Supporting Information

Ruthenium Catalyzed Selective Deacryloyl Silylation of Aromatic Acrylates

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1. *General remarks*

All reagents were obtained from commercial sources and used as received. Technical grade petroleum ether (40-60°C bp.) and ethyl acetate were used for chromatography column.

^{1}H NMR spectra were recorded in $CDCl_3$ at ambient temperature on Bruker AVANCE I 400 or 500 spectrometers at 400.1 or 500.1 MHz, using the solvent as internal standard (7.28 ppm). ^{13}C NMR spectra were obtained at 101 or 125 MHz and referenced to the internal solvent signals (central peak is 77.16 ppm). Chemical shift (δ) and coupling constants (*J*) are given in ppm and in Hz, respectively. The peak patterns are indicated as follows: s, singlet; d, doublet; t, triplet; q, quartet; m, multiplet, and br. for broad.

GC analyses were performed with GC-7890A (Agilent) equipped with a 30-m capillary column (HP-5ms, fused silica capillary column, 30 M*0.25 mm*0.25 mm film thickness), was used with N_2/air as vector gas. GCMS were measured by GCMS-7890A-5975C (Agilent) with GC-7890A equipped with a 30-m capillary column (HP-5ms, fused silica capillary column, 30 M*0.25 mm*0.25 mm film thickness), was used with helium as vector gas. HRMS were measured by MAT 95XP (Termol) (LCMS-IT-TOF).

2. General Procedure for the catalytic reactions

2.1 General procedure for synthesis of aromatic acrylates

Acryloyl chloride (3.3 mmol, 268 μL), phenol (3.0 mmol), Et_3N (3.6 mmol, 500 μL), CH_2Cl_2 (10 mL) were introduced in flask, equipped with magnetic stirring bar and was stirred at room temperature. After 2 h, the solvent was then evaporated under vacuum and the desired product was purified by using a silica gel chromatography column and a mixture of petrol ether/ethyl acetate as eluent.

2.2 General procedure for ruthenium catalyzed selective silylation of aromatic acrylates with hydrosilanes

Aromatic acrylates (0.6 mmol), hydrosilane (0.75 mmol), $Ru_3(CO)_{12}$ (7.7 mg, 2 mol%), toluene (1 mL) were introduced in Schlenck tube under under air, equipped with magnetic stirring bar and was stirred and then took placed in the oil bath at 100 ^oC. After 4 h, the solvent was then evaporated under vacuum and the desired product was purified by using a silica gel chromatography column and a mixture of petrol ether/ethyl acetate as eluent.

2.3 General procedure for ruthenium catalyzed selective silylation of (1,1'-biphenyl)-4,4'-diyl diacrylate with hydrosilanes

(1,1'-Biphenyl)-4,4'-diyl diacrylate (0.5 mmol, 147 mg), hydrosilane (1.5 mmol), $Ru_3(CO)_{12}$ (7.7 mg, 2 mol%), toluene (1 mL) were introduced in Schlenck tube under under air, equipped with magnetic stirring bar and was stirred and then took placed in the oil bath at 100 ^oC. After 4 h, the solvent was then evaporated under vacuum and the desired product was purified by using a silica gel chromatography column and a mixture of petrol ether/ethyl acetate as eluent.

2.4 Synthesis of diethyldiphenoxysilane (6)

Phenyl acrylate (1.0 mmol, 0.139 μL), diethylsilane (0.5 mmol, 65 μL), $Ru_3(CO)_{12}$ (7.7 mg, 2 mol%), toluene (1 mL) were introduced in Schlenck tube under under air, equipped with magnetic stirring bar and was stirred and then took placed in the oil bath at 100 ^oC. After 4 h, the solvent was then evaporated under vacuum and the

desired product was purified by using a silica gel chromatography column and petrol ether as eluent, 64 mg (62% yield) colorless oil was obtained.

2.5 gram scale for synthesis of tributyl(naphthalen-1-yloxy)silane (3i)

Naphthalen-1-yl acrylate (6 mmol, 1.19 g), nBu_3SiH (7.5 mmol, 1.93 mL), $Ru_3(CO)_{12}$ (77 mg, 2 mol%), toluene (10 mL) were introduced in Schlenck tube under under air, equipped with magnetic stirring bar and was stirred and then took placed in the oil bath at 100 ^oC. After 4 h, the solvent was then evaporated under vacuum and the desired product was purified by using a silica gel chromatography column and a mixture of petrol ether/ethyl acetate as eluent, Rf = 0.7 (Petrol ether), 1.81 g (88% yield) colorless oil was obtained.

2.6 Synthesis of 1-(benzyloxy)naphthalene (7)

Tributyl(naphthalen-1-yloxy)silane (**3i**) (0.3 mmol, 103 mg), BnBr (0.45 mmol, 54 μL), tetrabutylammonium fluoride (TBAF) (0.6 mmol, 157 mg), toluene (2 mL) were introduced in Schlenck tube under under air, equipped with magnetic stirring bar and was stirred and then took placed in the oil bath at 100 ^oC. After 6 h, the solvent was then evaporated under vacuum and the desired product was purified by using a silica gel chromatography column and a mixture of petrol ether/ethyl acetate as eluent, 62 mg (89% yield) light yellow oil was obtained.

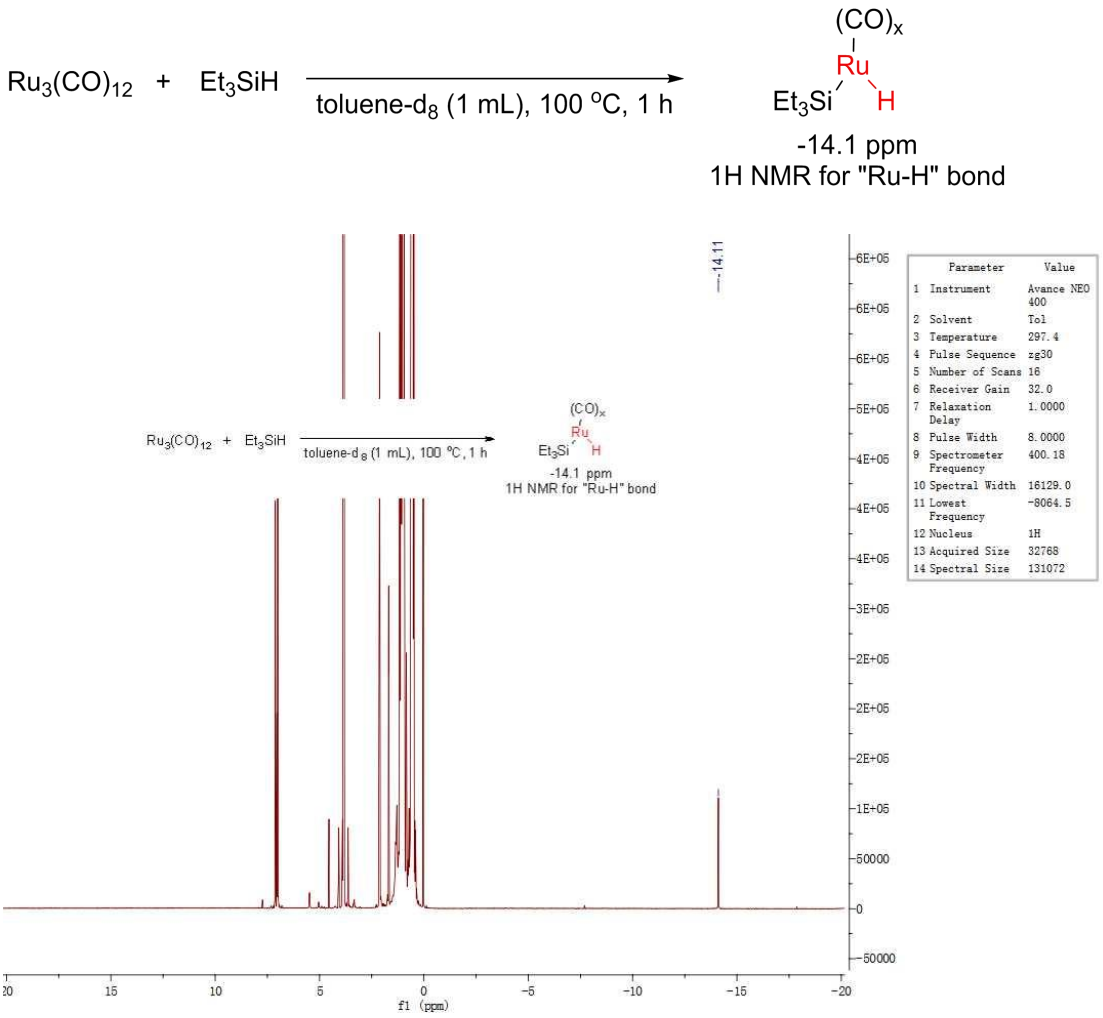
2.7 Synthesis of naphthalen-1-ol (8)

Tributyl(naphthalen-1-yloxy)silane (**3i**) (0.3 mmol, 103 mg), tetrabutylammonium fluoride (TBAF) (0.6 mmol, 157 mg), EtOH (2 mL) were introduced in Schlenck tube under under air, equipped with magnetic stirring bar and was stirred and then took placed in the oil bath at 70 ^oC. After 6 h, the solvent was then evaporated under vacuum and the desired product was purified by using a silica gel chromatography column and a mixture of petrol ether/ethyl acetate as eluent, 40 mg (92% yield) colorless oil was obtained.

2.8 Synthesis of 1-(allyloxy)naphthalene (9)

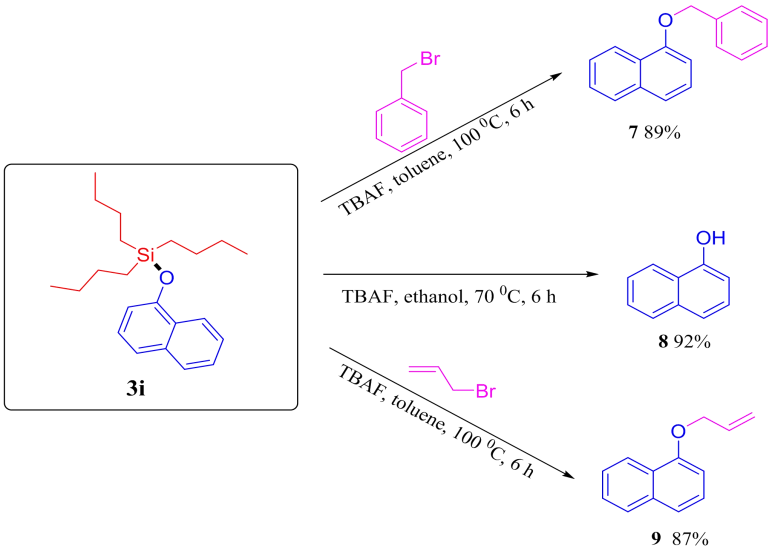
Tributyl(naphthalen-1-yloxy)silane (**3i**) (0.3 mmol, 103 mg), allyl bromide (0.45 mmol, 39 μL), tetrabutylammonium fluoride (TBAF) (0.6 mmol, 157 mg), toluene (2 mL) were introduced in Schlenck tube under under air, equipped with magnetic stirring bar and was stirred and then took placed in the oil bath at 100 ^{o}C. After 6 h, the solvent was then evaporated under vacuum and the desired product was purified by using a silica gel chromatography column and a mixture of petrol ether/ethyl acetate as eluent, 48 mg (87% yield) light yellow oil was obtained.

3. Mechanism study for the selective hydrosilylation



4. Application of silyl-ether.

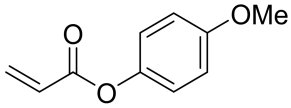
Further transformations of the naphtyl silyl-ether product **3i** was examined to illustrate their synthetic utility (**Scheme S1**). Firstly, classical treatment with TBAF converted the C-Si bond to C-OH group to generate naphthalen-1-ol **8** in 92% yield in EtOH as hydride donor. Then, with the addition of 1 equiv of TBAF and 1.5 equiv of benzyl bromide, 89% of 1-(benzyloxy)naphthalene **7** was obtained. Interestingly, allyl bromide reacted with aryl silyl-ether **3i** led to 1-(allyloxy)naphthalene **9** in 87% yield.



Scheme S1. Application of silyl-ether.

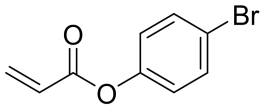
Characterization data of substrates

4-methoxyphenyl acrylate (1c)[1]



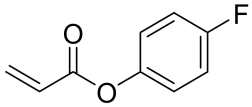
Colorless oil, yield = 82%, 438 mg.
^{1}H NMR (400 MHz, Chloroform-*d*) δ = 7.09-7.06 (m, 2H), 6.94-6.91 (m, 2H), 6.62 (d, *J* = 17.6, 1H), 6.37-6.30 (m, 1H), 6.01 (d, *J* = 10.4, 1H), 3.82 (s, 3H).
^{13}C NMR (101 MHz, Chloroform-*d*) δ = 165.0, 157.4, 144.1, 132.4, 128.1, 122.4, 114.5, 55.6.

4-bromophenyl acrylate (1d)[1]



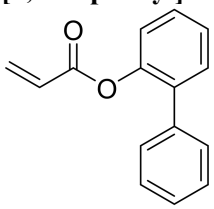
Colorless oil, yield = 80%, 540 mg.
^{1}H NMR (400 MHz, Chloroform-*d*) δ = 7.54-7.51 (m, 2H), 7.06-7.04 (m, 2H), 6.65 (dd, *J* = 17.2, 1.2 Hz, 1H), 6.36-6.29 (m, 1H), 6.05 (dd, *J* = 10.4, 1.2 Hz, 1H).
^{13}C NMR (101 MHz, Chloroform-*d*) δ = 164.3, 149.7, 133.2, 132.6, 127.7, 123.5, 119.1.

4-fluorophenyl acrylate (1e)[2]



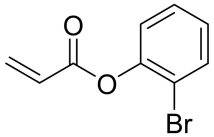
Colorless oil, yield = 76%, 378 mg.
^{1}H NMR (500 MHz, Chloroform-*d*) δ = 7.14-7.07 (m, 4H), 6.62 (dd, *J* = 17.0, 1.0 Hz, 1H), 6.36-6.31 (m, 1H), 6.03 (dd, *J* = 10.5, 1.5 Hz, 1H).
^{13}C NMR (126 MHz, Chloroform-*d*) δ = 164.6, 161.3 (J_{CF} = 24.4 Hz), 146.5 (J_{CF} = 2.5 Hz), 132.9, 127.8, 123.1 (J_{CF} = 8.8 Hz), 116.2 (J_{CF} = 21.4 Hz).
19F NMR (470 MHz, Chloroform-d) δ = -117.0 ppm.

[1,1'-biphenyl]-2-yl acrylate (1f)[3]



Colorless oil, yield = 86%, 578 mg.
^{1}H NMR (500 MHz, Chloroform-*d*) δ = 7.53-7.51 (m, 3H), 7.48-7.44 (m, 3H), 7.42-7.38 (m, 2H), 7.29-7.27 (m, 1H), 6.53 (dt, *J* = 17.2, 1.1 Hz, 1H), 6.23 (ddd, *J* = 17.0, 1.0 Hz, 1H), 6.26-6.20 (m, 1H).
^{13}C NMR (126 MHz, Chloroform-*d*) δ = 164.5, 147.6, 137.5, 134.9, 132.5, 131.0, 128.9, 128.5, 128.3, 127.7, 127.5, 126.5, 122.9.

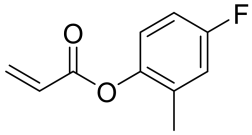
2-bromophenyl acrylate (1g)[4]



Colorless oil, yield = 91%, 614 mg.

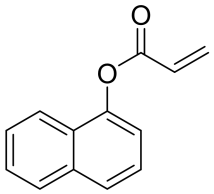
^{1}H NMR (400 MHz, Chloroform-*d*) δ = 7.66-7.63 (m, 1H), 7.37-7.35 (m, 1H), 7.22-7.16 (m, 2H), 6.70 (d, *J* = 17.2, 1H), 6.42-6.35 (m, 1H), 6.10 (d, *J* = 10.4, 1H).
^{13}C NMR (101 MHz, Chloroform-*d*) δ = 163.7, 148.2, 133.54, 133.52, 128.6, 127.5, 127.4, 123.9, 116.3.

4-fluoro-2-methylphenyl acrylate (1h)



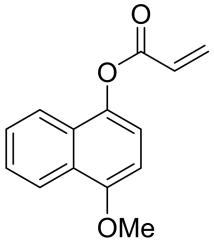
Colorless oil, yield = 83%, 448 mg.
^{1}H NMR (500 MHz, Chloroform-*d*) δ = 7.04-6.91 (m, 3H), 6.67-6.63 (m, 1H), 6.39-6.34 (m, 1H), 6.06 (dd, *J* = 10.5, 1.0 Hz, 1H), 2.19 (s, 3H).
^{13}C NMR (126 MHz, Chloroform-*d*) δ = 164.4, 161.3 (J_{CF} = 24.3 Hz), 145.1 (J_{CF} = 3.8 Hz), 132.9, 132.4 (J_{CF} = 7.6 Hz), 127.6, 123.2 (J_{CF} = 8.8 Hz), 117.7 (J_{CF} = 22.7 Hz), 113.7 (J_{CF} = 12.5 Hz), 16.4.
19F NMR (470 MHz, Chloroform-d) δ = -117.3 ppm.

naphthalen-1-yl acrylate (1i)[2]



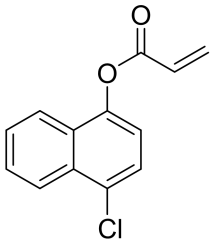
Brown oil, yield = 95%, 564 mg.
^{1}H NMR (400 MHz, Chloroform-*d*) δ = 7.98-7.93 (m, 2H), 7.82 (d, *J* = 8.4 Hz, 1H), 7.59-7.53 (m, 3H), 7.39 (d, 1H), 6.80 (dd, *J* = 17.6, 1.2 Hz, 1H), 6.59-6.52 (m, 1H), 6.14 (dd, *J* = 10.8, 1.2 Hz, 1H).
^{13}C NMR (101 MHz, Chloroform-*d*) δ = 164.6, 146.5, 134.7, 133.1, 128.1, 127.8, 126.8, 126.54, 126.53, 126.2, 125.5, 121.2, 118.1.

4-methoxynaphthalen-1-yl acrylate (1j)



Black oil, yield = 85%, 581 mg.
^{1}H NMR (400 MHz, Chloroform-*d*) δ = 8.34-8.31 (m, 1H), 7.84-7.82 (m, 1H), 7.5-7.53 (m, 2H), 7.23 (d, *J* = 8.4 Hz, 1H), 6.82-6.77 (m, 2H), 6.55-6.48 (m, 1H), 6.12 (d, *J* = 10.8, 1H), 4.03 (s, 3H).
^{13}C NMR (101 MHz, Chloroform-*d*) δ = 165.1, 153.6, 139.9, 132.8, 128.0, 127.5, 127.1, 126.3, 125.9, 122.5, 121.0, 117.8, 103.0, 55.8.

4-chloronaphthalen-1-yl acrylate (1k)

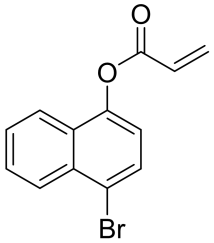


Black oil, yield = 79%, 550 mg.

^{1}H NMR (400 MHz, Chloroform-*d*) δ = 8.32 (d, *J* = 8.4 Hz, 1H), 7.93 (d, *J* = 8.0 Hz, 1H), 7.68-7.59 (m, 3H), 7.27 (d, *J* = 8.0 Hz, 1H), 6.79-6.75 (m, 1H), 6.54-6.47 (m, 1H), 6.16-6.14 (m, 1H).

^{13}C NMR (101 MHz, Chloroform-*d*) δ = 164.5, 145.5, 133.5, 131.7, 129.5, 127.9, 127.7, 127.6, 127.4, 125.7, 125.0, 121.8, 118.2.

4-bromonaphthalen-1-yl acrylate (1l)

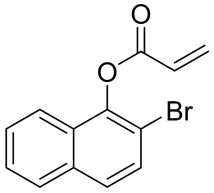


Brown oil, yield = 86%, 710 mg.

^{1}H NMR (400 MHz, Chloroform-*d*) δ = 8.28 (d, *J* = 8.4 Hz, 1H), 7.92 (d, *J* = 8.0 Hz, 1H), 7.81 (d, *J* = 8.0 Hz, 1H), 7.68-7.58 (m, 2H), 7.22 (d, *J* = 8.0 Hz, 1H), 6.77 (d, *J* = 17.2 Hz, 1H), 6.54-6.47 (m, 1H), 6.15 (m, *J* = 10.8 Hz, 1H).

^{13}C NMR (101 MHz, Chloroform-*d*) δ = 164.4, 146.2, 133.5, 132.9, 129.3, 128.1, 128.0, 127.7, 127.6, 127.4, 121.8, 120.0, 118.8.

2-bromonaphthalen-1-yl acrylate (lm)

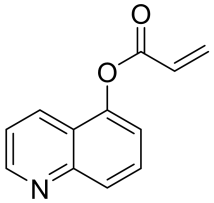


White solid, yield = 68%, 561 mg.

^{1}H NMR (400 MHz, Chloroform-*d*) δ = 7.89-7.82 (m, 2H), 7.67-7.64 (m, 2H), 7.60-7.53 (m, 2H), 6.83 (dd, *J* = 17.6, 1.2 Hz, 1H), 6.59-6.52 (m, 1H), 6.19 (dd, *J* = 10.4, 0.8 Hz, 1H).

^{13}C NMR (101 MHz, Chloroform-*d*) δ = 163.4, 144.3, 133.9, 133.6, 129.6, 128.2, 127.5, 127.4, 127.2, 126.9, 121.4, 113.4.

quinolin-5-yl acrylate (1n)

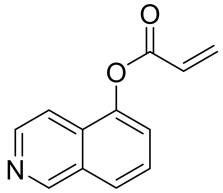


Brown solid, yield = 92%, 549 mg.

^{1}H NMR (400 MHz, Chloroform-*d*) δ = 8.95 (d, *J* = 2.8 Hz, 1H), 8.22 (d, *J* = 8.4 Hz, 1H), 8.06 (d, *J* = 8.4 Hz, 1H), 7.74 (t, *J* = 8.0 Hz, 1H), 7.45-7.39 (m, 2H), 6.75 (d, *J* = 17.6 Hz, 1H), 6.52-6.45 (m, 1H), 6.14 (d, *J* = 10.4 Hz, 1H).

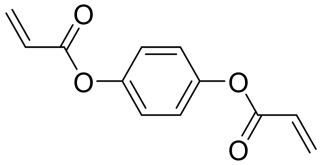
^{13}C NMR (101 MHz, Chloroform-*d*) δ = 164.4, 150.9, 149.0, 146.0, 133.6, 130.1, 129.0, 127.6, 127.5, 122.4, 121.5, 118.8.

isoquinolin-5-yl acrylate (1o)



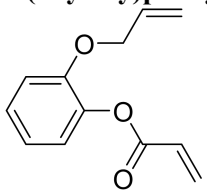
Brown solid, yield = 65%, 388 mg.
^{1}H NMR (400 MHz, Chloroform-*d*) δ = 9.25 (d, *J* = 4.0 Hz, 1H), 8.52 (d, *J* = 5.6 Hz, 1H), 7.83 (t, *J* = 7.2 Hz, 1H), 7.64-7.48 (m, 3H), 6.73-6.67 (m, 1H), 6.48-6.39 (m, 1H), 6.11-6.08 (m, 1H).
^{13}C NMR (101 MHz, Chloroform-*d*) δ = 164.1, 152.3, 145.4, 143.3, 133.6, 129.5, 129.4, 127.2, 127.0, 125.5, 122.4, 114.2.

1,4-phenylene diacrylate (1p)[5]



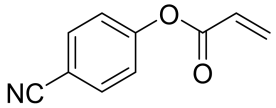
White solid, yield = 63%, 412 mg.
^{1}H NMR (400 MHz, Chloroform-*d*) δ = 7.18 (s, 4H), 6.64-6.60 (m, 2H), 6.37-6.30 (m, 2H), 6.03 (dd, *J* = 10.8, 1.2 Hz, 2H).
^{13}C NMR (101 MHz, Chloroform-*d*) δ = 164.4, 148.1, 132.9, 127.8, 122.5.

2-(allyloxy)phenyl acrylate (1q)



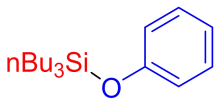
Colorless oil, yield = 78%, 477 mg.
^{1}H NMR (400 MHz, Chloroform-*d*) δ = 7.21 (t, *J* = 7.6 Hz, 1H), 7.12 (d, *J* = 7.6 Hz, 1H), 7.00 (d, *J* = 8.0 Hz, 2H), 6.64 (d, *J* = 17.3 Hz, 1H), 6.42-6.35 (m, 1H), 6.04-5.97 (m, 2H), 5.39 (d, *J* = 17.2 Hz, 1H), 5.26 (d, *J* = 10.8 Hz, 1H), 4.58 (d, *J* = 4.4 Hz, 2H).
^{13}C NMR (101 MHz, Chloroform-*d*) δ = 164.2, 150.3, 140.1, 133.0, 132.5, 127.8, 126.9, 123.0, 121.2, 117.3, 114.1, 69.4.

4-cyanophenyl acrylate (1r)



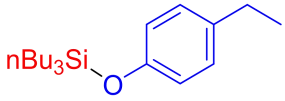
Light yellow oil, yield = 85%, 441 mg.
^{1}H NMR (400 MHz, Chloroform-*d*) δ = 7.74-7.71 (m, 2H), 7.32-7.28 (m, 2H), 6.69-6.64 (m, 1H), 6.37-6.31 (m, 1H), 6.12-6.09 (m, 1H).
^{13}C NMR (101 MHz, Chloroform-*d*) δ = 163.7, 154.0, 134.0, 133.8, 127.3, 122.9, 118.4, 109.9.

tributyl(phenoxy)silane (3a)[6]



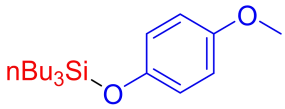
Colorless oil, yield = 85%, 149 mg, R_f = 0.7 (Petrol ether).
^{1}H NMR (400 MHz, Chloroform-d) δ = 7.26 (t, J = 8.0 Hz, 2H), 6.98 (t, J = 7.2 Hz, 1H), 6.88 (d, J = 7.6 Hz, 2H), 1.43-1.36 (m, 12H), 0.93 (t, J = 6.8 Hz, 9H), 0.81-0.77 (m, 6H).
^{13}C NMR (101 MHz, Chloroform-d) δ = 155.7, 129.5, 121.3, 120.1, 26.6, 25.4, 13.9, 13.9.

tributyl(4-ethylphenoxy)silane (3b)



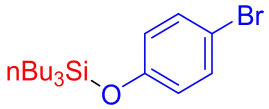
Yellow solid, yield = 92%, 177 mg, R_f = 0.6 (Petrol ether).
^{1}H NMR (400 MHz, Chloroform-d) δ = 7.05 (d, J = 8.4 Hz, 2H), 6.76 (d, J = 8.4 Hz, 2H), 2.63-2.57 (m, 2H), 1.39-1.33 (m, 12H), 1.22 (t, J = 7.6 Hz, 3H), 0.90 (t, J = 7.2 Hz, 9H), 0.76-0.72 (m, 6H).
^{13}C NMR (101 MHz, Chloroform-d) δ = 153.4, 136.9, 128.7, 119.8, 28.2, 26.6, 25.4, 15.9, 13.92, 13.89.
29Si NMR (79.5 MHz, Chloroform-d) δ = 18.0 ppm.
HRMS (ESI-TOF): m/z [M+H]+ calcd for $C_{20}H_{37}OSi$ 321.2614, found 321.2611.

tributyl(4-methoxyphenoxy)silane (3c)[7]



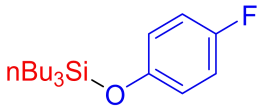
Yellow oil, yield = 88%, 170 mg, R_f = 0.7 (Petrol ether).
^{1}H NMR (400 MHz, Chloroform-d) δ = 6.79 (s, 4H), 3.78 (s, 3H), 1.39-1.36 (m, 12H), 0.91 (t, J = 6.8 Hz, 9H), 0.76-0.72 (m, 6H).
^{13}C NMR (101 MHz, Chloroform-d) δ = 154.2, 149.4, 120.6, 114.6, 55.7, 26.7, 25.4, 13.88, 13.85.

(4-bromophenoxy)tributylsilane (3d)



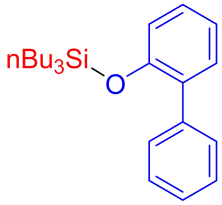
Colourless oil, yield = 80%, 177 mg, R_f = 0.7 (Petrol ether).
^{1}H NMR (400 MHz, Chloroform-d) δ = 7.34 (d, J = 8.8 Hz, 2H), 6.73 (d, J = 8.8 Hz, 2H), 1.39-1.35 (m, 12H), 0.93-0.90 (m, 9H), 0.77-0.73 (m, 6H).
^{13}C NMR (101 MHz, Chloroform-d) δ = 154.9, 132.4, 121.9, 113.6, 26.6, 25.3, 13.9, 13.8.

tributyl(4-fluorophenoxy)silane (3e)[7]



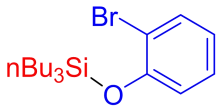
Colourless oil, yield = 89%, 165 mg, R_f = 0.7 (Petrol ether).
^{1}H NMR (400 MHz, Chloroform-d) δ = 6.95-6.90 (m, 2H), 6.80-6.77 (m, 2H), 1.39-1.35 (m, 12H), 0.91 (t, J = 6.8 Hz, 9H), 0.76-0.72 (m, 6H).
^{13}C NMR (101 MHz, Chloroform-d) δ = 158.9 (J_{CF} = 239.4 Hz), 151.7 (J_{CF} = 2.0 Hz), 120.9 (J_{CF} = 8.1 Hz), 115.9 (J_{CF} = 22.2 Hz), 26.6, 25.3, 13.9, 13.8.
19F NMR (470 MHz, Chloroform-d) δ = -123.5 ppm.

([1,1'-biphenyl]-2-yloxy)tributylsilane (3f)



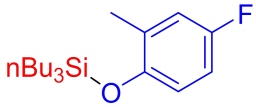
Yellow oil, yield = 90%, 198 mg, R_f = 0.6 (Petrol ether).
^{1}H NMR (400 MHz, Chloroform-d) δ = 7.62 (d, J = 7.6 Hz, 2H), 7.49-7.38 (m, 4H), 7.32-7.28 (m, 1H), 7.11 (t, J = 7.6 Hz, 1H), 7.01 (d, J = 8.4 Hz, 1H), 1.37-1.25 (m, 12H), 0.93 (t, J = 6.8 Hz, 9H), 0.67-0.63 (m, 6H).
^{13}C NMR (101 MHz, Chloroform-d) δ = 152.8, 139.3, 133.4, 130.9, 129.8, 128.4, 127.9, 126.8, 121.7, 120.3, 26.7, 25.2, 14.0, 13.8.
29Si NMR (79.5 MHz, Chloroform-d) δ = 18.6 ppm.
HRMS (ESI-TOF): m/z [M+H]+ calcd for $C_{24}H_{37}OSi$ 369.2614, found 369.2613.

(2-bromophenoxy)tributylsilane (3g)



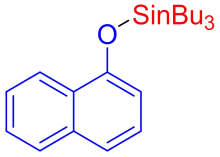
Colourless oil, yield = 68%, 150 mg, R_f = 0.7 (Petrol ether).
^{1}H NMR (500 MHz, Chloroform-d) δ = 7.55-7.53 (m, 1H), 7.21-7.18 (m, 1H), 6.90 (d, J = 6.4Hz, 1H), 6.86-6.83 (m, 1H), 1.45-1.36 (m, 12H), 0.93 (t, J = 5.6 Hz, 9H), 0.85-0.82 (m, 6H).
^{13}C NMR (126 MHz, Chloroform-d) δ = 152.9, 133.4, 128.3, 122.4, 120.4, 115.5, 26.6, 25.3, 14.1, 13.9.
29Si NMR (79.5 MHz, Chloroform-d) δ = 20.8 ppm.

tributyl(4-fluoro-2-methylphenoxy)silane (3h)



Colourless oil, yield = 85%, 165 mg, R_f = 0.7 (Petrol ether).
^{1}H NMR (400 MHz, Chloroform-d) δ = 6.86-6.83 (m, 1H), 6.77-6.73 (m, 1H), 6.70-6.67 (m, 1H), 2.20 (s, 3H), 1.38-1.33 (m, 12H), 0.90 (t, J = 6.8 Hz, 9H), 0.78-0.74 (m, 6H).
^{13}C NMR (101 MHz, Chloroform-d) δ = 158.4 (J_{CF} = 238.4 Hz), 150.1 (J_{CF} = 2.0 Hz), 130.5 (J_{CF} = 8.1 Hz), 119.0 (J_{CF} = 8.1 Hz), 117.4 (J_{CF} = 22.2 Hz), 112.7 (J_{CF} = 22.2 Hz), 26.6, 25.4, 17.0, 14.1, 13.9.
19F NMR (470 MHz, Chloroform-d) δ = -124.0 ppm.
HRMS (ESI-TOF): m/z [M+H]+ calcd for $C_{19}H_{34}FOSi$ 325.2363, found 325.2355.

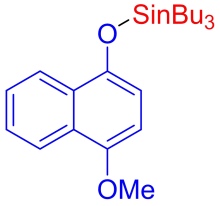
tributyl(naphthalen-1-yloxy)silane (3i)



Brown oil, yield = 80%, 164 mg, R_f = 0.7 (Petrol ether).
^{1}H NMR (400 MHz, Chloroform-d) δ = 8.24-8.21 (m, 1H), 7.84-7.82 (m, 1H), 7.51-7.41 (m, 3H), 7.36 (t, J = 7.6 Hz, 1H), 6.90-6.88 (m, 1H), 1.47-1.30 (m, 12H), 0.96-0.87 (m, 15H).
^{13}C NMR (101 MHz, Chloroform-d) δ = 151.9, 135.2, 128.1, 127.7, 126.2, 126.0, 125.1, 122.8, 121.0, 112.4, 26.7, 25.5, 14.1, 13.9.
29Si NMR (79.5 MHz, Chloroform-d) δ = 19.4 ppm.

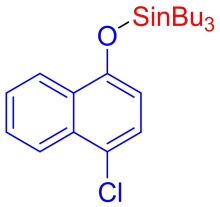
HRMS (ESI-TOF): m/z [M+H]+ calcd for $C_{22}H_{35}OSi$ 343.2457, found 343.2449.

tributyl((4-methoxynaphthalen-1-yl)oxy)silane (3j)



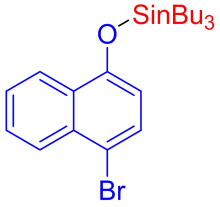
Brown oil, yield = 50%, 112 mg, R_f = 0.5 (Petrol ether).
^{1}H NMR (400 MHz, Chloroform-d) δ = 8.23-8.12 (m, 2H), 7.52-7.49 (m, 2H), 6.78-6.67 (m, 2H), 3.98 (s, 3H), 1.44-1.33 (m, 12H), 0.91-0.82 (m, 15H).
^{13}C NMR (101 MHz, Chloroform-d) δ = 149.9, 145.4, 128.6, 126.6, 125.8, 125.6, 122.6, 121.9, 111.6, 103.7, 55.8, 26.7, 25.5, 14.1, 13.9.
29Si NMR (79.5 MHz, Chloroform-d) δ = 19.0 ppm.
HRMS (ESI-TOF): m/z [M+H]+ calcd for $C_{22}H_{37}O_2Si$ 373.2563, found 373.2556.

tributyl((4-chloronaphthalen-1-yl)oxy)silane (3k)



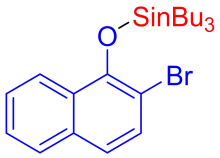
Brown solid, yield = 52%, 117 mg, R_f = 0.7 (Petrol ether).
^{1}H NMR (400 MHz, Chloroform-d) δ = 8.23 (d, J = 9.2 Hz, 2H), 7.62-7.56 (m, 2H), 7.43 (d, J = 8.0 Hz, 1H), 6.80 (d, J = 8.4 Hz, 1H), 1.45-1.35 (m, 12H), 0.92-0.86 (m, 15H).
^{13}C NMR (101 MHz, Chloroform-d) δ = 151.1, 131.9, 129.0, 127.4, 126.0, 125.9, 124.5, 123.7, 123.2, 112.3, 26.6, 25.4, 14.0, 13.8.
29Si NMR (79.5 MHz, Chloroform-d) δ = 20.4 ppm.
HRMS (ESI-TOF): m/z [M+H]+ calcd for $C_{22}H_{34}OSiCl$ 377.2067, found 377.2076.

((4-bromonaphthalen-1-yl)oxy)tributylsilane (3l)



Brown oil, yield = 50%,126 mg, R_f = 0.7 (Petrol ether).
^{1}H NMR (400 MHz, Chloroform-d) δ = 8.22-8.17 (m, 2H), 7.64-7.54 (m, 3H), 6.74 (d, J = 8.0 Hz, 1H), 1.44-1.34 (m, 12H), 0.92-0.85 (m, 15H).
^{13}C NMR (101 MHz, Chloroform-d) δ = 151.8, 133.0, 129.7, 129.3, 127.7, 127.1, 126.0, 123.2, 113.8, 112.9, 26.6, 25.4, 14.0, 13.8.
29Si NMR (79.5 MHz, Chloroform-d) δ = 20.4 ppm.

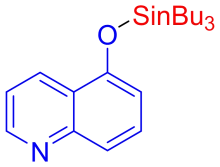
((2-bromonaphthalen-1-yl)oxy)tributylsilane (3m)



Brown oil, yield = 35%, 88 mg, R_f = 0.7 (Petrol ether).

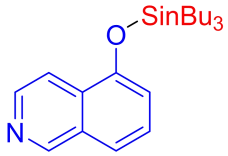
^{1}H NMR (400 MHz, Chloroform-d) δ = 8.09-8.06 (m, 1H), 7.81-7.78 (m, 1H), 7.56 (d, J = 8.8 Hz, 1H), 7.51-7.49 (m, 2H), 7.37 (d, J = 8.8 Hz, 1H), 1.39-1.28 (m, 12H), 0.93-0.85 (m, 15H).
^{13}C NMR (101 MHz, Chloroform-d) δ = 149.6, 133.9, 130.3, 129.1, 127.9, 126.4, 126.0, 122.8, 122.6, 110.0, 26.6, 25.4, 14.7, 13.8.

5-((tributylsilyl)oxy)quinoline (3n)



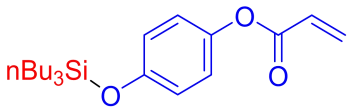
Brown oil, yield = 89%, 183 mg, R_f = 0.5 (Petrol ether).
^{1}H NMR (500 MHz, Chloroform-d) δ = 8.90-8.89 (m, 1H), 8.52-8.50 (m, 1H), 7.74 (d, J = 8.5 Hz, 1H), 7.57 (d, J = 8.0 Hz, 1H), 7.40-7.38 (m, 1H), 6.92-6.91 (m, 1H), 1.43-1.33 (m, 12H), 0.89-0.84 (m, 15H).
^{13}C NMR (126 MHz, Chloroform-d) δ = 151.6, 150.4, 149.4, 131.5, 129.6, 123.2, 122.1, 120.3, 112.7, 26.5, 25.3, 14.0, 13.8.
HRMS (ESI-TOF): m/z [M+H]+ calcd for $C_{21}H_{34}NOSi$ 344.2410, found 344.2414.

5-((tributylsilyl)oxy)isoquinoline (3o)



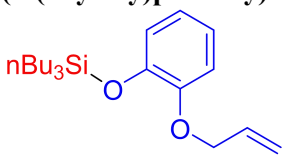
Brown solid, yield = 92%, 189 mg, R_f = 0.5 (Petrol ether).
^{1}H NMR (400 MHz, Chloroform-d) δ = 9.23 (s, 1H), 8.53 (d, J = 6.0 Hz, 1H), 7.97 (d, J = 6.0 Hz, 1H), 7.60 (d, J = 8.0 Hz, 1H), 7.49 (t, J = 8.0 Hz, 1H), 7.09-7.07 (m, 1H), 1.43-1.27 (m, 12H), 0.90-0.85 (m, 15H).
^{13}C NMR (101 MHz, Chloroform-d) δ = 151.8, 151.1, 141.9, 130.9, 130.0, 127.8, 120.3, 116.6, 115.9, 26.6, 25.4, 14.0, 13.8.
HRMS (ESI-TOF): m/z [M+H]+ calcd for $C_{21}H_{34}NOSi$ 344.2410, found 344.2406.

4-((tributylsilyl)oxy)phenyl acrylate (3p)



Colourless oil, yield = 71%, 154 mg, R_f = 0.7 (Petrol ether).
^{1}H NMR (400 MHz, Chloroform-d) δ = 7.01-6.99 (m, 2H), 6.84 (d, J = 8.8 Hz, 2H), 6.63-6.58 (m, 1H), 6.36-6.29 (m, 1H), 6.02-5.99 (m, 1H), 1.39-1.35 (m, 12H), 0.91 (t, J = 6.8 Hz, 9H), 0.77-0.73 (m, 6H).
^{13}C NMR (101 MHz, Chloroform-d) δ = 165.0, 153.4, 144.6, 132.4, 128.2, 122.3, 120.5, 26.6, 25.3, 13.88, 13.85.
HRMS (ESI-TOF): m/z [M+H]+ calcd for $C_{21}H_{35}O_3Si$ 363.2355, found 363.2346.

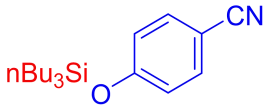
(2-(allyloxy)phenoxy)tributylsilane (3q)



Colourless oil, yield = 83%, 173 mg, R_f = 0.7 (Petrol ether).
^{1}H NMR (400 MHz, Chloroform-d) δ = 6.90-6.82 (m, 4H), 6.14-6.07 (m, 1H), 5.45-5.40 (m, 1H), 5.30-5.27 (m, 1H), 4.53 (d, J = 5.6 Hz, 2H), 1.40-1.32 (m, 12H), 0.89 (t, J = 6.8 Hz, 9H), 0.77-0.73 (m, 6H).

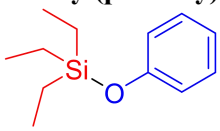
^{13}C NMR (101 MHz, Chloroform-d) δ = 150.2, 145.5, 133.8, 121.7, 121.3, 121.2, 117.6, 114.1, 69.8, 26.7, 25.4, 14.1, 13.9.
29Si NMR (79.5 MHz, Chloroform-d) δ = 19.8 ppm.
HRMS (ESI-TOF): m/z [M+H]+ calcd for $C_{21}H_{37}O_2Si$ 349.2563, found 349.2561.

