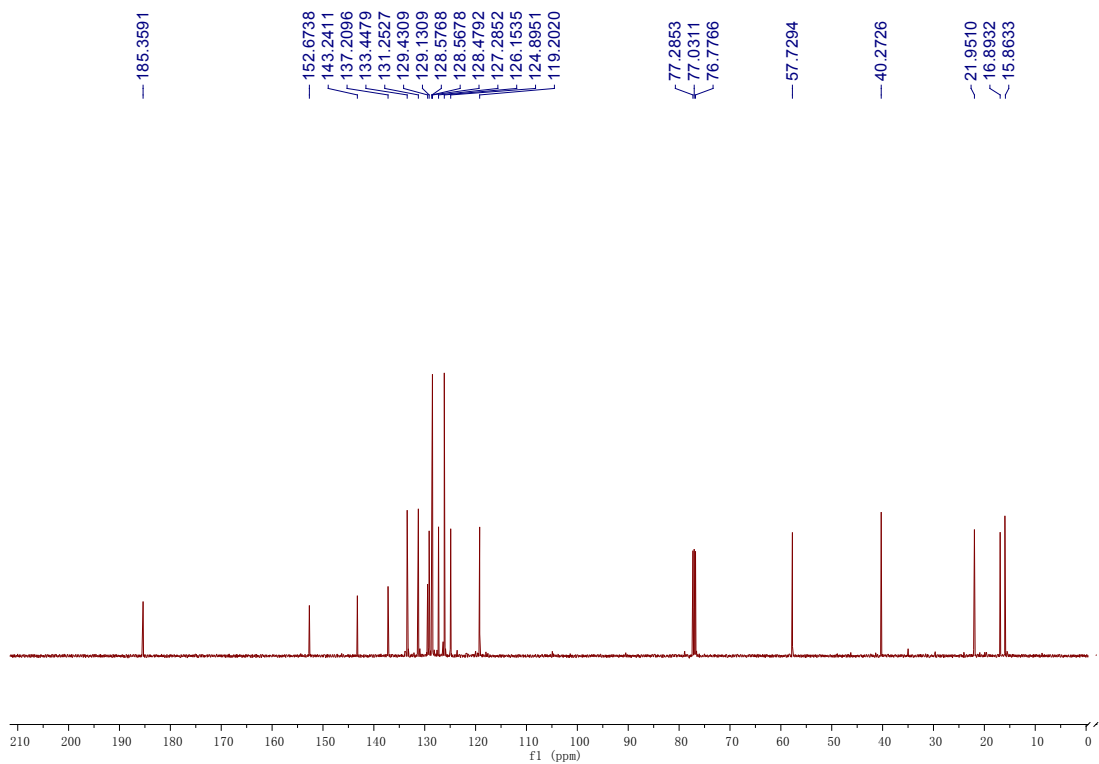
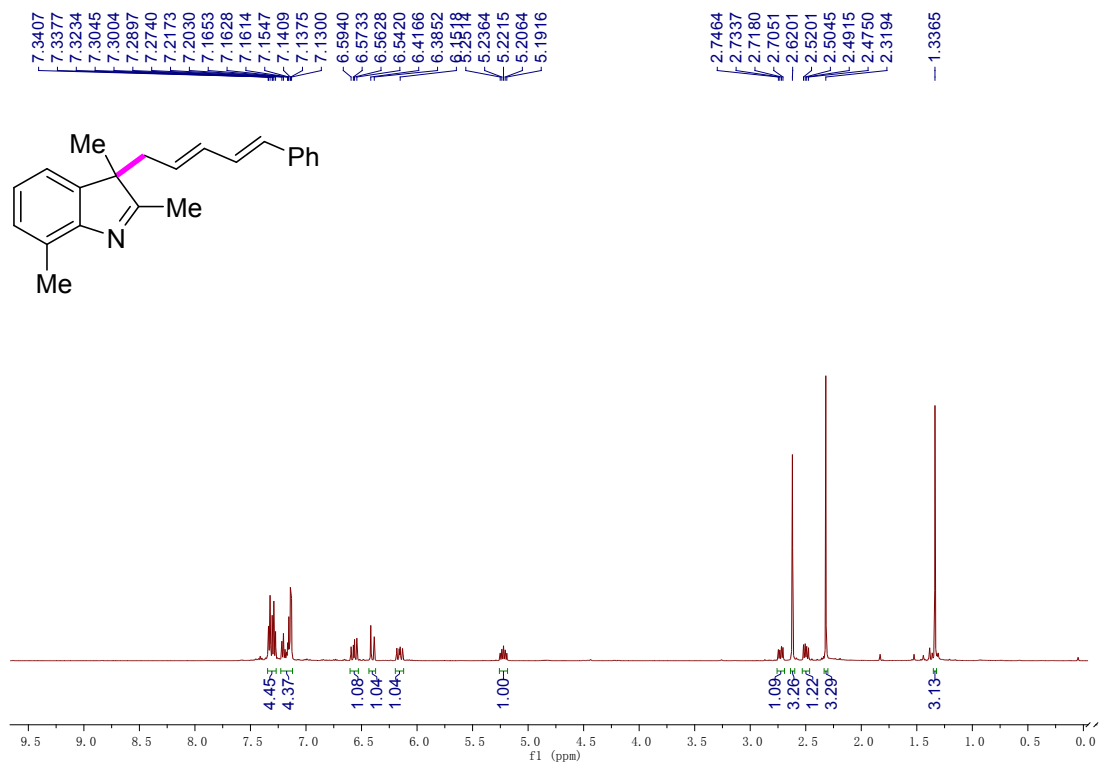
5-methyl-2,3-dimethyl-3-((2E,4E)-5-phenylpenta-2,4-dien-1-yl)-3H-indole (3ap)



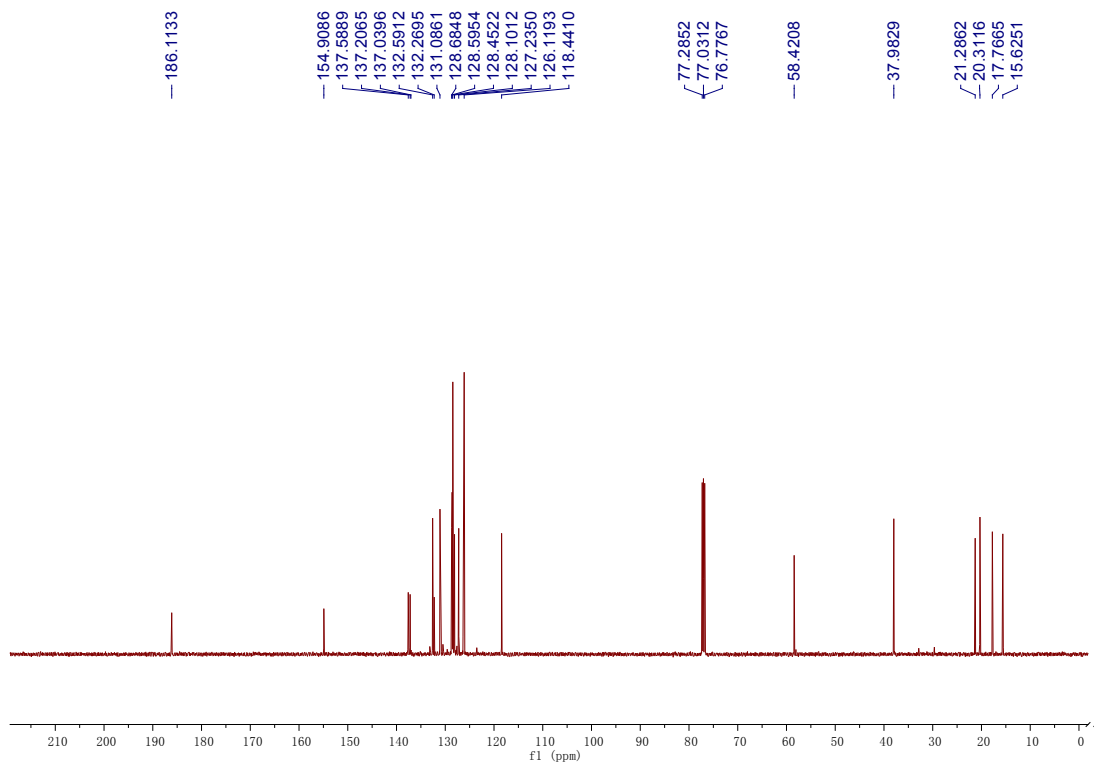
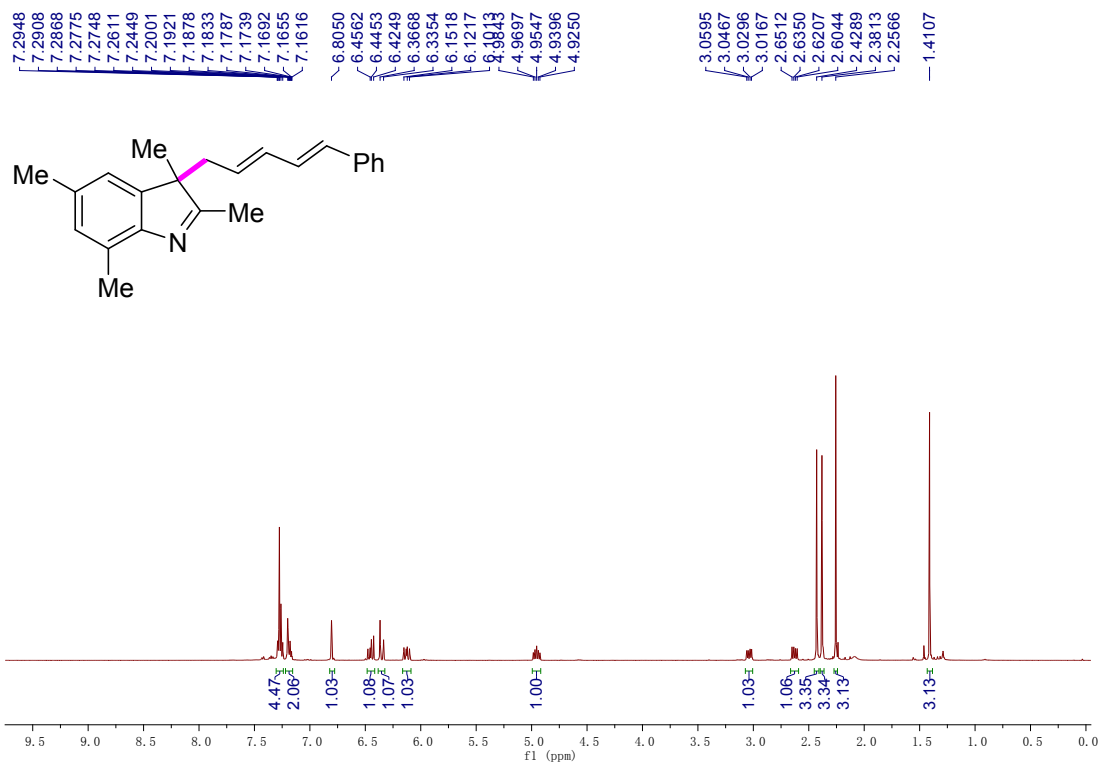
2,3,4-trimethyl-3-((2E,4E)-5-phenylpenta-2,4-dien-1-yl)-3H-indole (3aq)