4-((tributylsilyl)oxy)benzonitrile (3r)



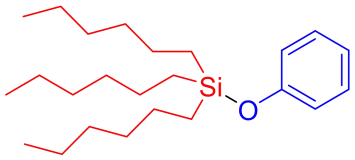
Colourless oil, yield = 88%, 167 mg, R_f = 0.7 (Petrol ether).
^{1}H NMR (400 MHz, Chloroform-d) δ = 7.57-7.51 (m, 2H), 6.95-6.89 (m, 2H), 1.37-1.32 (m, 12H), 0.89 (t, J = 6.8 Hz, 9H), 0.65-0.61 (m, 6H).
^{13}C NMR (101 MHz, Chloroform-d) δ = 160.8, 134.3, 120.9, 119.5, 116.6, 26.6, 25.3, 14.7, 13.9.
29Si NMR (79.5 MHz, Chloroform-d) δ = 19.0 ppm.

triethyl(phenoxy)silane (3s)[6]



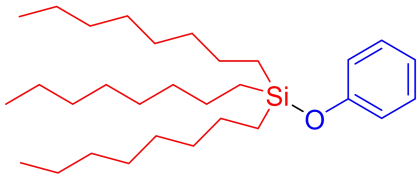
Black solid, yield = 81%, 101 mg, R_f = 0.7 (Petrol ether).
^{1}H NMR (400 MHz, Chloroform-d) δ = 7.28-7.23 (m, 2H), 6.97 (t, J = 7.6, 1H), 6.89-6.87 (m, 2H), 1.03 (t, J = 8.0 Hz, 9H), 0.80-0.74 (m, 6H).
^{13}C NMR (101 MHz, Chloroform-d) δ = 155.8, 129.5, 121.4, 112.1, 6.8, 5.2.

trihexyl(phenoxy)silane (3t)[8]



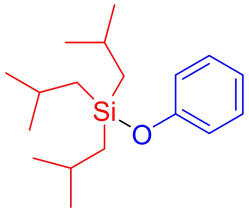
White oil, yield = 65%, 147 mg, R_f = 0.7 (Petrol ether).
^{1}H NMR (400 MHz, Chloroform-d) δ = 7.28-7.24 (m, 2H), 6.97 (t, J = 7.2 Hz, 1H), 6.88-6.86 (m, 2H), 1.44-1.28 (m, 24H), 0.92 (t, J = 6.8 Hz, 9H), 0.79-0.75 (m, 6H).
^{13}C NMR (101 MHz, Chloroform-d) δ = 155.8, 129.5, 121.3, 120.1, 33.4, 31.6, 23.1, 22.7, 14.3.

trioctyl(phenoxy)silane (3u)[9]



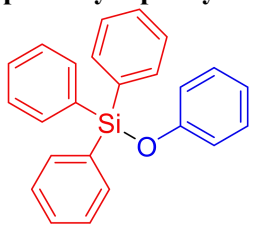
Colourless oil, yield = 52%, 144 mg, R_f = 0.6 (Petrol ether).
^{1}H NMR (400 MHz, Chloroform-d) δ = 7.28-7.24 (m, 2H), 6.98 (t, J = 7.6 Hz, 1H), 6.89-6.87 (m, 2H), 1.44-1.31 (m, 36H), 0.93 (t, J = 6.4 Hz, 9H), 0.78 (t, J = 7.6 Hz, 6H).
^{13}C NMR (101 MHz, Chloroform-d) δ = 155.8, 129.5, 121.3, 120.1, 33.7, 32.1, 29.40, 29.38, 23.1, 22.9, 14.3, 14.2.

triisobutyl(phenoxy)silane (3v)[10]



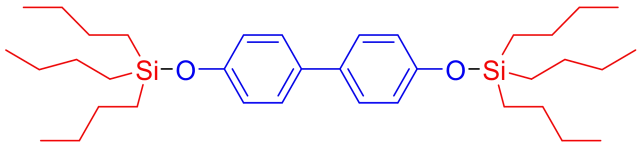
White oil, yield = 89%, 156 mg, R_f = 0.7 (Petrol ether).
^{1}H NMR (400 MHz, Chloroform-d) δ = 7.28-7.23 (m, 2H), 6.96 (t, J = 7.2 Hz, 1H), 6.87 (d, J = 7.6 Hz, 2H), 1.97-1.90 (m, 3H), 1.00 (d, J = 6.8 Hz, 18H), 0.81 (d, J = 7.2 Hz, 6H).
^{13}C NMR (101 MHz, Chloroform-d) δ = 155.7, 129.5, 121.0, 120.0, 26.5, 26.0, 24.4.

phenoxytriphenylsilane (3w)[11]



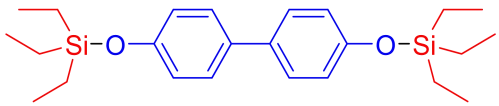
White solid, yield = 87%, 184 mg, R_f = 0.6 (Petrol ether).
^{1}H NMR (400 MHz, Chloroform-d) δ = 7.71 - 7.66 (m, 6H), 7.48 - 7.39 (m, 9H), 7.18 - 7.14 (m, 2H), 6.95 - 6.89 (m, 3H).
^{13}C NMR (101 MHz, Chloroform-d) δ = 155.2, 135.7, 133.7, 130.4, 129.5, 128.1, 121.7, 120.2.

4,4'-bis((tributylsilyl)oxy)-1,1'-biphenyl (5a)



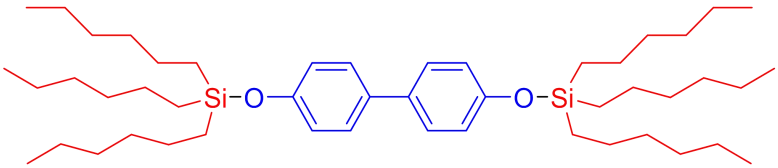
Colourless oil, yield = 60%, 175 mg, R_f = 0.7 (Petrol ether).
^{1}H NMR (400 MHz, Chloroform-d) δ = 7.43 (d, J = 8.8 Hz, 4H), 6.89 (d, J = 8.4 Hz, 4H), 1.42-1.37 (m, 24H), 0.92 (t, J = 7.2 Hz, 18H), 0.80-0.76 (m, 12H).
^{13}C NMR (101 MHz, Chloroform-d) δ = 154.8, 134.1, 127.7, 120.3, 26.6, 25.4, 14.0, 13.9.
29Si NMR (79.5 MHz, Chloroform-d) δ = 18.6 ppm.
HRMS (ESI-TOF): m/z [M+H]+ calcd for $C_{36}H_{63}O_2Si_2$ 583.4367, found 583.4356.

4,4'-bis((triethylsilyl)oxy)-1,1'-biphenyl (5b)



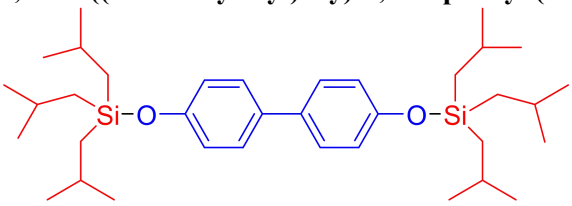
Yellow oil, yield = 62%, 154 mg, R_f = 0.6 (Petrol ether).
^{1}H NMR (400 MHz, Chloroform-d) δ = 7.44 (d, J = 8.4 Hz, 4H), 6.92 (d, J = 8.8 Hz, 4H), 1.05 (t, J = 8.4 Hz, 18H), 0.83-0.77 (m, 12H).
^{13}C NMR (101 MHz, Chloroform-d) δ = 154.8, 134.1, 127.8, 120.3, 6.8, 5.2.
29Si NMR (79.5 MHz, Chloroform-d) δ = 21.1 ppm.
HRMS (ESI-TOF): m/z [M+H]+ calcd for $C_{24}H_{39}O_2Si_2$ 415.2489, found 415.2486.

4,4'-bis((trihexylsilyl)oxy)-1,1'-biphenyl (5c)



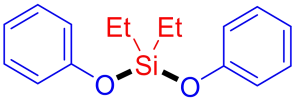
Yellow oil, yield = 54%, 242 mg, R_f = 0.7 (Petrol ether).
^{1}H NMR (400 MHz, Chloroform-d) δ = 7.43 (d, J = 8.4 Hz, 4H), 6.89 (d, J = 8.4 Hz, 4H), 1.43-1.29 (m, 48H), 0.91 (t, J = 6.4 Hz, 18H), 0.79-0.75 (m, 12H).
^{13}C NMR (101 MHz, Chloroform-d) δ = 154.8, 134.1, 127.7, 120.3, 33.4, 31.6, 23.1, 22.7, 14.28, 14.25.
29Si NMR (79.5 MHz, Chloroform-d) δ = 18.6 ppm.
HRMS (ESI-TOF): m/z [M+H]+ calcd for $C_{48}H_{87}O_2Si_2$ 751.6245, found 751.6240.

4,4'-bis((triisobutylsilyl)oxy)-1,1'-biphenyl (5d)



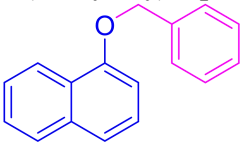
Yellow oil, yield = 48%, 166 mg, R_f = 0.7 (Petrol ether).
^{1}H NMR (400 MHz, Chloroform-d) δ = 7.43 (d, J = 8.4 Hz, 4H), 6.88 (d, J = 8.4 Hz, 4H), 1.97-1.90 (m, 6H), 1.00 (d, J = 6.4 Hz, 36H), 0.81 (d, J = 6.8 Hz, 12H).
^{13}C NMR (101 MHz, Chloroform-d) δ = 154.8, 133.8, 127.7, 120.1, 26.5, 26.0, 24.4.
29Si NMR (79.5 MHz, Chloroform-d) δ = 18.6 ppm.
HRMS (ESI-TOF): m/z [M+H]+ calcd for $C_{36}H_{63}O_2Si_2$ 583.4367, found 583.4372.

diethyldiphenoxysilane (6)



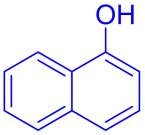
Colorless oil, yield = 62%, 64 mg, R_f = 0.7 (Petrol ether).
^{1}H NMR (400 MHz, Chloroform-d) δ = 7.26-7.21 (m, 4H), 7.03-6.98 (m, 6H), 1.06-0.98 (m, 6H), 0.91-0.85 (m, 4H).
^{13}C NMR (101 MHz, Chloroform-d) δ = 154.5, 129.7, 122.1, 119.9, 6.3, 4.6.

1-(benzyloxy)naphthalene (7)[12]



Light yellow oil, yield = 89%, 62 mg.
^{1}H NMR (400 MHz, Chloroform-d) δ = 8.40-8.38 (m, 1H), 7.86-7.83 (m, 1H), 7.58-7.38 (m, 9H), 6.92 (d, J = 7.2 Hz, 1H), 5.29 (s, 2H).
^{13}C NMR (101 MHz, Chloroform-d) δ = 154.6, 137.3, 134.7, 128.7, 128.1, 127.6, 127.5, 126.6, 126.0, 125.9, 125.4, 122.3, 120.6, 105.3, 70.2.

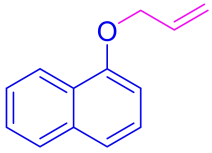
naphthalen-1-ol (8)[13]



Colorless oil, yield = 92%, 40 mg.

^{1}H NMR (400 MHz, Chloroform-d) δ = 8.23-8.20 (m, 1H), 7.86-7.84 (m, 1H), 7.54-7.47 (m, 3H), 7.34 (t, J = 7.6 Hz, 1H), 6.85-6.83 (m, 1H), 5.45 (brs, 1H).
^{13}C NMR (101 MHz, Chloroform-d) δ = 151.5, 134.9, 127.8, 126.6, 126.0, 125.4, 124.5, 121.7, 120.8, 108.7.

1-(allyloxy)naphthalene (9)[13]



Light yellow oil, yield = 87%, 48 mg.
^{1}H NMR (400 MHz, Chloroform-d) δ = 8.44-8.41 (m, 1H), 7.89-7.87 (m, 1H), 7.58-7.42 (m, 4H), 6.87 (d, J = 7.6 Hz, 1H), 6.30-6.21 (m, 1H), 5.63-5.58 (m, 1H), 5.43-5.40 (m, 1H), 4.78-4.77 (m, 2H).
^{13}C NMR (101 MHz, Chloroform-d) δ = 154.4, 134.7, 133.4, 127.6, 126.5, 125.92, 125.87, 125.3, 122.2, 120.5, 117.5, 105.2, 69.0.

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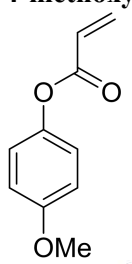
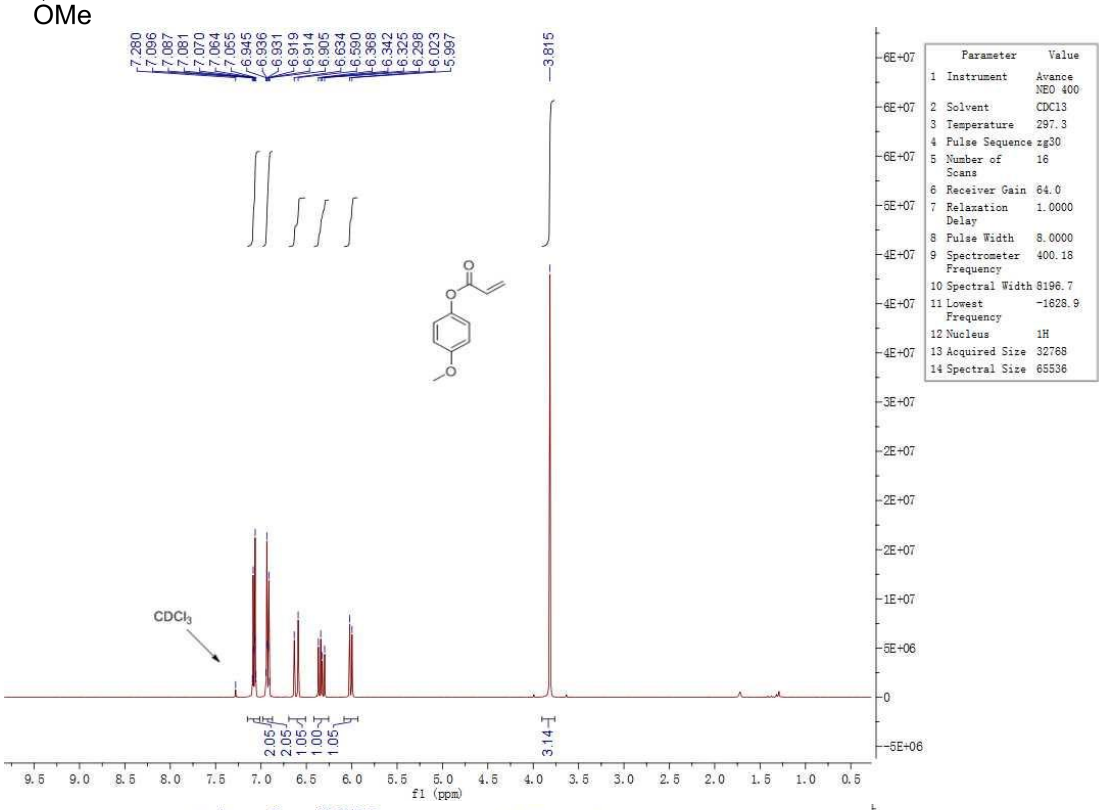
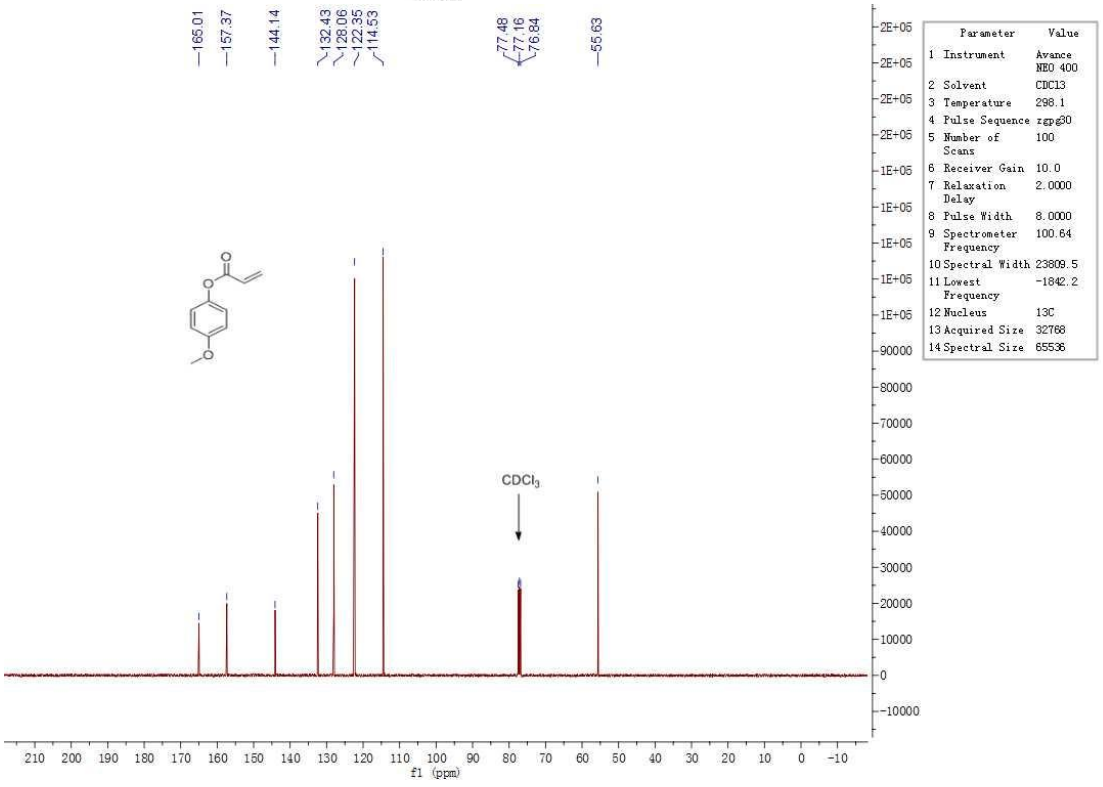
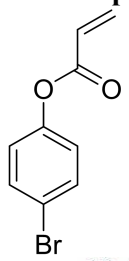
4-methoxyphenyl acrylate (1c)

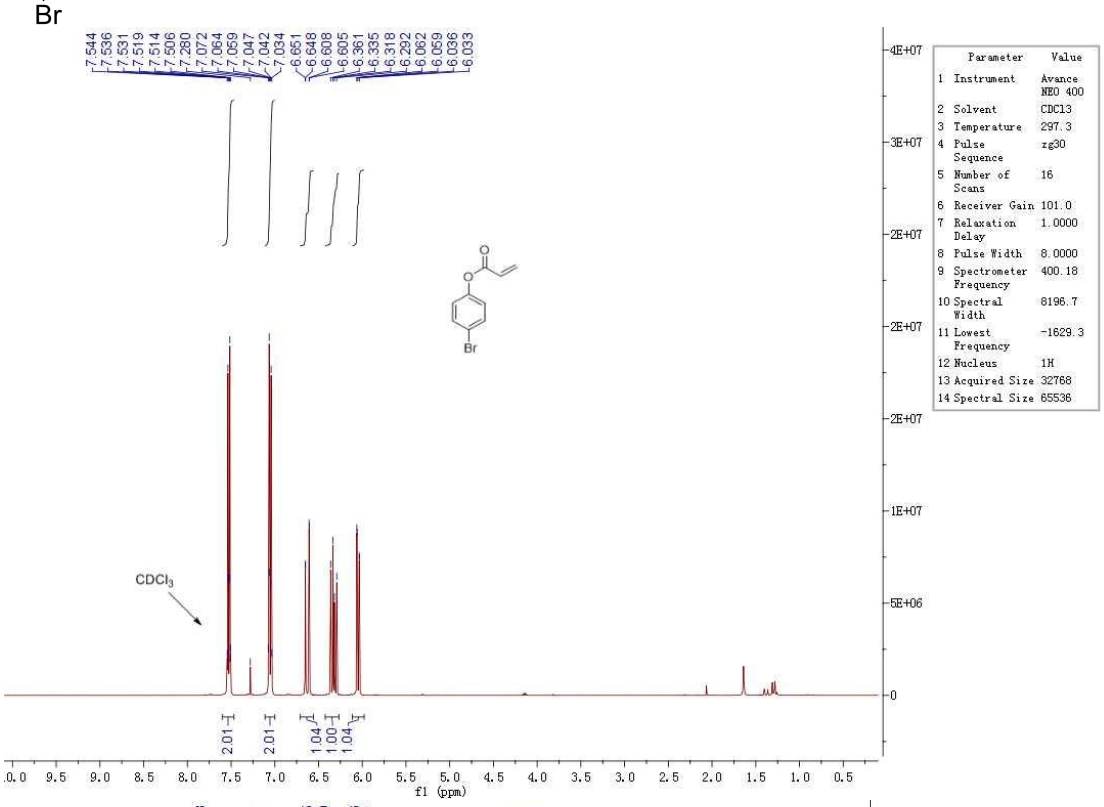


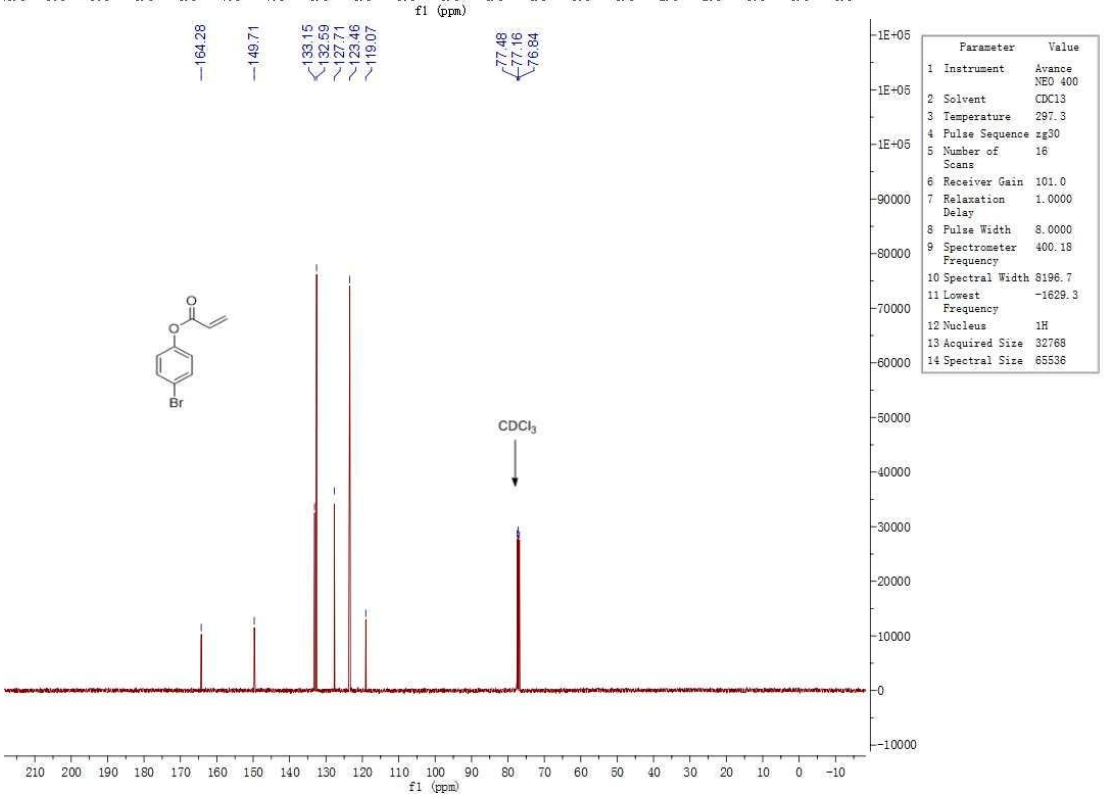




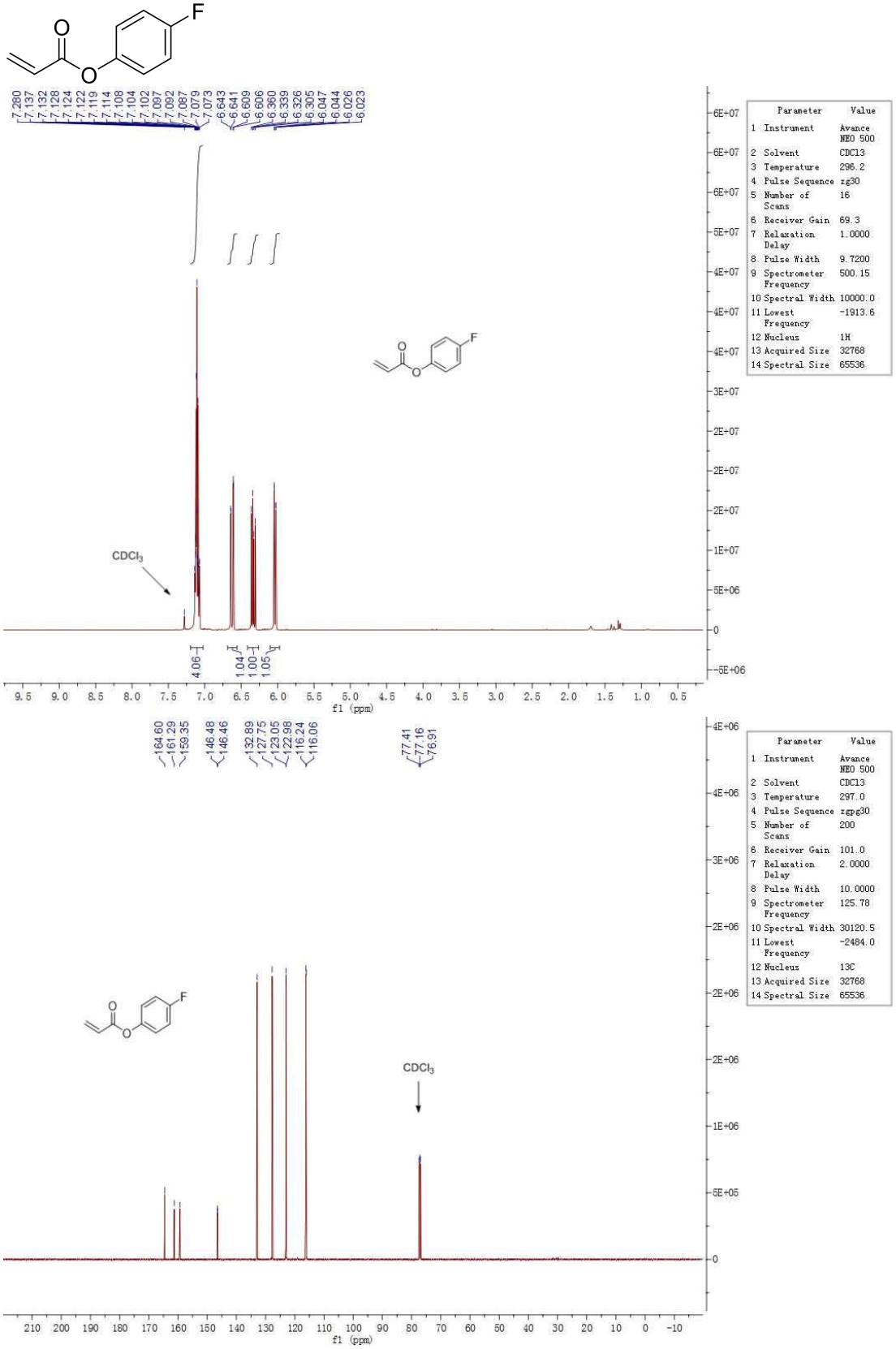
4-bromophenyl acrylate (1d)

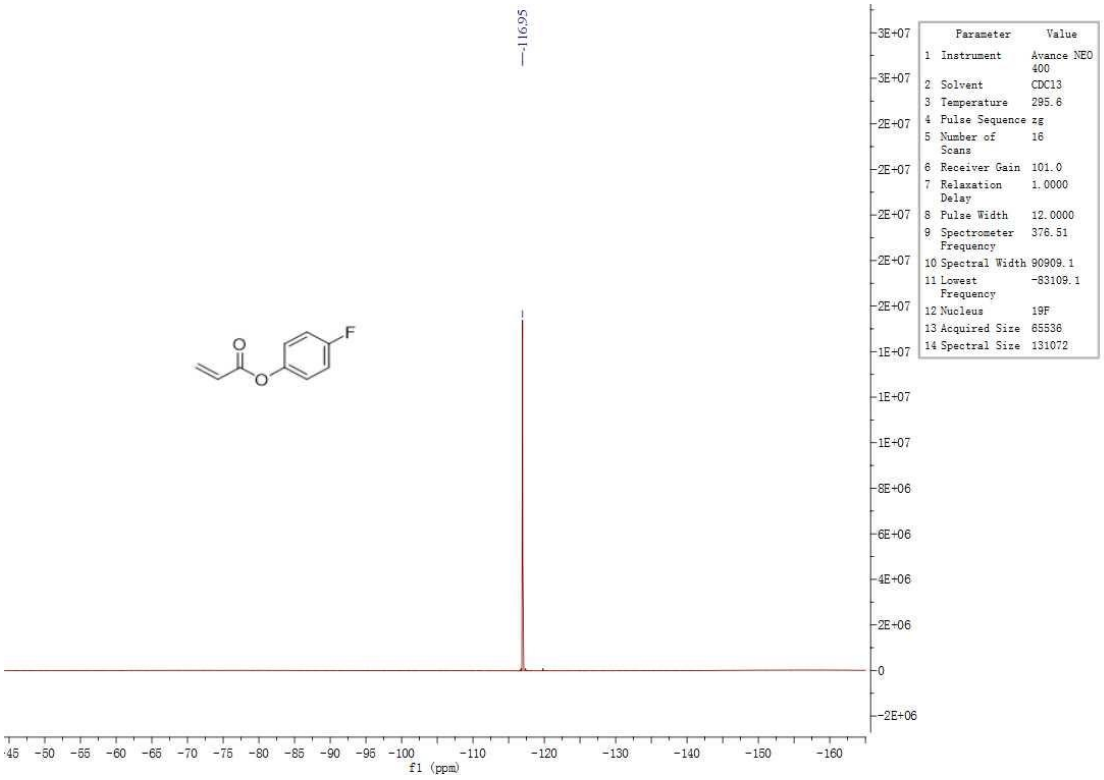






4-fluorophenyl acrylate (1e)

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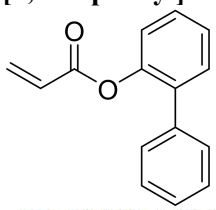
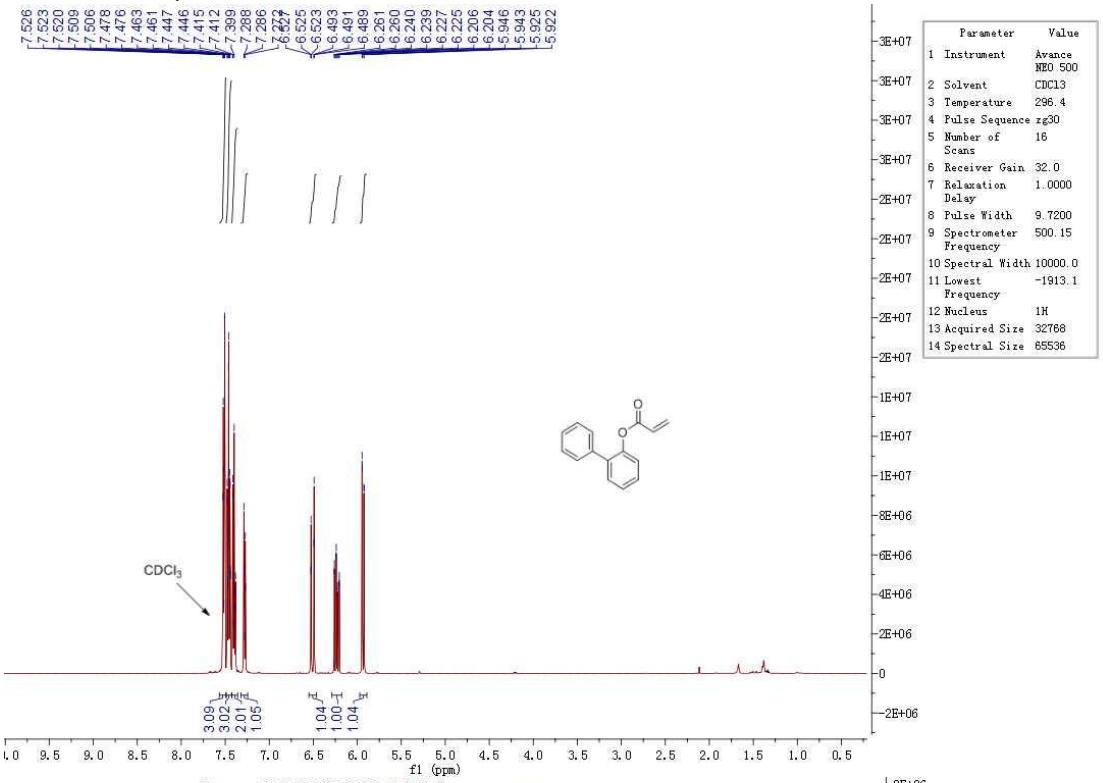
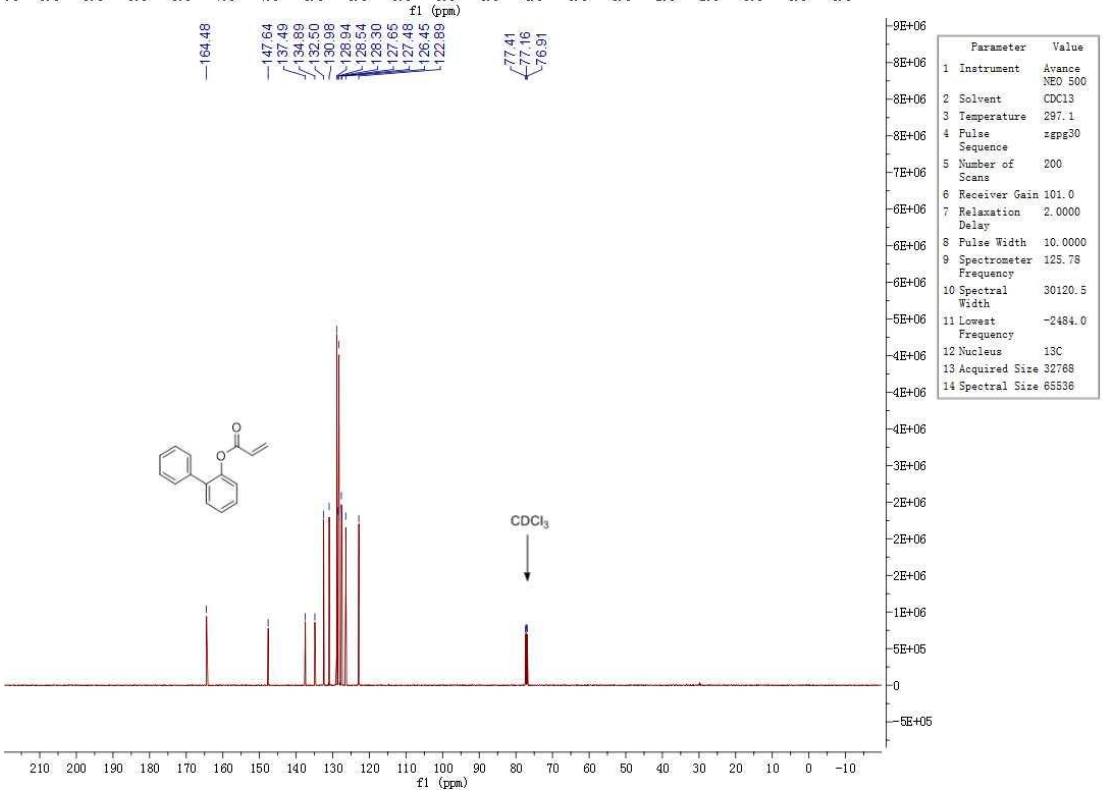
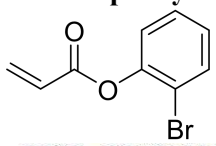
[1,1'-biphenyl]-2-yl acrylate (1f)

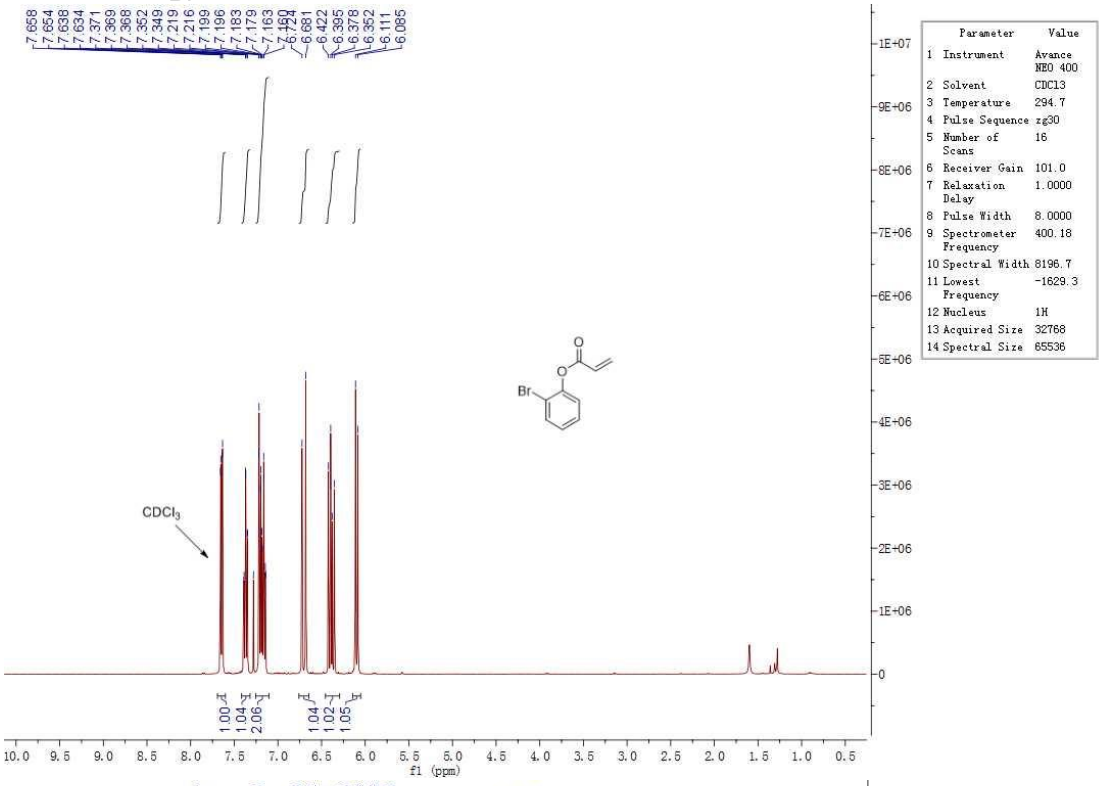


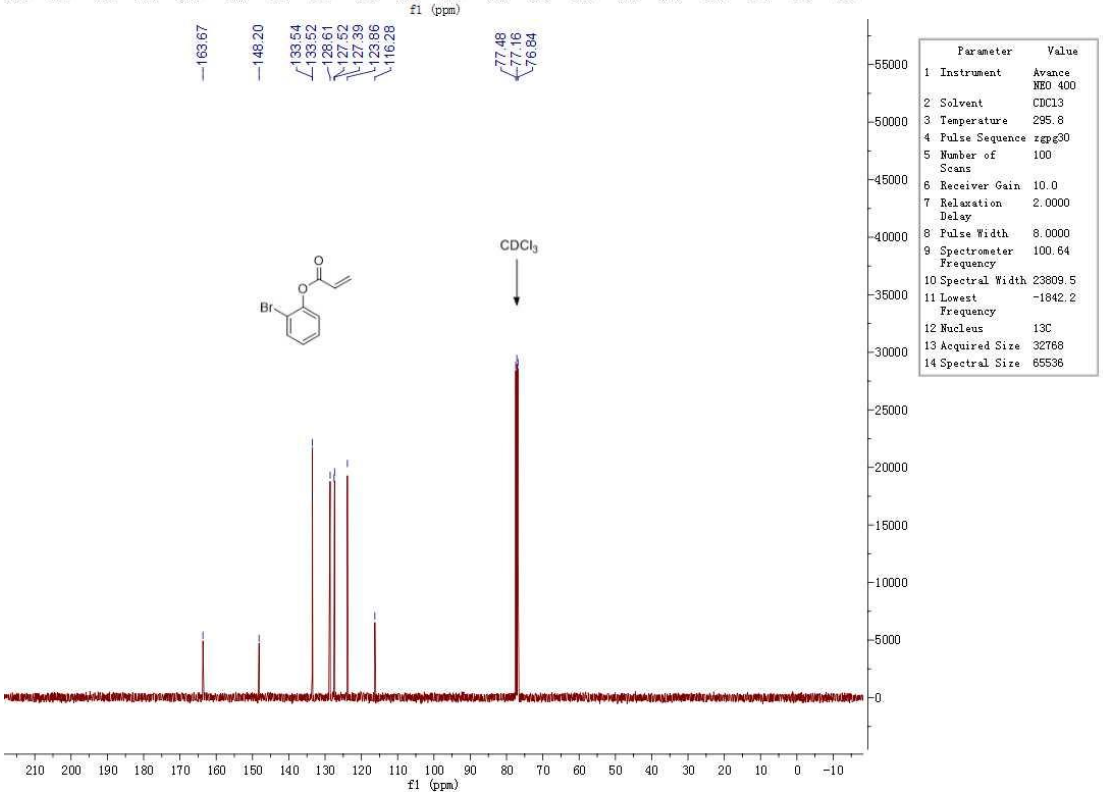




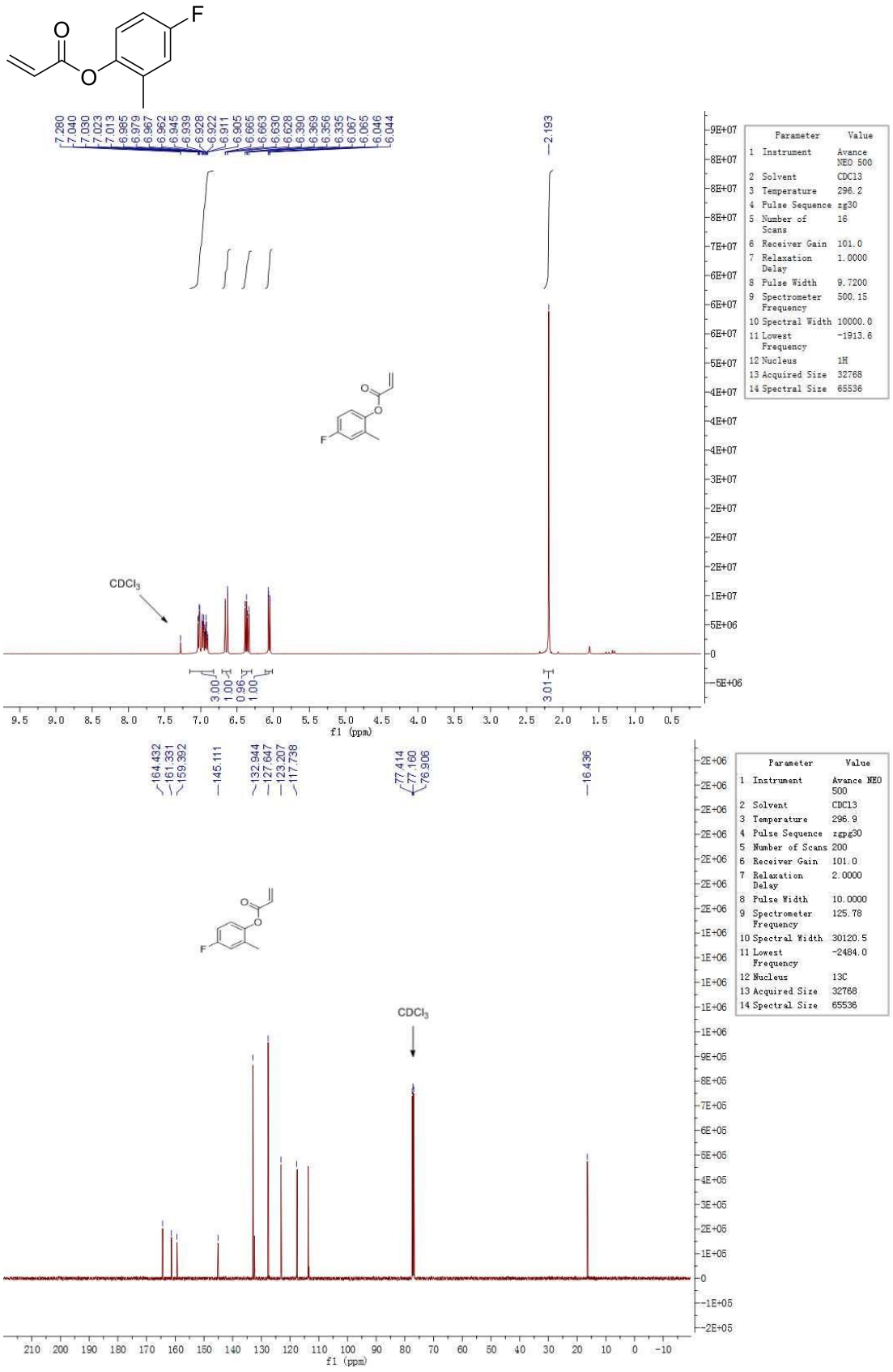
2-bromophenyl acrylate (1g)

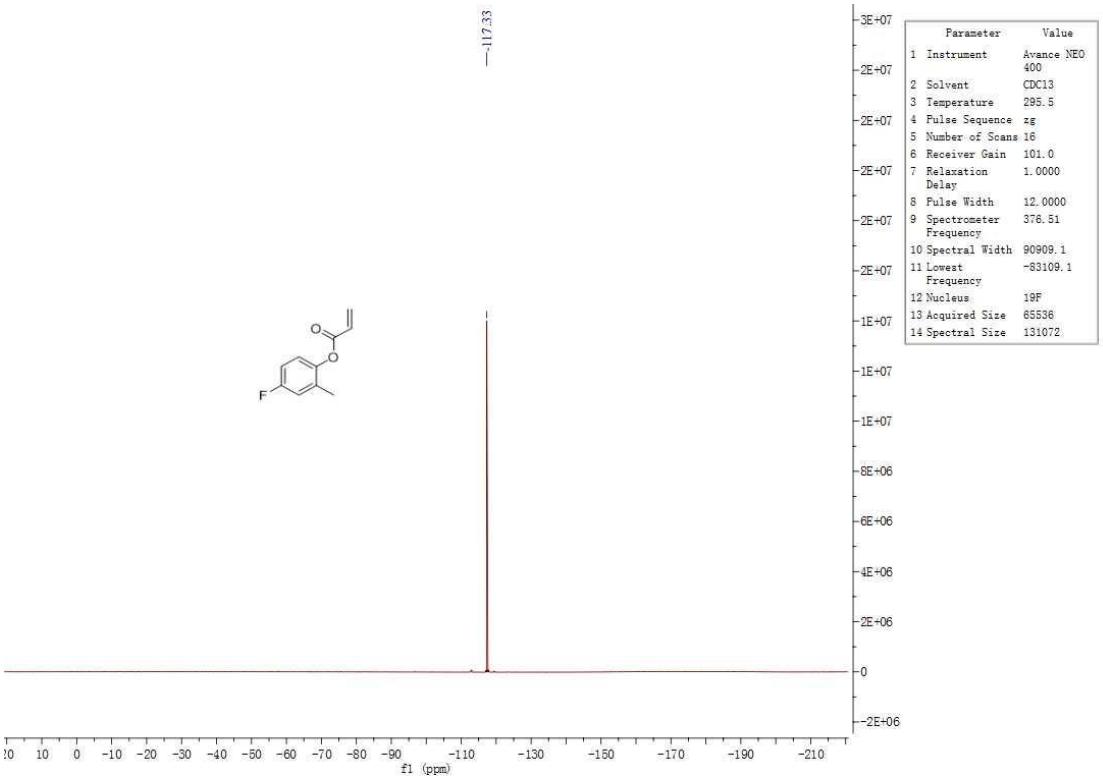






4-fluoro-2-methylphenyl acrylate (1h)





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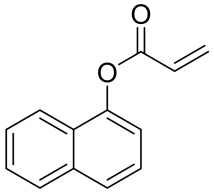
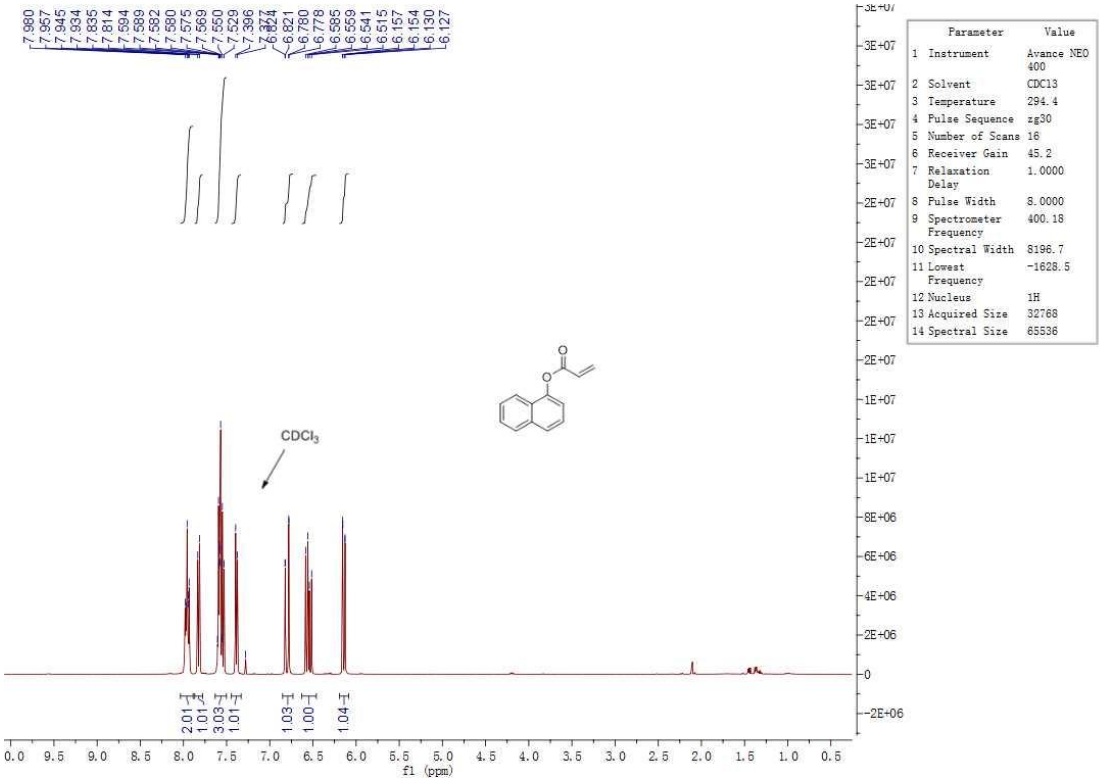
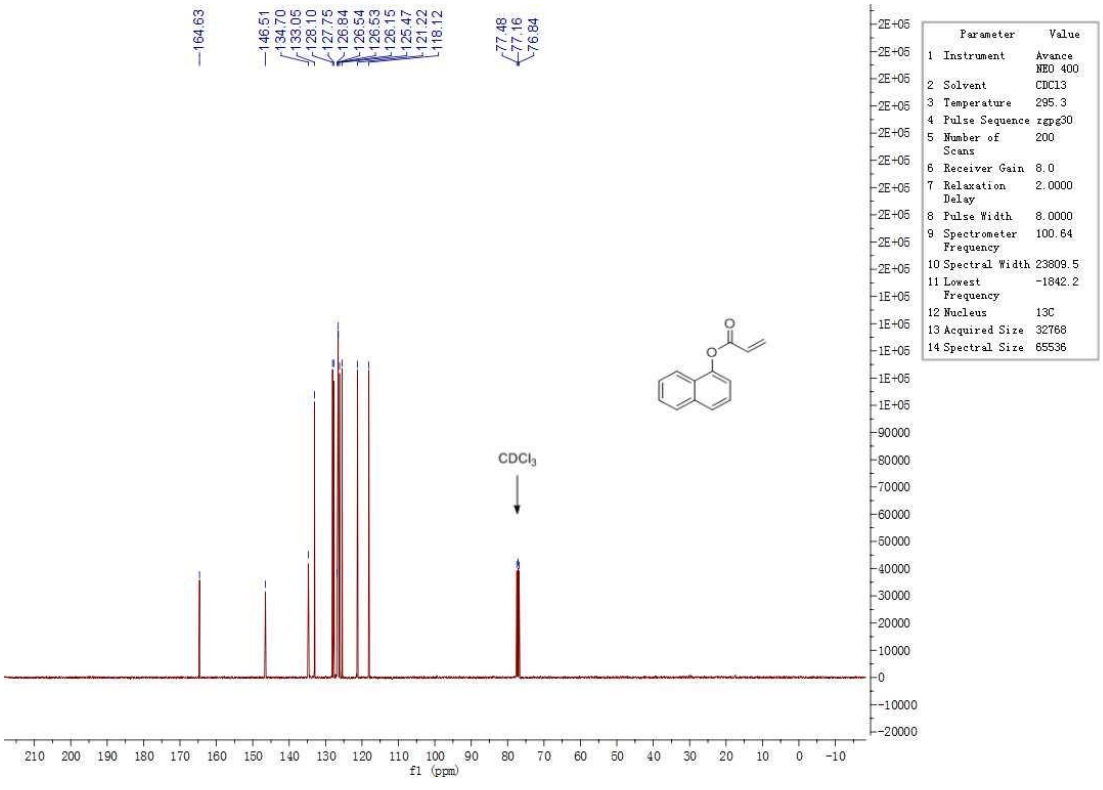
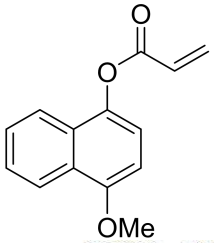
naphthalen-1-yl acrylate (1i)

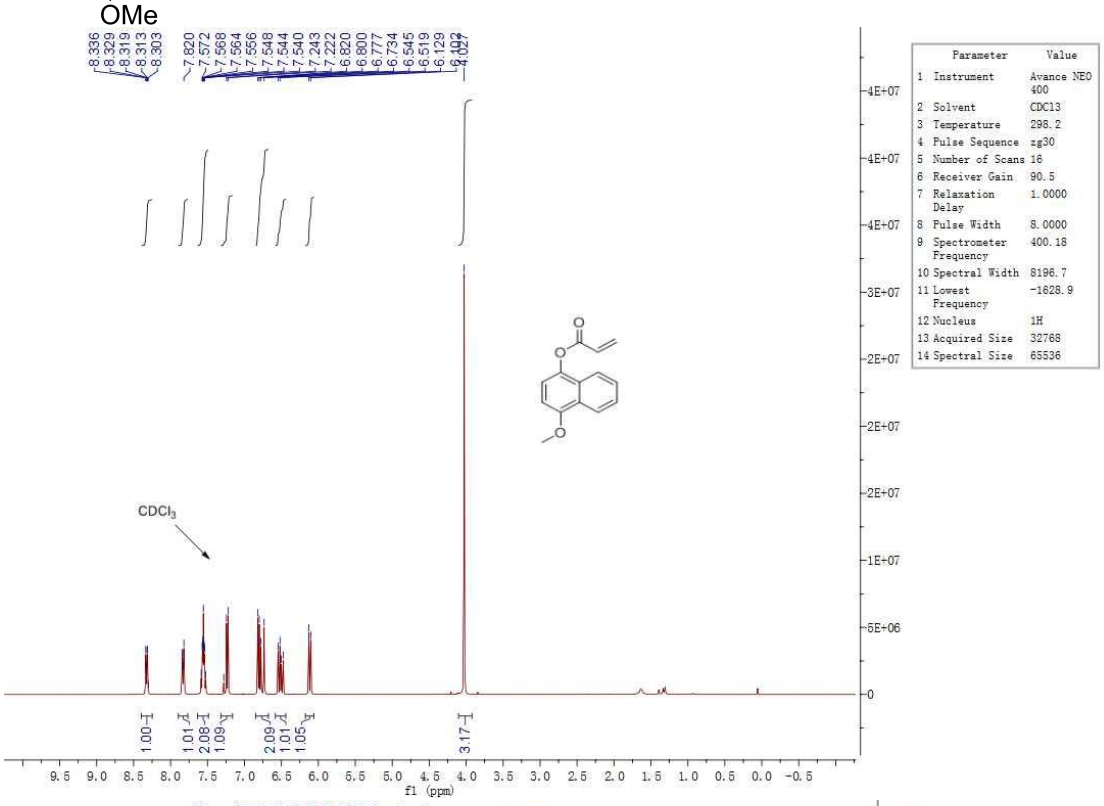


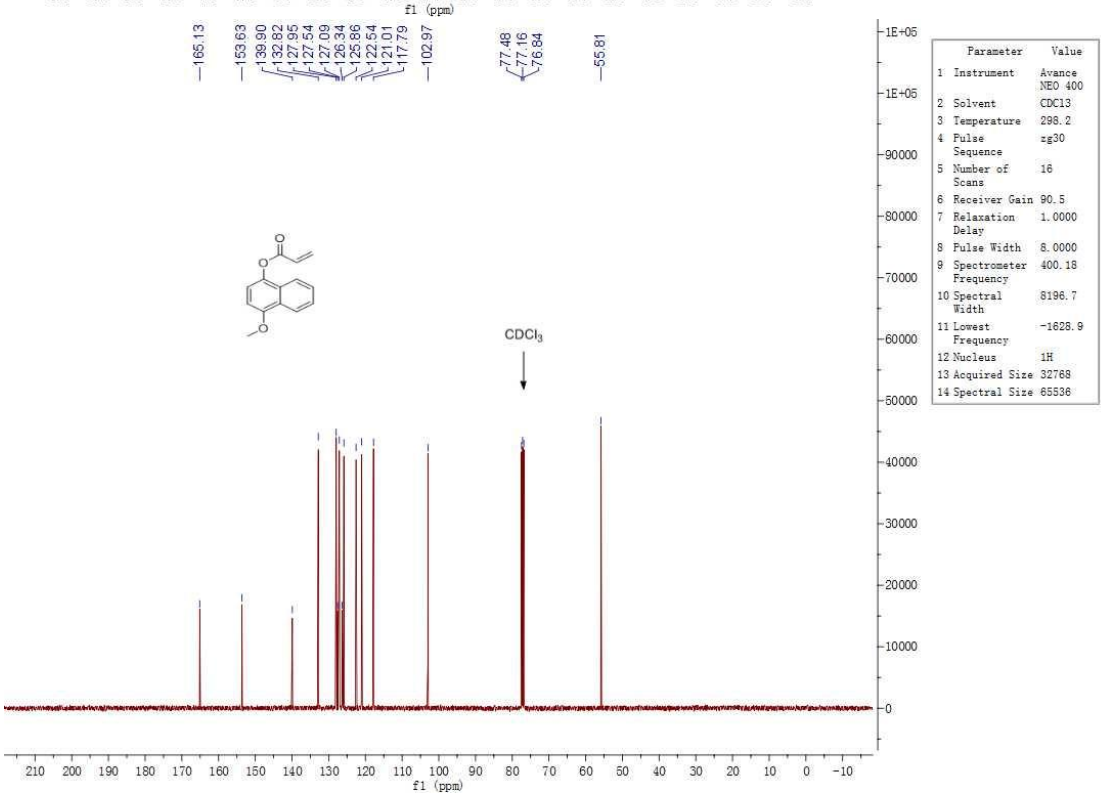




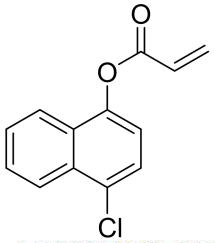
4-methoxynaphthalen-1-yl acrylate (1j)

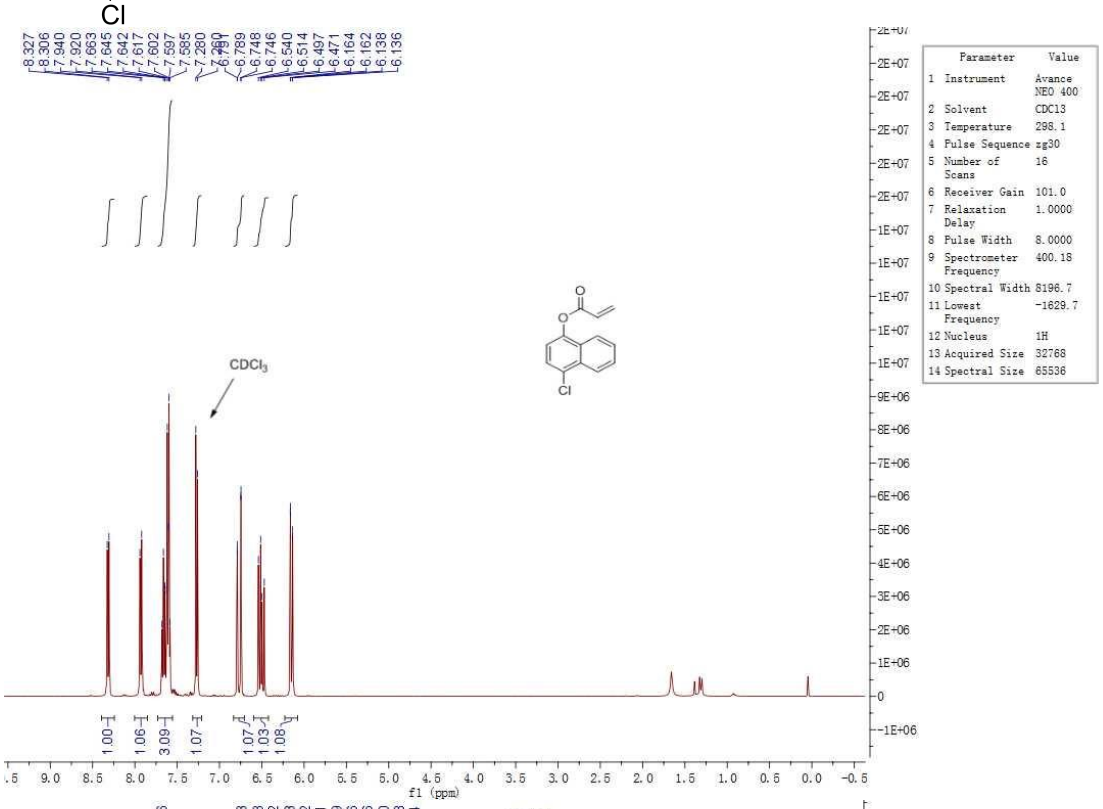


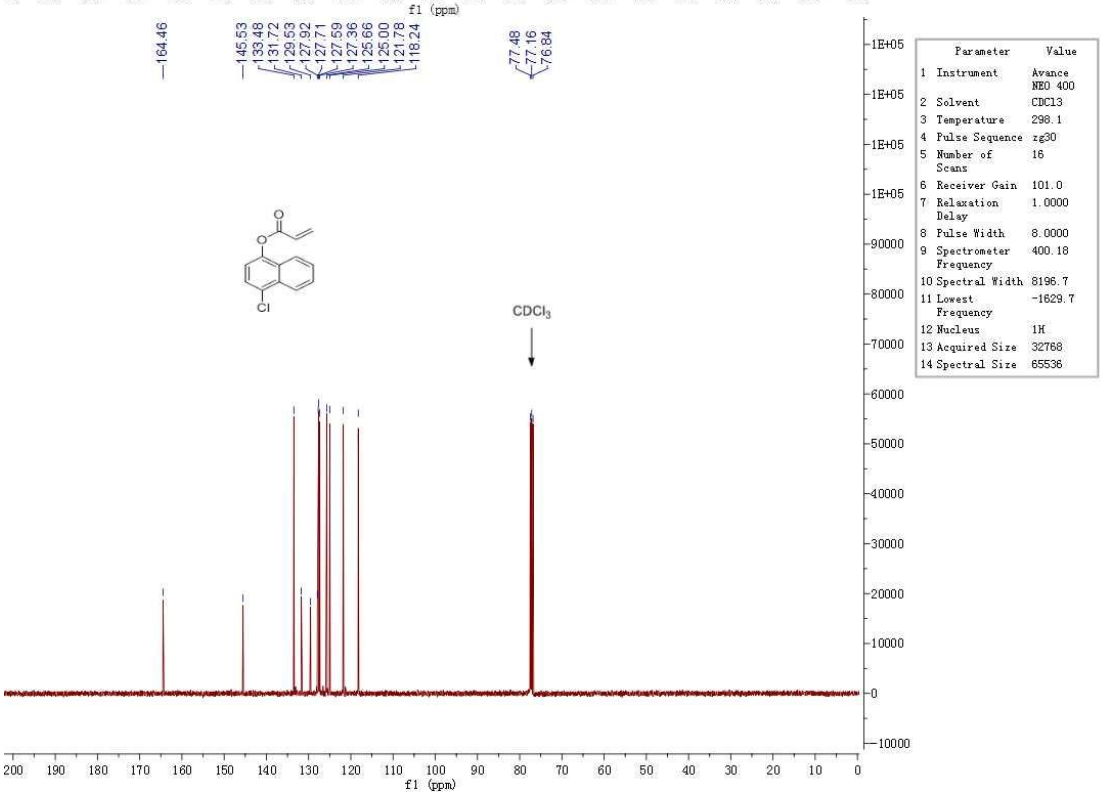




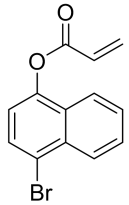
4-chloronaphthalen-1-yl acrylate (1k)

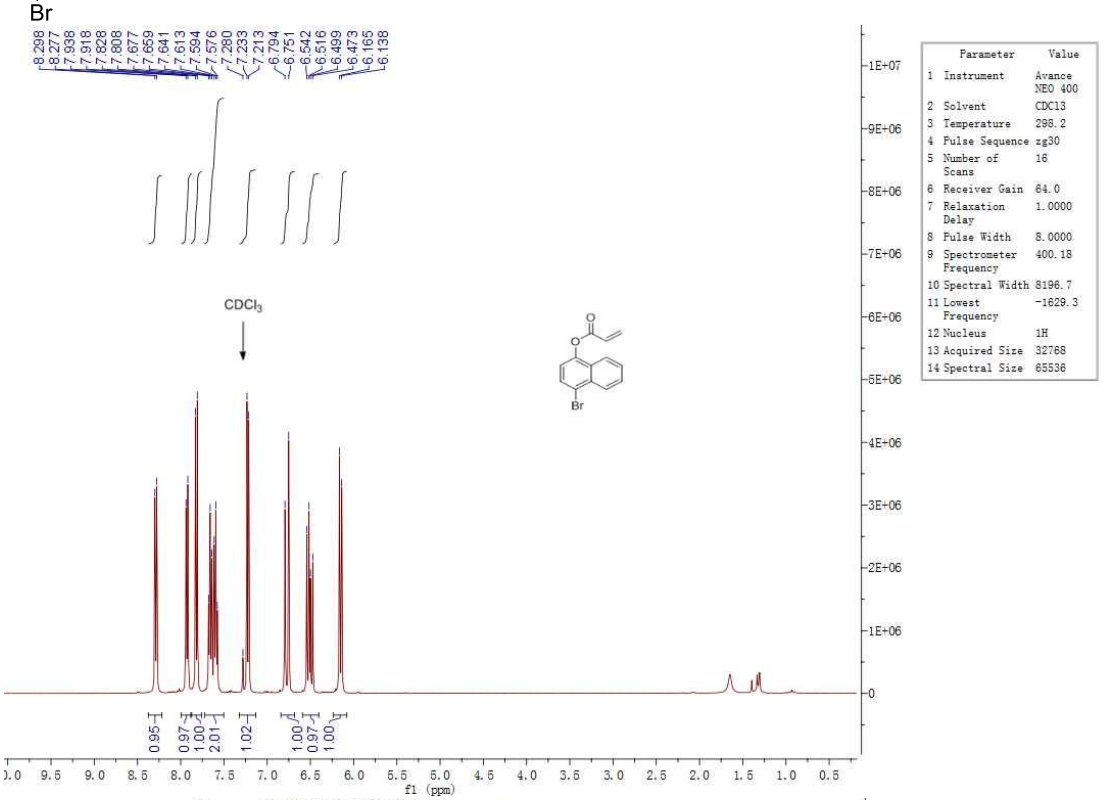






4-bromonaphthalen-1-yl acrylate (1l)





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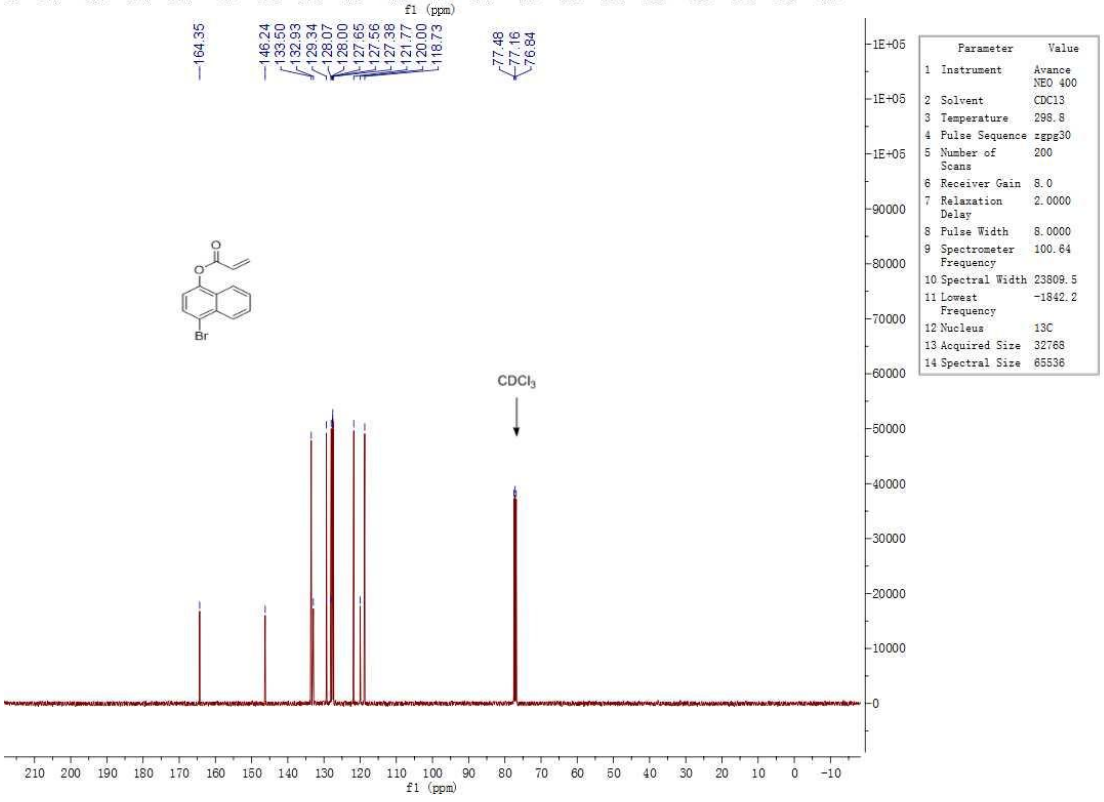

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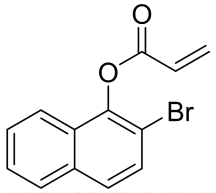
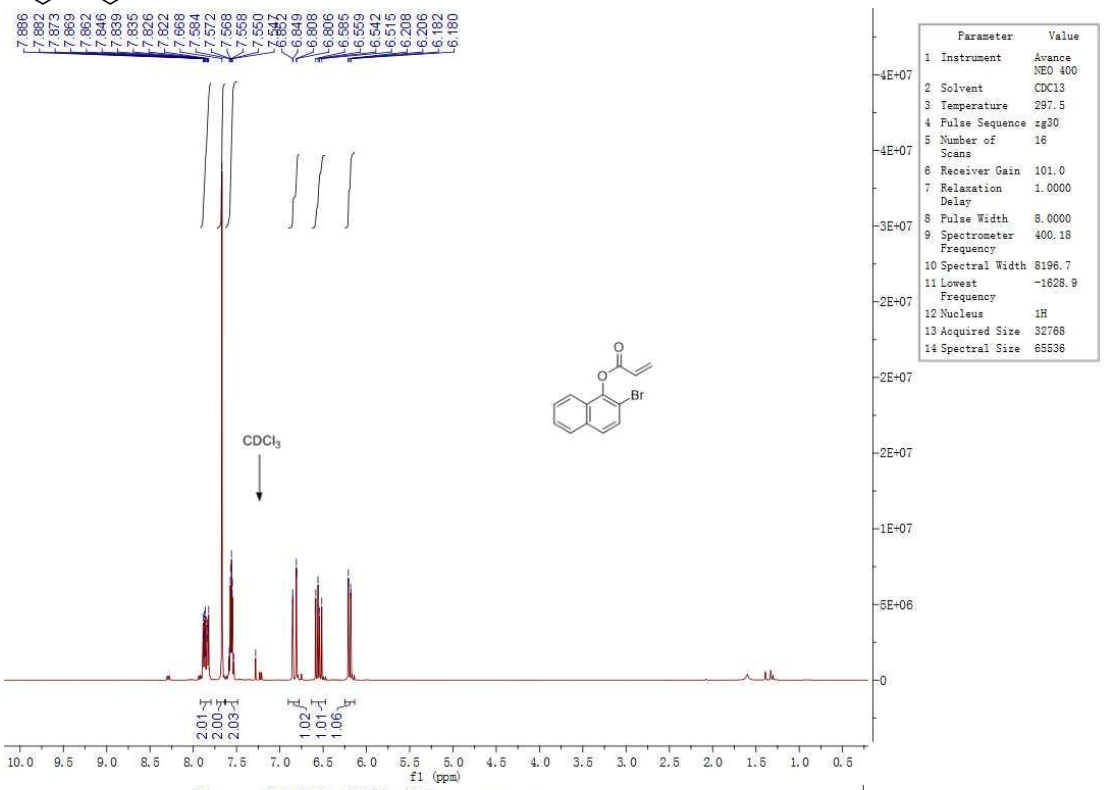
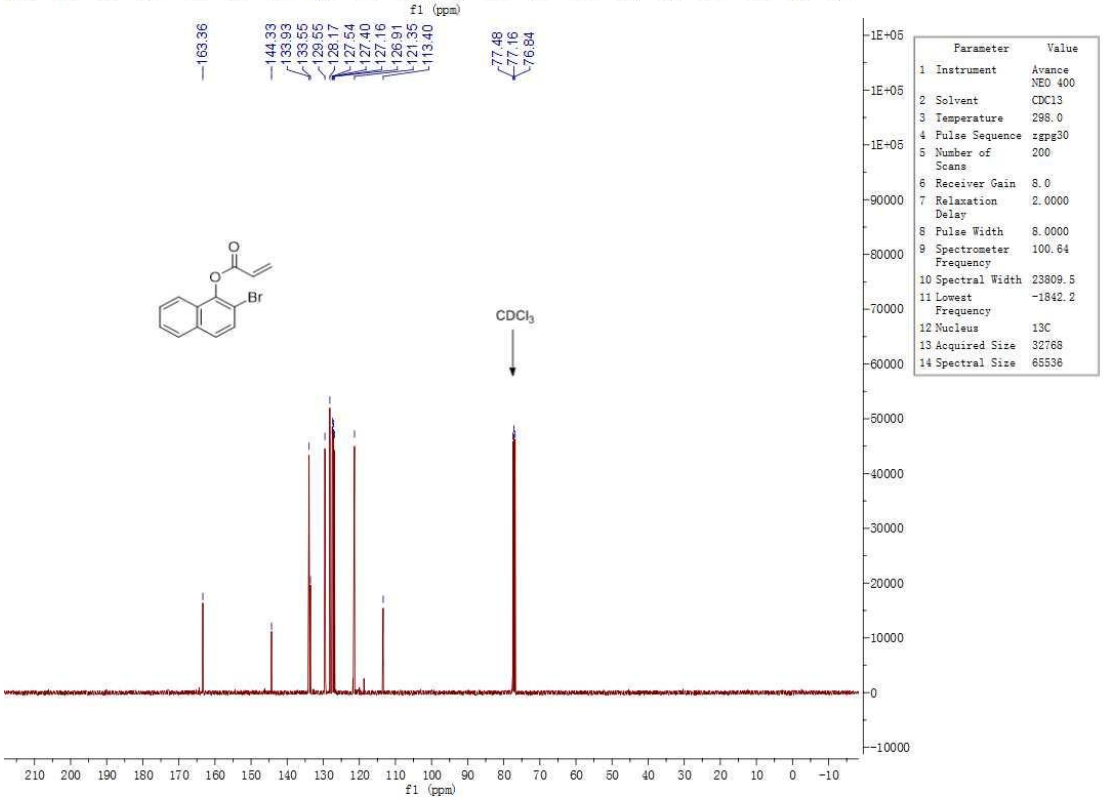
1	Instrument	Avance NEO 400
2	Solvent	CDCl3
3	Temperature	298.8
4	Pulse Sequence	zgpg30
5	Number of Scans	200
6	Receiver Gain	8.0
7	Relaxation Delay	2.0000
8	Pulse Width	8.0000
9	Spectrometer Frequency	100.64
10	Spectral Width	23809.5
11	Lowest Frequency	-1842.2
12	Nucleus	13C
13	Acquired Size	32768
14	Spectral Size	65536

2-bromonaphthalen-1-yl acrylate (lm)



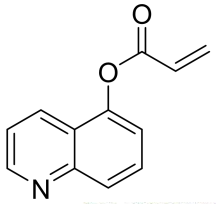


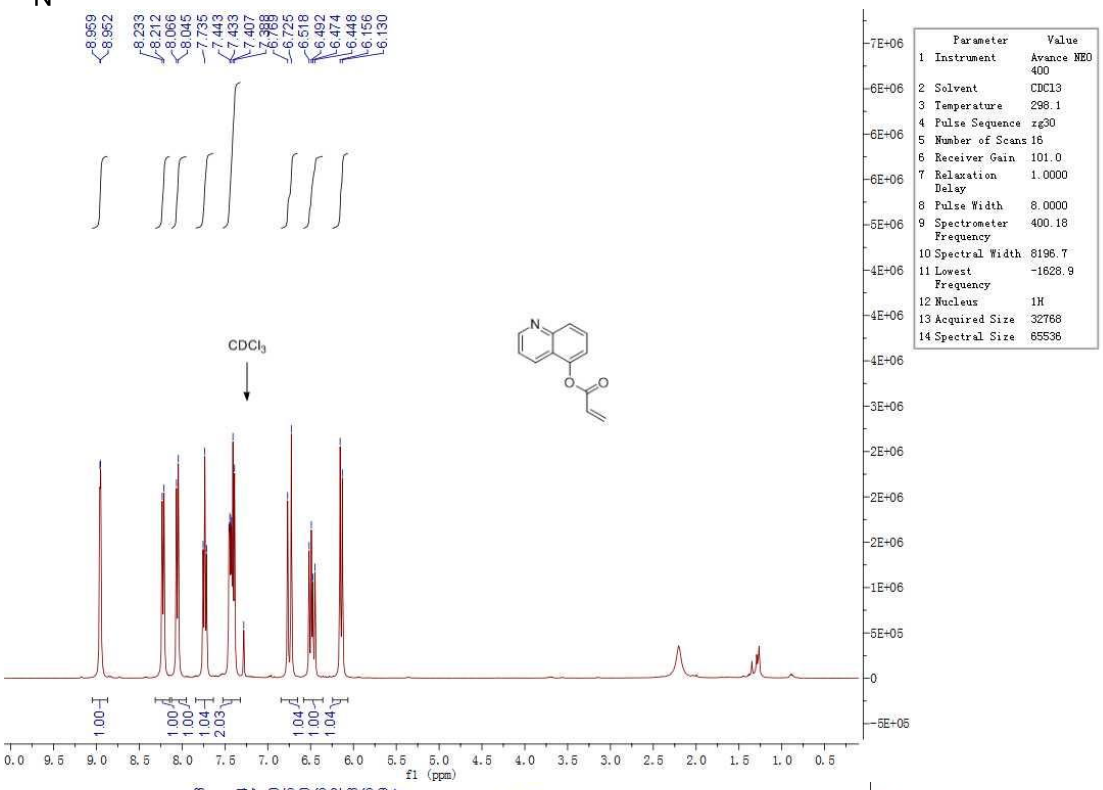
	Parameter	Value
1	Instrument	Avance NEO 400
2	Solvent	CDCl3
3	Temperature	297.5
4	Pulse Sequence	zg30
5	Number of Scans	16
6	Receiver Gain	101.0
7	Relaxation Delay	1.0000
8	Pulse Width	8.0000
9	Spectrometer Frequency	400.18
10	Spectral Width	8196.7
11	Lowest Frequency	-1628.9
12	Nucleus	1H
13	Acquired Size	32768
14	Spectral Size	65536



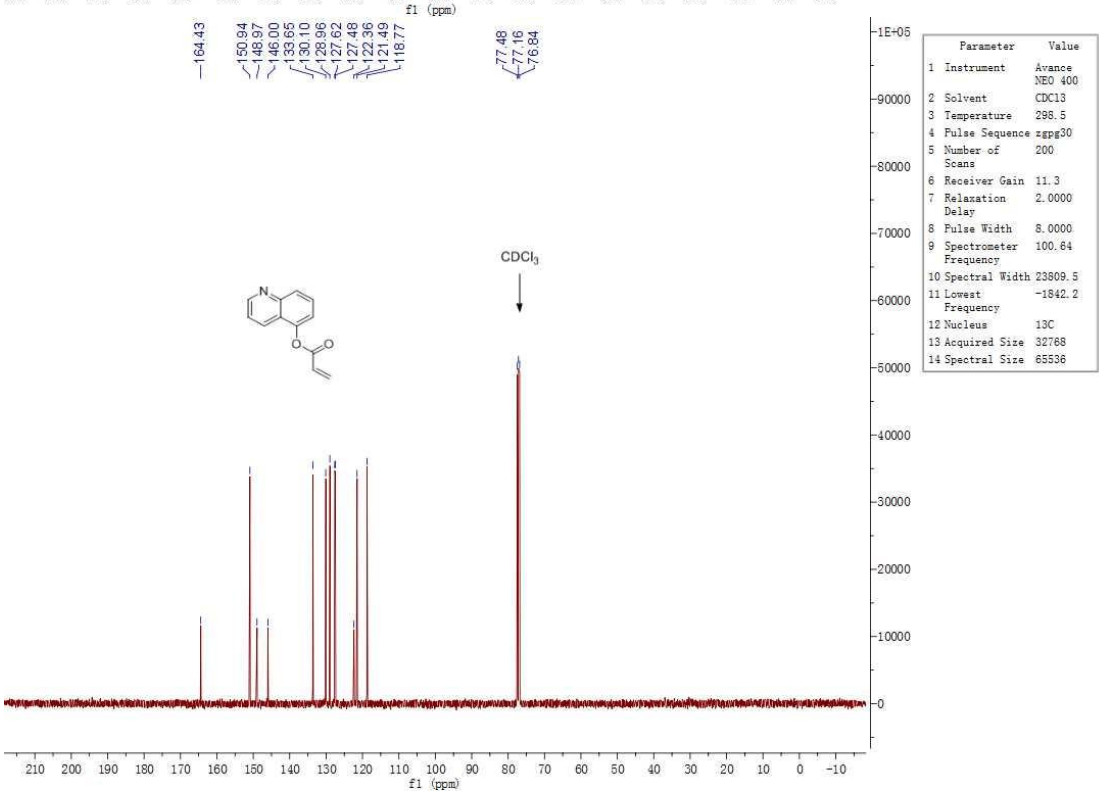
	Parameter	Value
1	Instrument	Avance NEO 400
2	Solvent	CDCl3
3	Temperature	298.0
4	Pulse Sequence	zgpg30
5	Number of Scans	200
6	Receiver Gain	8.0
7	Relaxation Delay	2.0000
8	Pulse Width	8.0000
9	Spectrometer Frequency	100.64
10	Spectral Width	23809.5
11	Lowest Frequency	-1842.2
12	Nucleus	13C
13	Acquired Size	32768
14	Spectral Size	65536

quinolin-5-yl acrylate (1n)



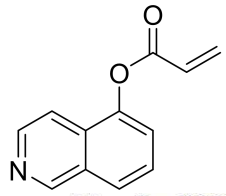


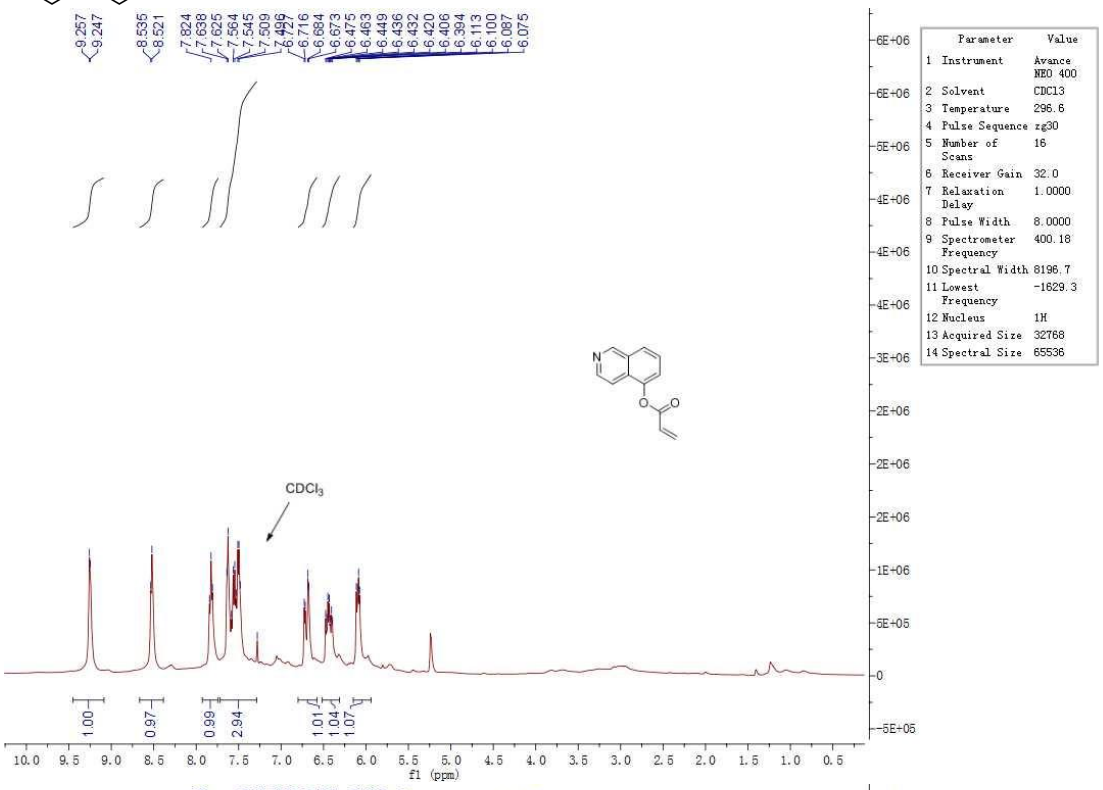
	Parameter	Value
1	Instrument	Avance NEO 400
2	Solvent	CDCl3
3	Temperature	298.1
4	Pulse Sequence	zg30
5	Number of Scans	16
6	Receiver Gain	101.0
7	Relaxation Delay	1.0000
8	Pulse Width	8.0000
9	Spectrometer Frequency	400.18
10	Spectral Width	8196.7
11	Lowest Frequency	-1628.9
12	Nucleus	1H
13	Acquired Size	32768
14	Spectral Size	65536