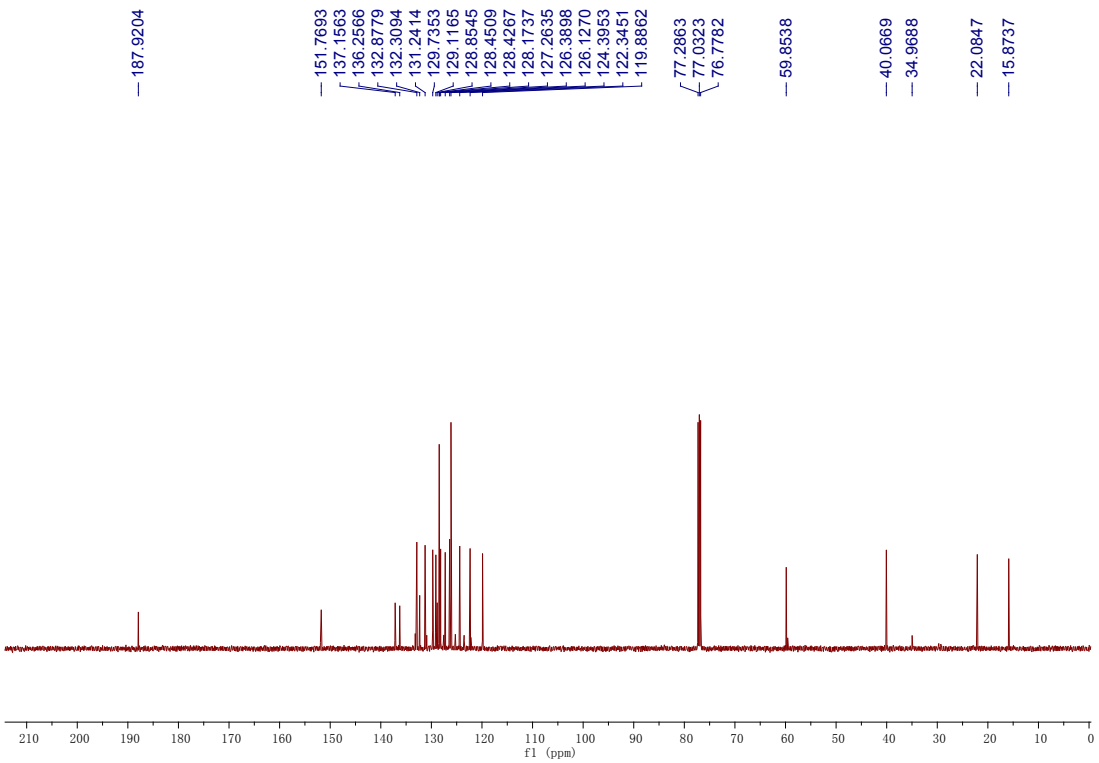
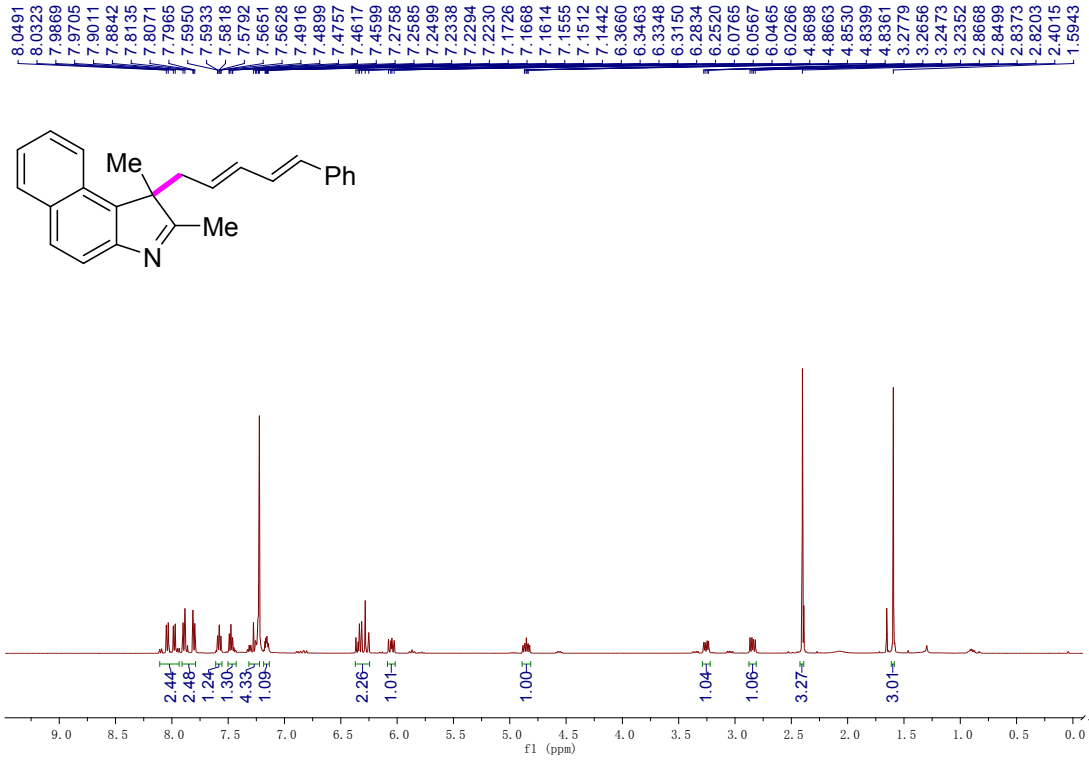
2,3,7-trimethyl-3-((2E,4E)-5-phenylpenta-2,4-dien-1-yl)-3H-indole (3ar)