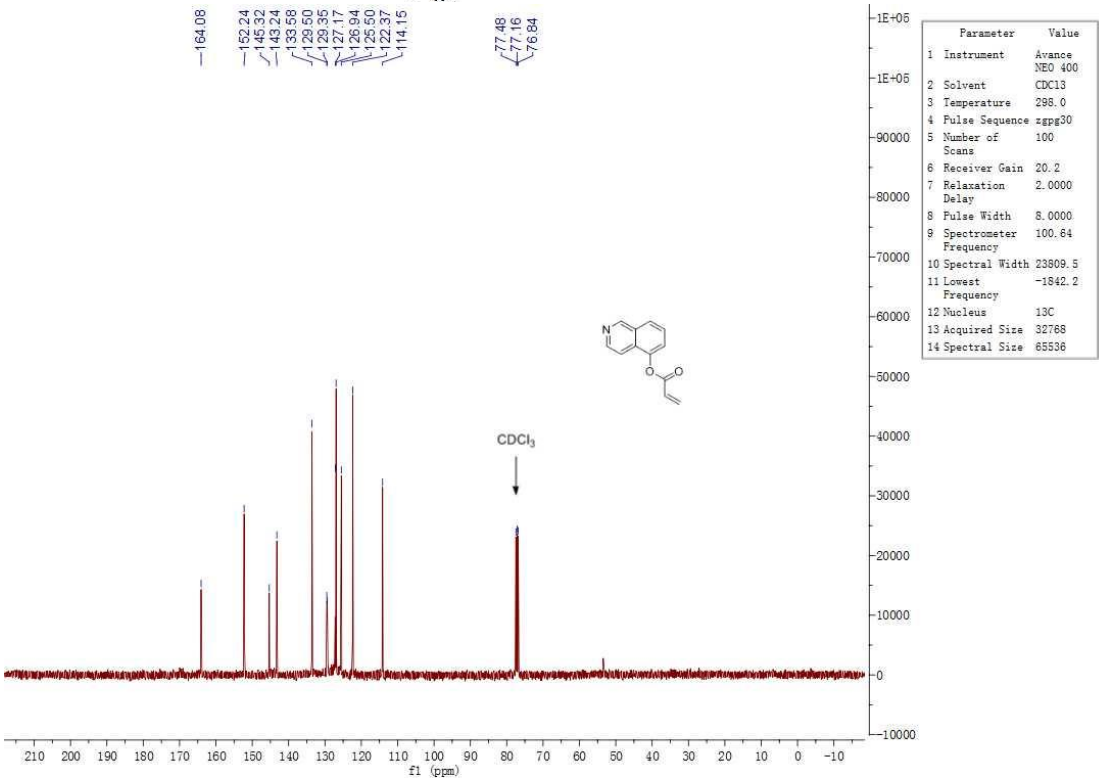
	Parameter	Value
1	Instrument	Avance NEO 400
2	Solvent	CDCl3
3	Temperature	298.5
4	Pulse Sequence	zgpg30
5	Number of Scans	200
6	Receiver Gain	11.3
7	Relaxation Delay	2.0000
8	Pulse Width	8.0000
9	Spectrometer Frequency	100.64
10	Spectral Width	23809.5
11	Lowest Frequency	-1842.2
12	Nucleus	13C
13	Acquired Size	32768
14	Spectral Size	65536

isoquinolin-5-yl acrylate (1o)



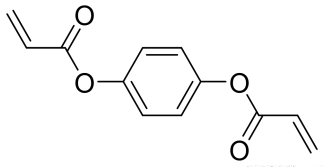


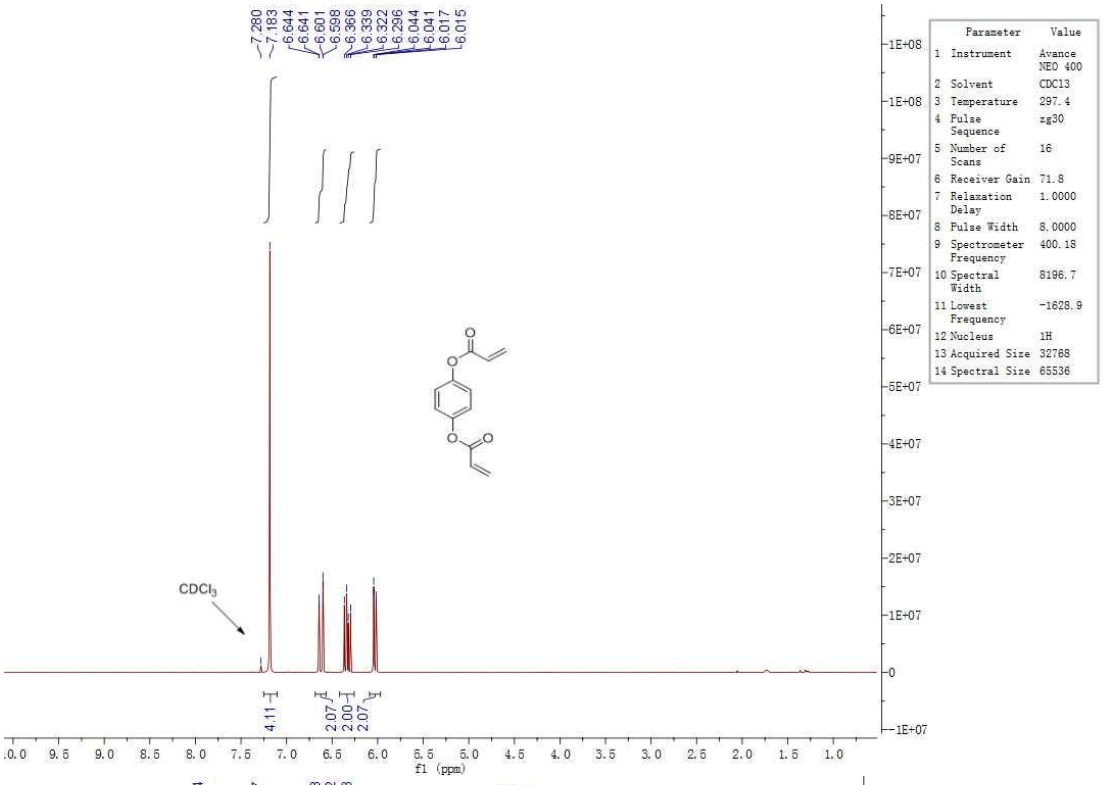
	Parameter	Value
1	Instrument	Avance NEO 400
2	Solvent	CDCl3
3	Temperature	296.6
4	Pulse Sequence	zg30
5	Number of Scans	16
6	Receiver Gain	32.0
7	Relaxation Delay	1.0000
8	Pulse Width	8.0000
9	Spectrometer Frequency	400.18
10	Spectral Width	8196.7
11	Lowest Frequency	-1629.3
12	Nucleus	1H
13	Acquired Size	32768
14	Spectral Size	65536

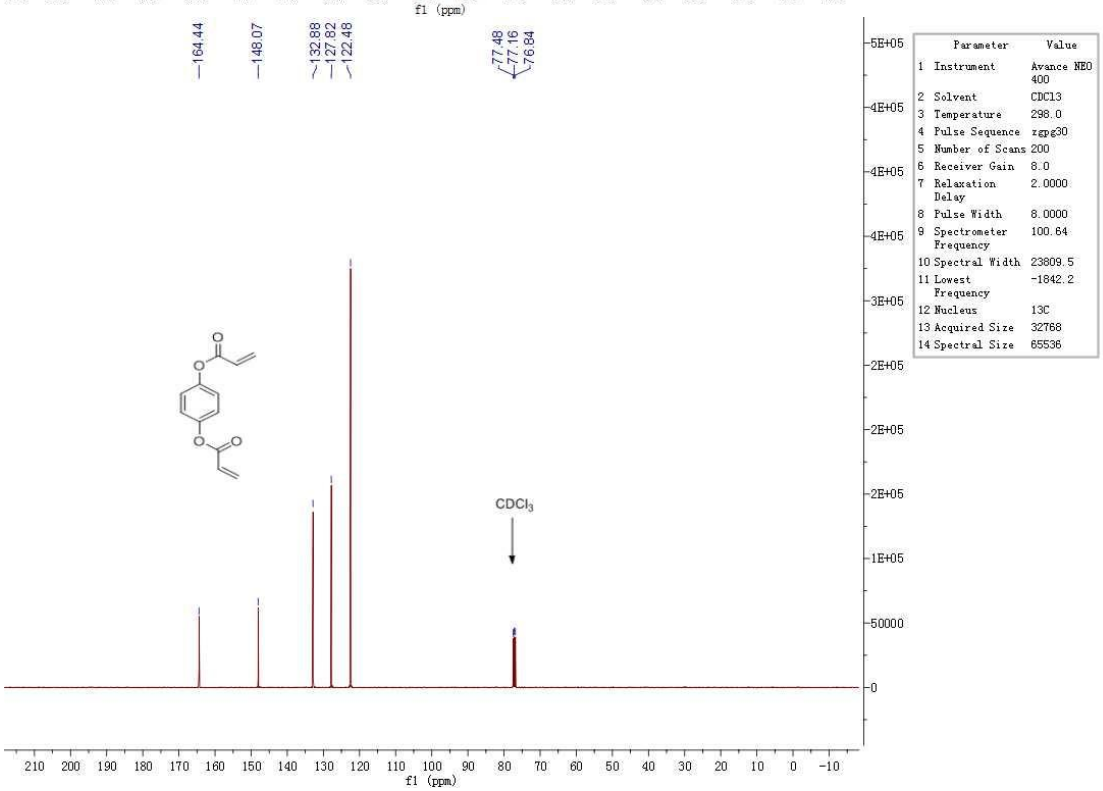


	Parameter	Value
1	Instrument	Avance NEO 400
2	Solvent	CDCl3
3	Temperature	298.0
4	Pulse Sequence	zgpg30
5	Number of Scans	100
6	Receiver Gain	20.2
7	Relaxation Delay	2.0000
8	Pulse Width	8.0000
9	Spectrometer Frequency	100.64
10	Spectral Width	23809.5
11	Lowest Frequency	-1842.2
12	Nucleus	13C
13	Acquired Size	32768
14	Spectral Size	65536

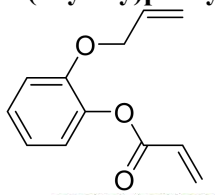
1,4-phenylene diacrylate (1p)

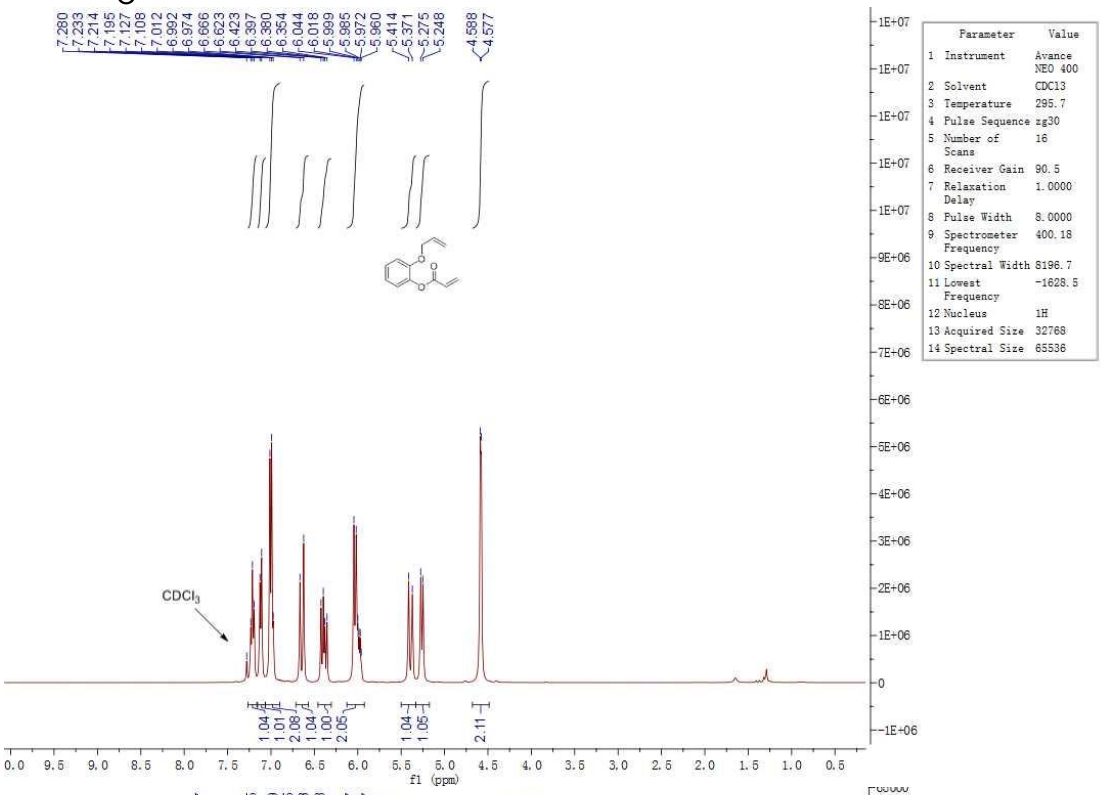


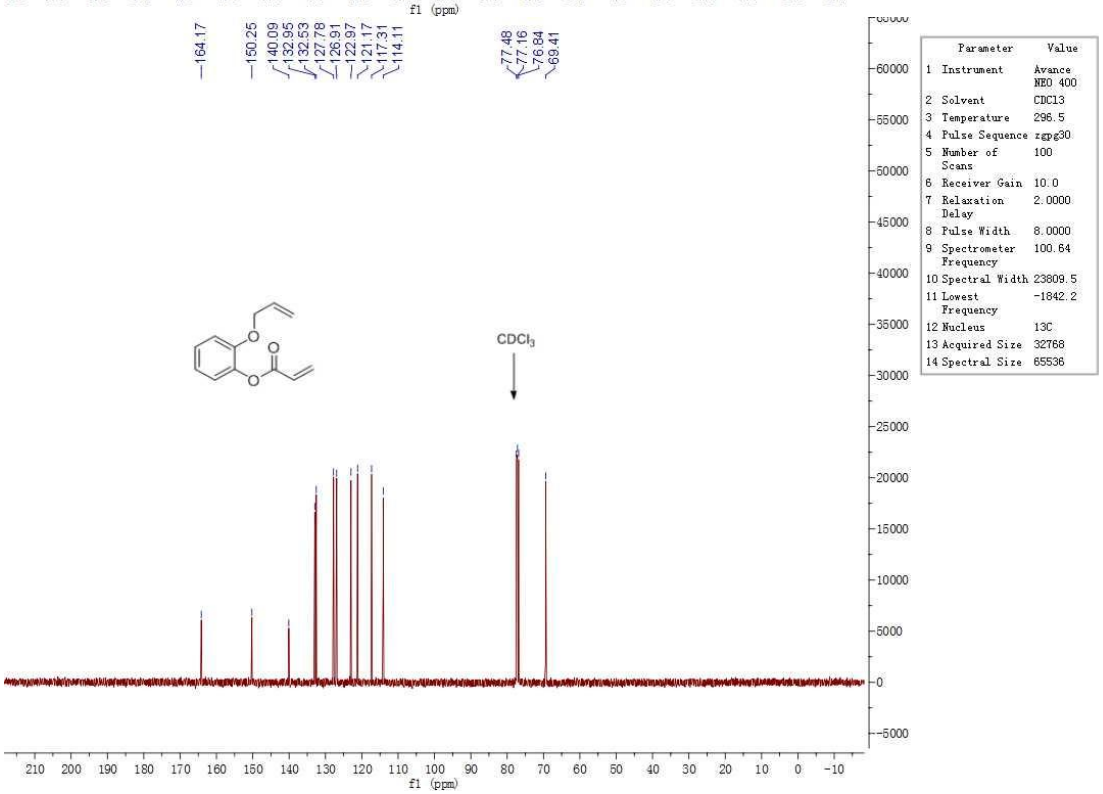




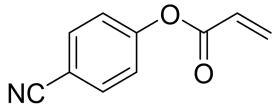
2-(allyloxy)phenyl acrylate (1q)

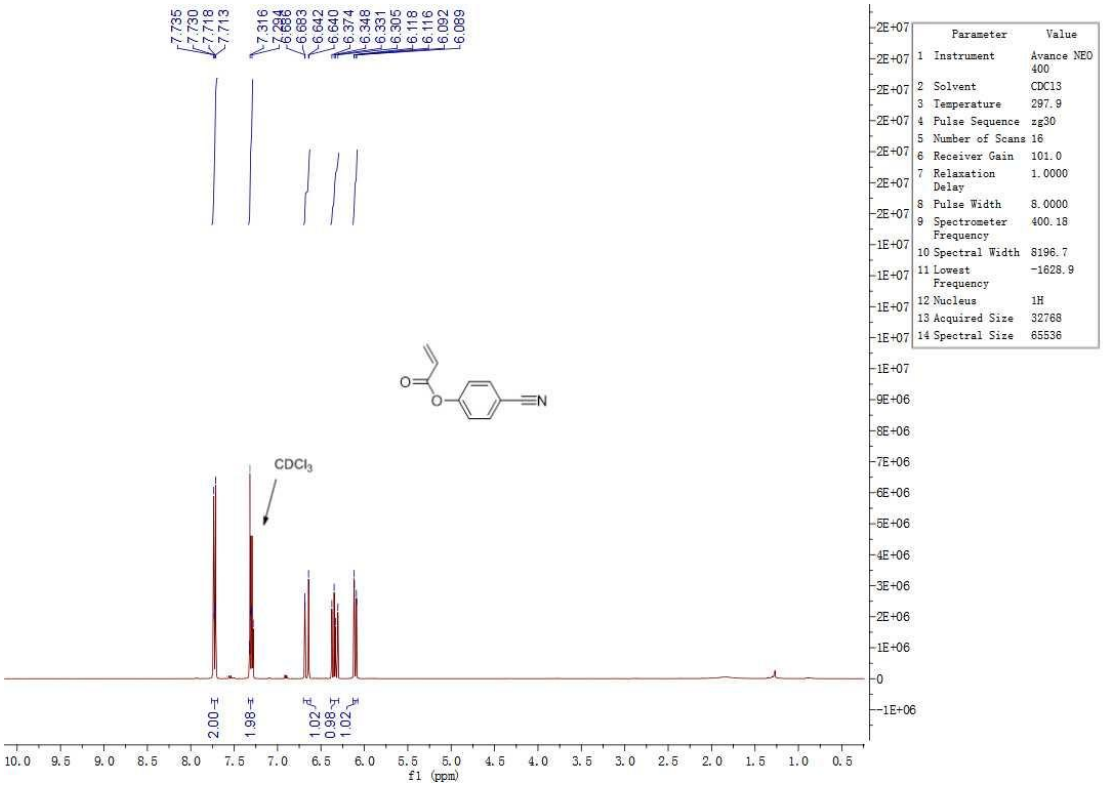


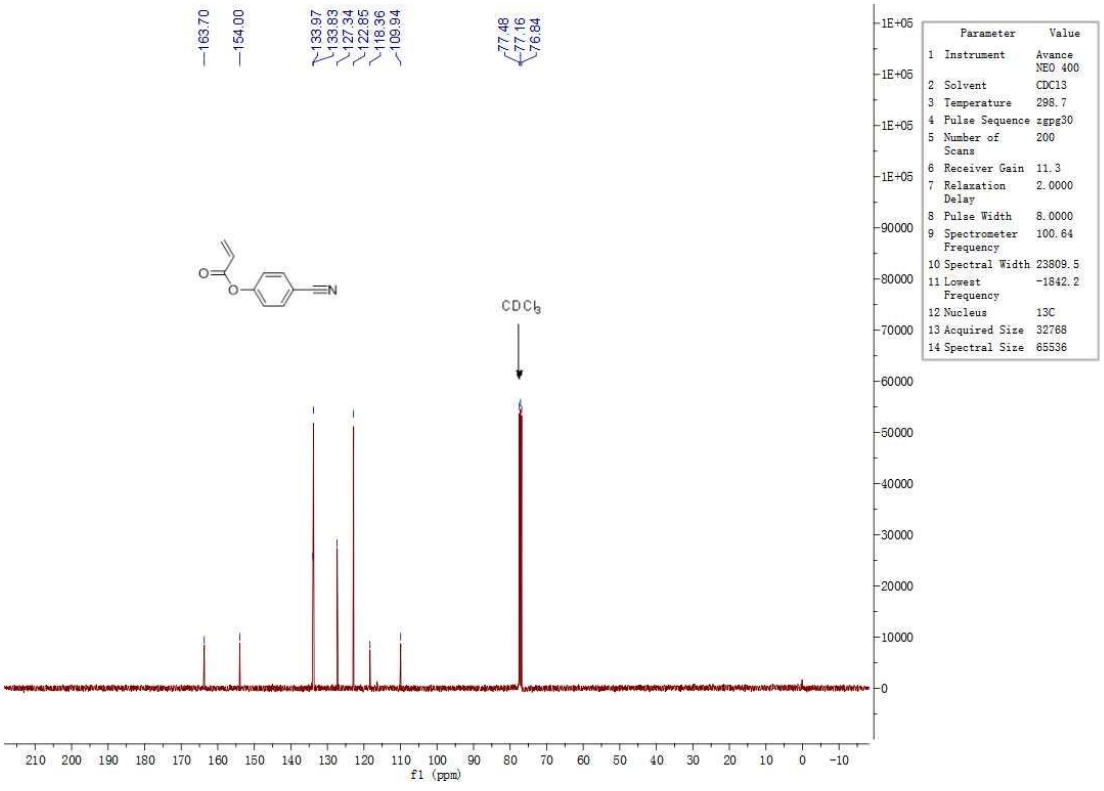




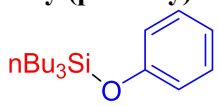
4-cyanophenyl acrylate (1r)

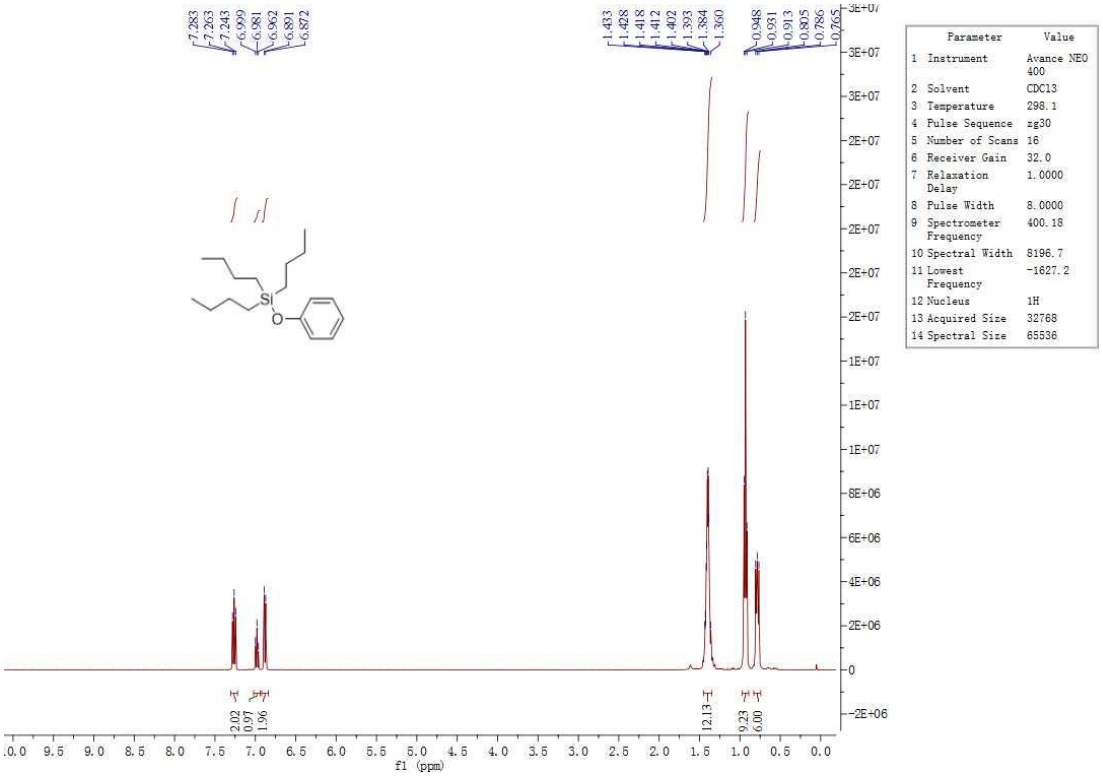


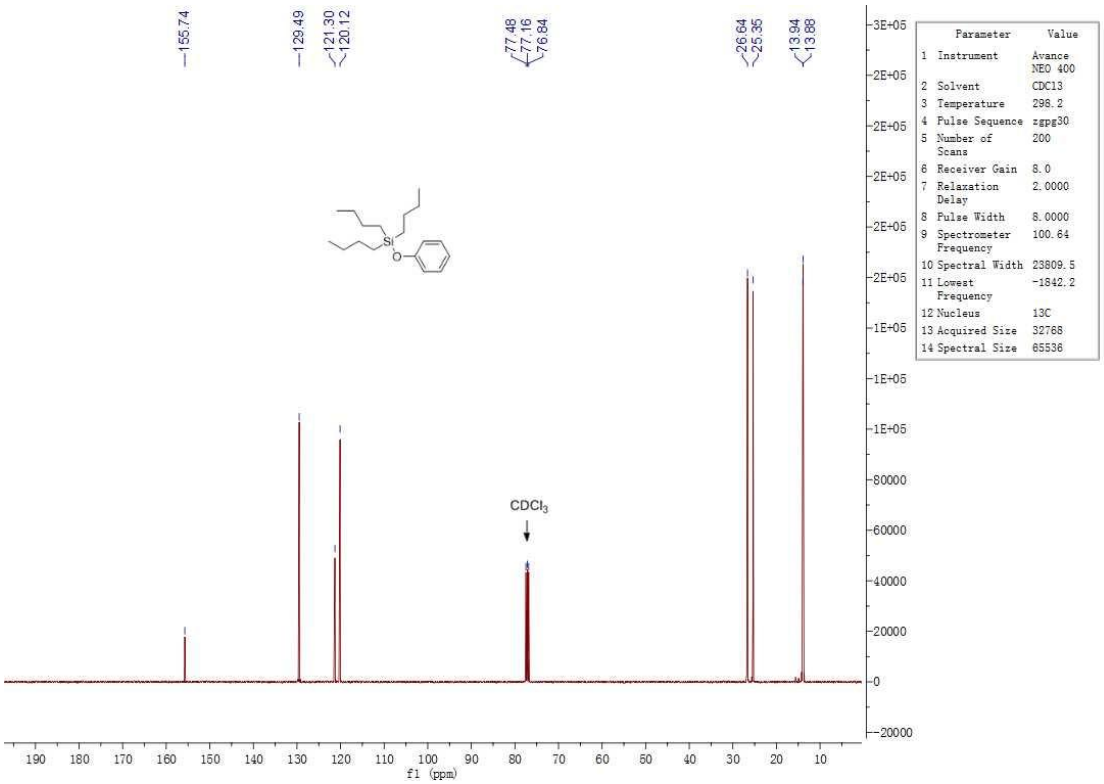




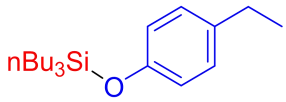
tributyl(phenoxy)silane (3a)

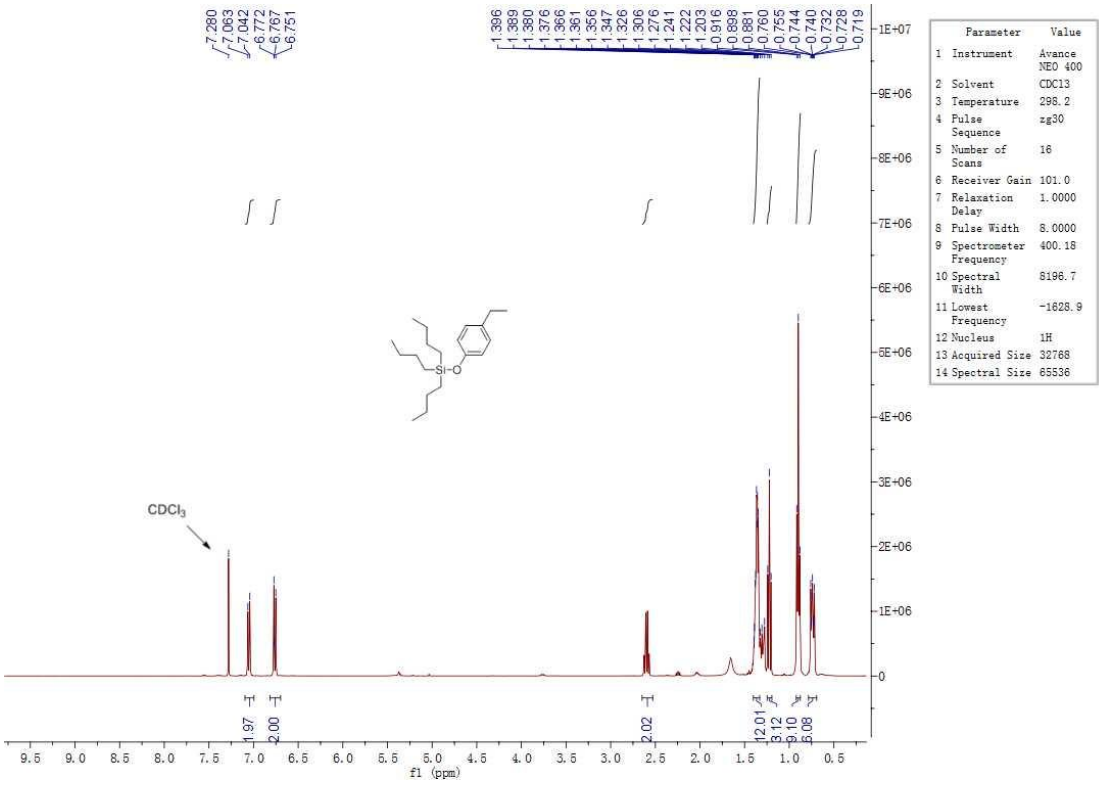




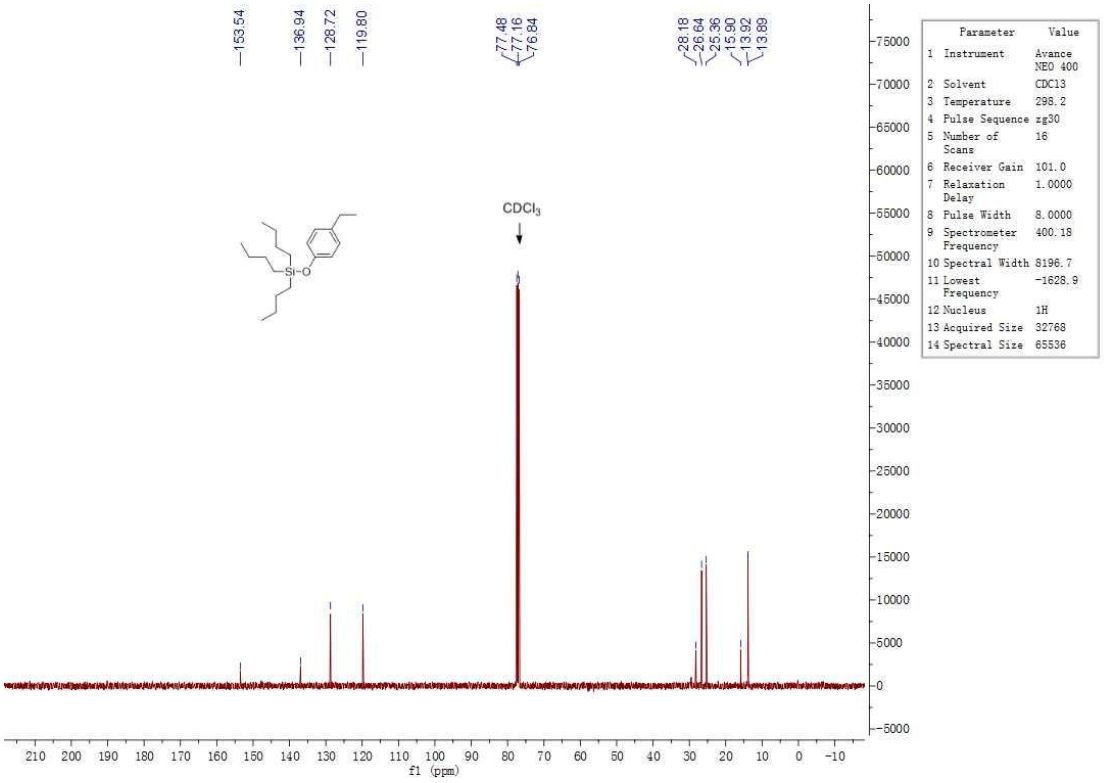


tributyl(4-ethylphenoxy)silane (3b)

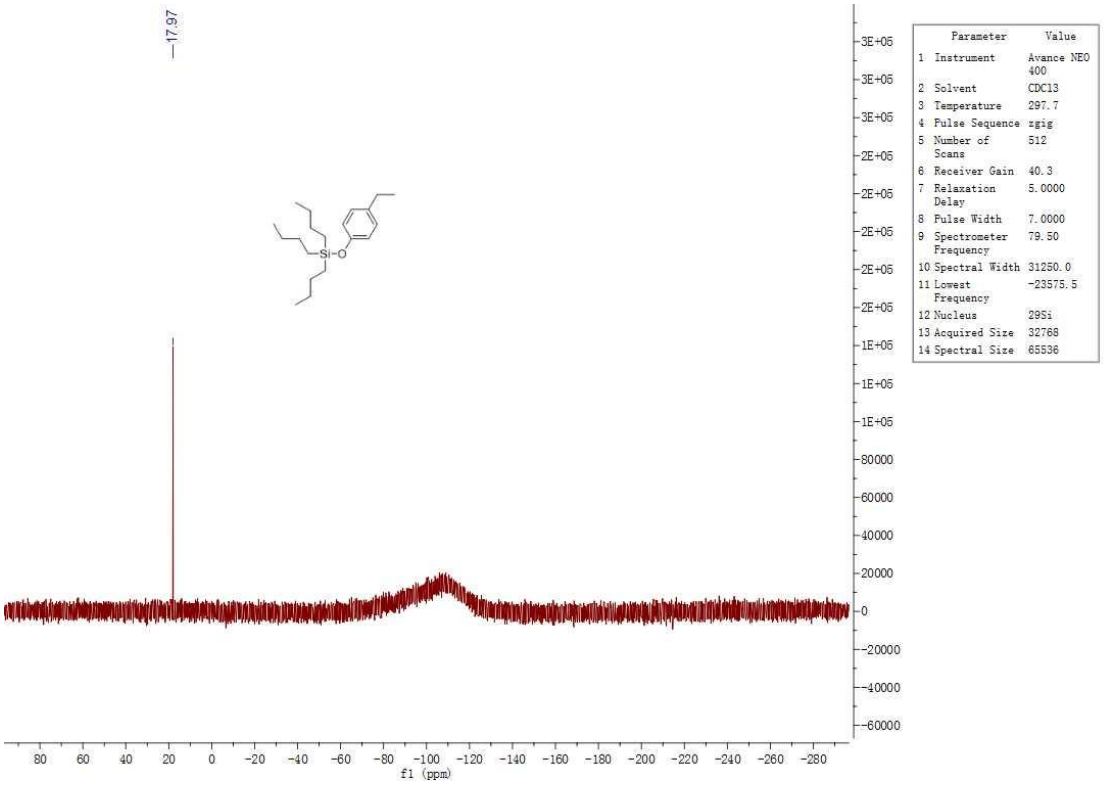




	Parameter	Value
1	Instrument	Avance NEO 400
2	Solvent	CDCl3
3	Temperature	298.2
4	Pulse Sequence	zg30
5	Number of Scans	16
6	Receiver Gain	101.0
7	Relaxation Delay	1.0000
8	Pulse Width	8.0000
9	Spectrometer Frequency	400.18
10	Spectral Width	8196.7
11	Lowest Frequency	-1628.9
12	Nucleus	1H
13	Acquired Size	32768
14	Spectral Size	65536

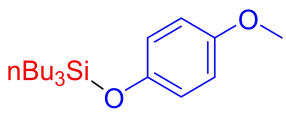


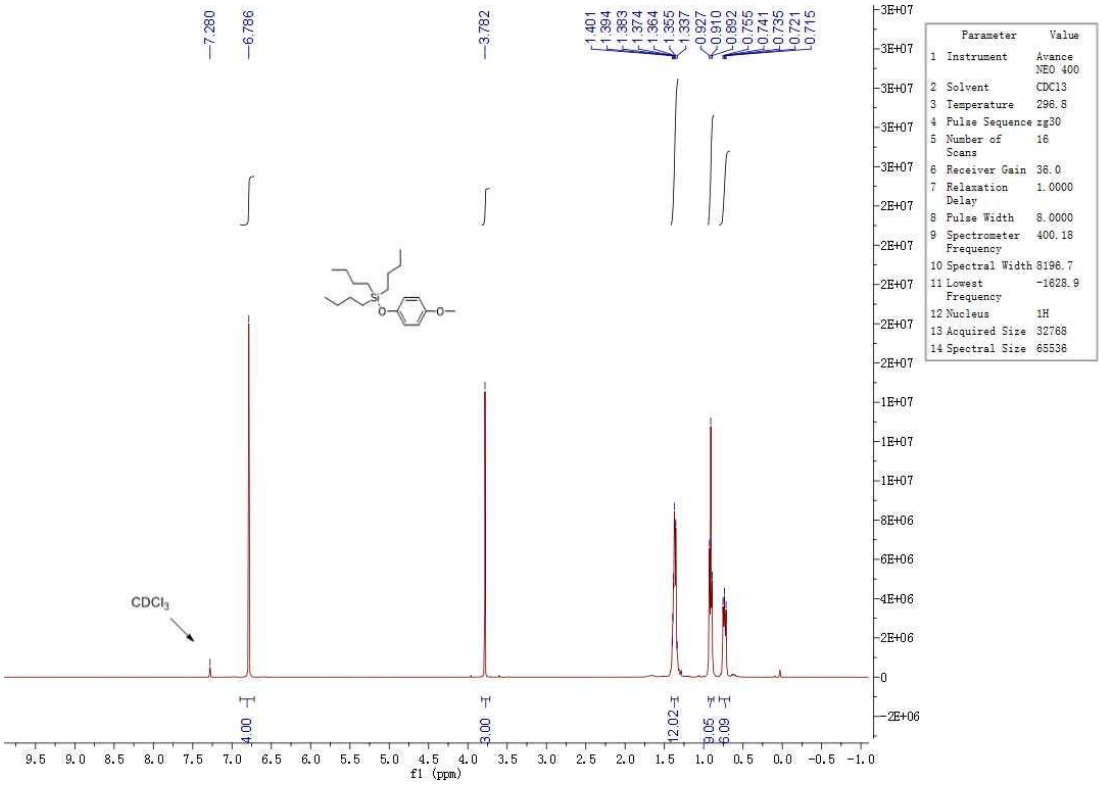
	Parameter	Value
1	Instrument	Avance NEO 400
2	Solvent	CDCl3
3	Temperature	298.2
4	Pulse Sequence	zg30
5	Number of Scans	16
6	Receiver Gain	101.0
7	Relaxation Delay	1.0000
8	Pulse Width	8.0000
9	Spectrometer Frequency	400.18
10	Spectral Width	8196.7
11	Lowest Frequency	-1628.9
12	Nucleus	1H
13	Acquired Size	32768
14	Spectral Size	65536

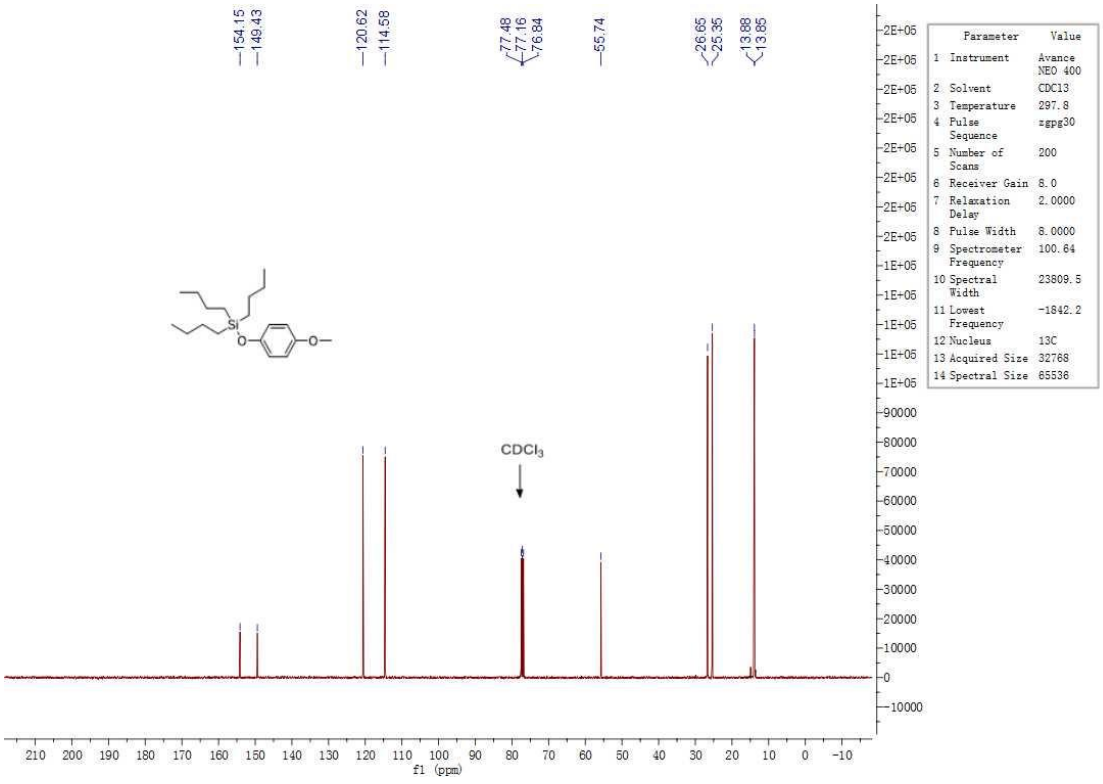


	Parameter	Value
1	Instrument	Avance NEO 400
2	Solvent	CDCl3
3	Temperature	297.7
4	Pulse Sequence	zgig
5	Number of Scans	512
6	Receiver Gain	40.3
7	Relaxation Delay	5.0000
8	Pulse Width	7.0000
9	Spectrometer Frequency	79.50
10	Spectral Width	31250.0
11	Lowest Frequency	-23575.5
12	Nucleus	29Si
13	Acquired Size	32768
14	Spectral Size	65536

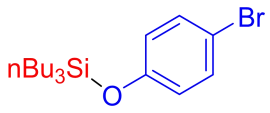
tributyl(4-methoxyphenoxy)silane (3c)