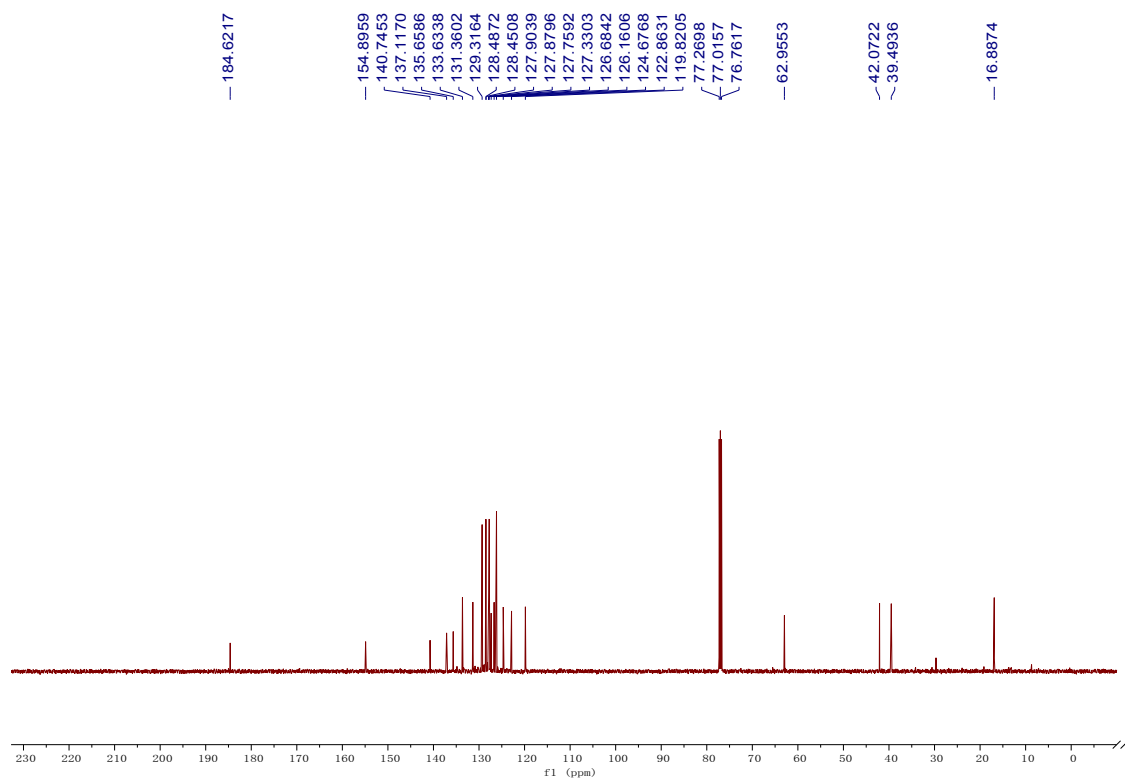
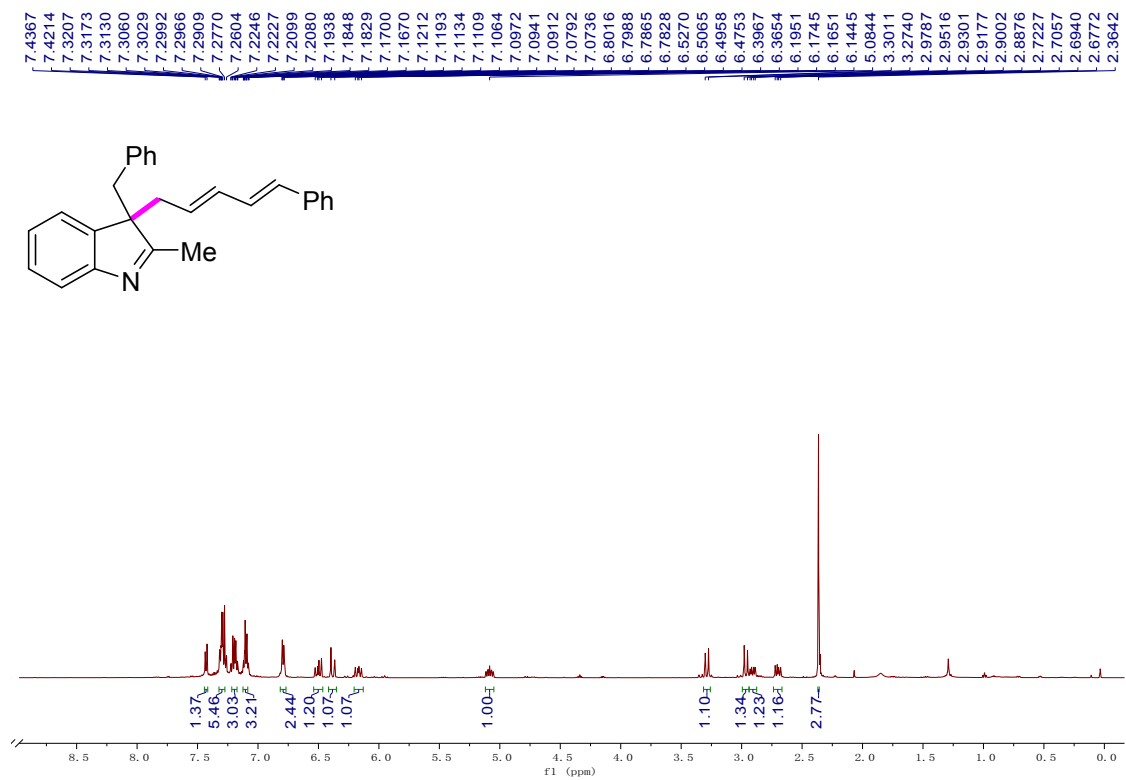
2,3,4,6-tetramethyl-3-((2E,4E)-5-phenylpenta-2,4-dien-1-yl)-3H-indole (3as)



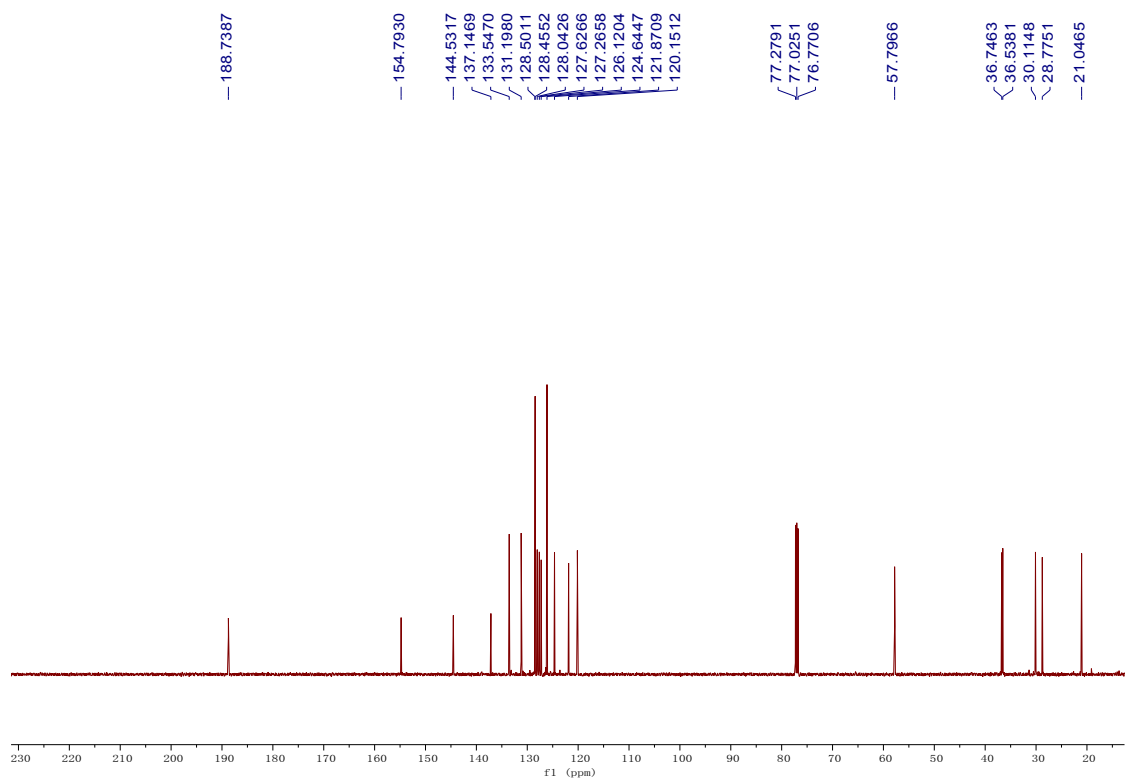
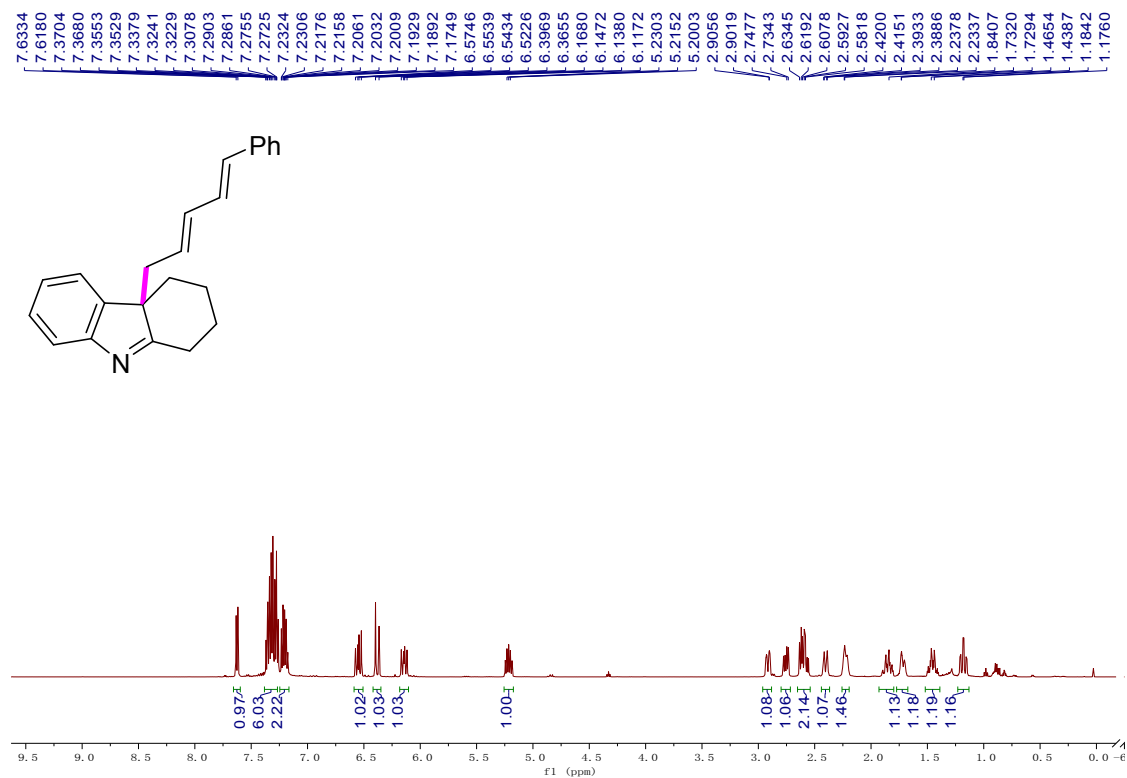
2,3-dimethyl-3-((2E,4E)-5-phenylpenta-2,4-dien-1-yl)-3H-benzo[g]indole (3at)