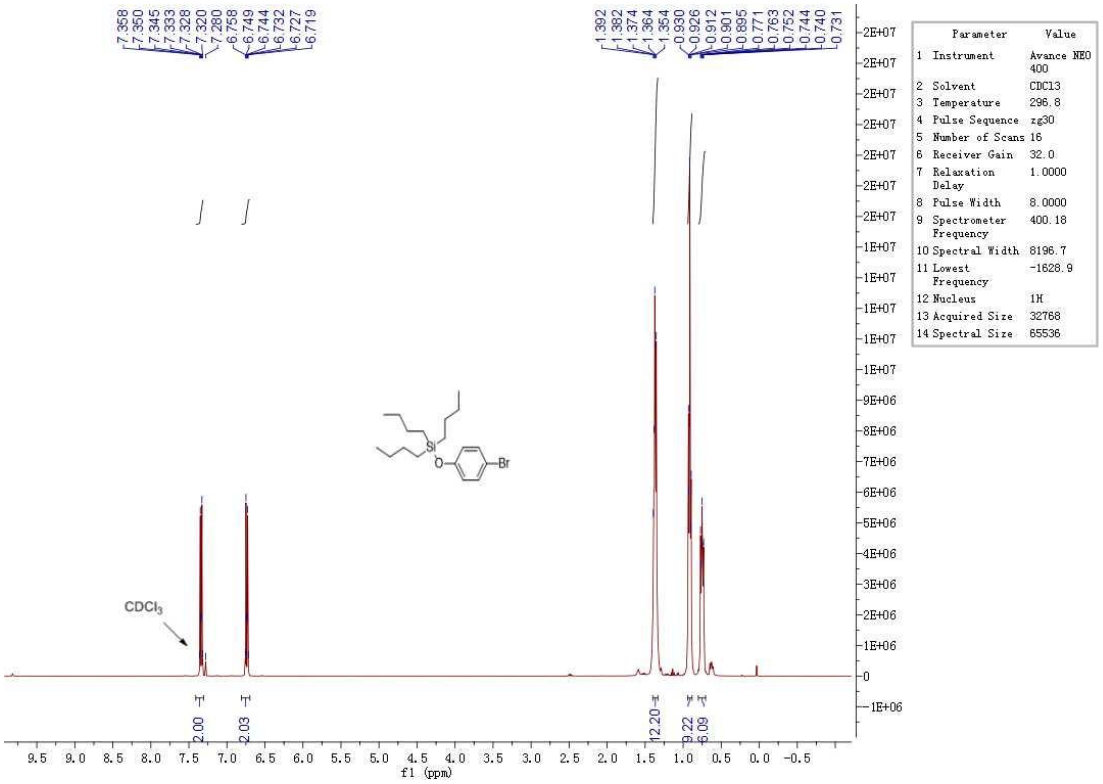


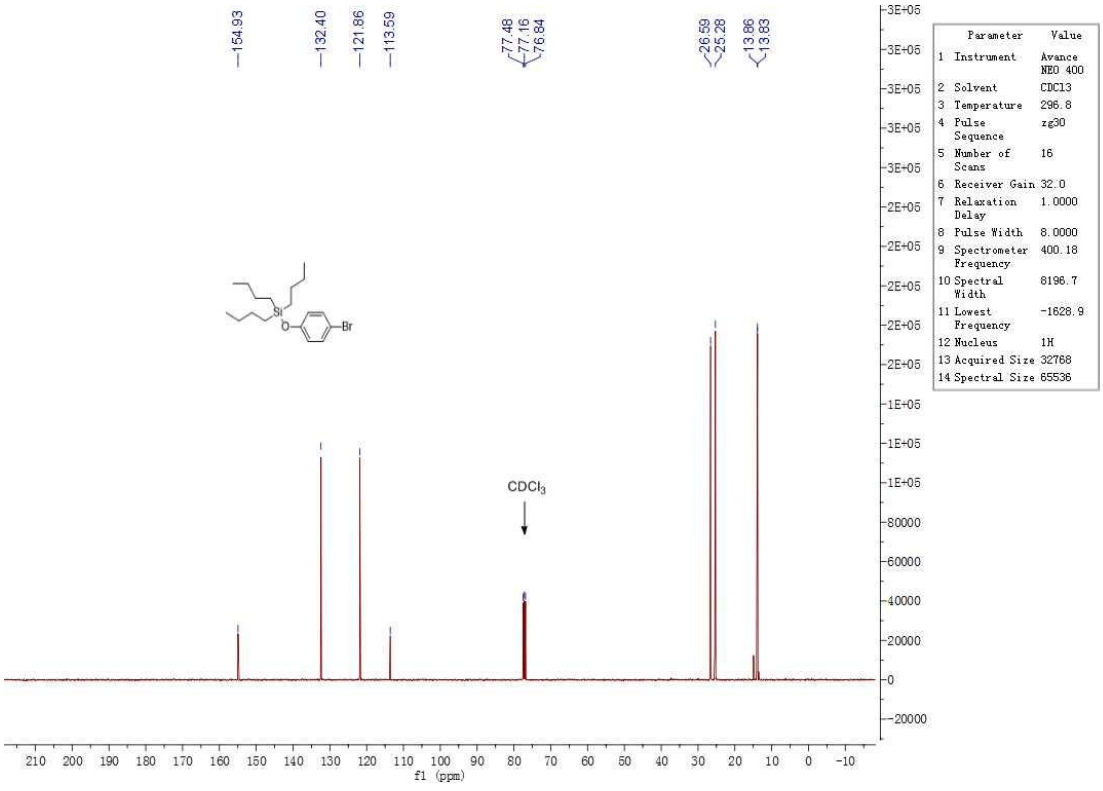




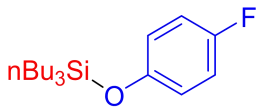
(4-bromophenoxy)tributylsilane (3d)

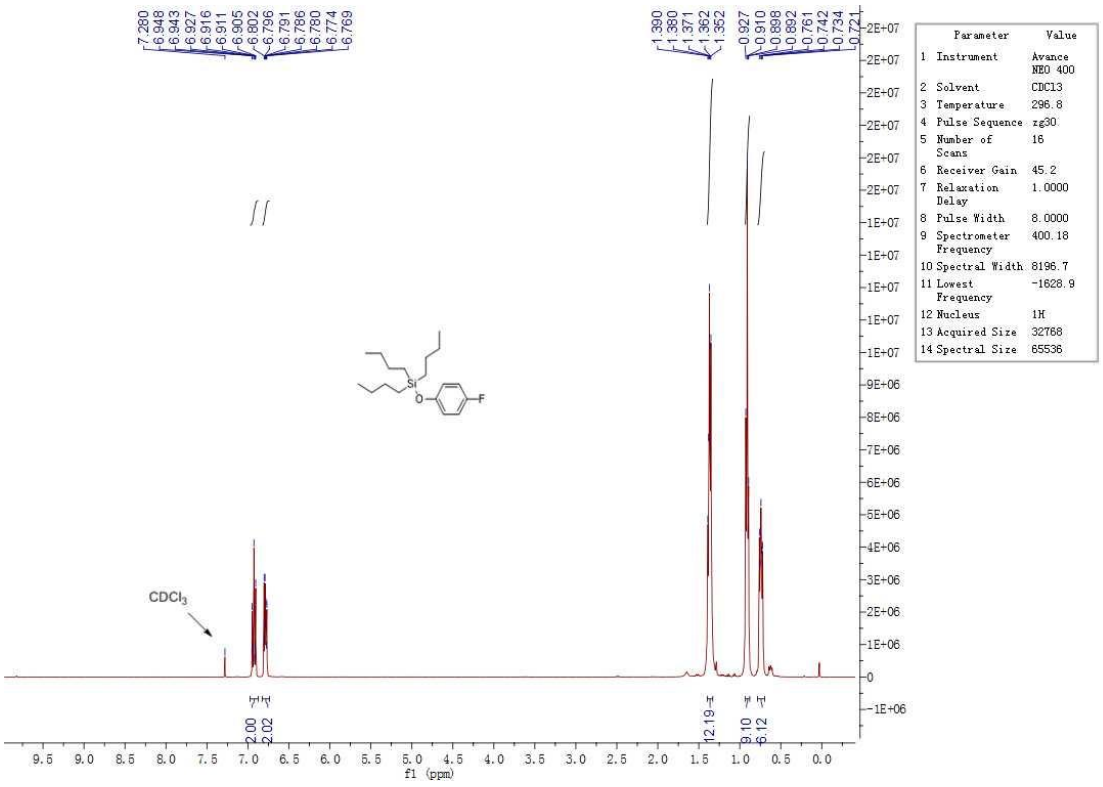


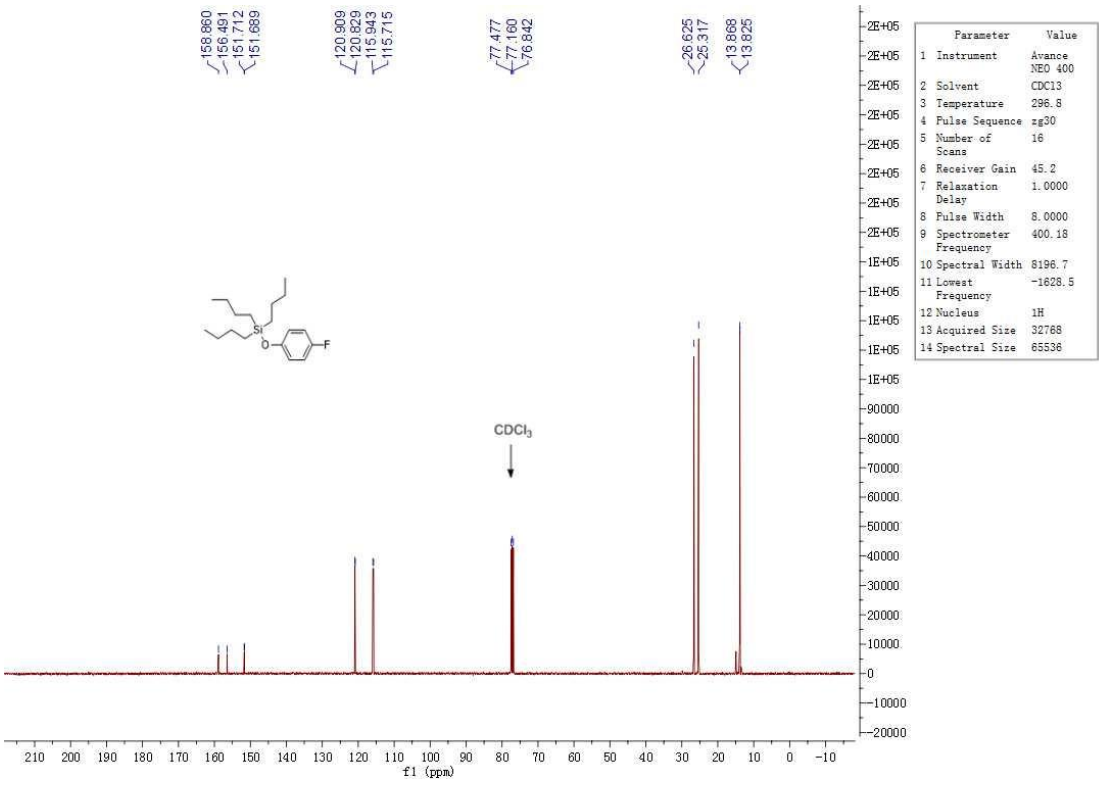


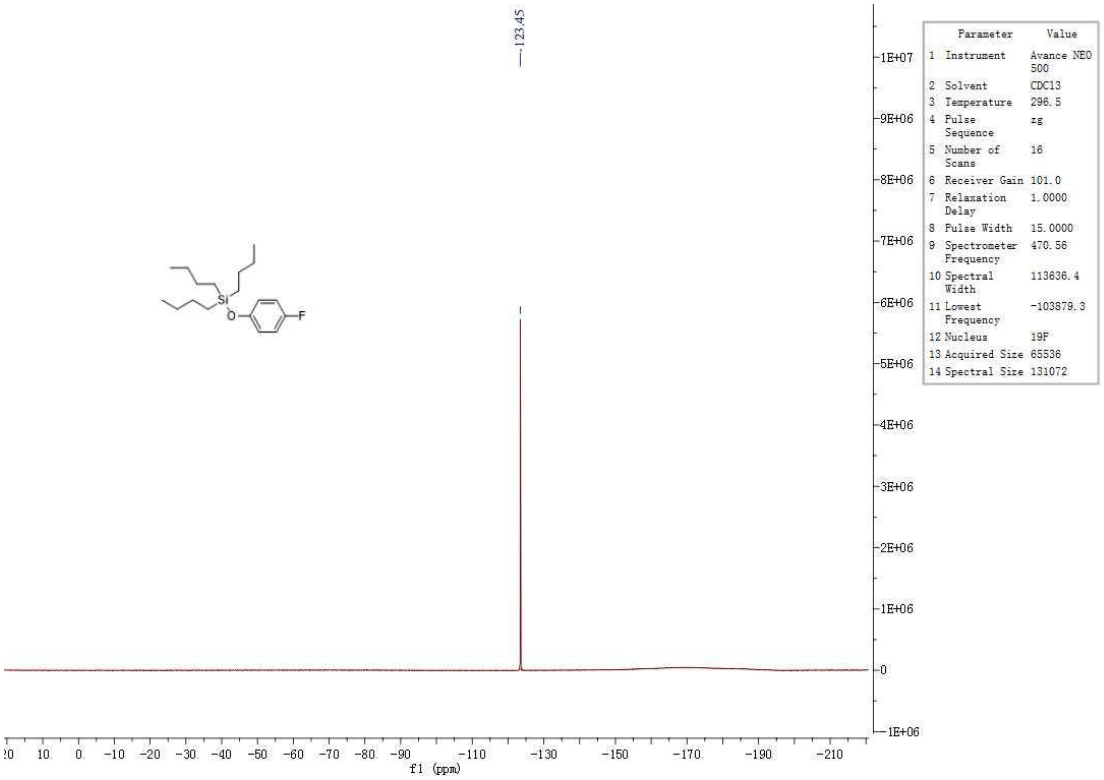


tributyl(4-fluorophenoxy)silane (3e)



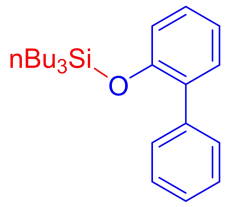


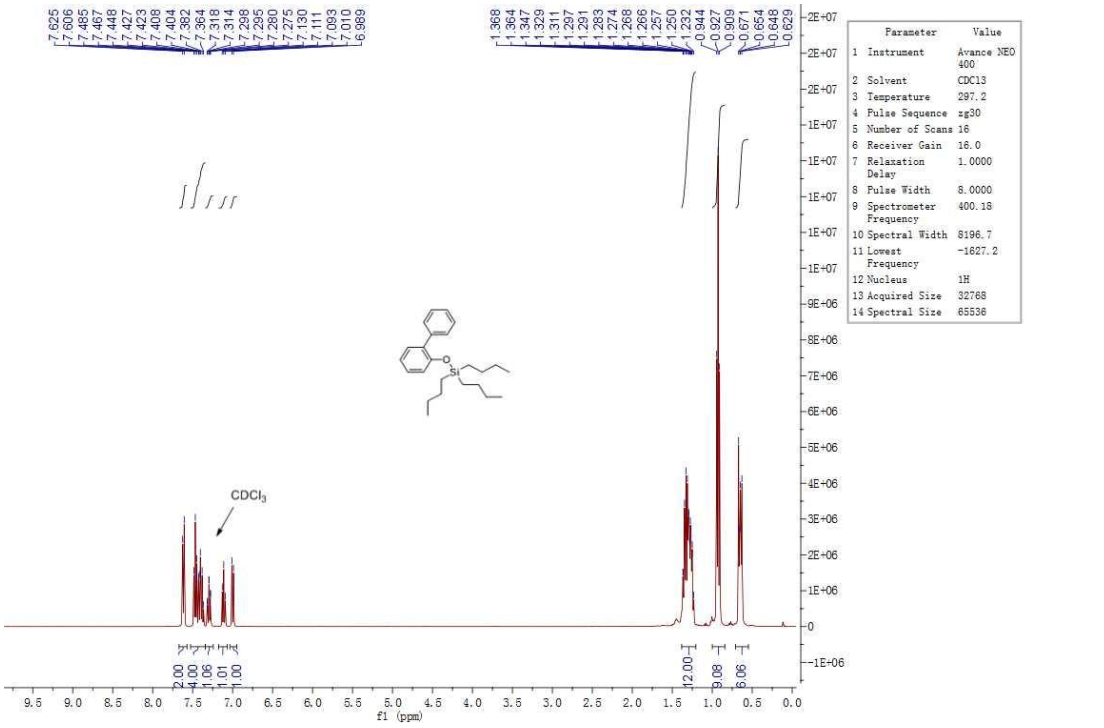


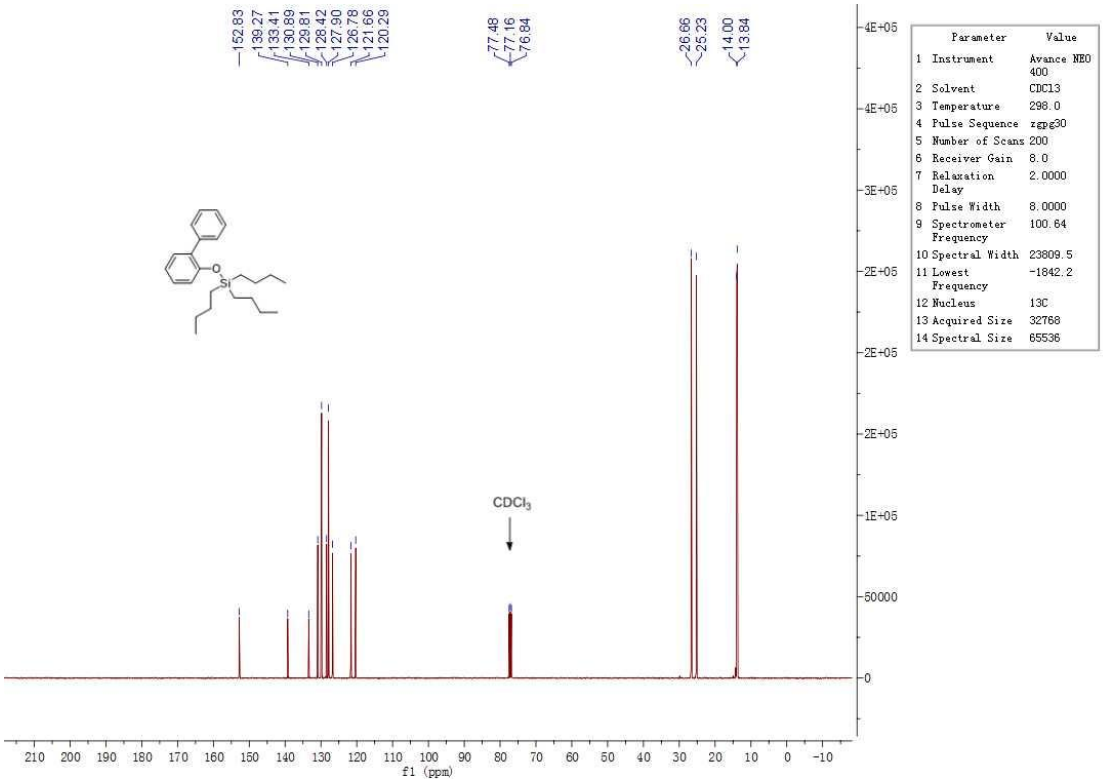


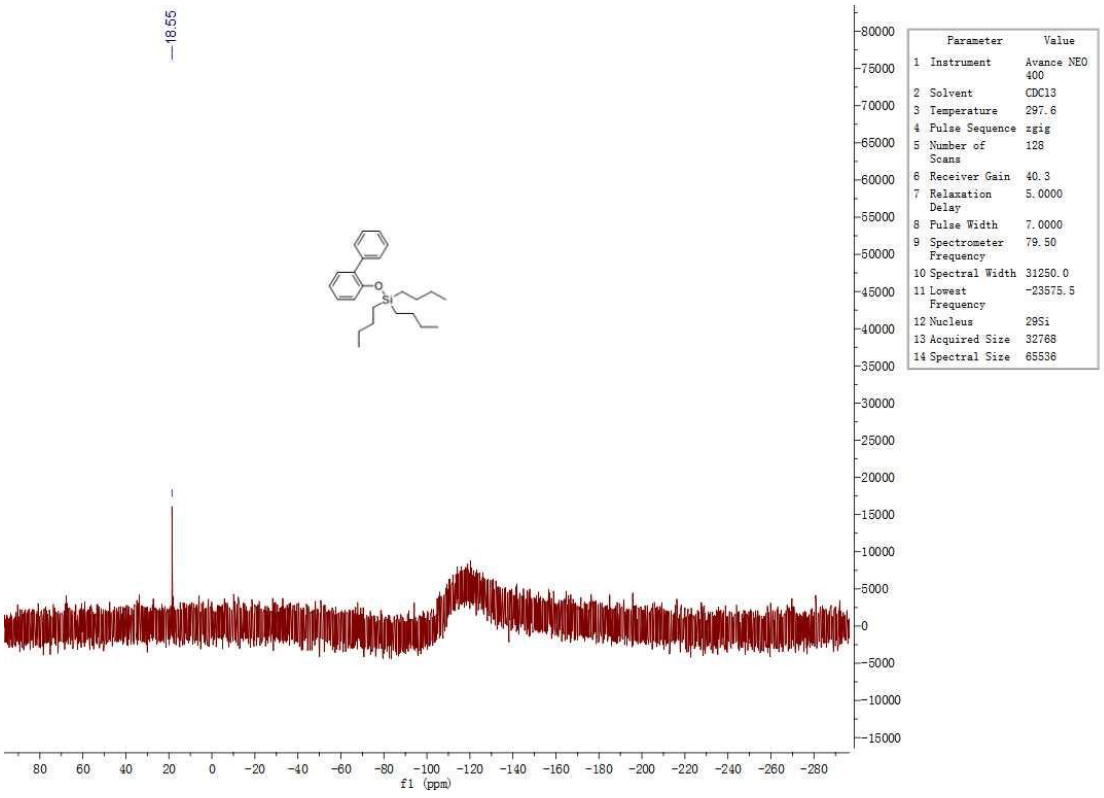
	Parameter	Value
1	Instrument	Avance NEO 500
2	Solvent	CDCl3
3	Temperature	296.5
4	Pulse Sequence	zg
5	Number of Scans	16
6	Receiver Gain	101.0
7	Relaxation Delay	1.0000
8	Pulse Width	15.0000
9	Spectrometer Frequency	470.56
10	Spectral Width	113636.4
11	Lowest Frequency	-103879.3
12	Nucleus	19F
13	Acquired Size	65536
14	Spectral Size	131072

([1,1'-biphenyl]-2-yloxy)tributylsilane (3f)



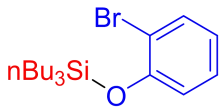


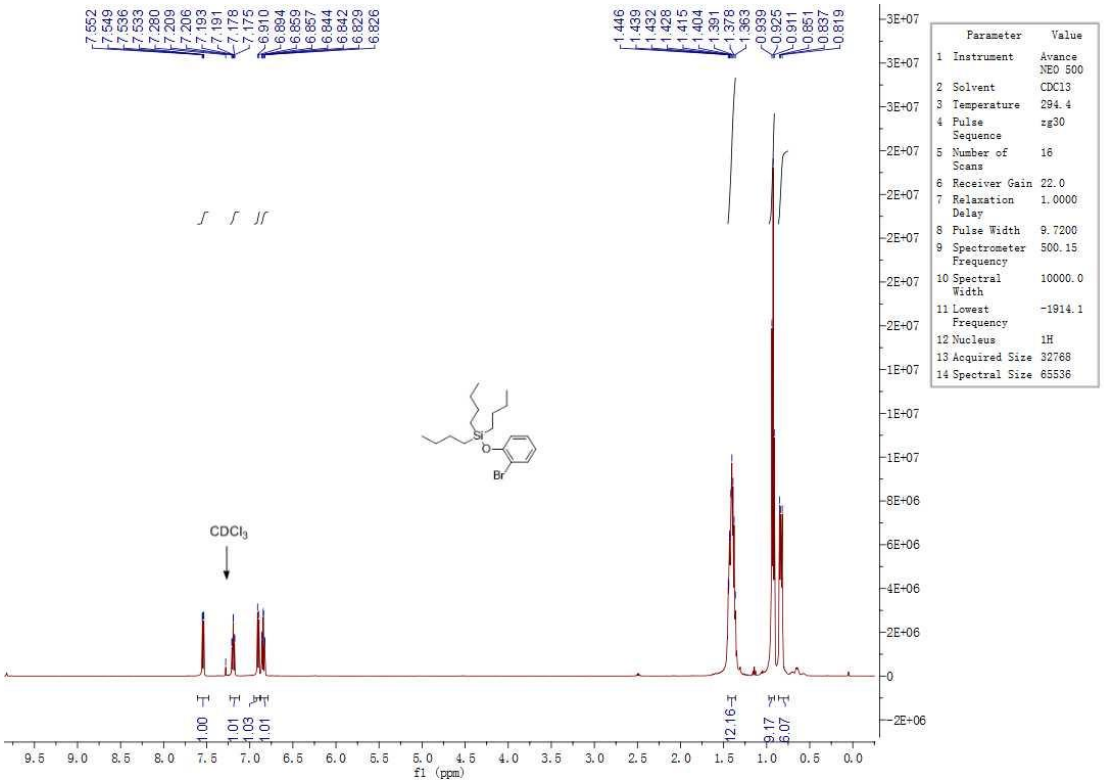


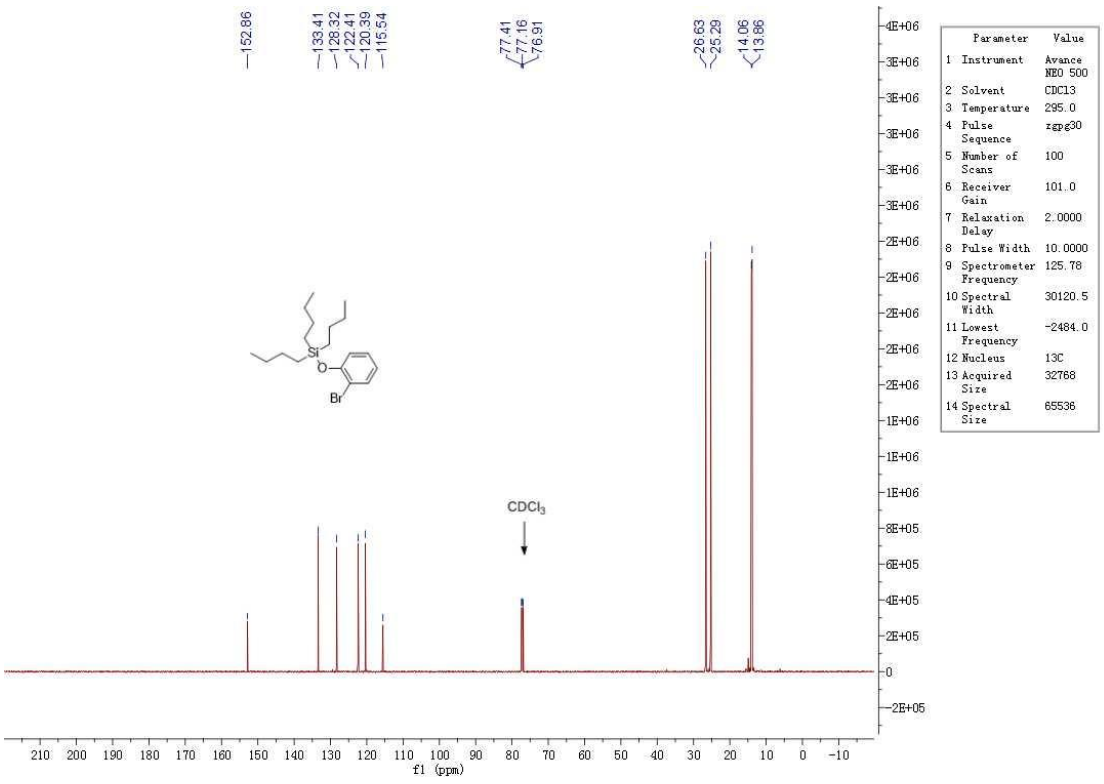


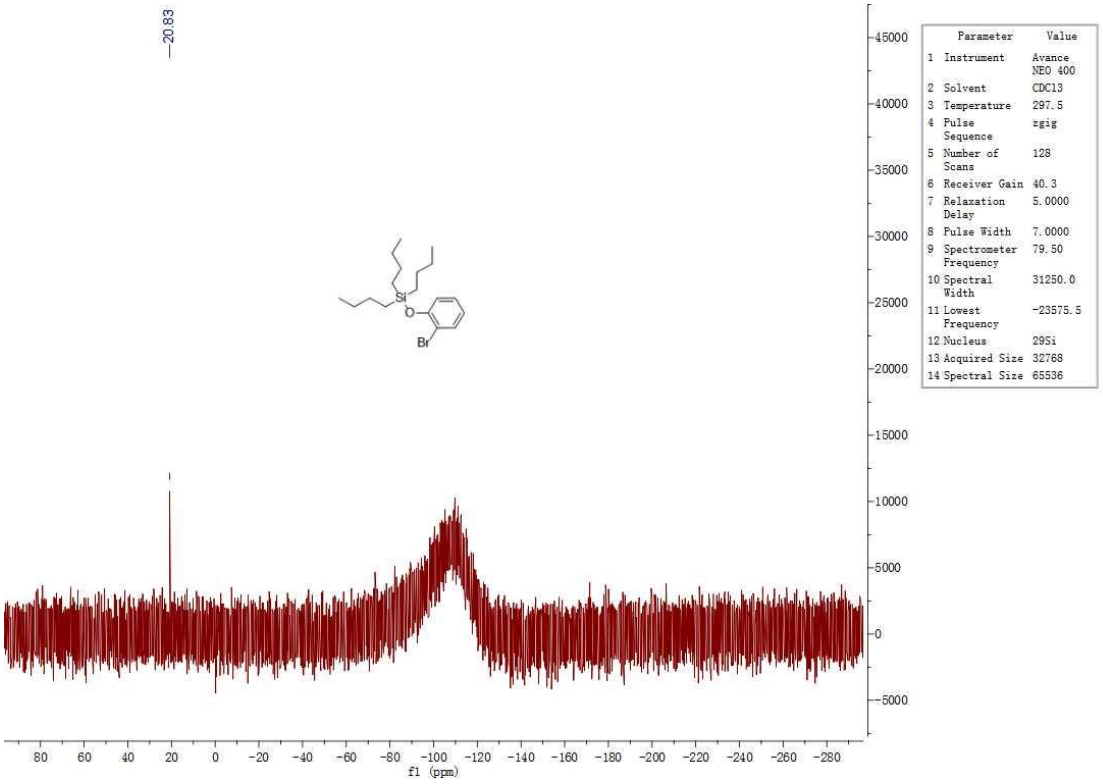
	Parameter	Value
1	Instrument	Avance NEO 400
2	Solvent	CDCl3
3	Temperature	297.6
4	Pulse Sequence	zgig
5	Number of Scans	128
6	Receiver Gain	40.3
7	Relaxation Delay	5.0000
8	Pulse Width	7.0000
9	Spectrometer Frequency	79.50
10	Spectral Width	31250.0
11	Lowest Frequency	-23575.5
12	Nucleus	29Si
13	Acquired Size	32768
14	Spectral Size	65536

(2-bromophenoxy)tributylsilane (3g)



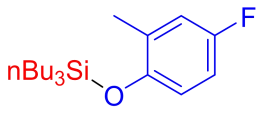


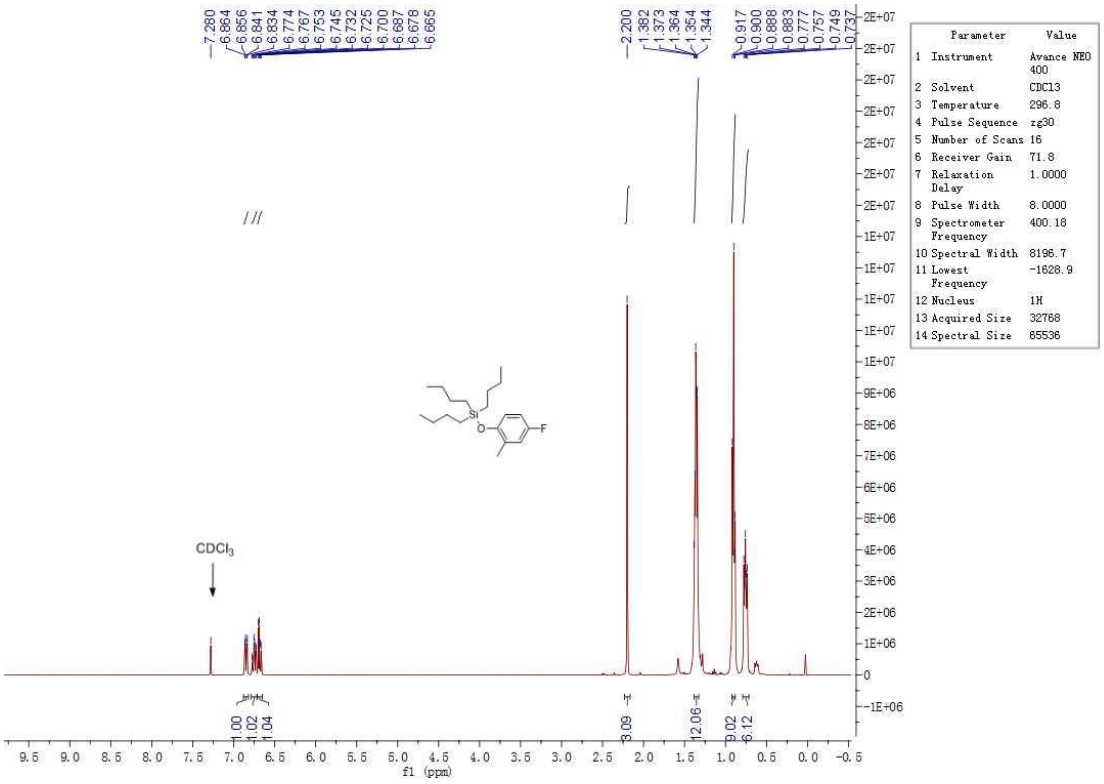


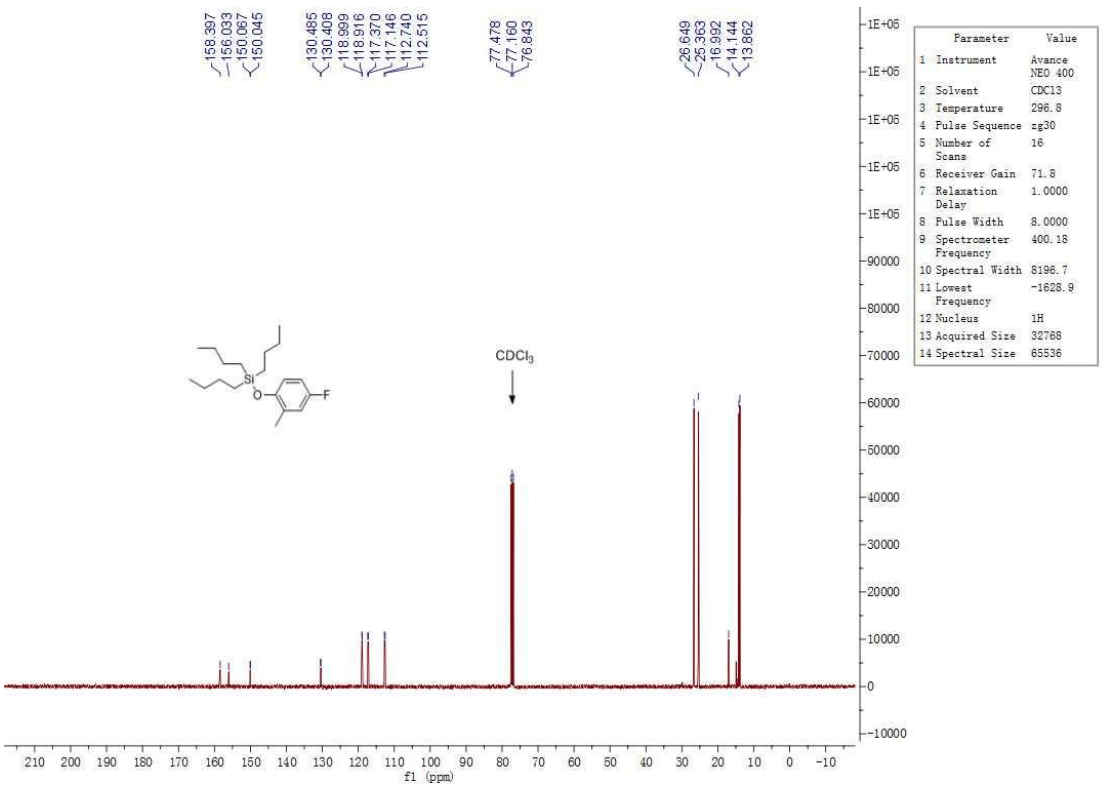


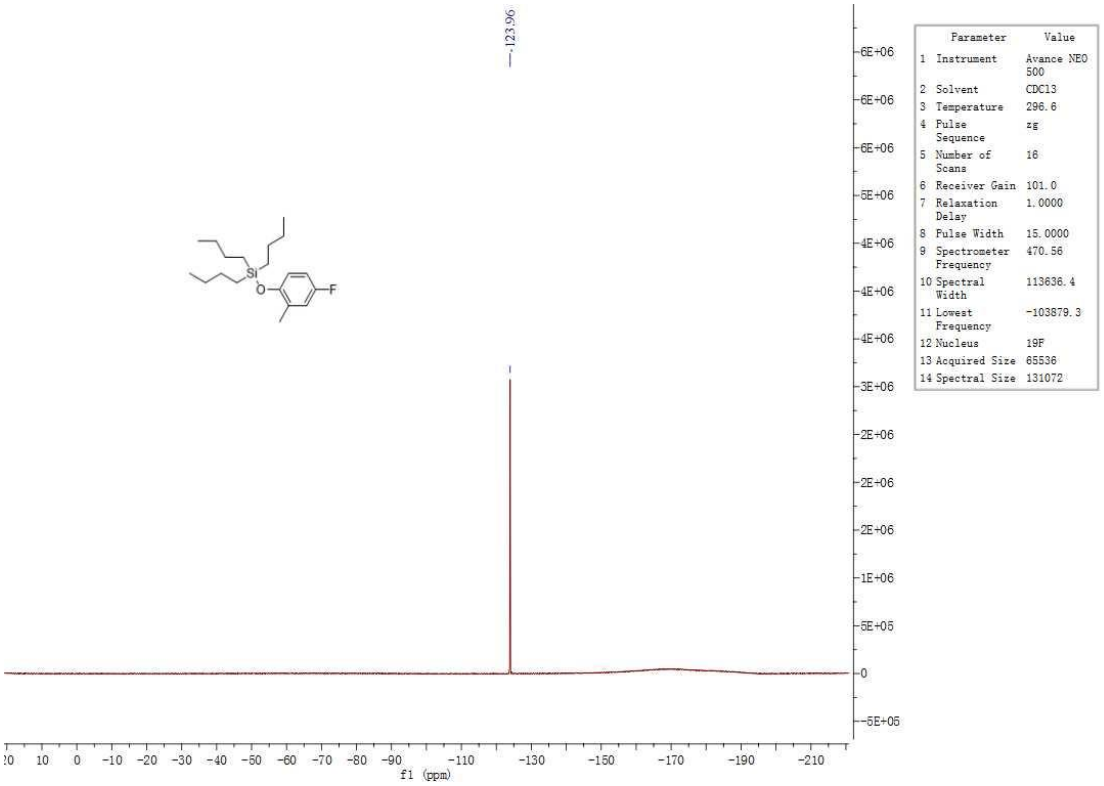
	Parameter	Value
1	Instrument	Avance NEO 400
2	Solvent	CDCl3
3	Temperature	297.5
4	Pulse Sequence	zgig
5	Number of Scans	128
6	Receiver Gain	40.3
7	Relaxation Delay	5.0000
8	Pulse Width	7.0000
9	Spectrometer Frequency	79.50
10	Spectral Width	31250.0
11	Lowest Frequency	-23575.5
12	Nucleus	29Si
13	Acquired Size	32768
14	Spectral Size	65536

tributyl(4-fluoro-2-methylphenoxy)silane (3h)



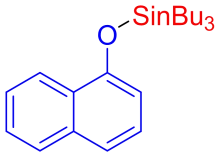


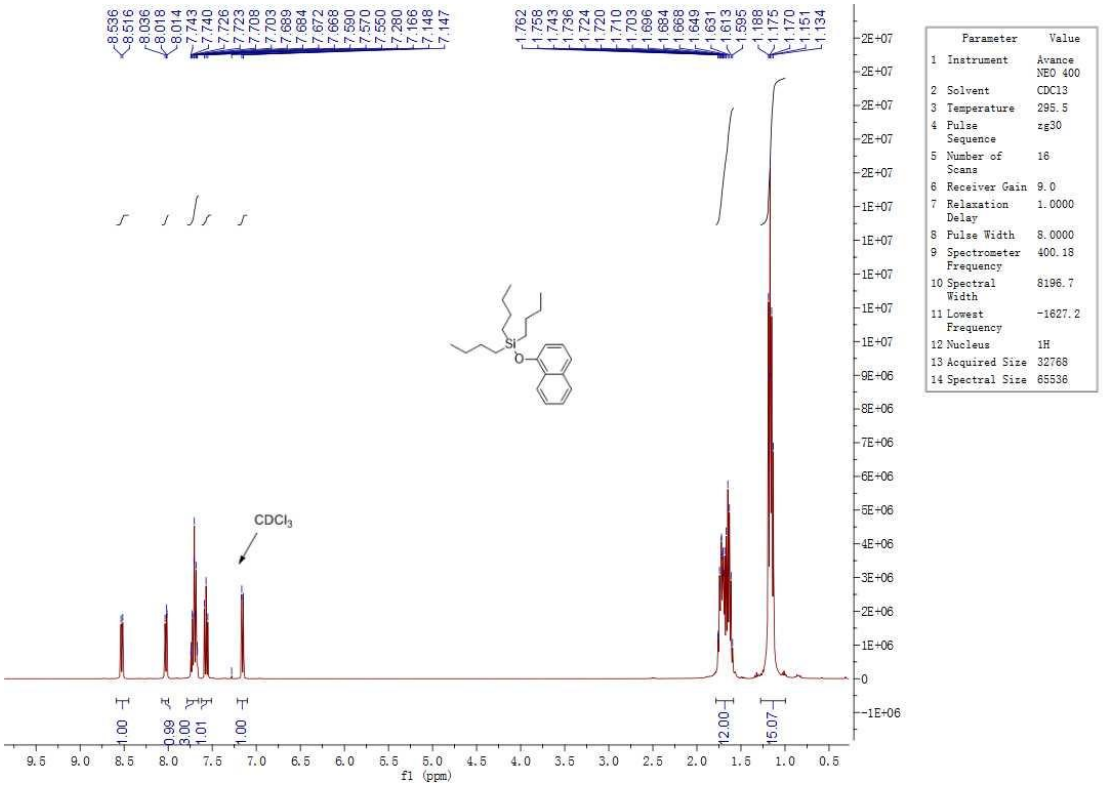




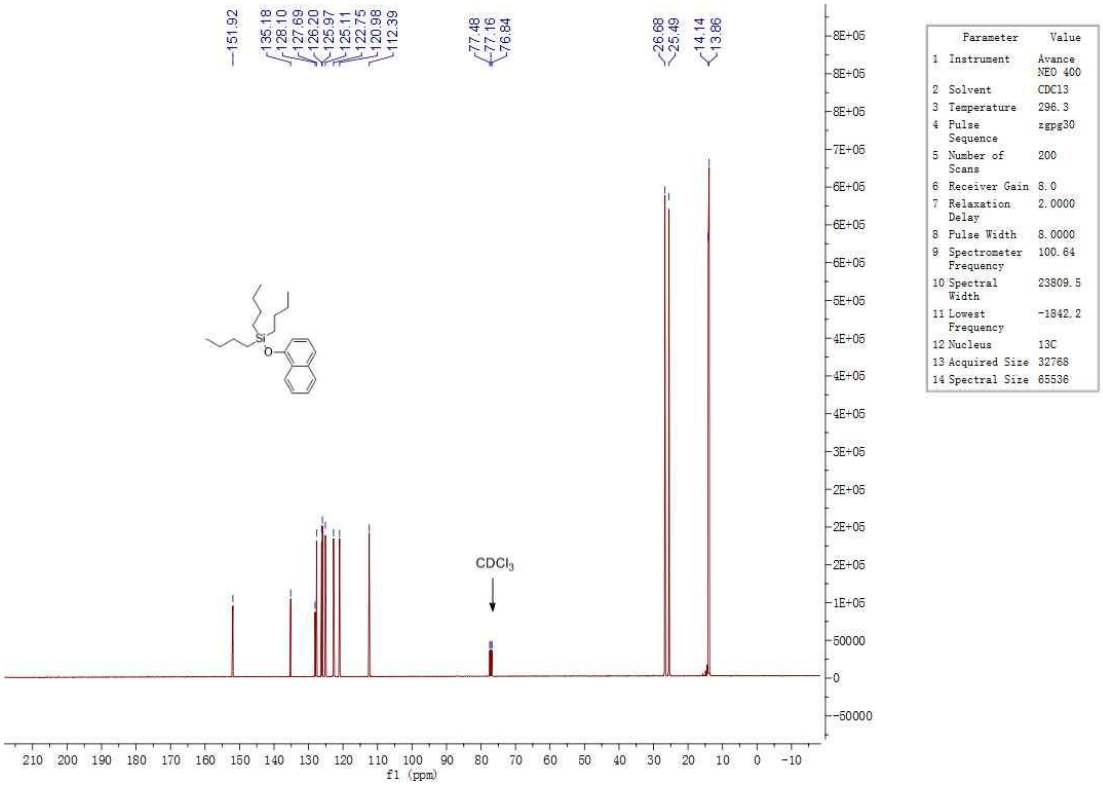
	Parameter	Value
1	Instrument	Avance NEO 500
2	Solvent	CDCl3
3	Temperature	296.6
4	Pulse Sequence	zg
5	Number of Scans	16
6	Receiver Gain	101.0
7	Relaxation Delay	1.0000
8	Pulse Width	15.0000
9	Spectrometer Frequency	470.56
10	Spectral Width	113636.4
11	Lowest Frequency	-103879.3
12	Nucleus	19F
13	Acquired Size	65536
14	Spectral Size	131072

tributyl(naphthalen-1-yloxy)silane (3i)

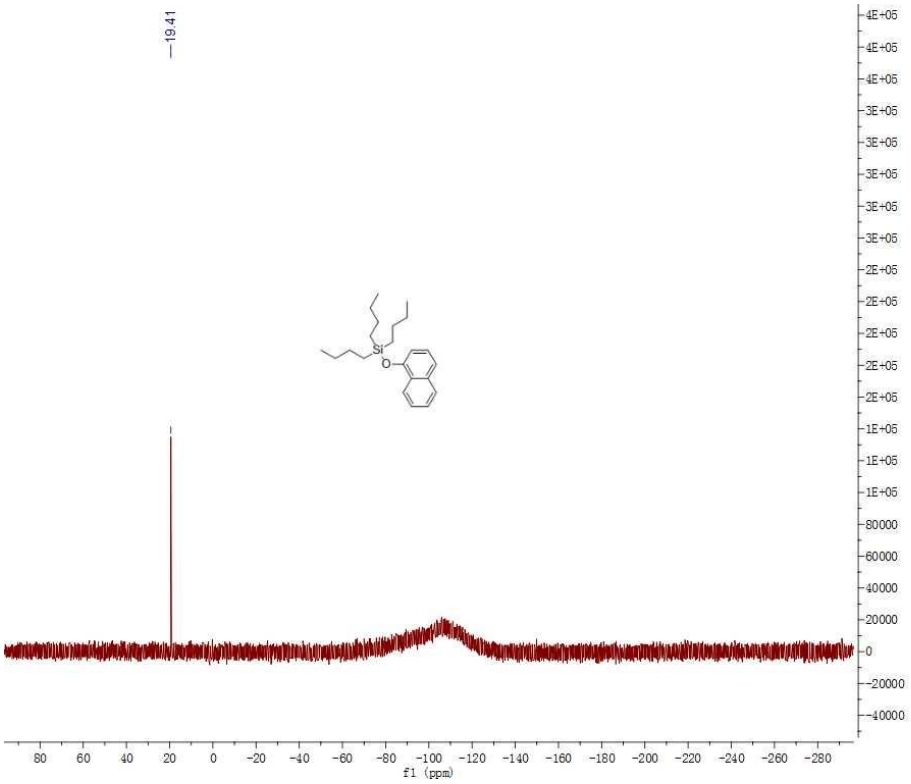




	Parameter	Value
1	Instrument	Avance NEO 400
2	Solvent	CDCl3
3	Temperature	295.5
4	Pulse Sequence	zg30
5	Number of Scans	16
6	Receiver Gain	9.0
7	Relaxation Delay	1.0000
8	Pulse Width	8.0000
9	Spectrometer Frequency	400.18
10	Spectral Width	8196.7
11	Lowest Frequency	-1627.2
12	Nucleus	1H
13	Acquired Size	32768
14	Spectral Size	65536

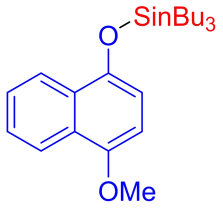


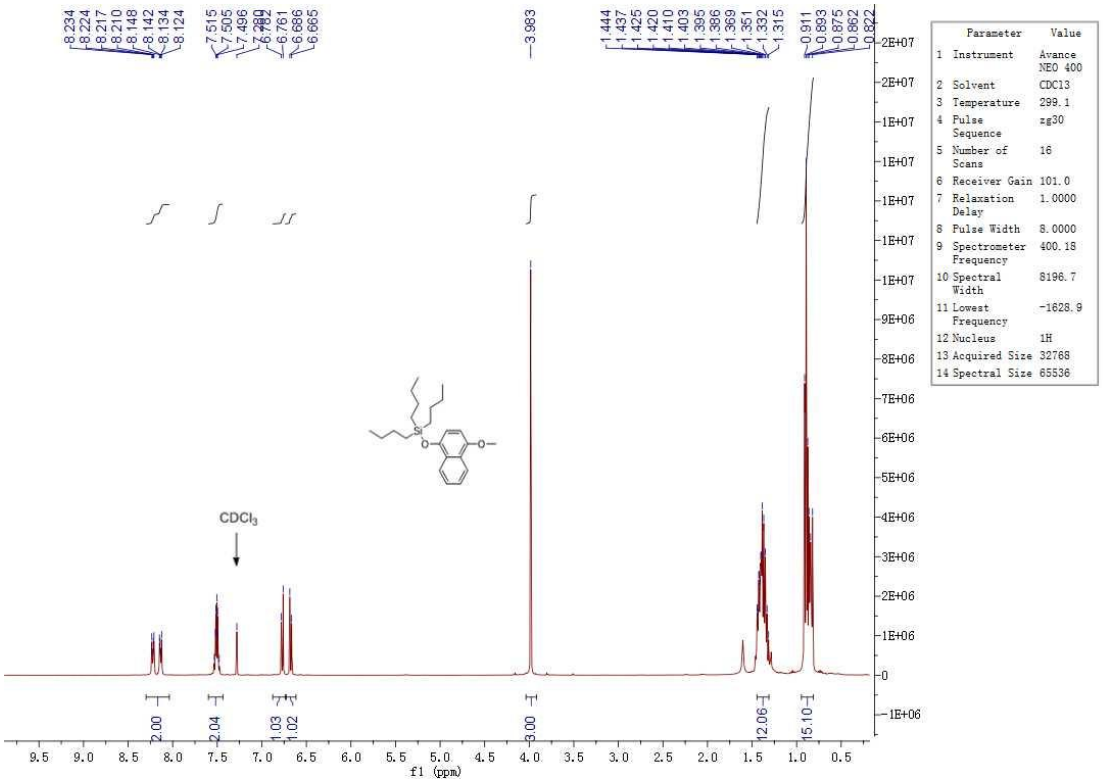
	Parameter	Value
1	Instrument	Avance NEO 400
2	Solvent	CDCl3
3	Temperature	296.3
4	Pulse Sequence	zgpg30
5	Number of Scans	200
6	Receiver Gain	8.0
7	Relaxation Delay	2.0000
8	Pulse Width	8.0000
9	Spectrometer Frequency	100.64
10	Spectral Width	23809.5
11	Lowest Frequency	-1842.2
12	Nucleus	13C
13	Acquired Size	32768
14	Spectral Size	65536

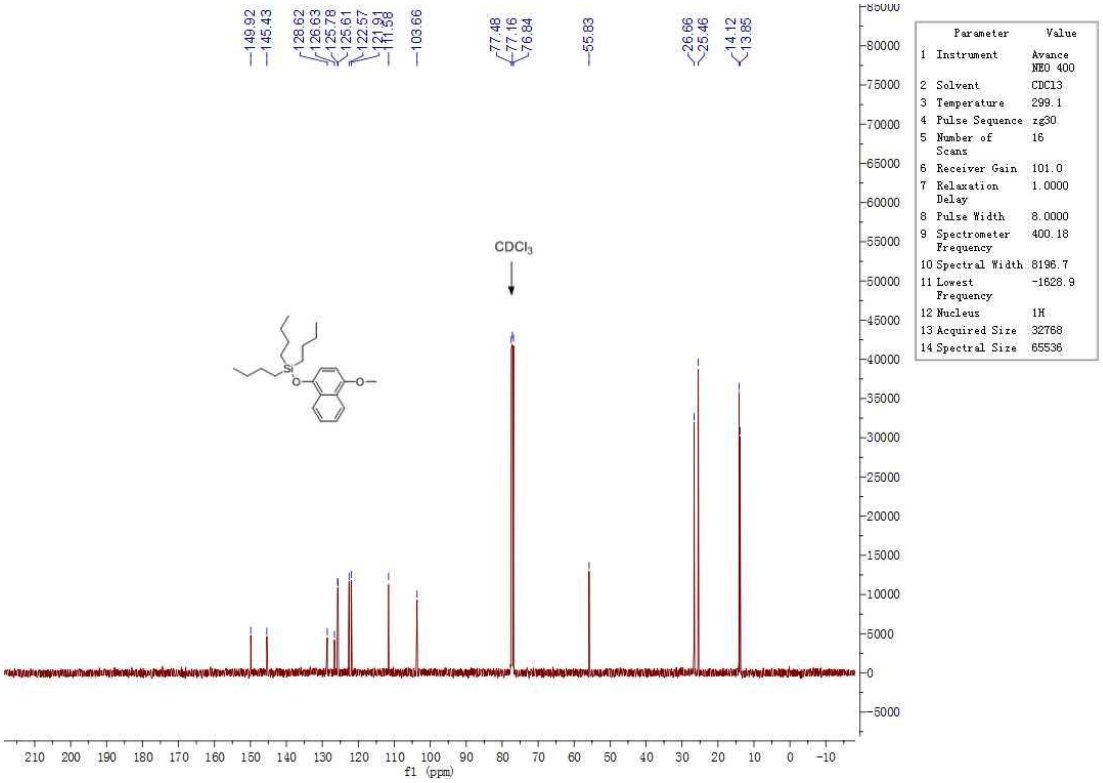


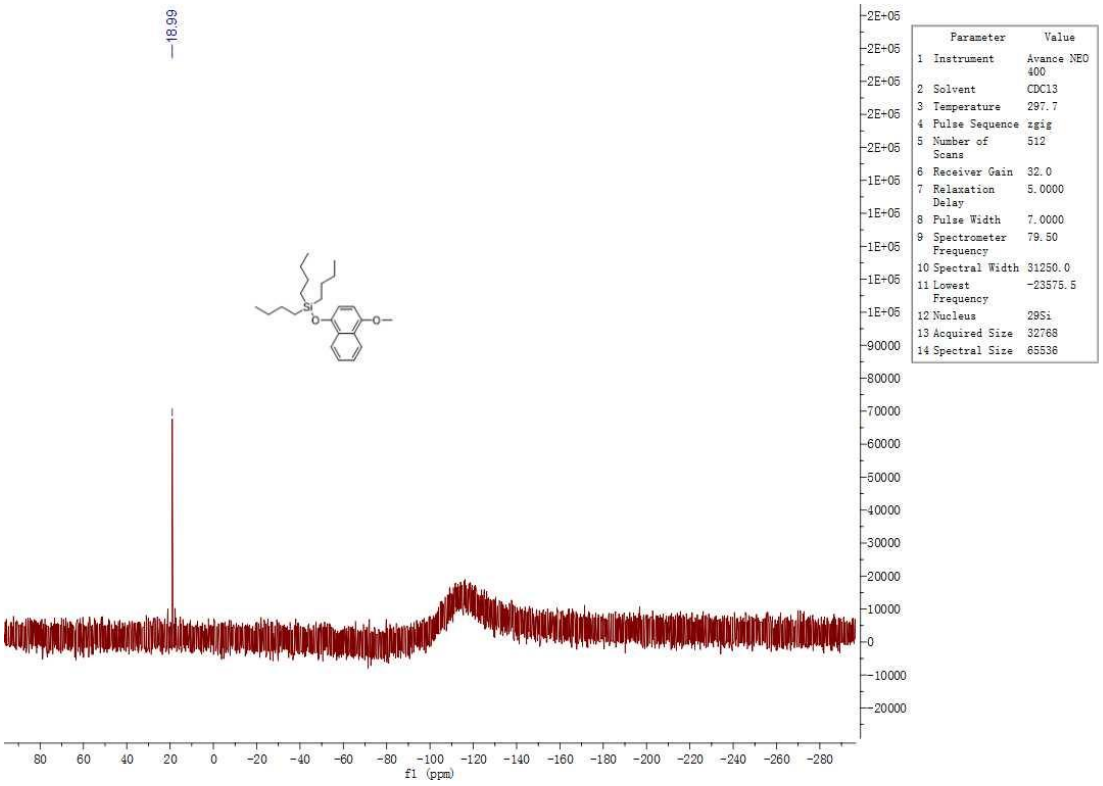
	Parameter	Value
1	Instrument	Avance NEO 400
2	Solvent	CDCl3
3	Temperature	297.9
4	Pulse Sequence	zgig
5	Number of Scans	512
6	Receiver Gain	40.3
7	Relaxation Delay	5.0000
8	Pulse Width	7.0000
9	Spectrometer Frequency	79.50
10	Spectral Width	31250.0
11	Lowest Frequency	-23575.5
12	Nucleus	29Si
13	Acquired Size	32768
14	Spectral Size	65536

tributyl((4-methoxynaphthalen-1-yl)oxy)silane (3j)



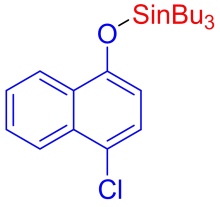


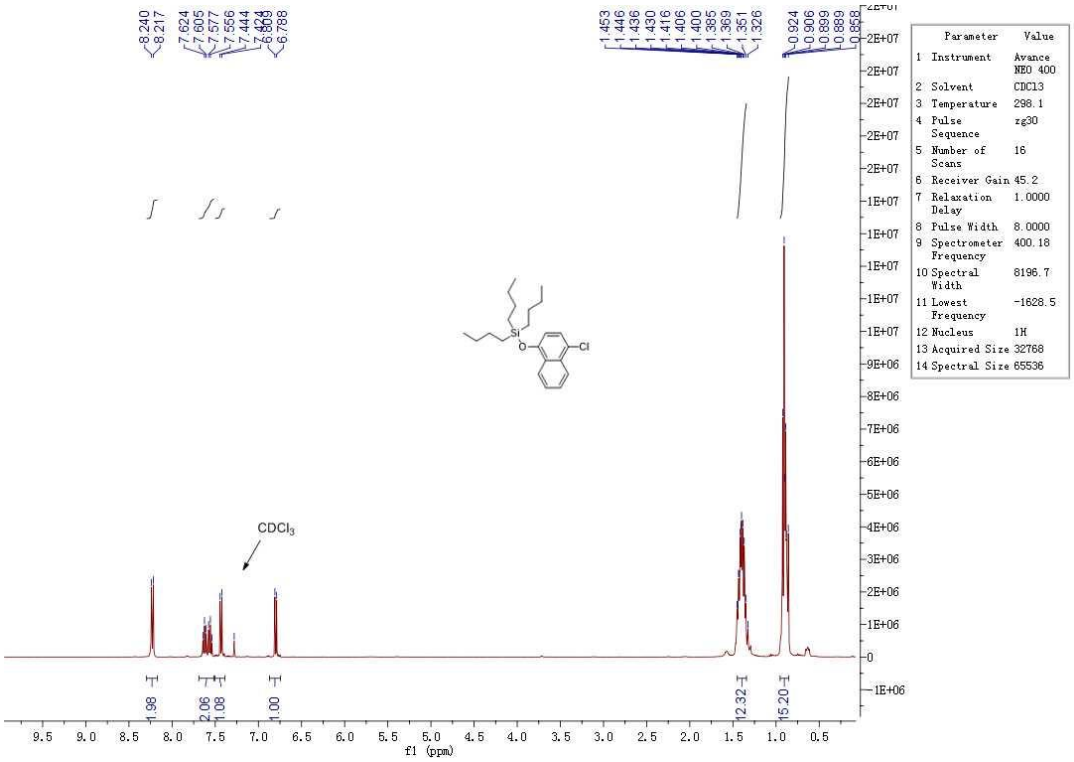


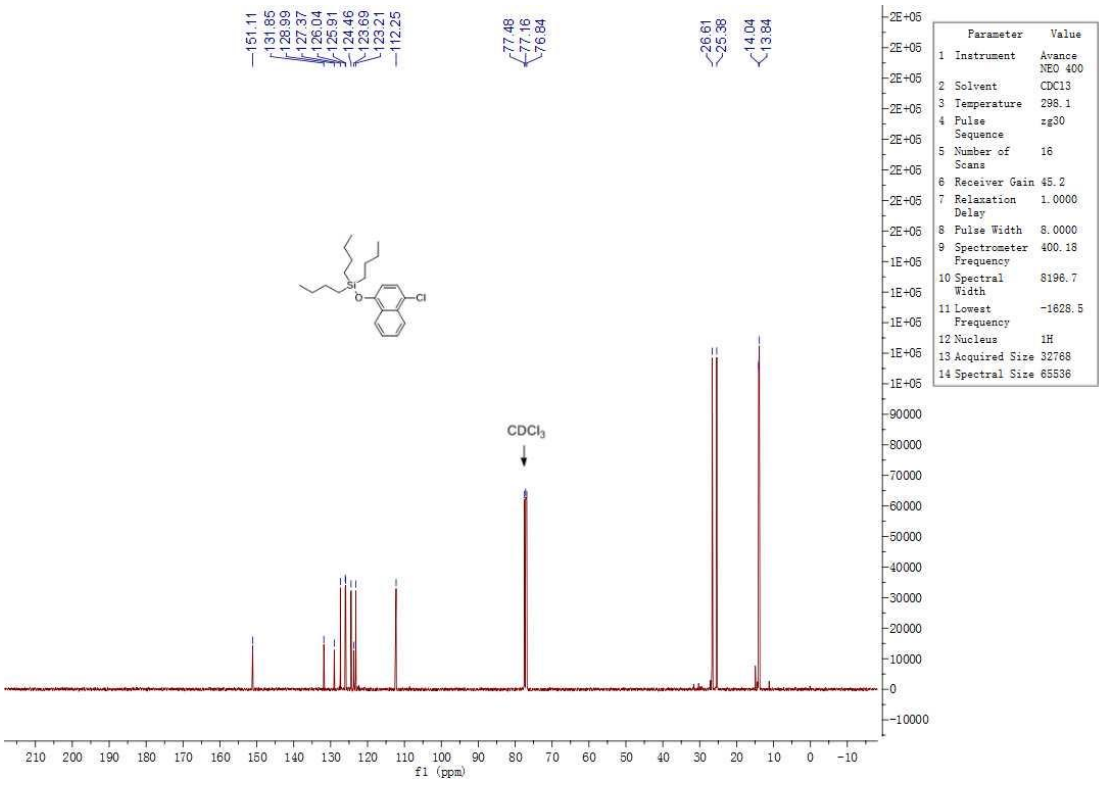


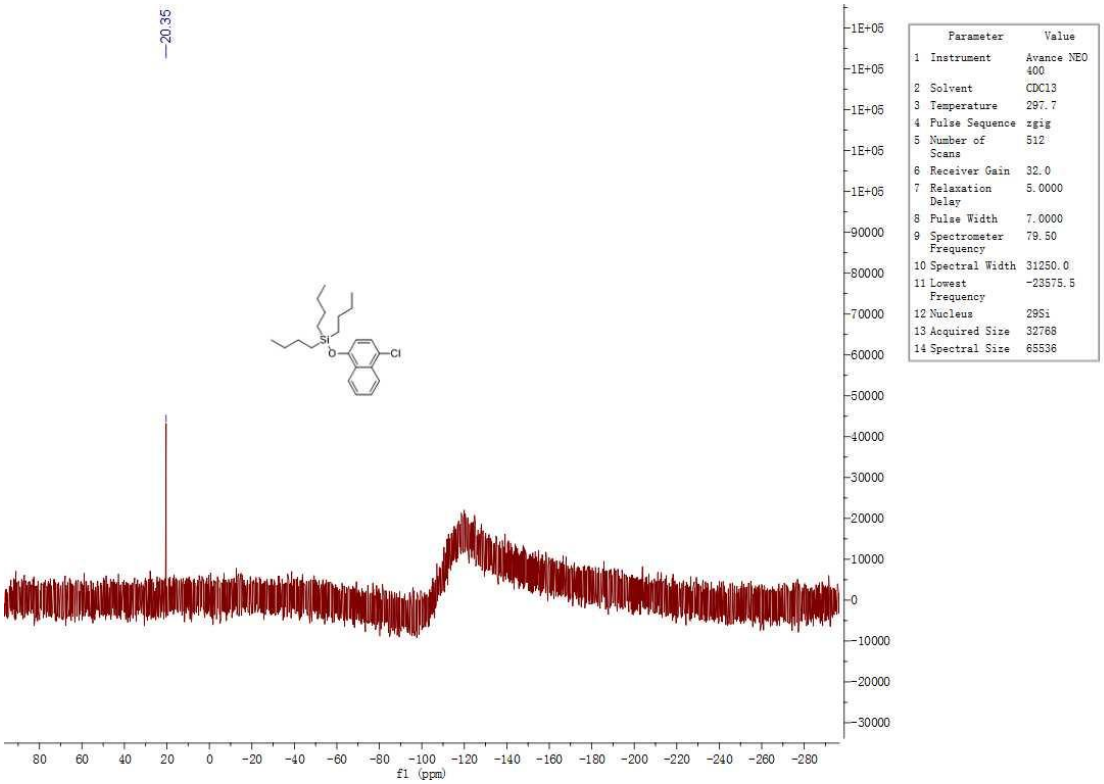
	Parameter	Value
1	Instrument	Avance NEO 400
2	Solvent	CDCl3
3	Temperature	297.7
4	Pulse Sequence	zgig
5	Number of Scans	512
6	Receiver Gain	32.0
7	Relaxation Delay	5.0000
8	Pulse Width	7.0000
9	Spectrometer Frequency	79.50
10	Spectral Width	31250.0
11	Lowest Frequency	-23575.5
12	Nucleus	29Si
13	Acquired Size	32768
14	Spectral Size	65536

tributyl((4-chloronaphthalen-1-yl)oxy)silane (3k)



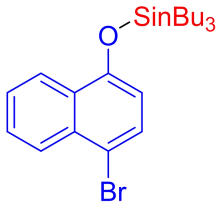


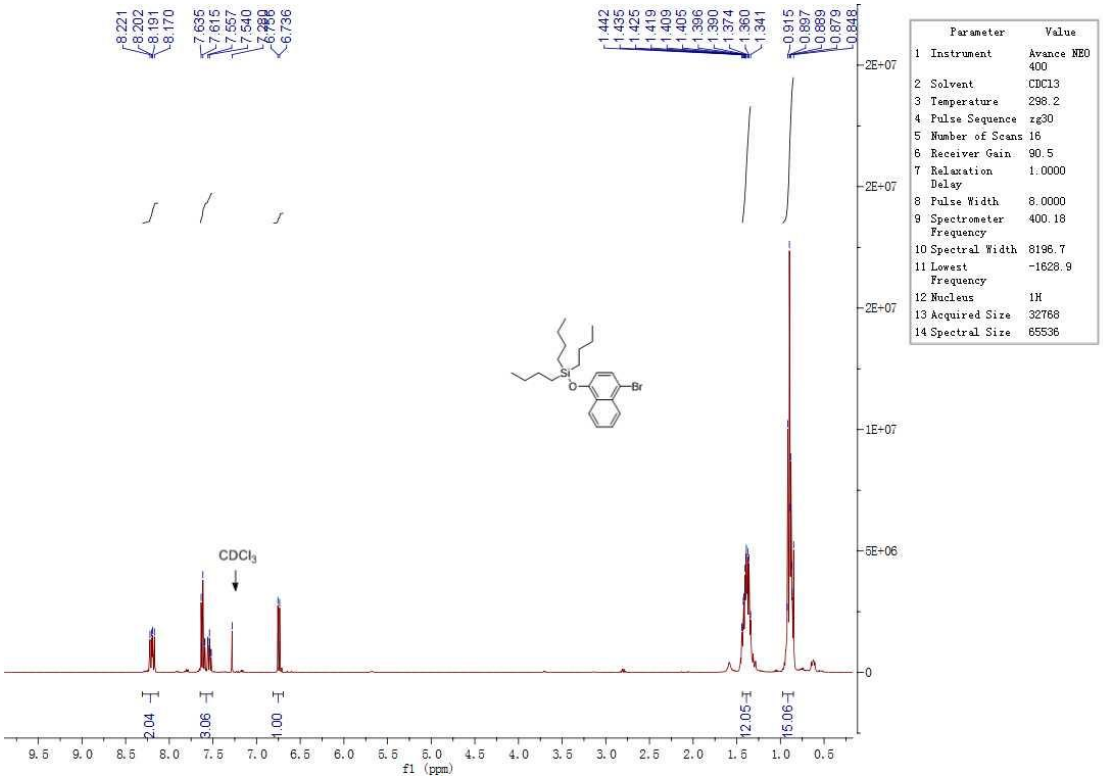


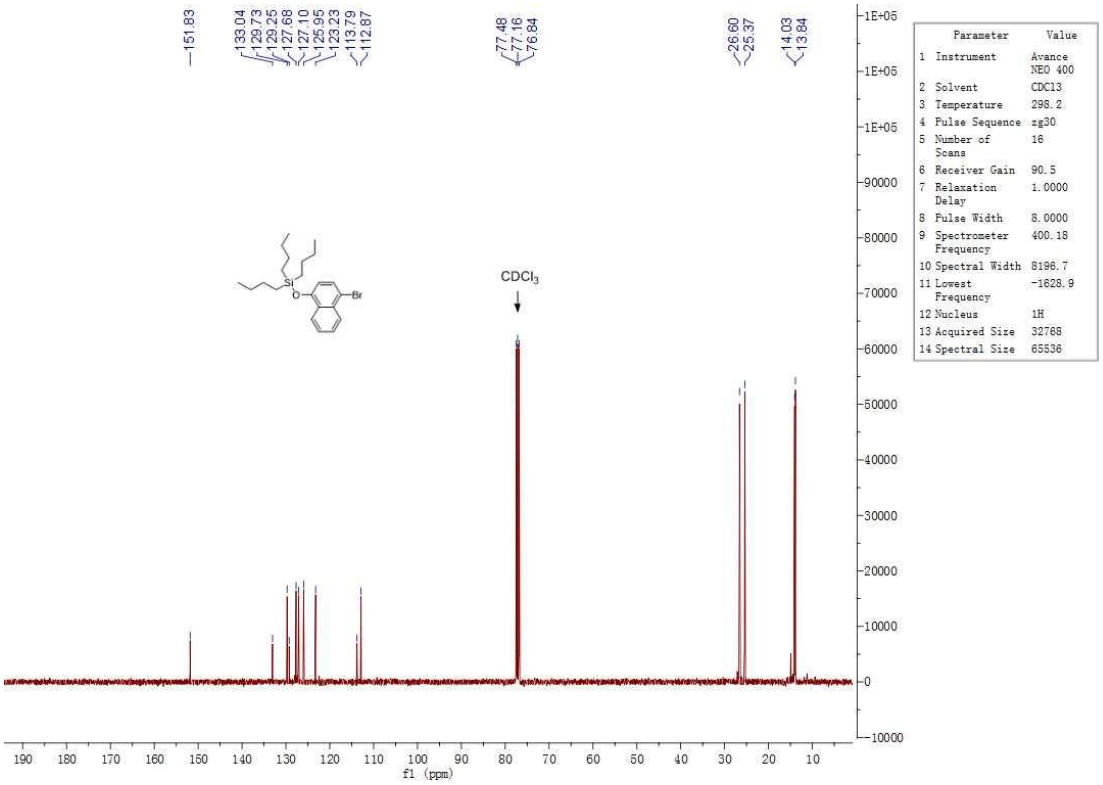


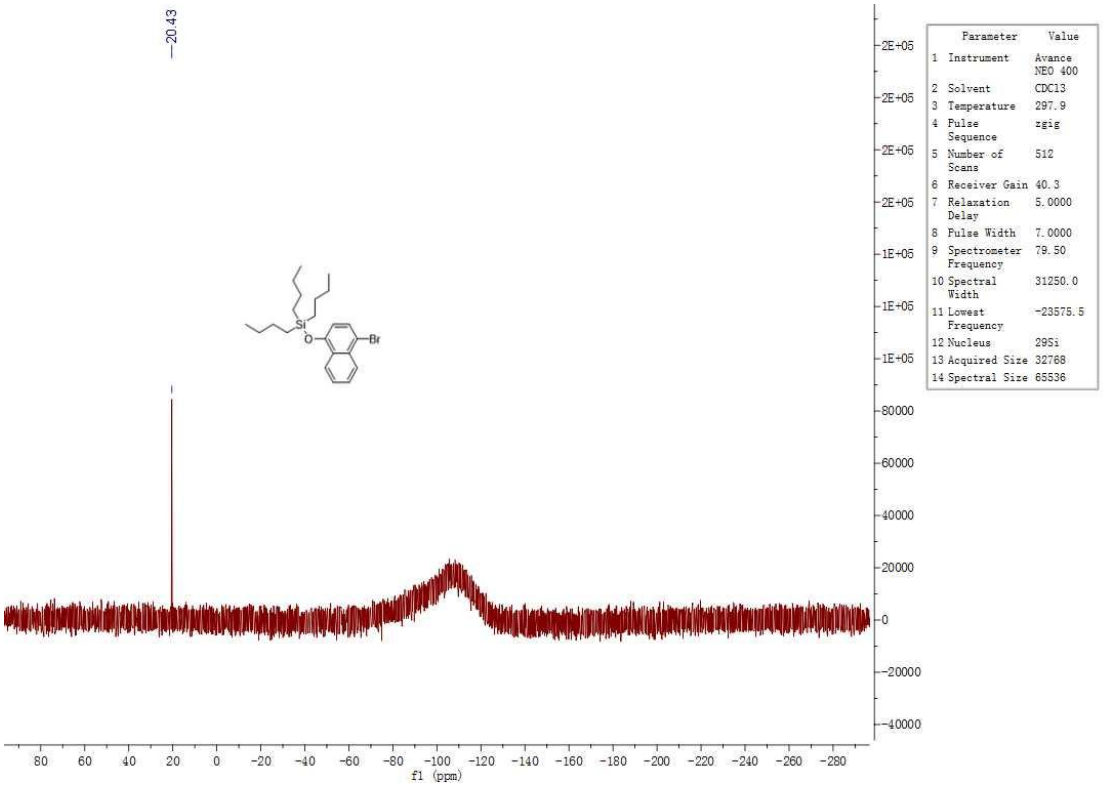
	Parameter	Value
1	Instrument	Avance NEO 400
2	Solvent	CDCl3
3	Temperature	297.7
4	Pulse Sequence	zgig
5	Number of Scans	512
6	Receiver Gain	32.0
7	Relaxation Delay	5.0000
8	Pulse Width	7.0000
9	Spectrometer Frequency	79.50
10	Spectral Width	31250.0
11	Lowest Frequency	-23575.5
12	Nucleus	29Si
13	Acquired Size	32768
14	Spectral Size	65536

((4-bromonaphthalen-1-yl)oxy)tributylsilane (3l)



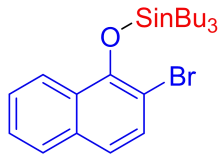


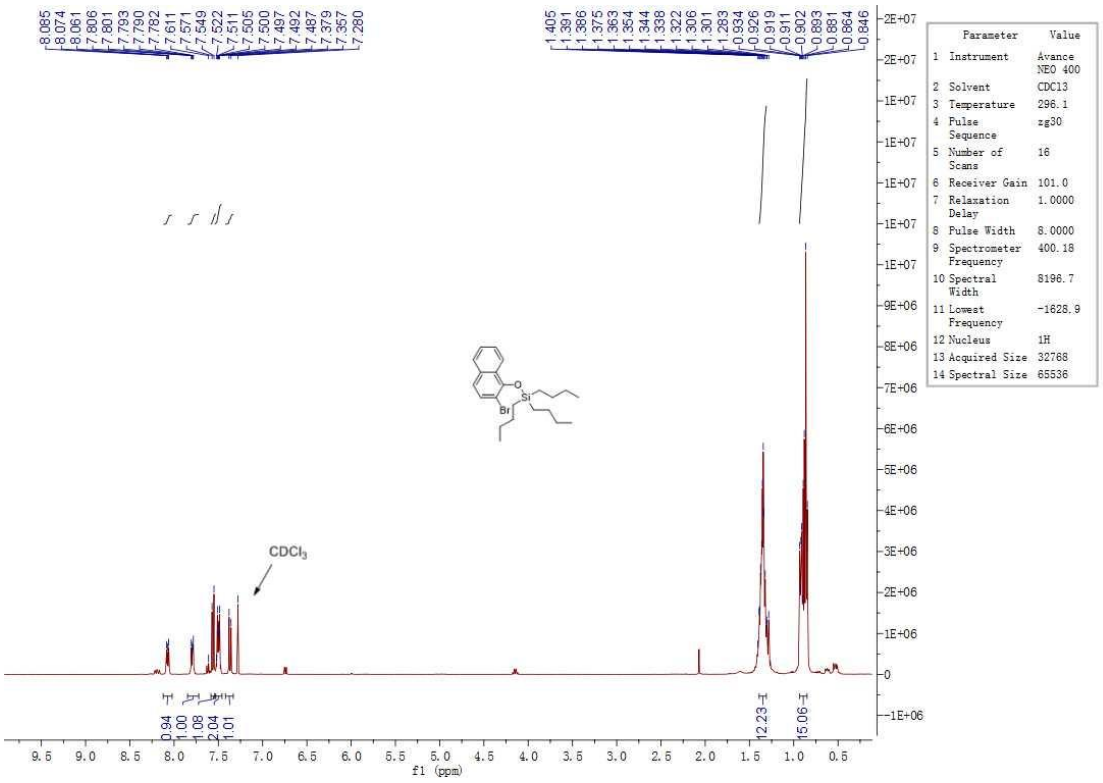


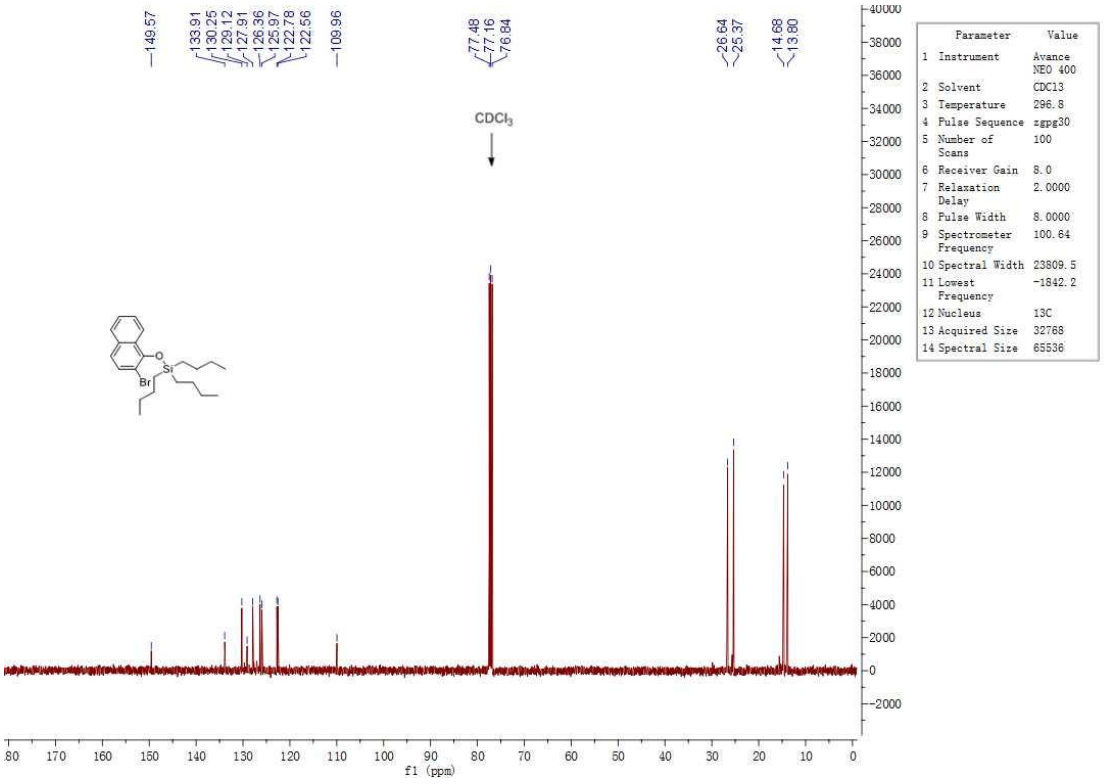


	Parameter	Value
1	Instrument	Avance NEO 400
2	Solvent	CDCl3
3	Temperature	297.9
4	Pulse Sequence	zgig
5	Number of Scans	512
6	Receiver Gain	40.3
7	Relaxation Delay	5.0000
8	Pulse Width	7.0000
9	Spectrometer Frequency	79.50
10	Spectral Width	31250.0
11	Lowest Frequency	-23575.5
12	Nucleus	29Si
13	Acquired Size	32768
14	Spectral Size	65536

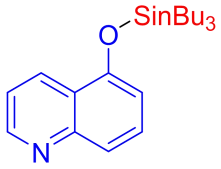
((2-bromonaphthalen-1-yl)oxy)tributylsilane (3m)

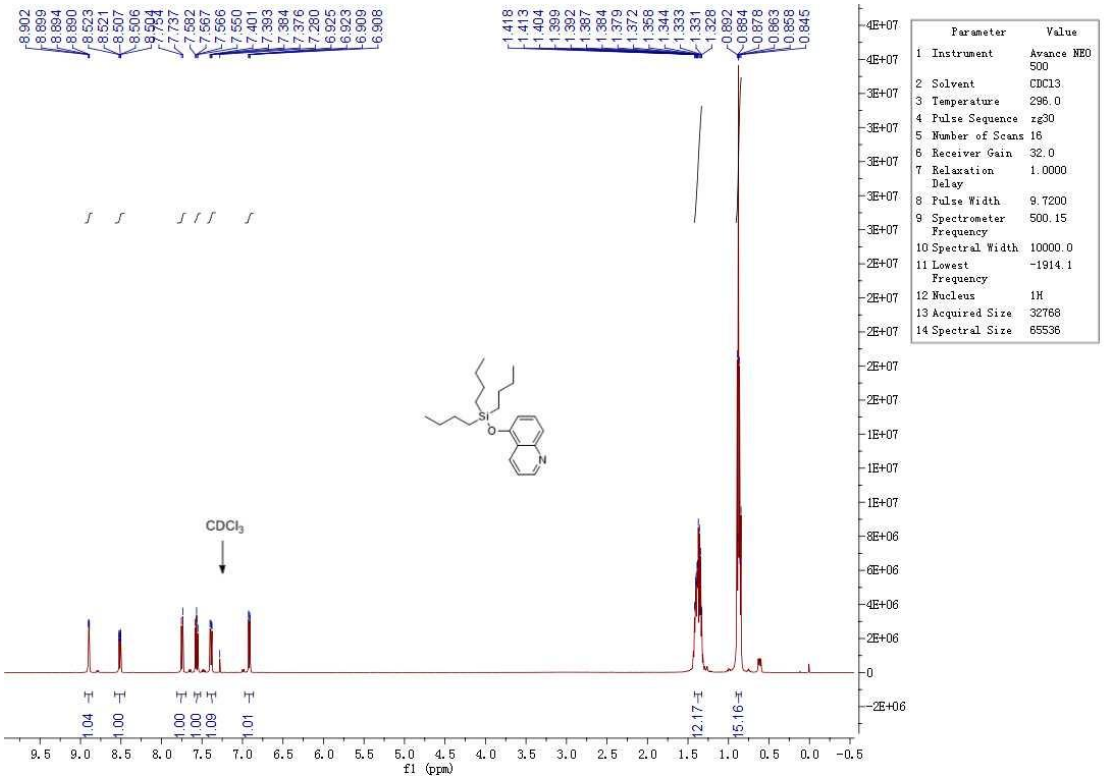




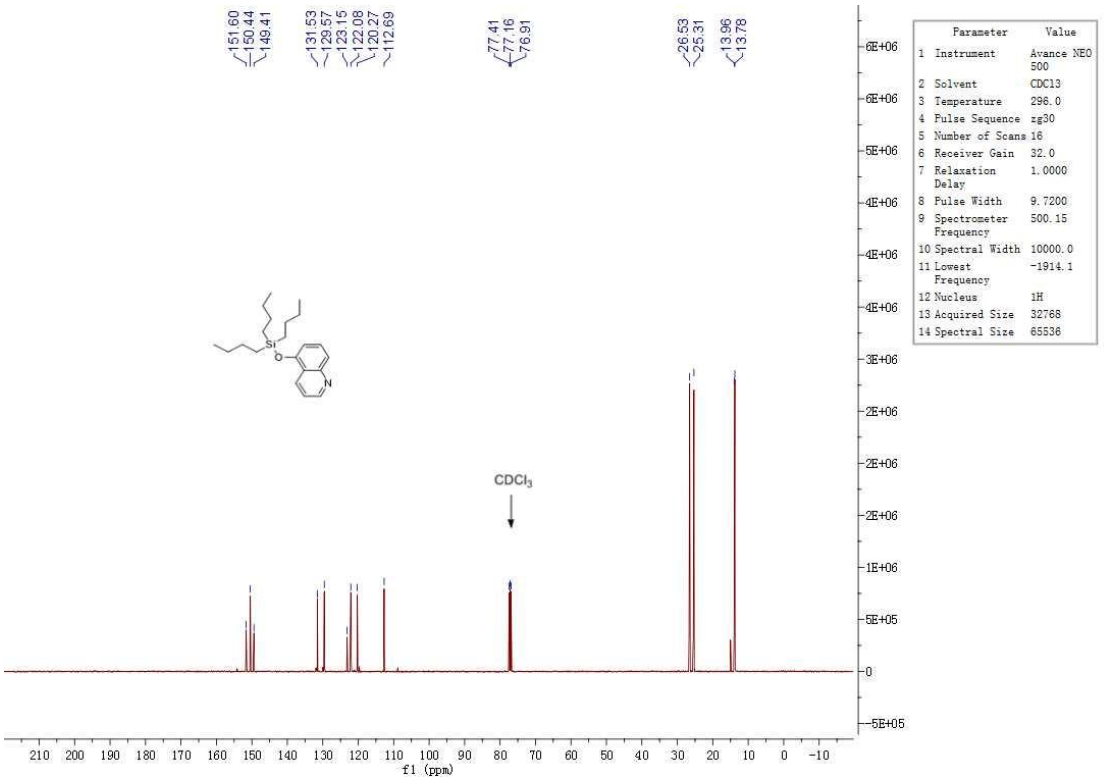


5-((tributylsilyl)oxy)quinoline (3n)