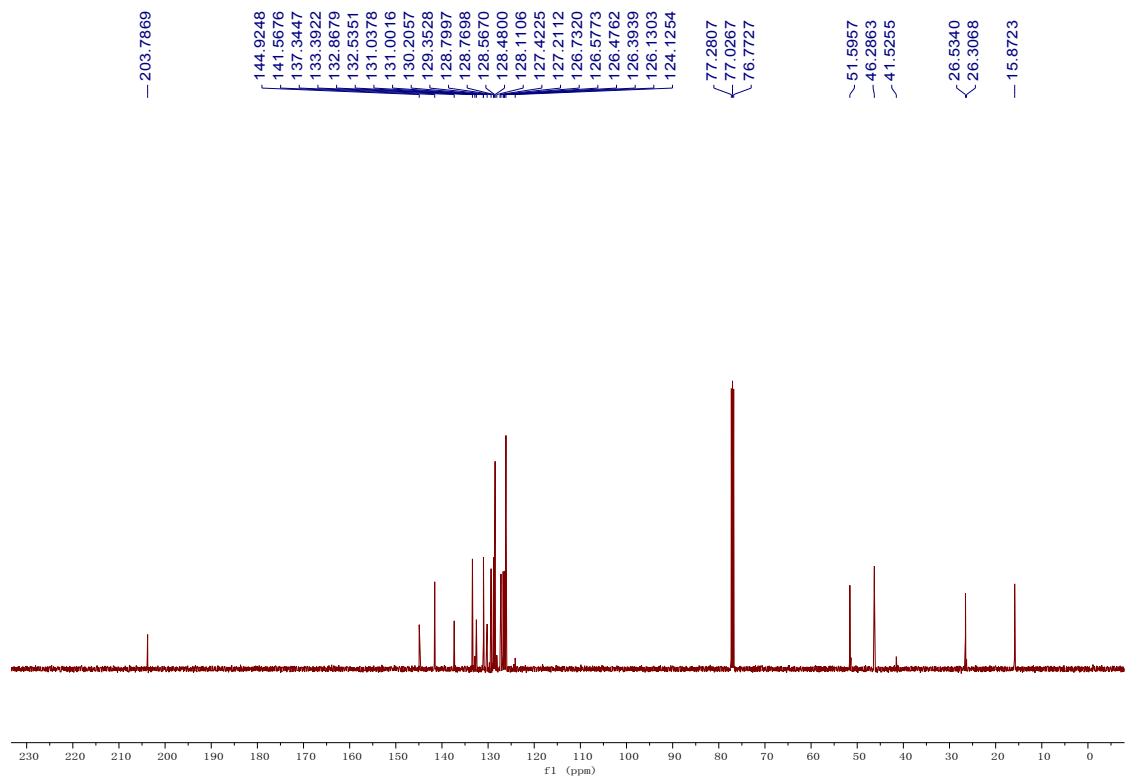
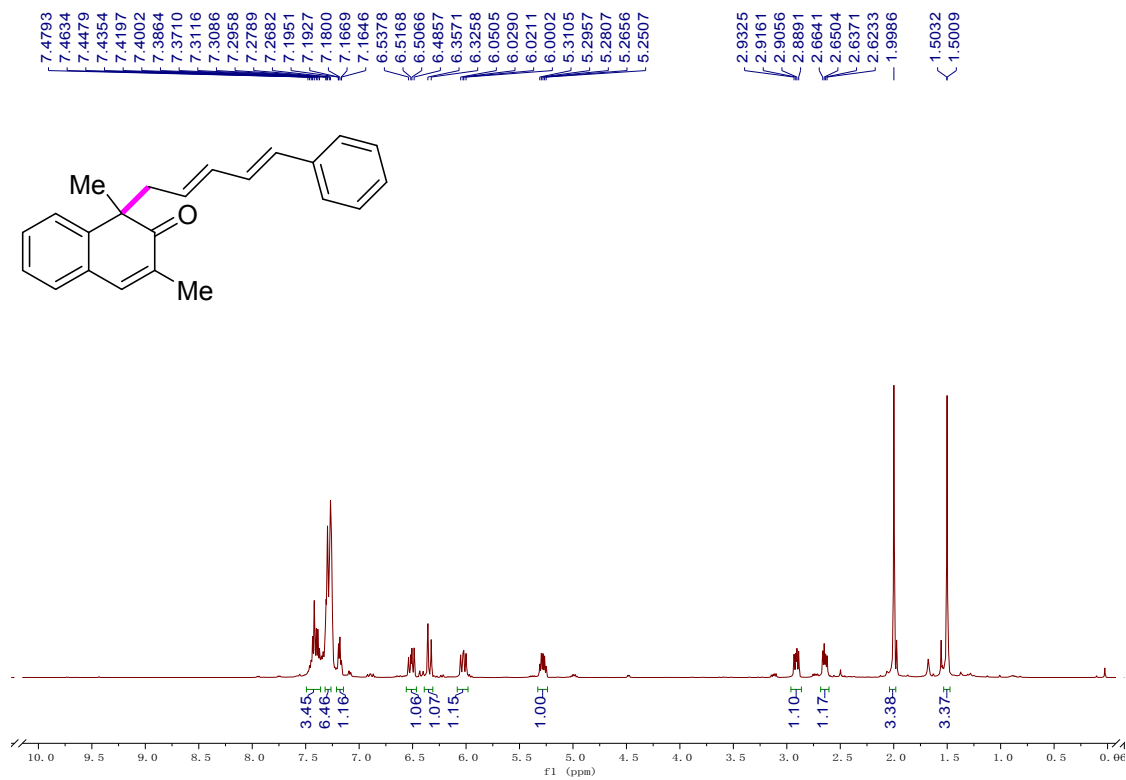
3-benzyl-2-methyl-3-((2E,4E)-5-phenylpenta-2,4-dien-1-yl)-3H-indole (3au)



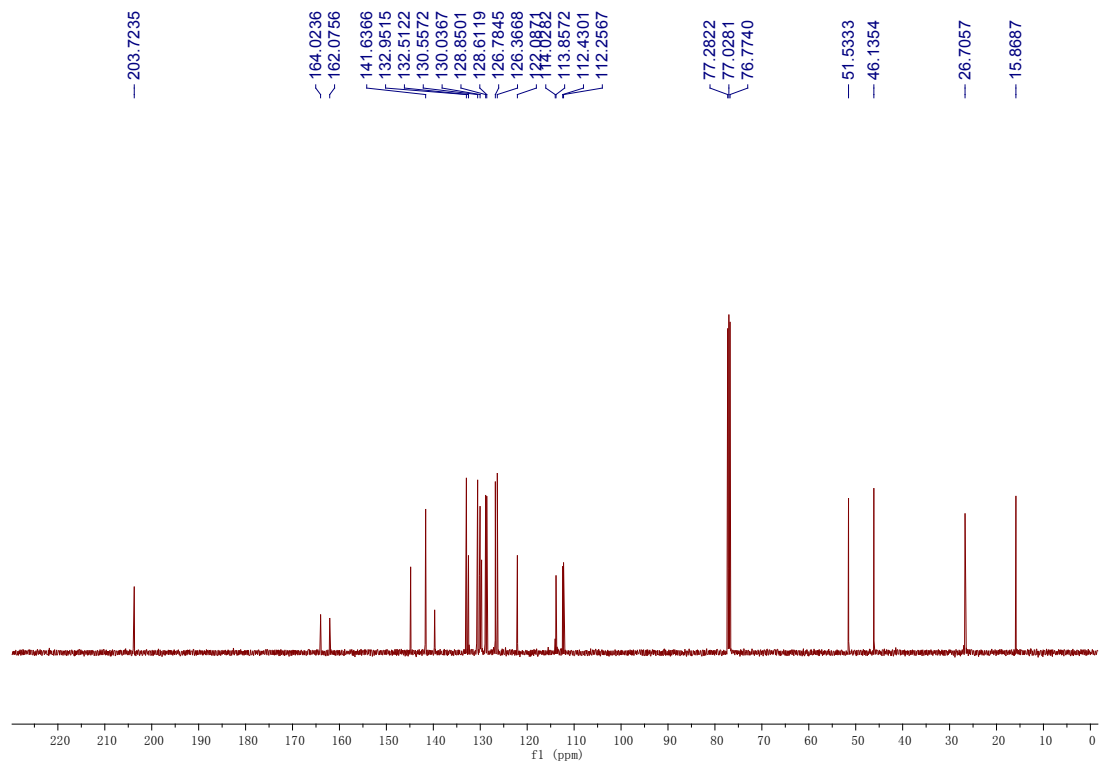
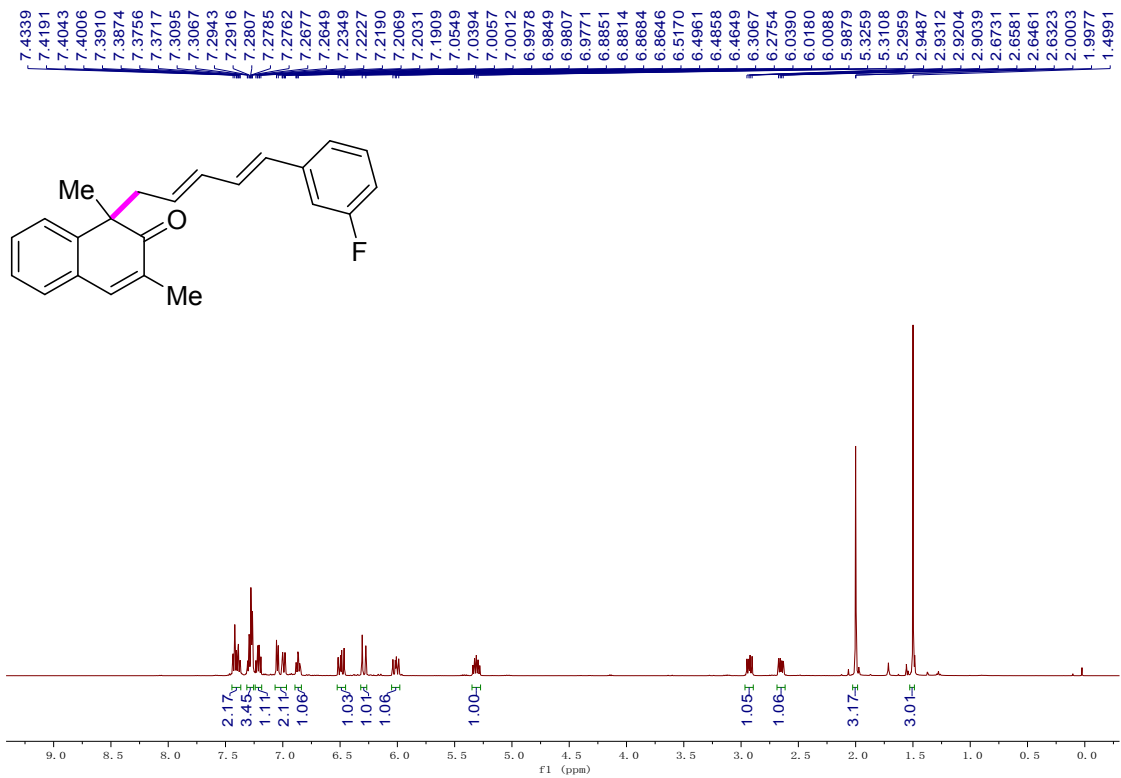
4a-((2E,4E)-5-phenylpenta-2,4-dien-1-yl)-2,3,4,4a-tetrahydro-1H-carbazole (3av)



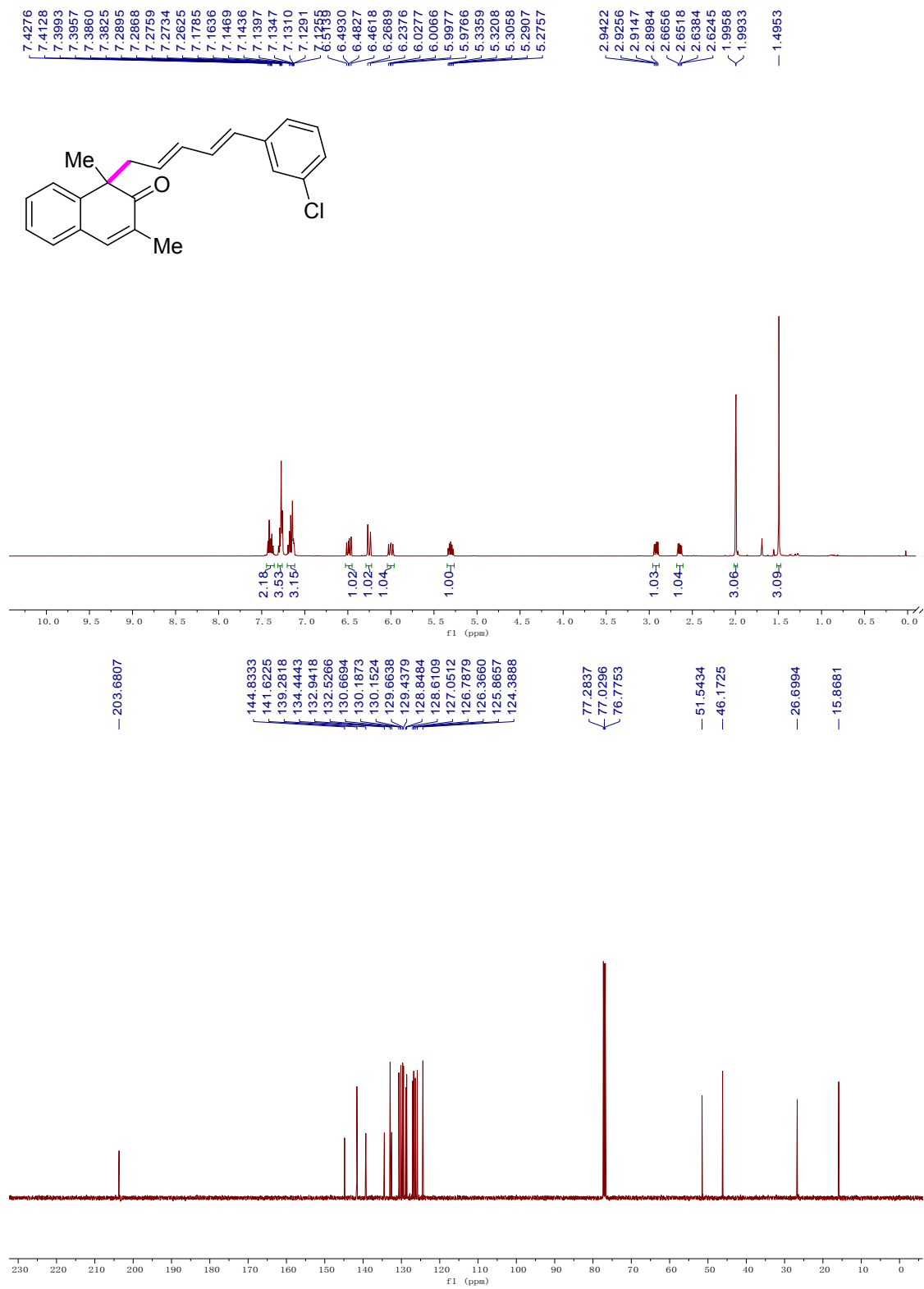
1,3-dimethyl-1-((2E,4E)-5-phenylpenta-2,4-dien-1-yl)naphthalen-2(1H)-one (5a)