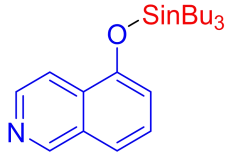


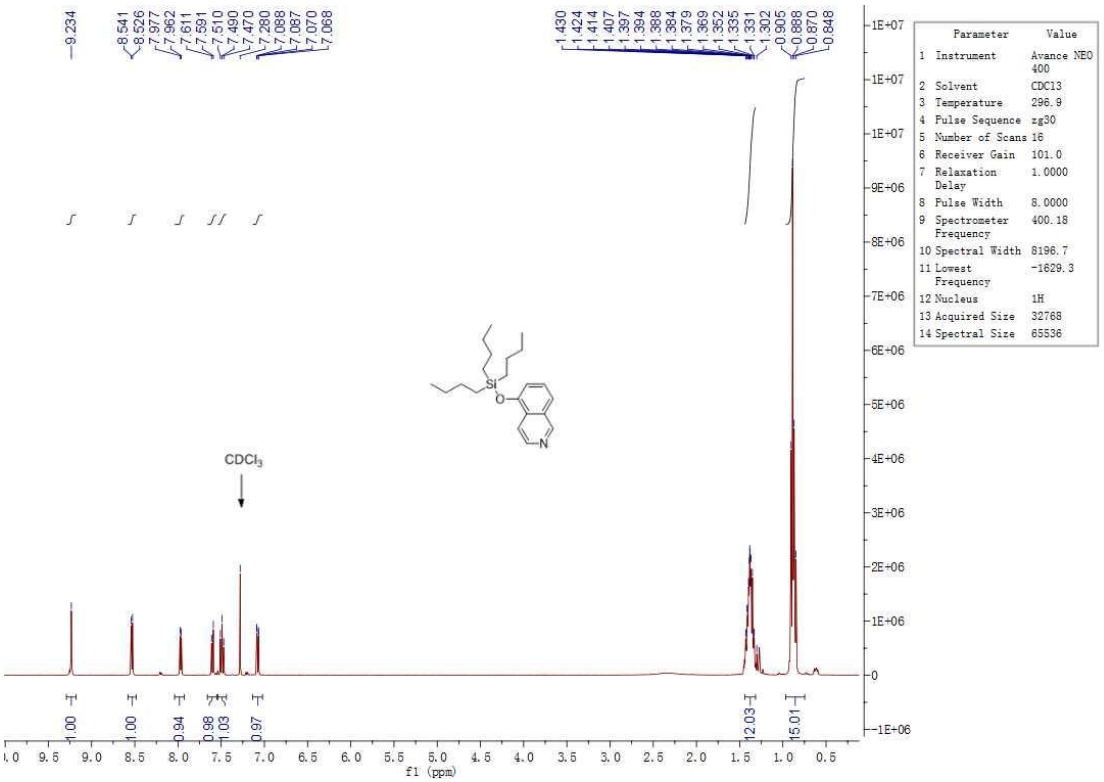
	Parameter	Value
1	Instrument	Avance NEO 500
2	Solvent	CDCl3
3	Temperature	296.0
4	Pulse Sequence	zg30
5	Number of Scans	16
6	Receiver Gain	32.0
7	Relaxation Delay	1.0000
8	Pulse Width	9.7200
9	Spectrometer Frequency	500.15
10	Spectral Width	10000.0
11	Lowest Frequency	-1914.1
12	Nucleus	1H
13	Acquired Size	32768
14	Spectral Size	65536

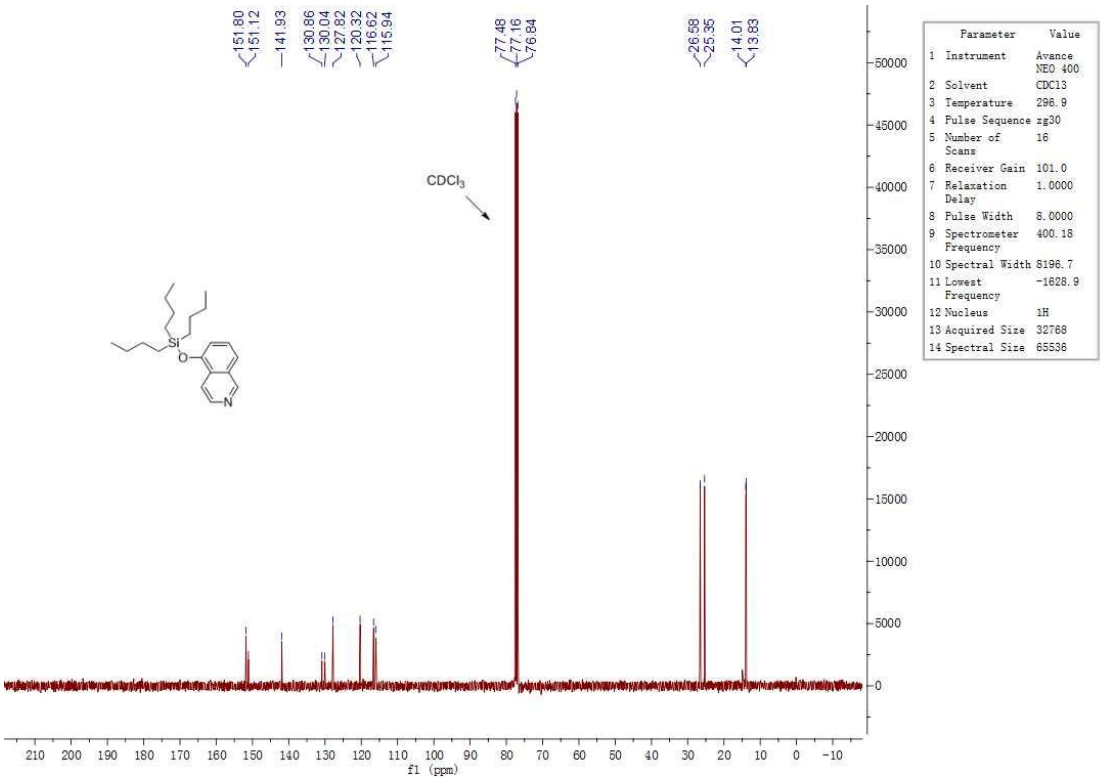


	Parameter	Value
1	Instrument	Avance NEO 500
2	Solvent	CDCl3
3	Temperature	296.0
4	Pulse Sequence	zg30
5	Number of Scans	16
6	Receiver Gain	32.0
7	Relaxation Delay	1.0000
8	Pulse Width	9.7200
9	Spectrometer Frequency	500.15
10	Spectral Width	10000.0
11	Lowest Frequency	-1914.1
12	Nucleus	1H
13	Acquired Size	32768
14	Spectral Size	65536

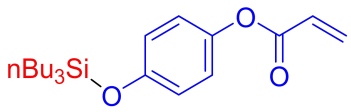
5-((tributylsilyl)oxy)isoquinoline (3o)

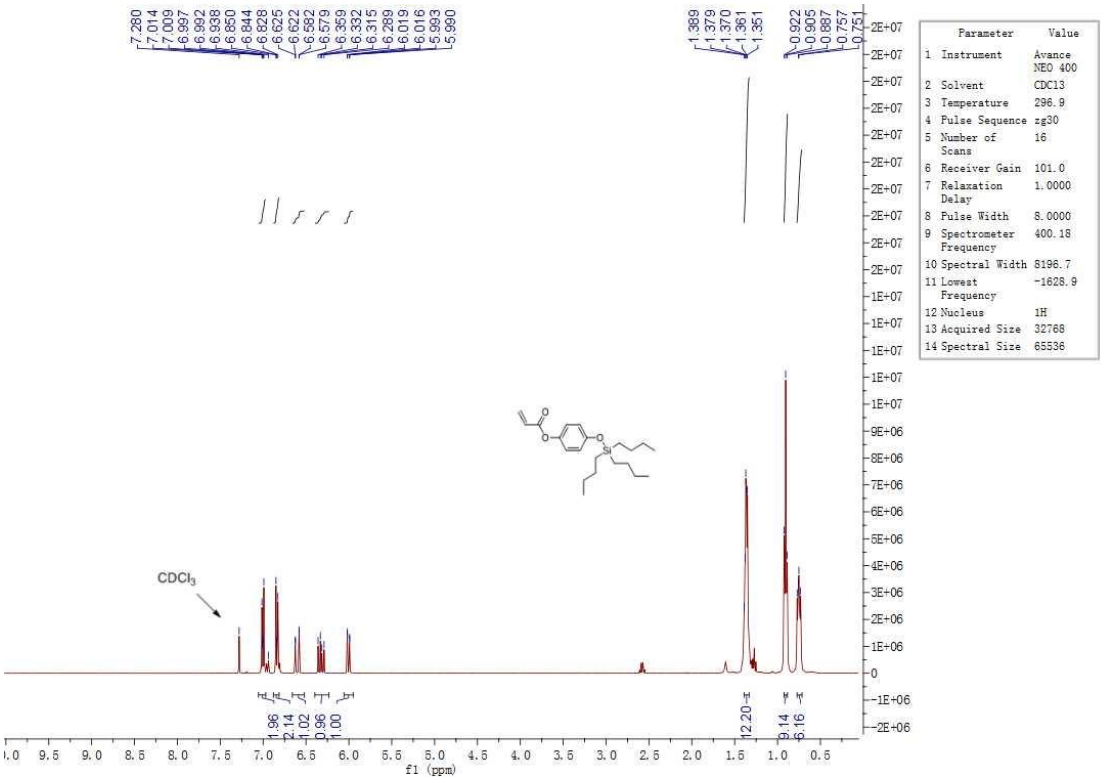


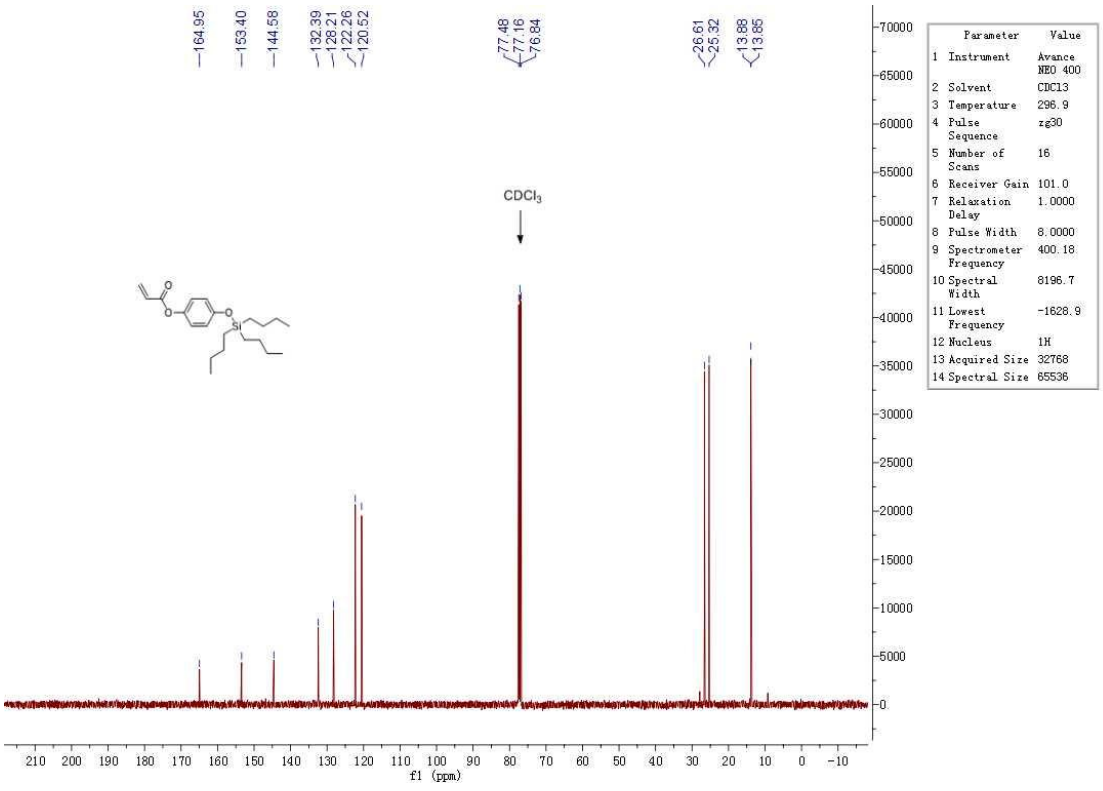




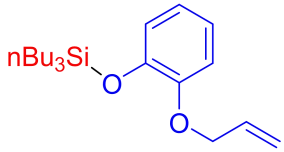
4-((tributylsilyl)oxy)phenyl acrylate (3p)

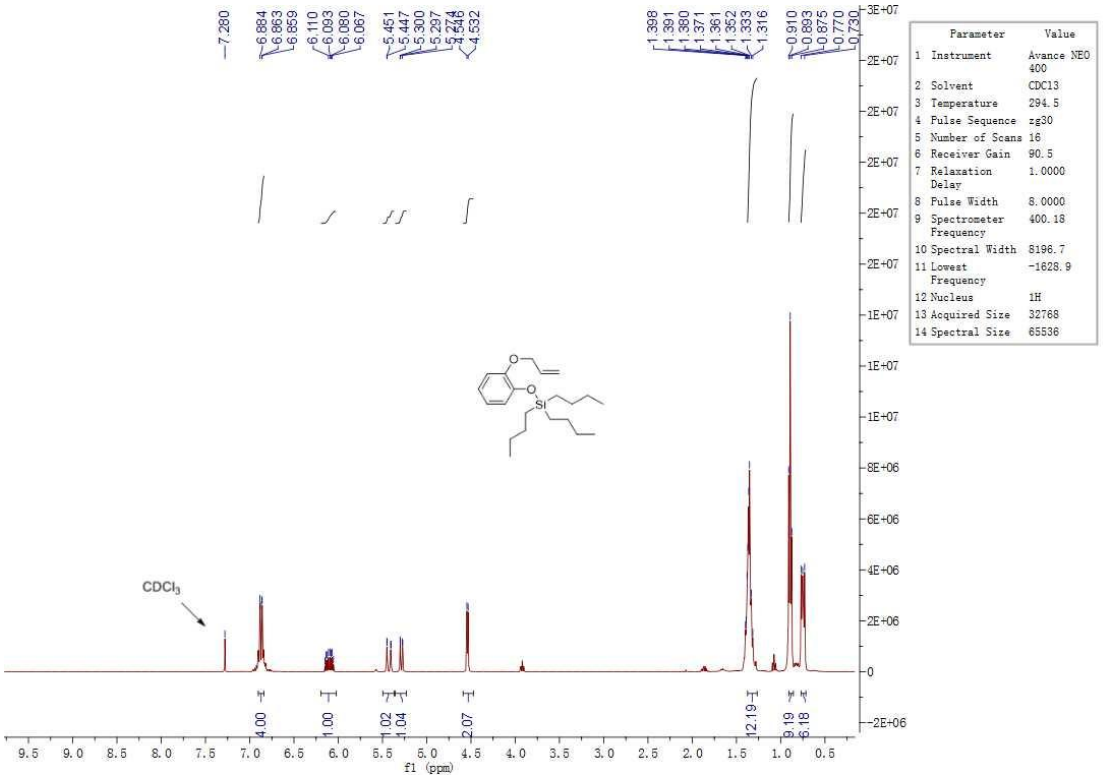


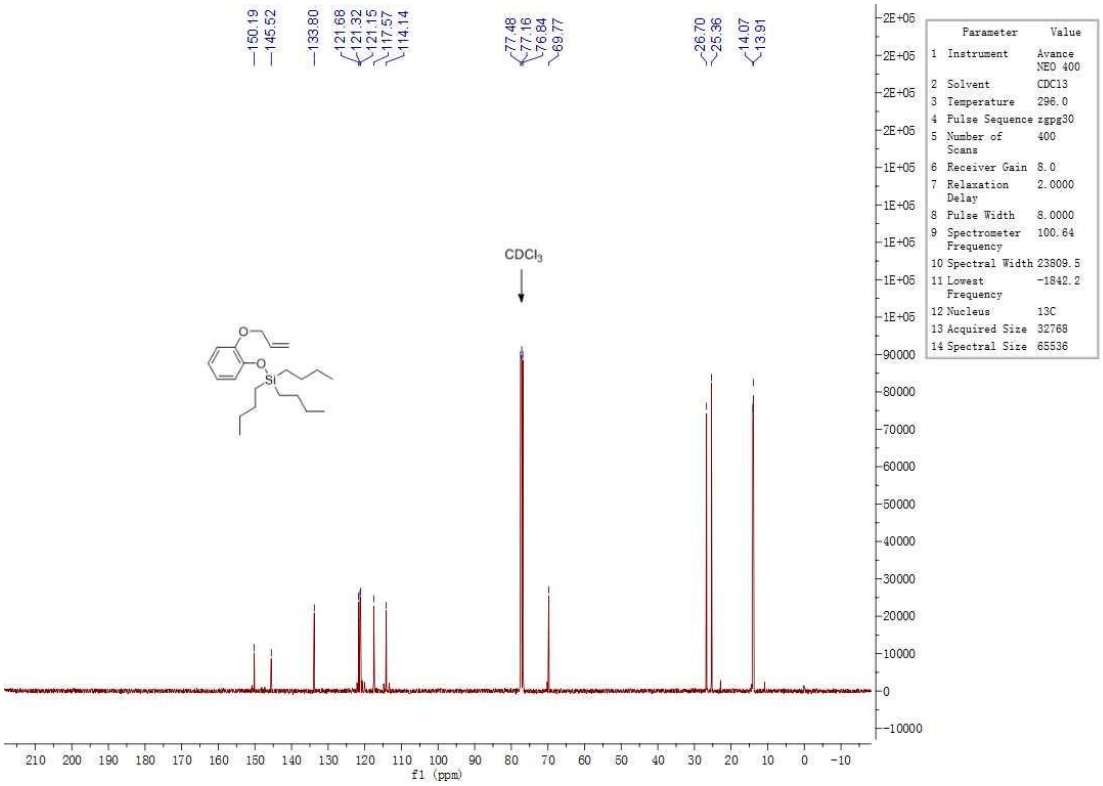


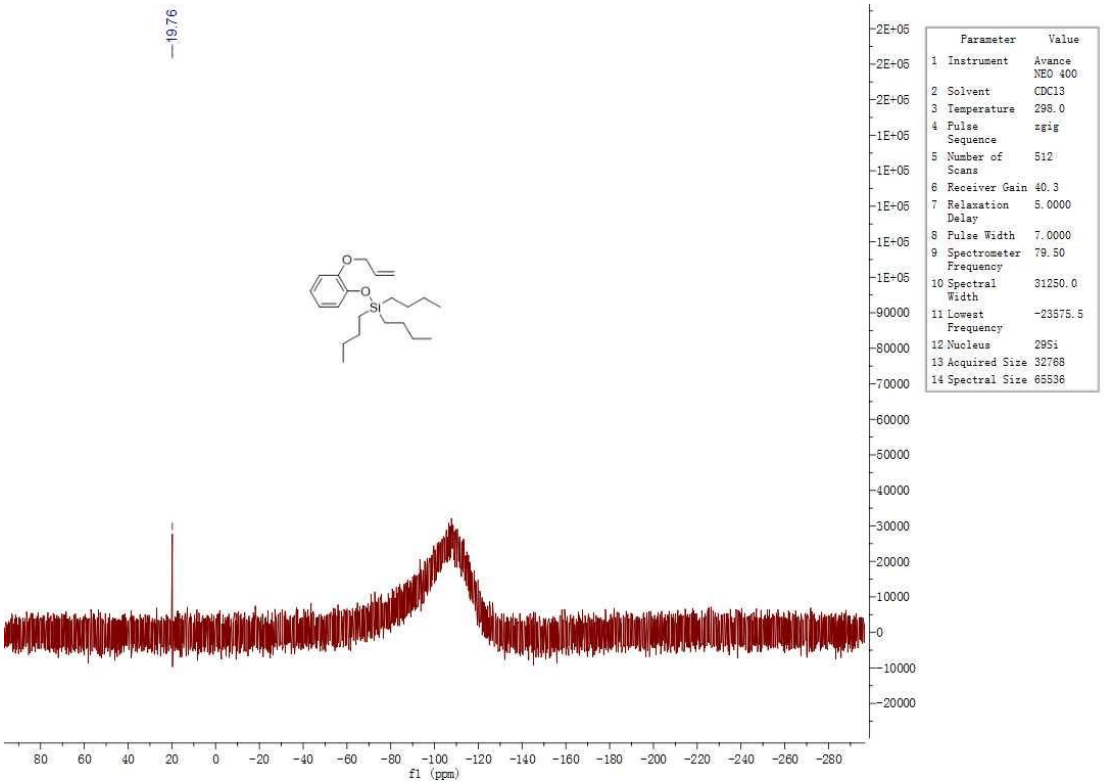


(2-(allyloxy)phenoxy)tributylsilane (3q)



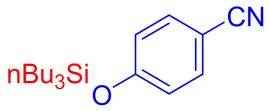


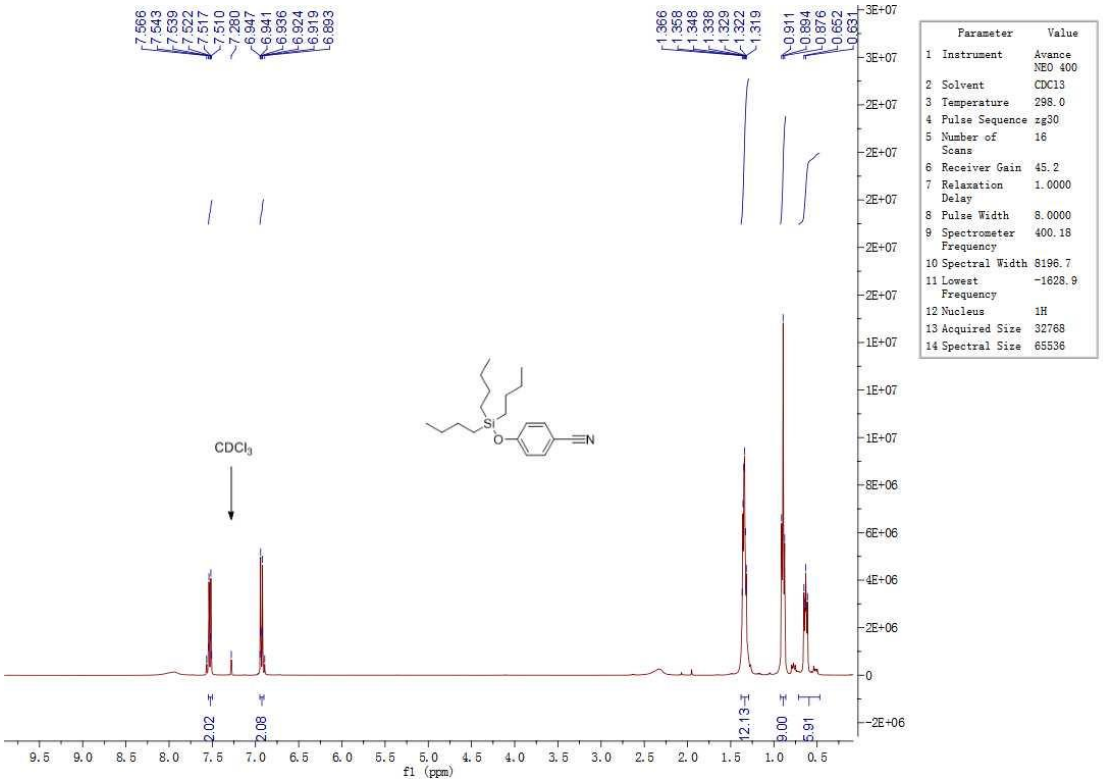


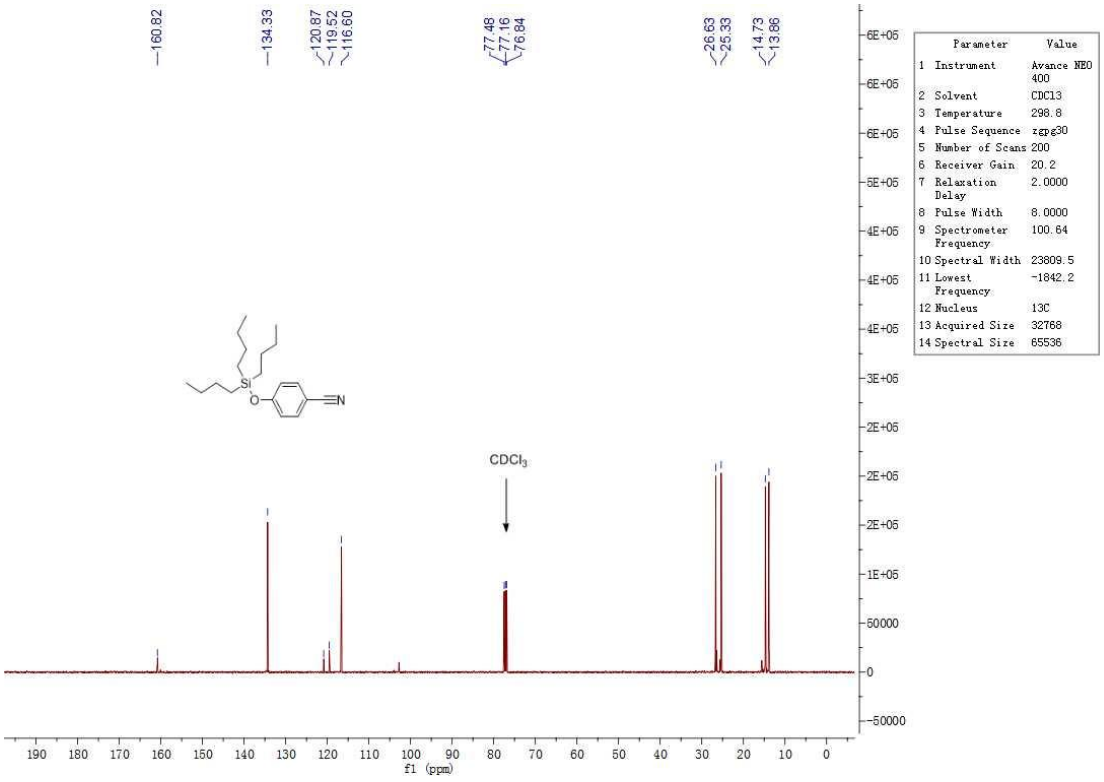


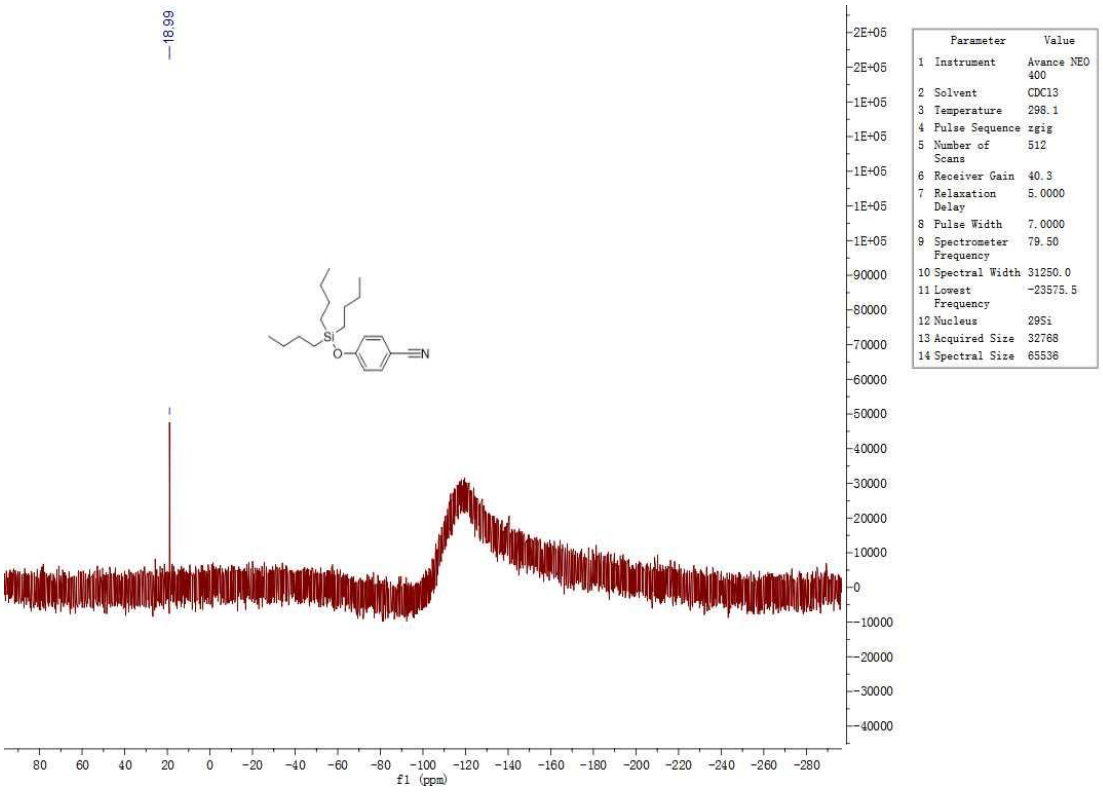
	Parameter	Value
1	Instrument	Avance NEO 400
2	Solvent	CDCl3
3	Temperature	298.0
4	Pulse Sequence	zgig
5	Number of Scans	512
6	Receiver Gain	40.3
7	Relaxation Delay	5.0000
8	Pulse Width	7.0000
9	Spectrometer Frequency	79.50
10	Spectral Width	31250.0
11	Lowest Frequency	-23575.5
12	Nucleus	29Si
13	Acquired Size	32768
14	Spectral Size	65536

4-((tributylsilyl)oxy)benzonitrile (3r)



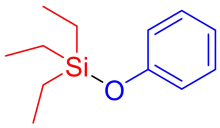


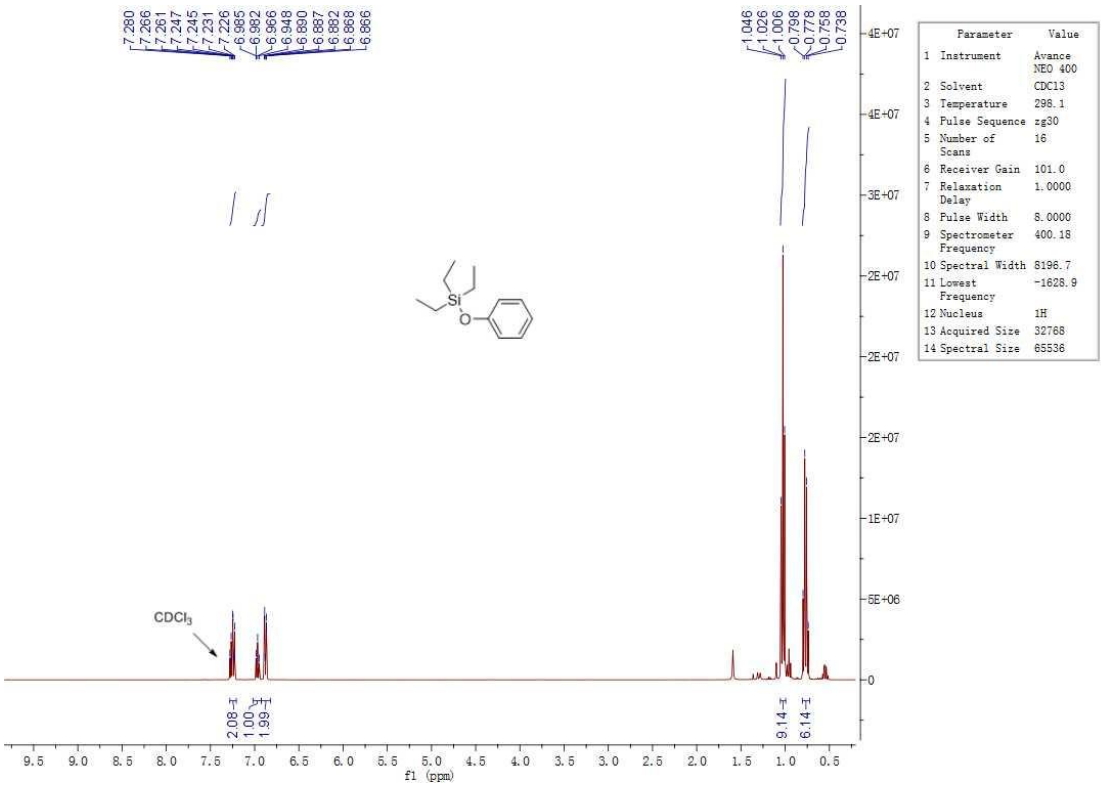


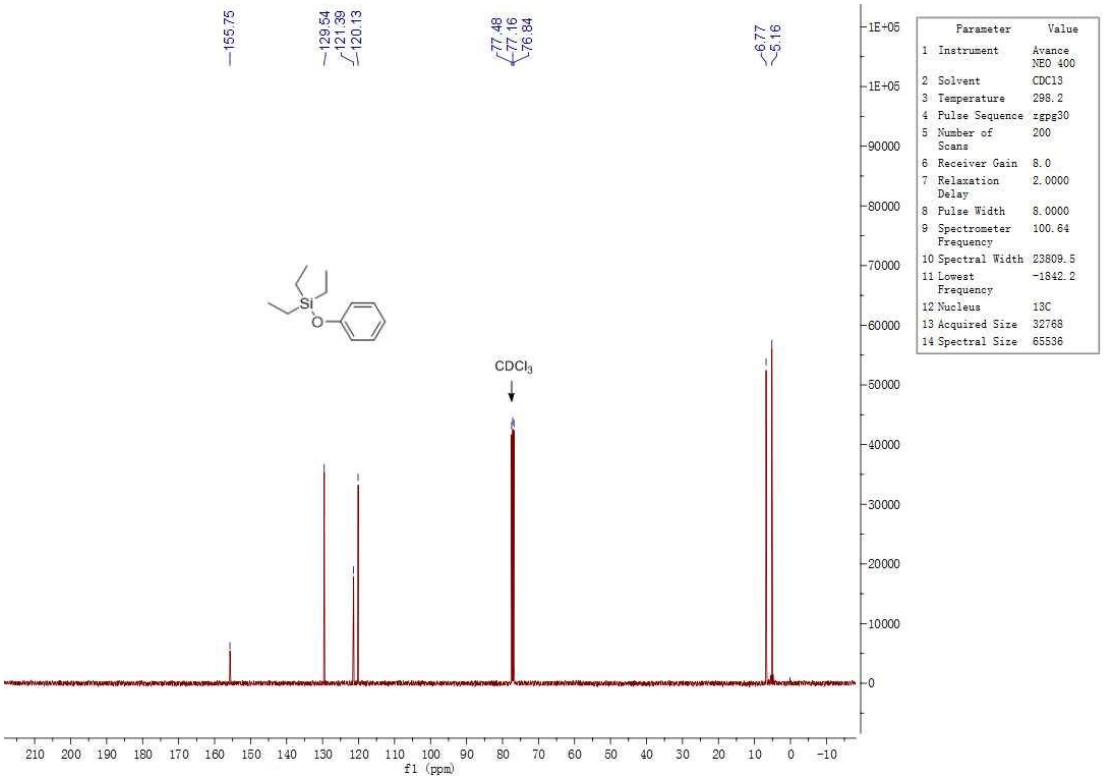


	Parameter	Value
1	Instrument	Avance NEO 400
2	Solvent	CDCl3
3	Temperature	298.1
4	Pulse Sequence	zgig
5	Number of Scans	512
6	Receiver Gain	40.3
7	Relaxation Delay	5.0000
8	Pulse Width	7.0000
9	Spectrometer Frequency	79.50
10	Spectral Width	31250.0
11	Lowest Frequency	-23575.5
12	Nucleus	29Si
13	Acquired Size	32768
14	Spectral Size	65536

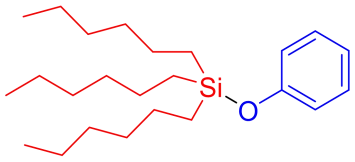
triethyl(phenoxy)silane (3s)

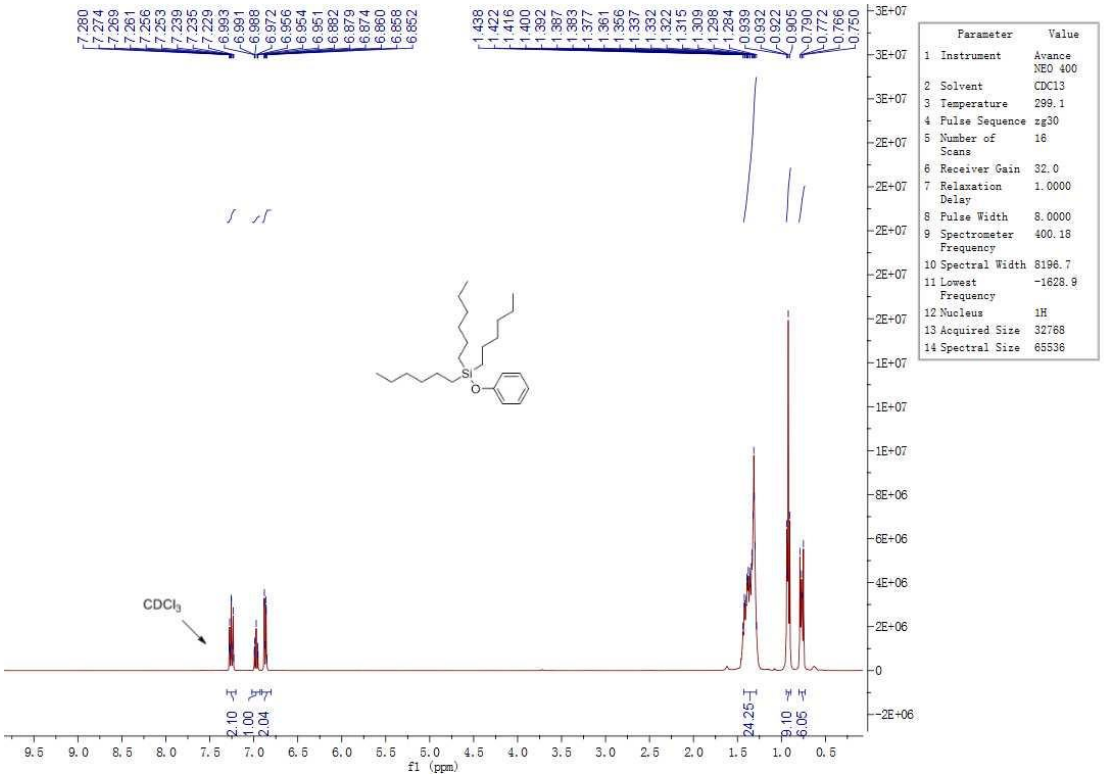


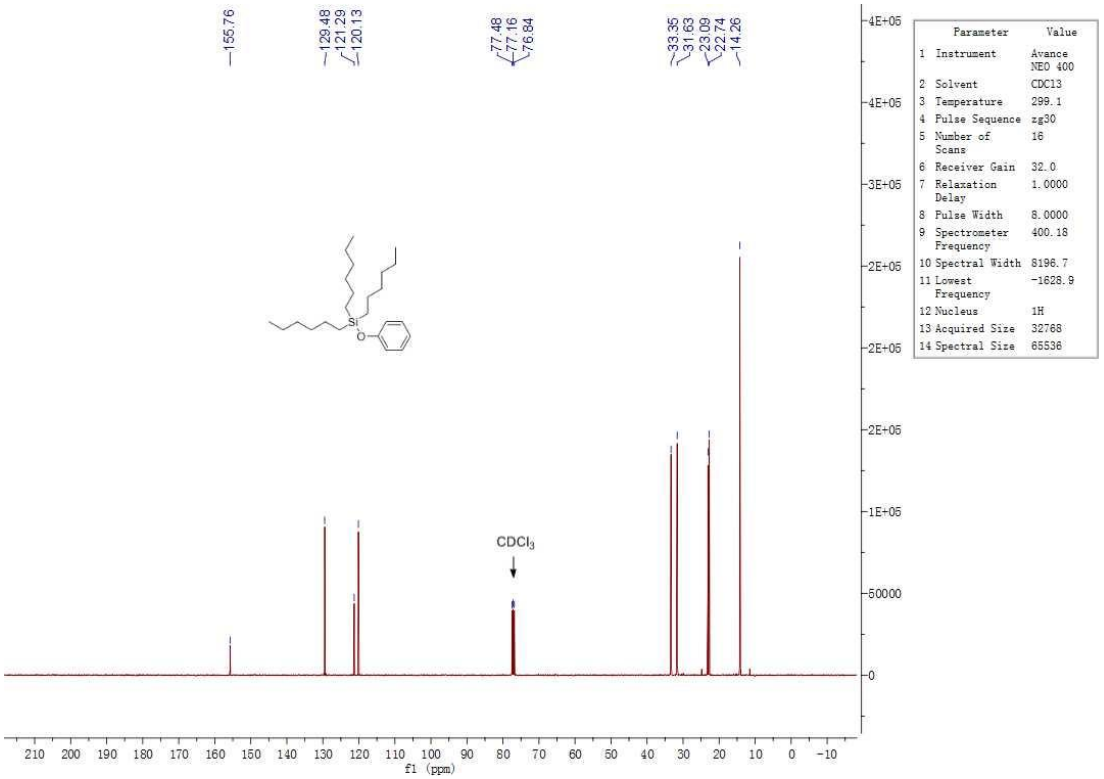




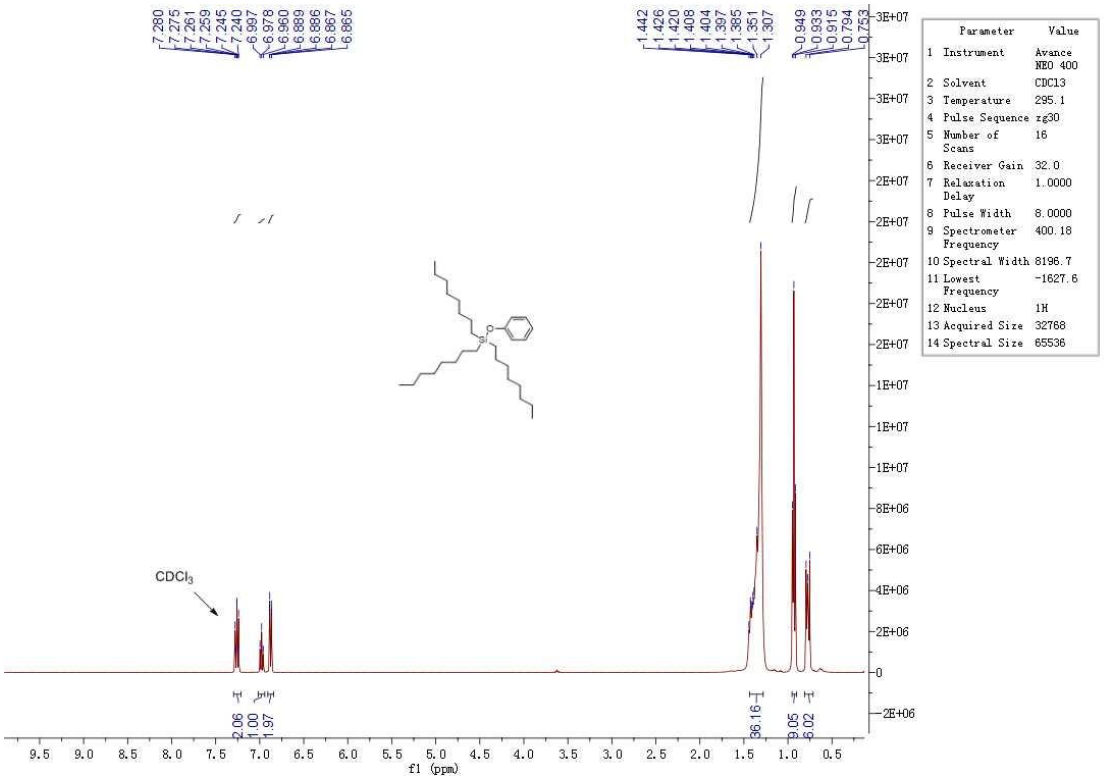
trihexyl(phenoxy)silane (3t)