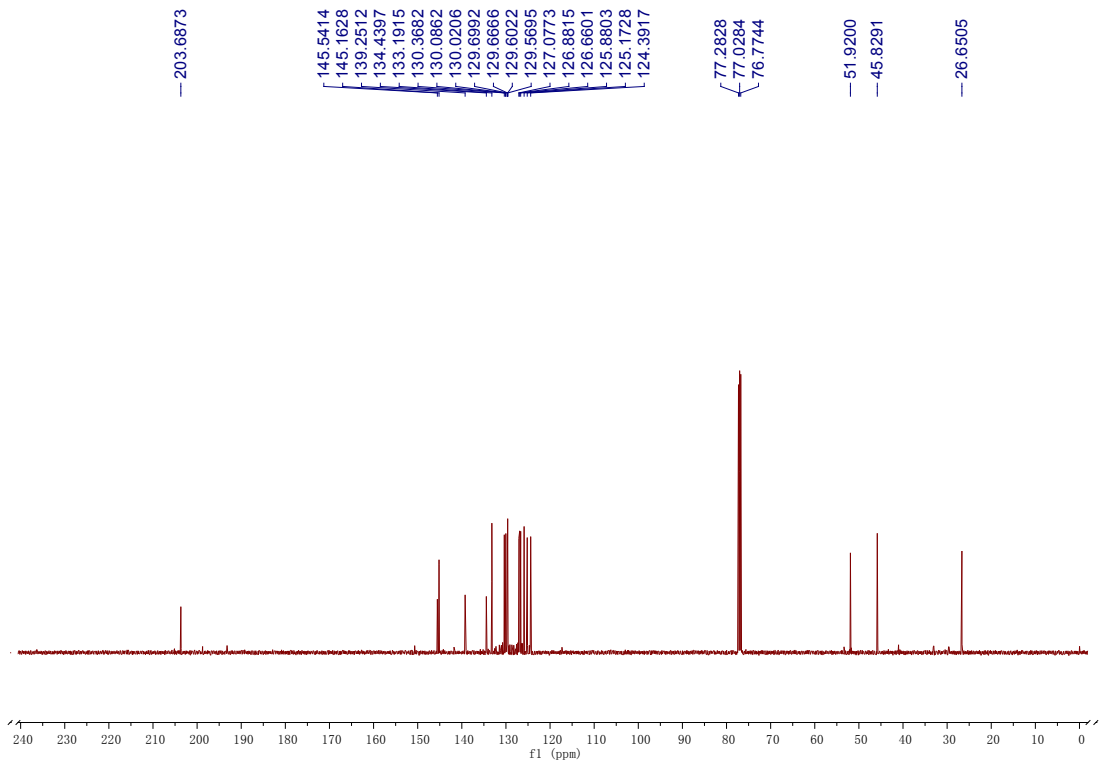
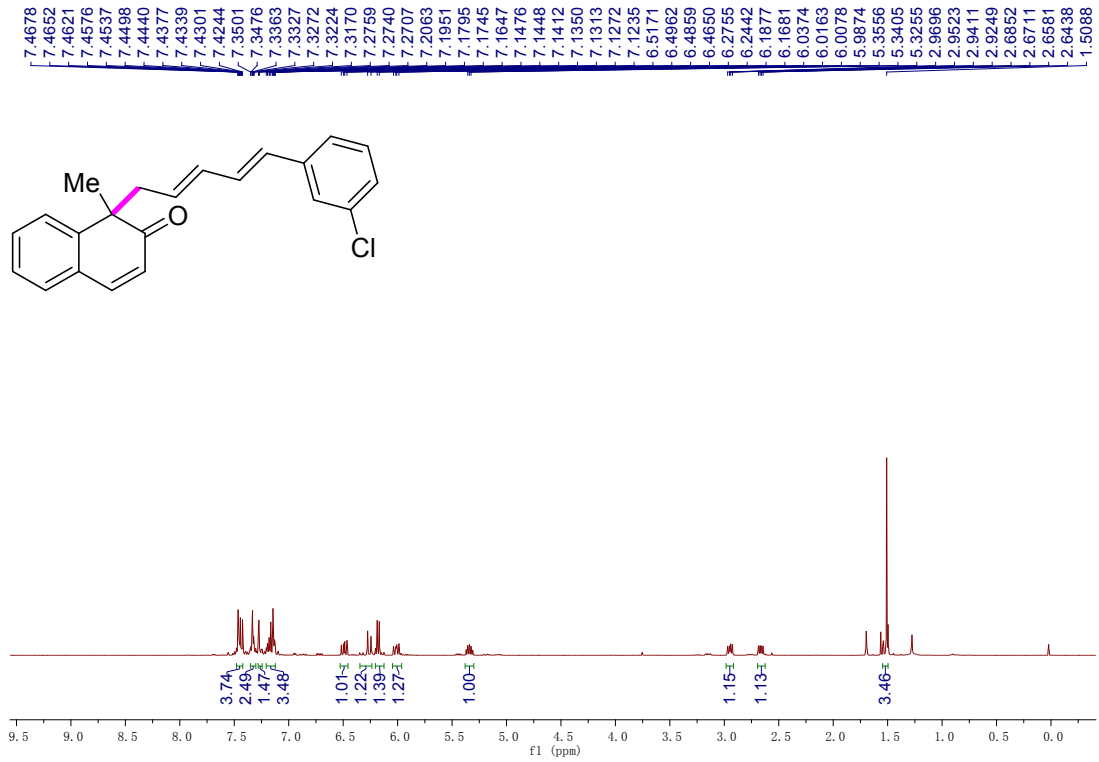
1,3-dimethyl-1-((2E,4E)-5-(3-fluorophenyl)penta-2,4-dien-1-yl)naphthalen-2(1H)-one (5b)



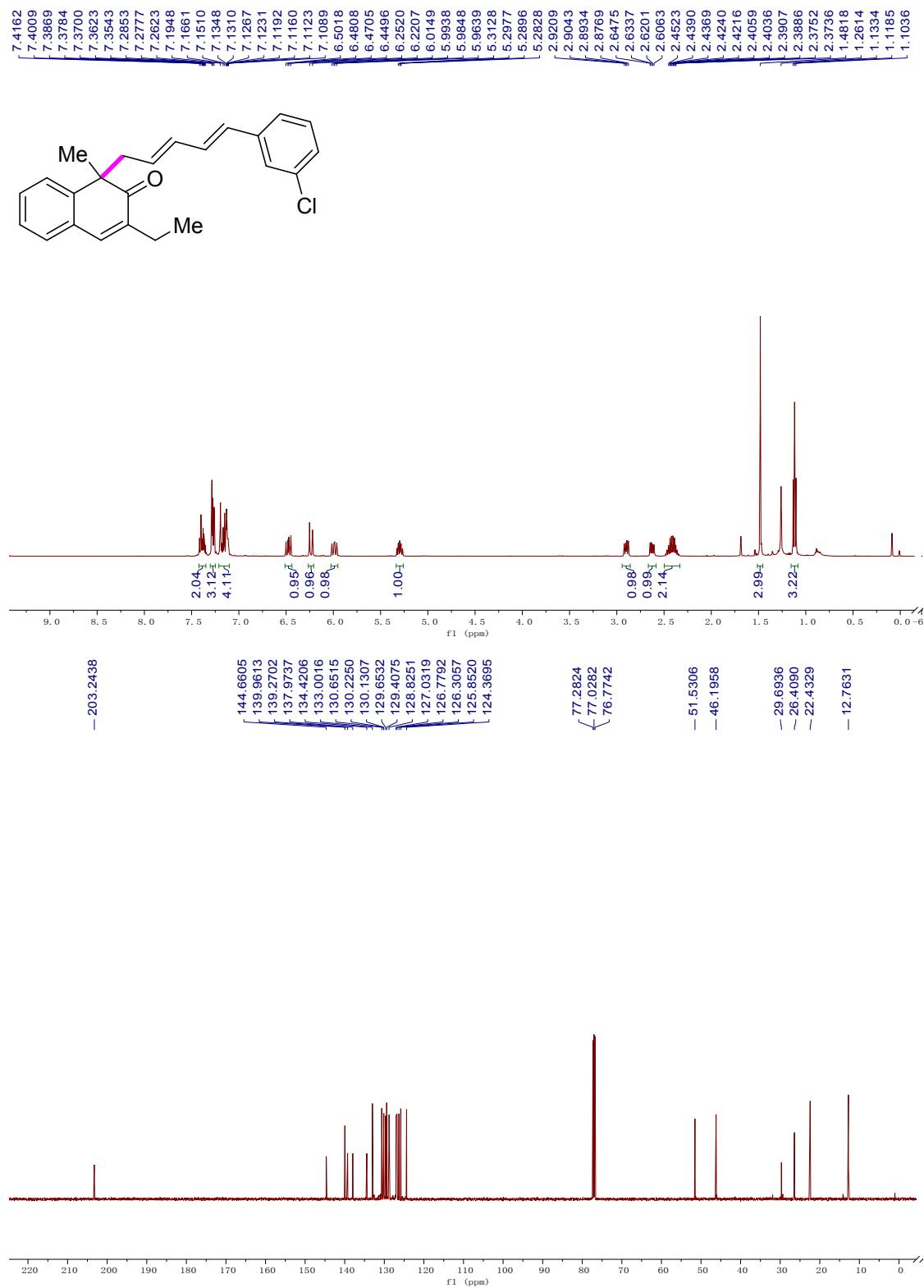
1,3-dimethyl-1-((2E,4E)-5-(3-chlorophenyl)penta-2,4-dien-1-yl)naphthalen-2(1H)-one (5c)



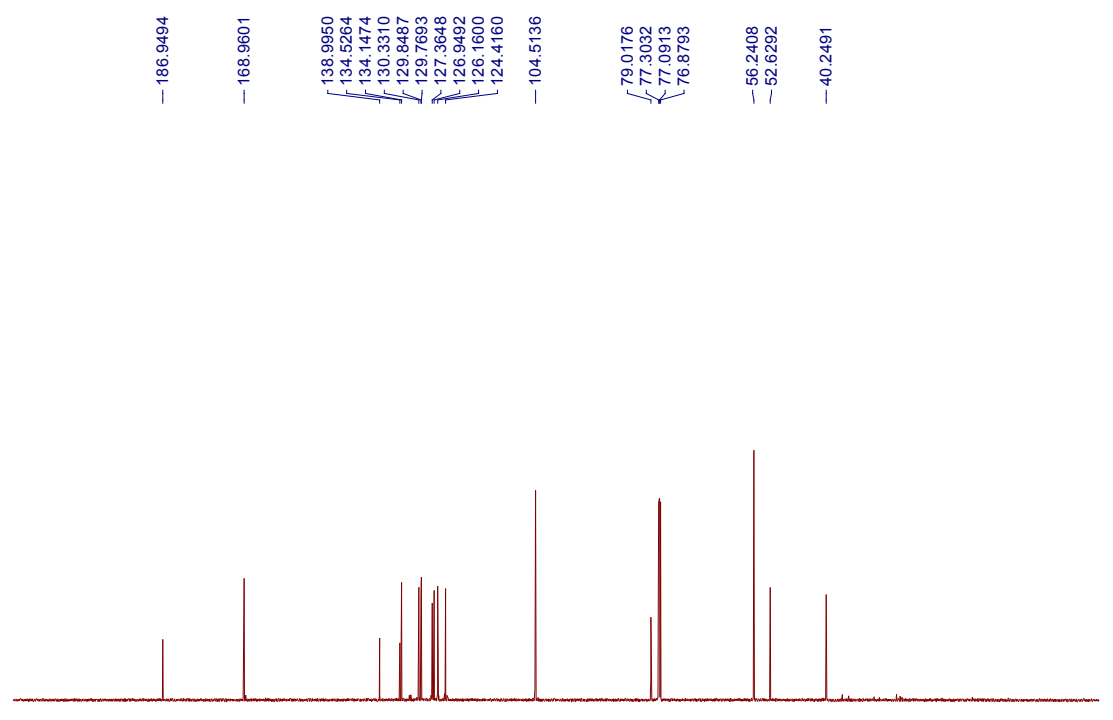
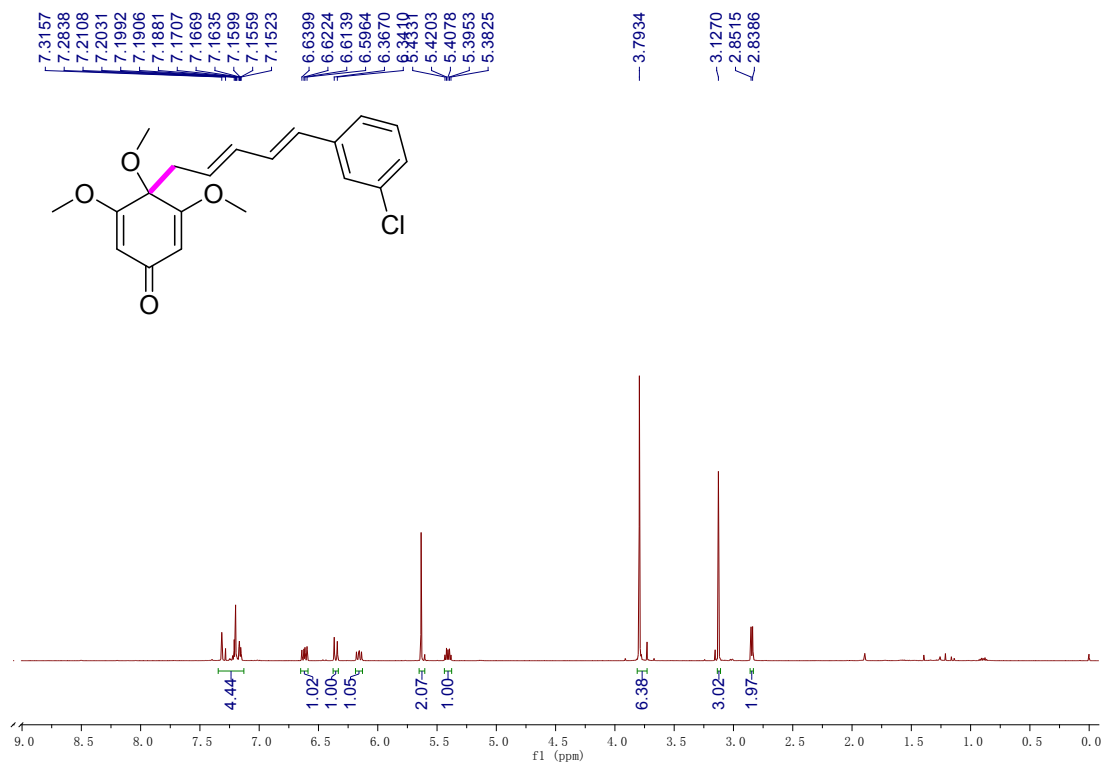
1-((2E,4E)-5-(3-chlorophenyl)penta-2,4-dien-1-yl)-1-methylnaphthalen-2(1H)-one (5d)



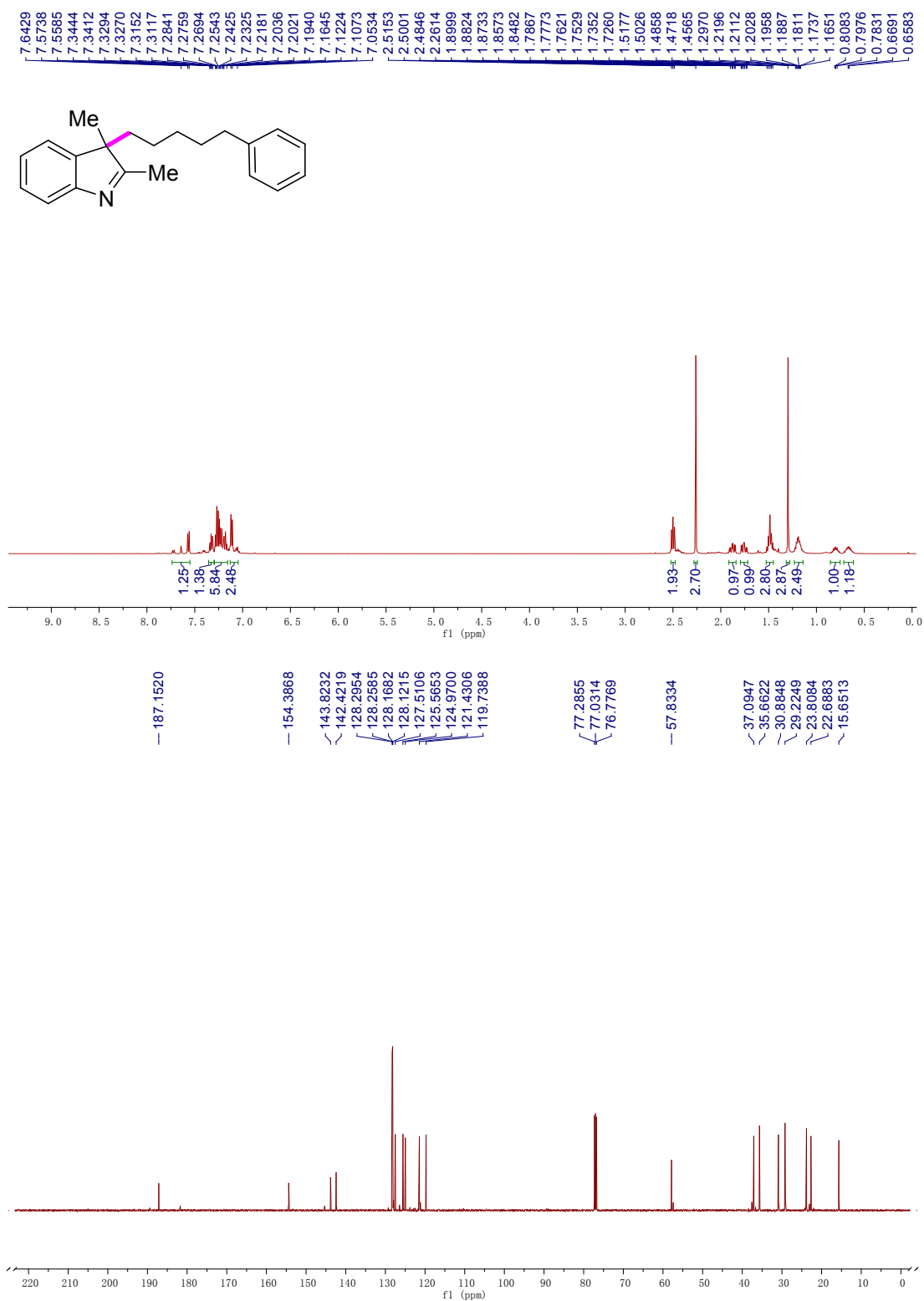
3-ethyl-1-methyl-1-((2E,4E)-5-(3-chlorophenyl)-2,4-dien-1-yl)naphthalen-2(1H)-one (5e)



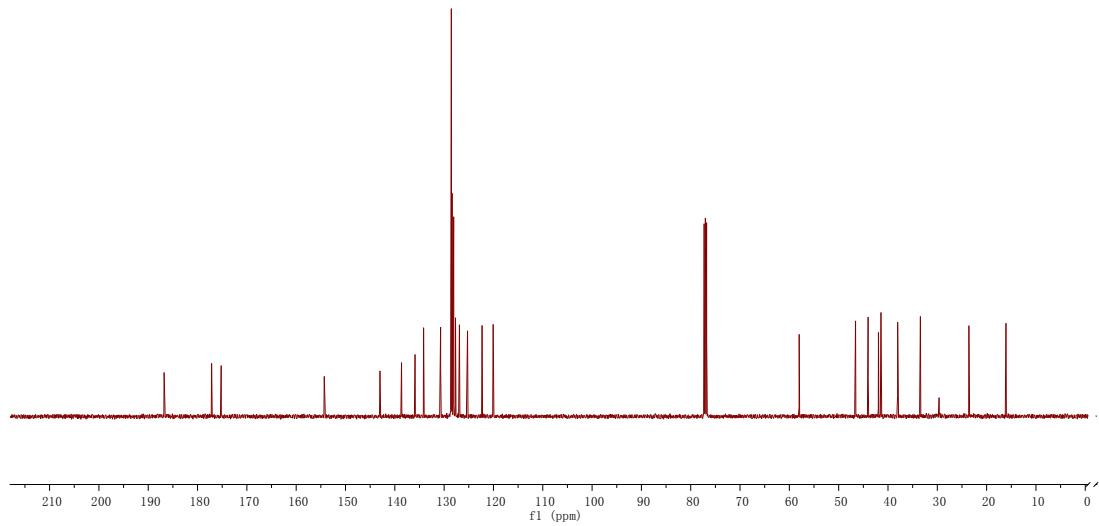
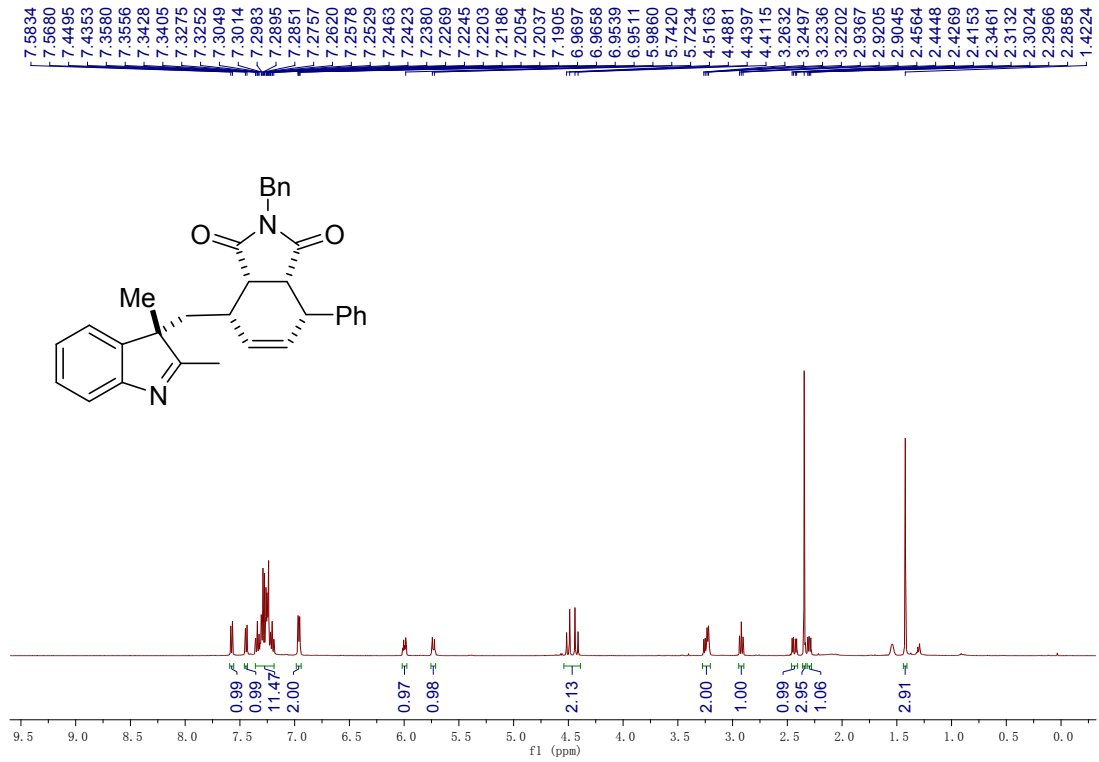
4-((2E,4E)-5-(3-chlorophenyl)penta-2,4-dien-1-yl)-3,4,5-trimethoxycyclohexa-2,5-dienone (5g)



2,3-dimethyl-3-(5-phenylpentyl)-3H-indole (6)

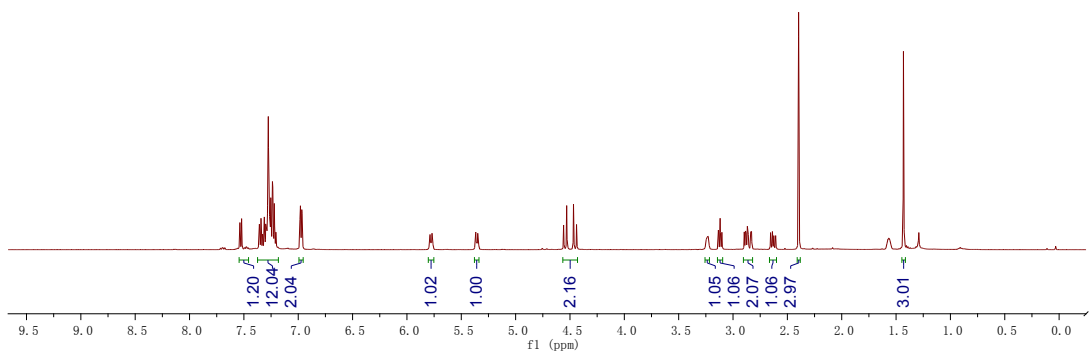
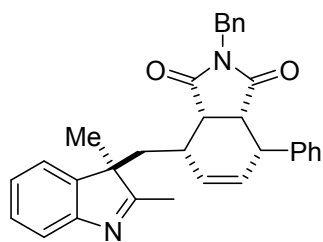


(3a*S*,4*S*,7*R*,7a*R*)-2-benzyl-4-(((*R*)-2,3-dimethyl-3H-indol-3-yl)methyl)-7-phenyl-3a,4,7,7a-tetrahydro-1H-isoindole-1,3(2H)-dione (7a)



(3*aS*,4*S*,7*R*,7*a**R*)-2-benzyl-4-(((*S*)-2,3-dimethyl-3*H*-indol-3-yl)methyl)-7-phenyl-3*a*,4,7,7*a*-tetrahydro-1*H*-isoindole-1,3(2*H*)-dione (7*b*)**

7.5366
7.5213
7.3571
7.3424
7.3296
7.3273
7.3144
7.3121
7.3059
7.2994
7.2968
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7.2651
7.2653
7.2614
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1.4320



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