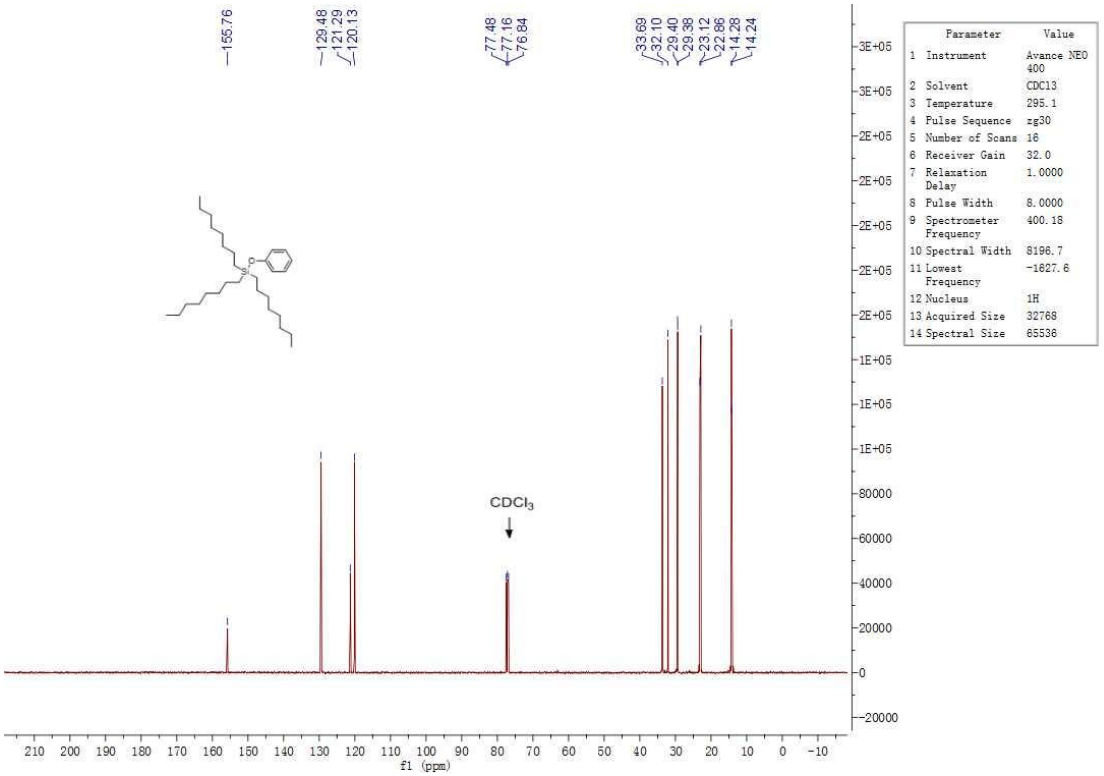




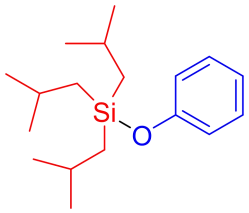


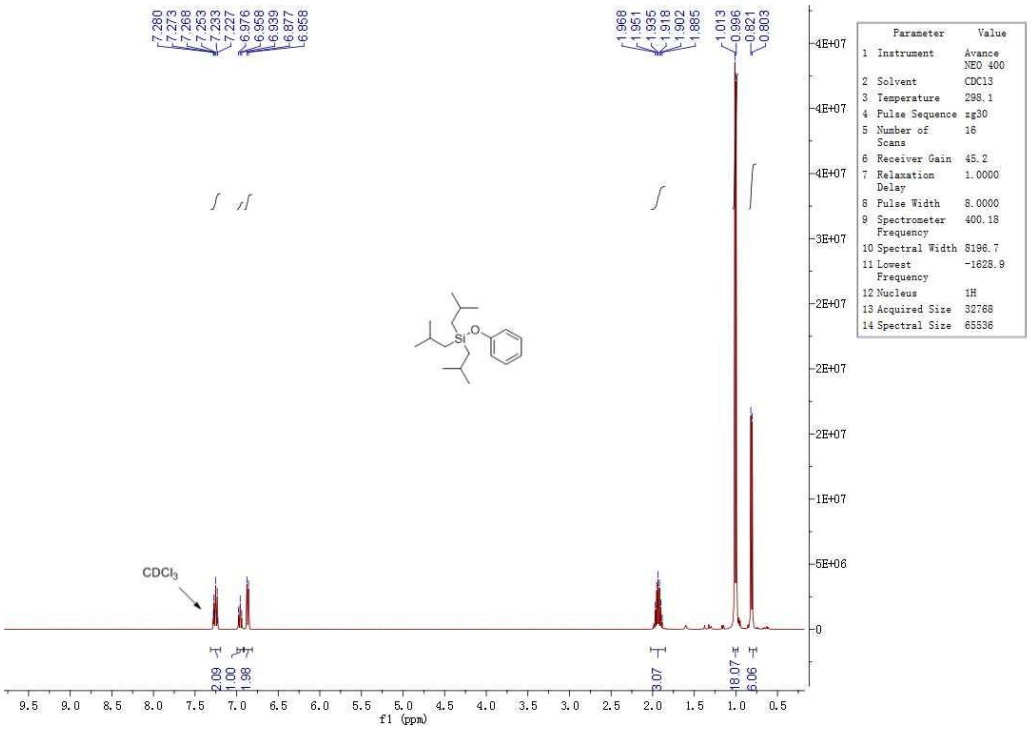
trioctyl(phenoxy)silane (3u)

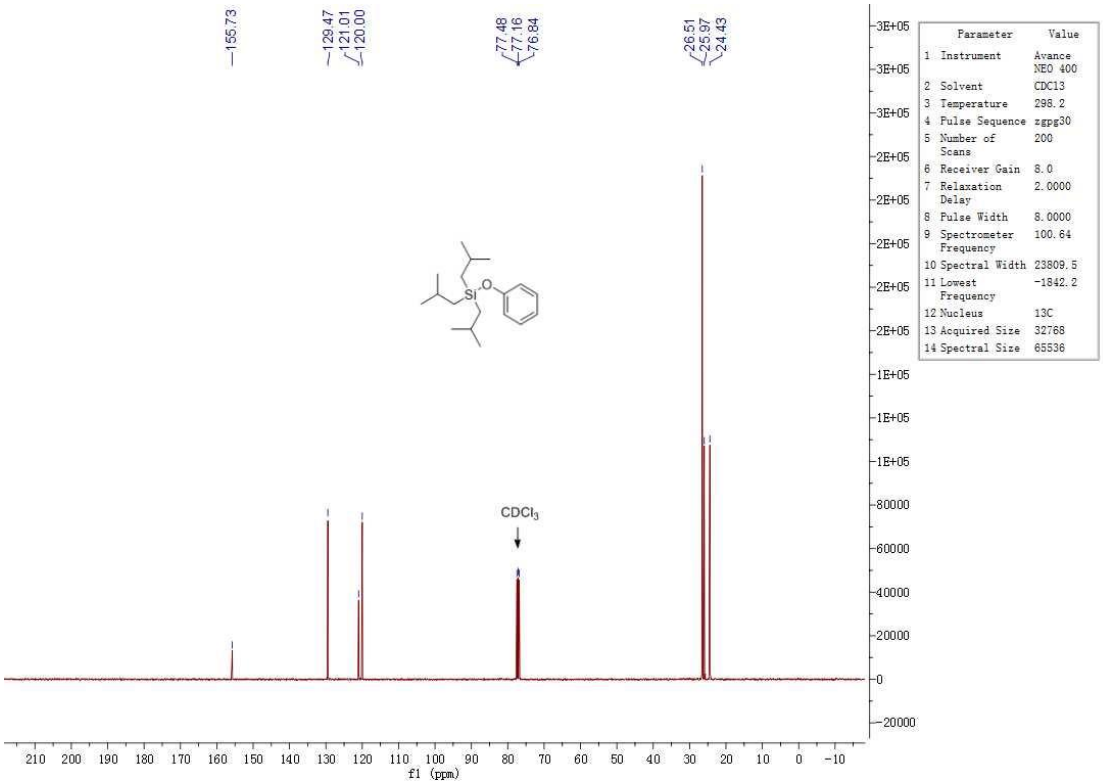




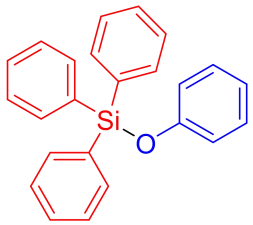
triisobutyl(phenoxy)silane (3v)

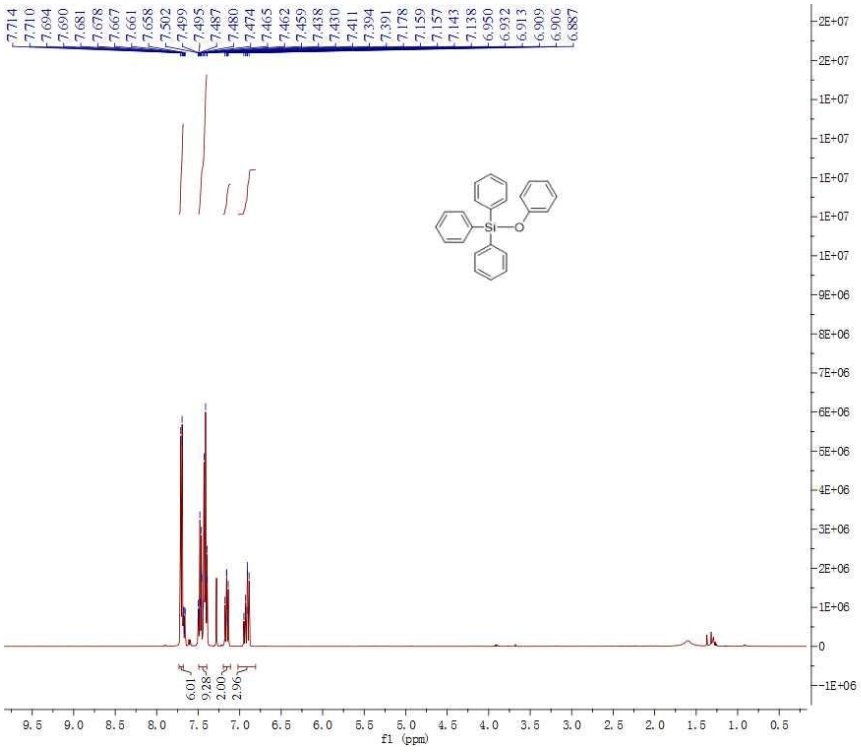




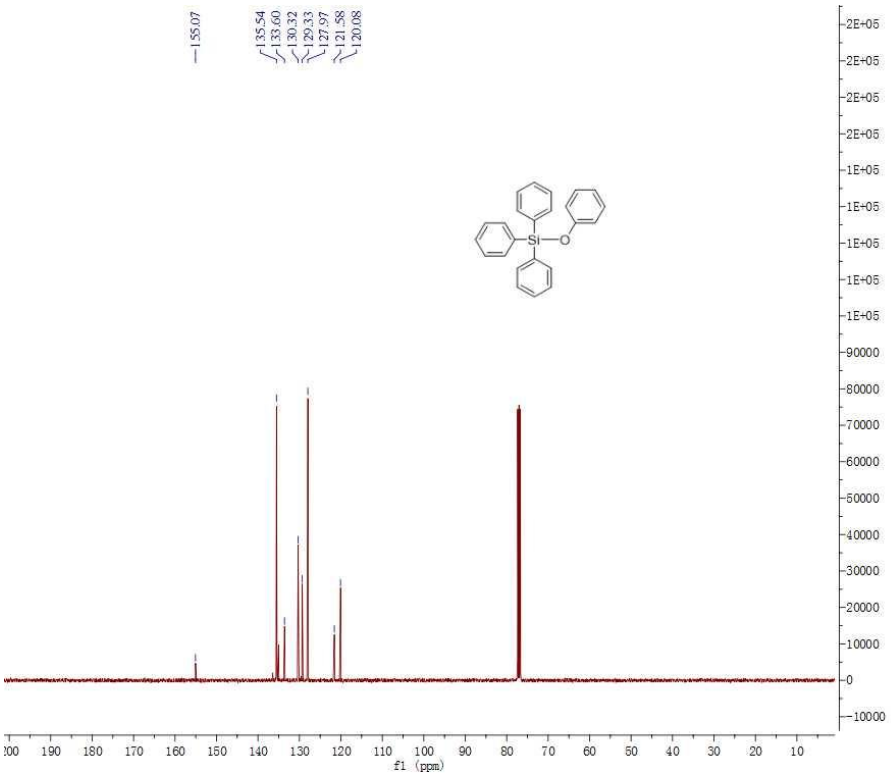


phenoxytriphenylsilane (3w)



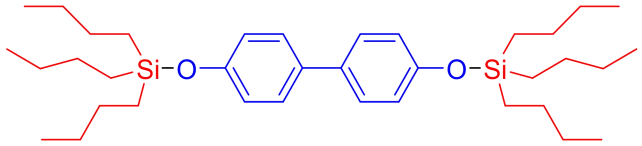


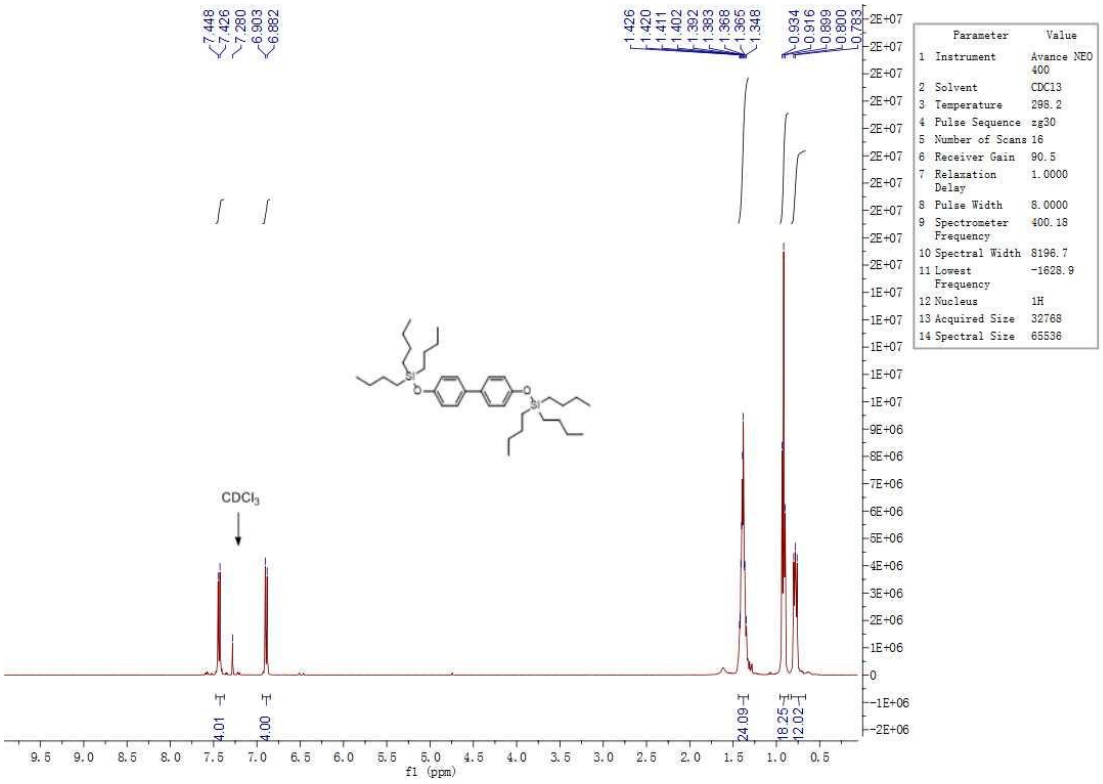
	Parameter	Value
1	Instrument	Avance NEO 400
2	Solvent	CDCl3
3	Temperature	298.3
4	Pulse Sequence	zg30
5	Number of Scans	16
6	Receiver Gain	101.0
7	Relaxation Delay	1.0000
8	Pulse Width	8.0000
9	Spectrometer Frequency	400.18
10	Spectral Width	8196.7
11	Lowest Frequency	-1628.9
12	Nucleus	1H
13	Acquired Size	32768
14	Spectral Size	65536

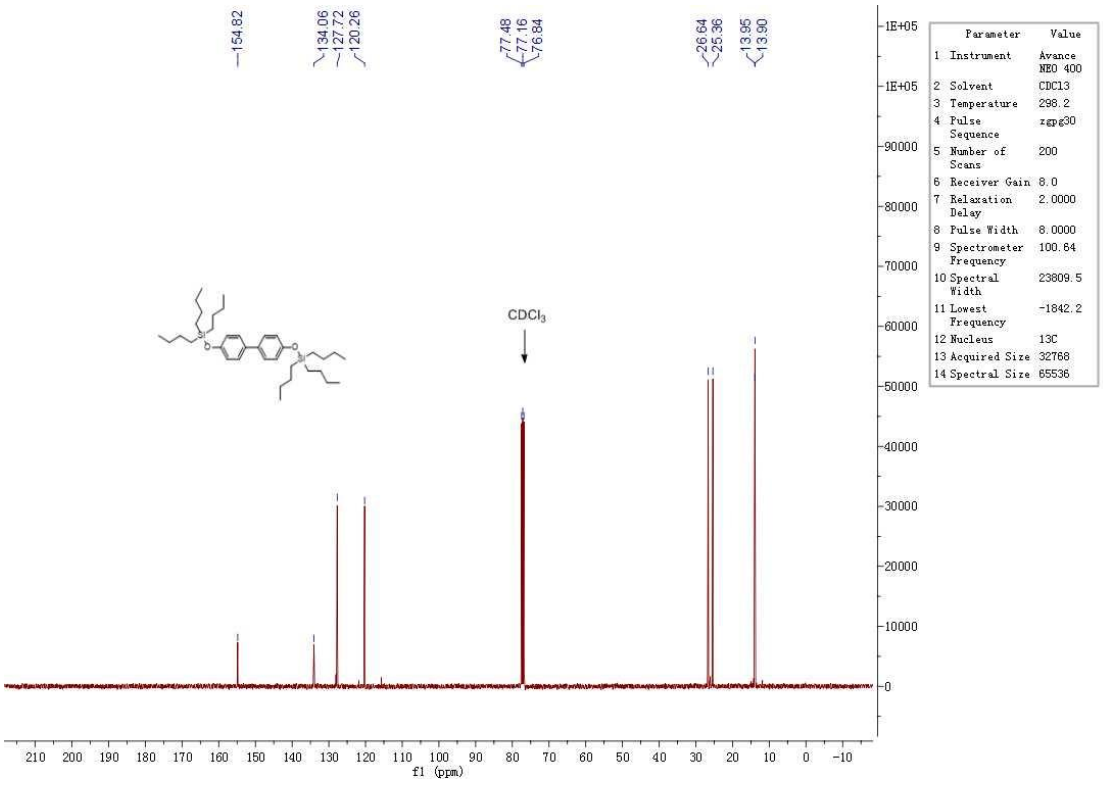


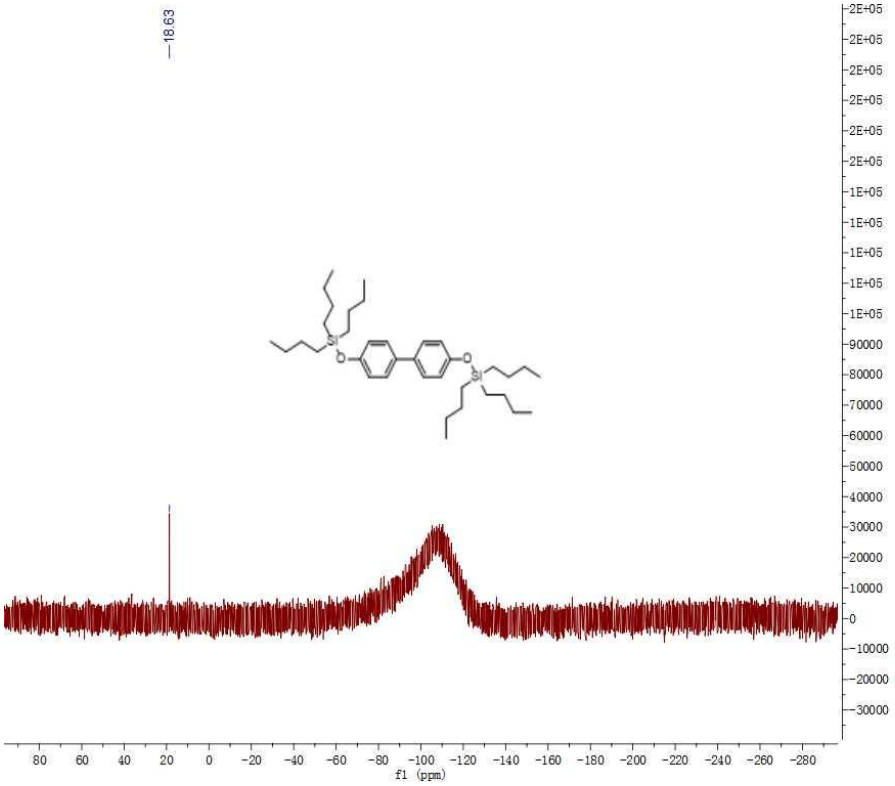
	Parameter	Value
1	Instrument	Avance NEO 400
2	Solvent	CDCl3
3	Temperature	298.1
4	Pulse Sequence	zgpg30
5	Number of Scans	300
6	Receiver Gain	8.0
7	Relaxation Delay	2.0000
8	Pulse Width	8.0000
9	Spectrometer Frequency	100.64
10	Spectral Width	23809.5
11	Lowest Frequency	-1842.2
12	Nucleus	13C
13	Acquired Size	32768
14	Spectral Size	65536

4,4'-bis((tributylsilyl)oxy)-1,1'-biphenyl (5a)



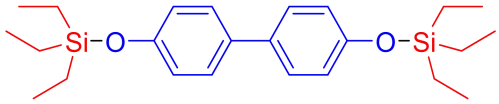


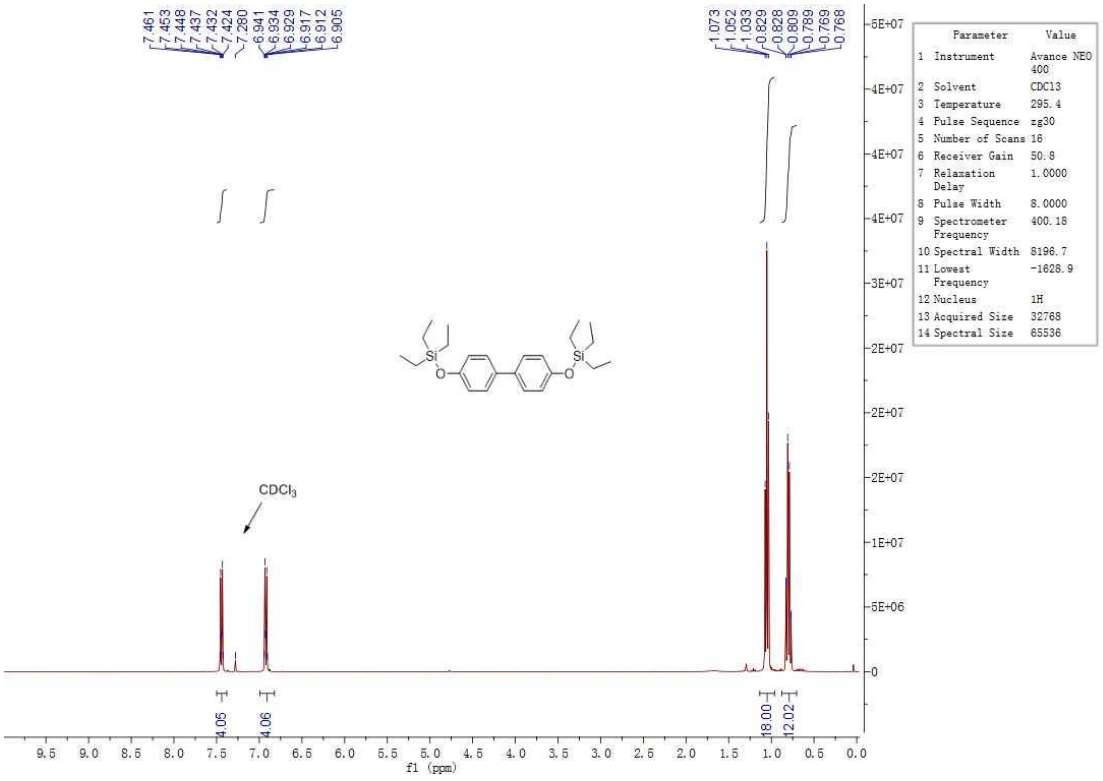


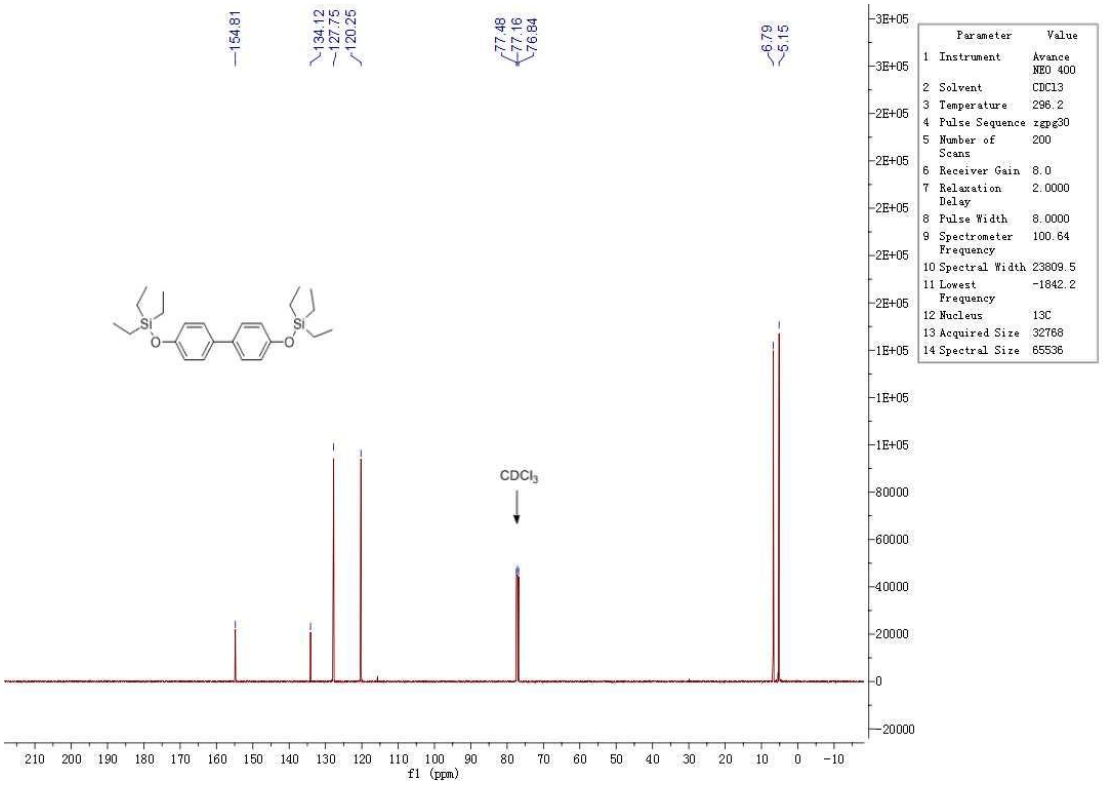


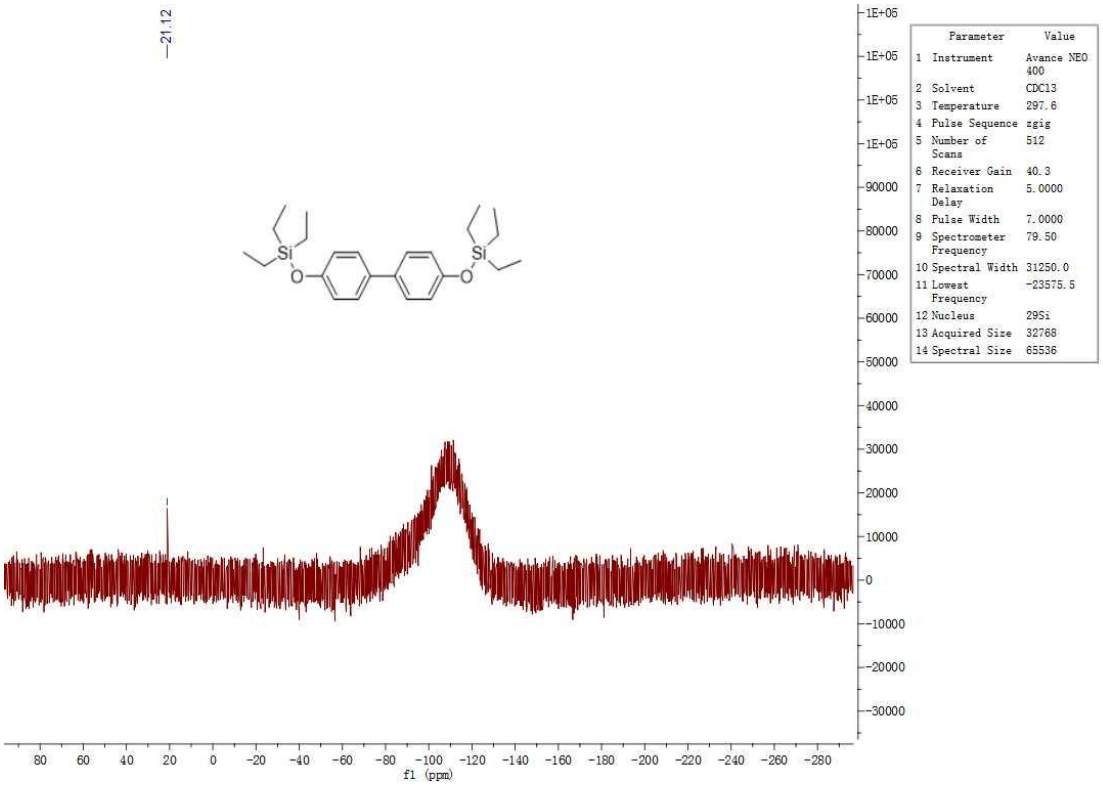
	Parameter	Value
1	Instrument	Avance NEO 400
2	Solvent	CDCl3
3	Temperature	297.7
4	Pulse Sequence	zgig
5	Number of Scans	512
6	Receiver Gain	40.3
7	Relaxation Delay	5.0000
8	Pulse Width	7.0000
9	Spectrometer Frequency	79.50
10	Spectral Width	31250.0
11	Lowest Frequency	-23575.5
12	Nucleus	29Si
13	Acquired Size	32768
14	Spectral Size	65536

4,4'-bis((triethylsilyl)oxy)-1,1'-biphenyl (5b)



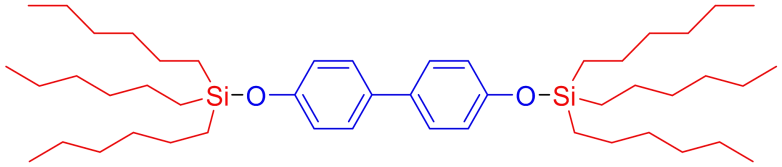


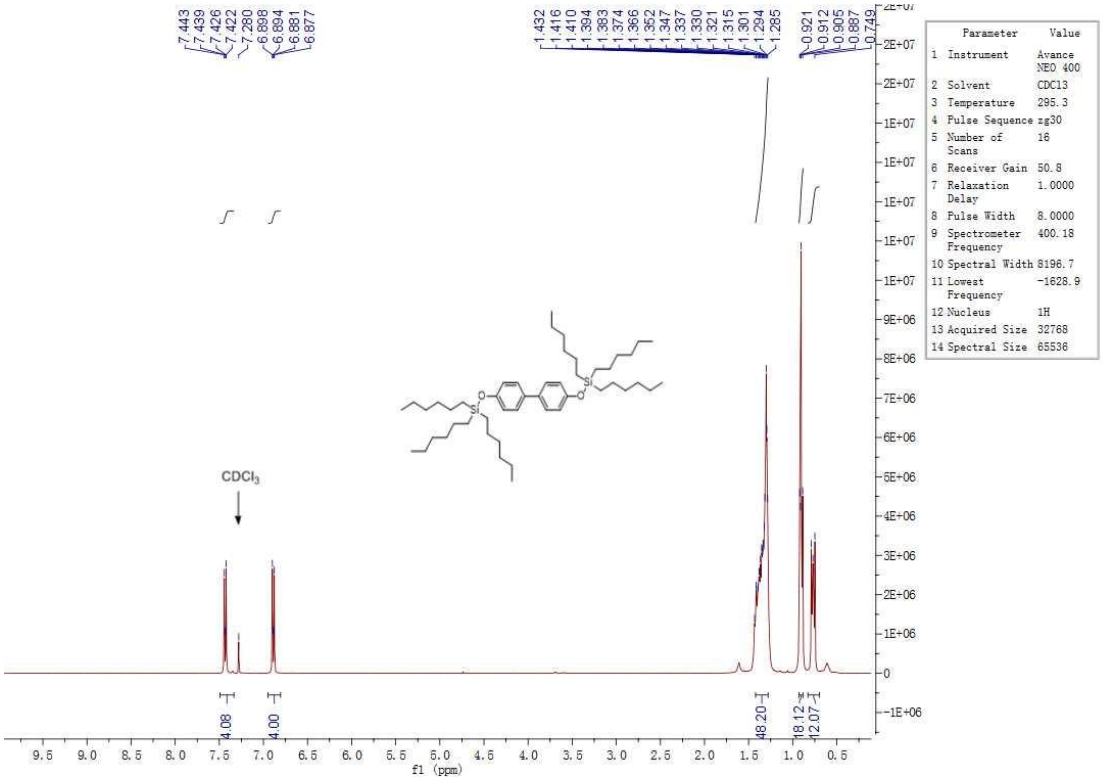


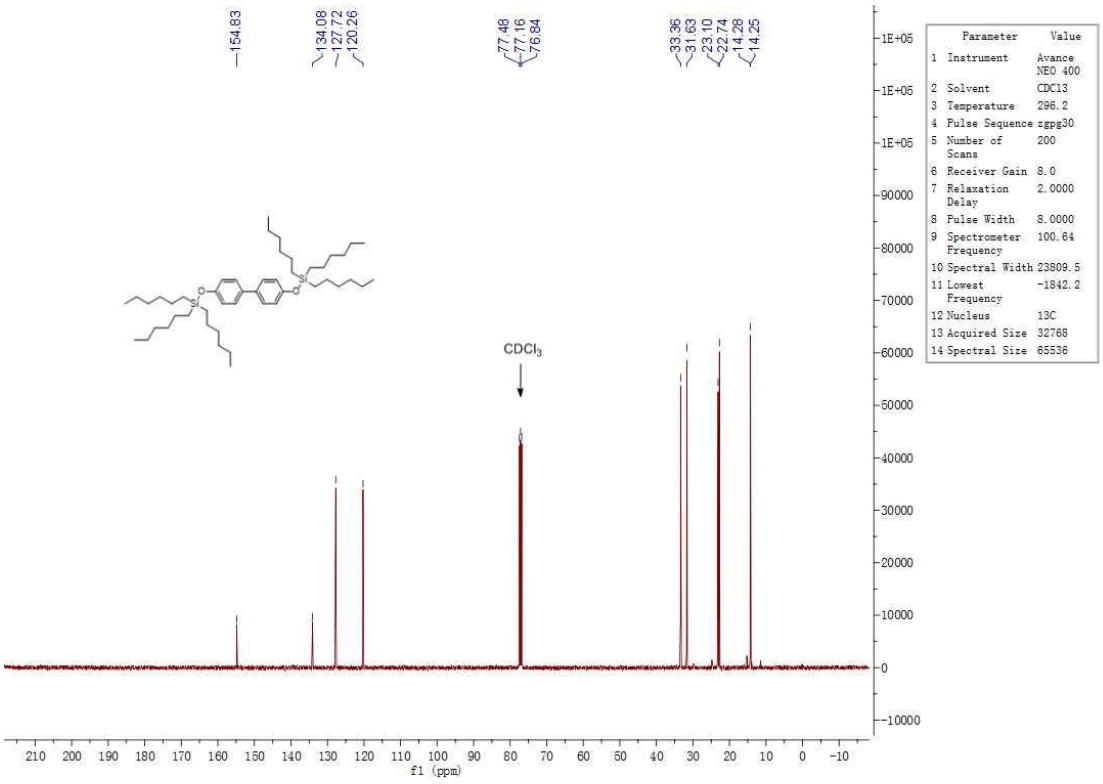


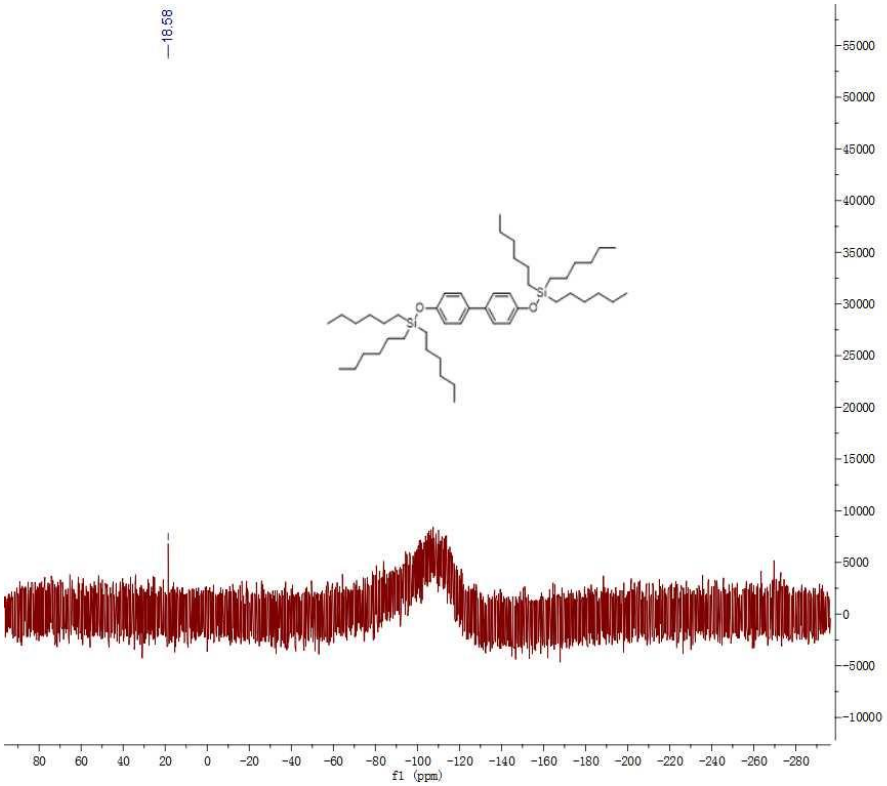
	Parameter	Value
1	Instrument	Avance NEO 400
2	Solvent	CDCl3
3	Temperature	297.6
4	Pulse Sequence	zgig
5	Number of Scans	512
6	Receiver Gain	40.3
7	Relaxation Delay	5.0000
8	Pulse Width	7.0000
9	Spectrometer Frequency	79.50
10	Spectral Width	31250.0
11	Lowest Frequency	-23575.5
12	Nucleus	29Si
13	Acquired Size	32768
14	Spectral Size	65536

4,4'-bis((trihexylsilyl)oxy)-1,1'-biphenyl (5c)



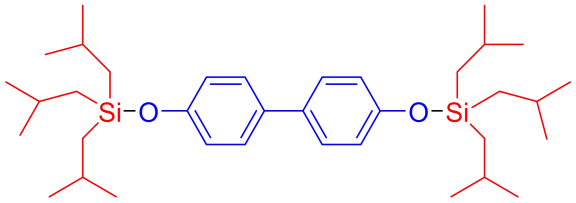


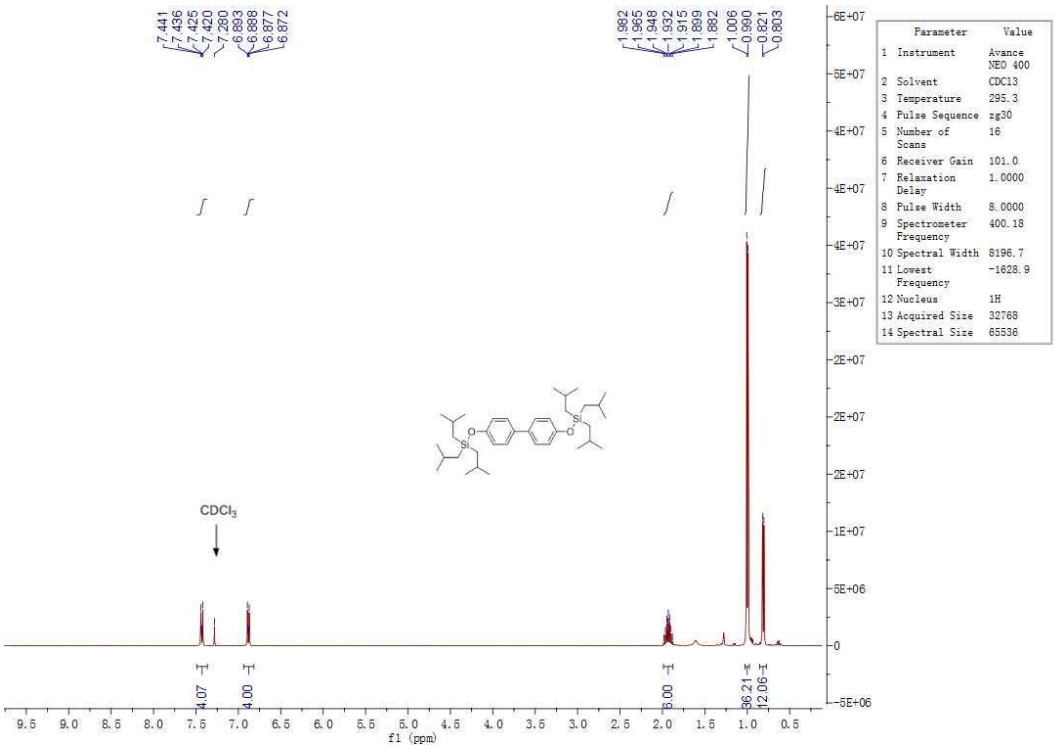


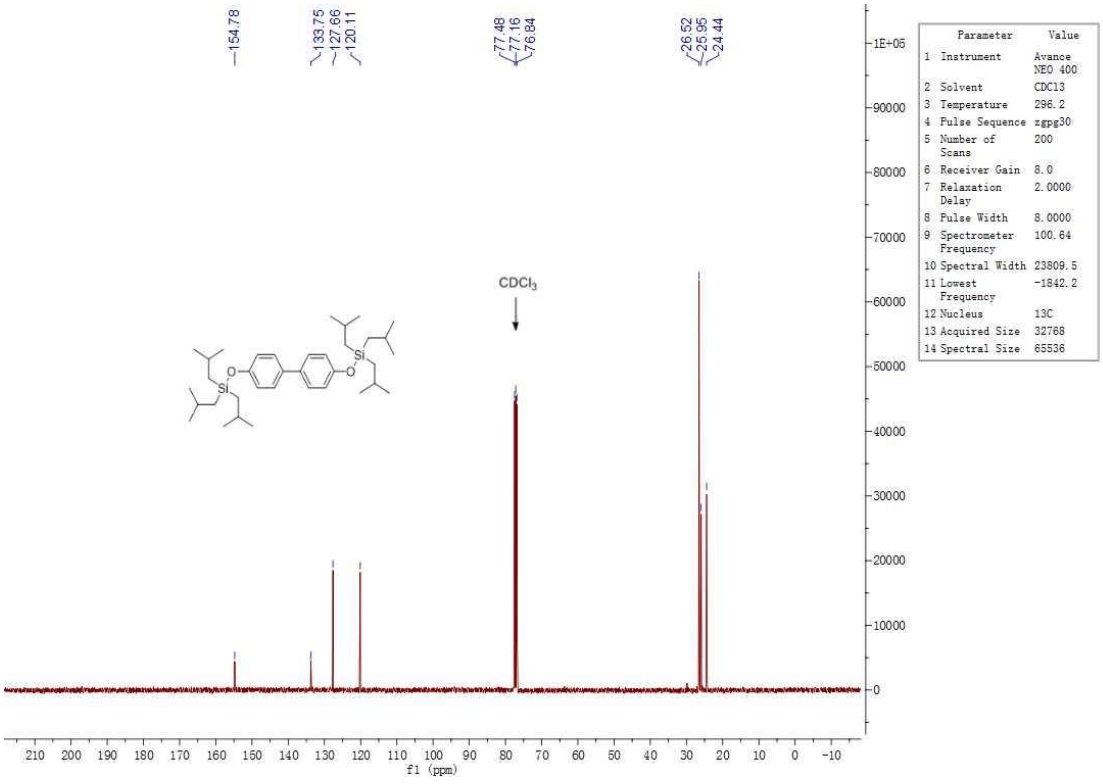


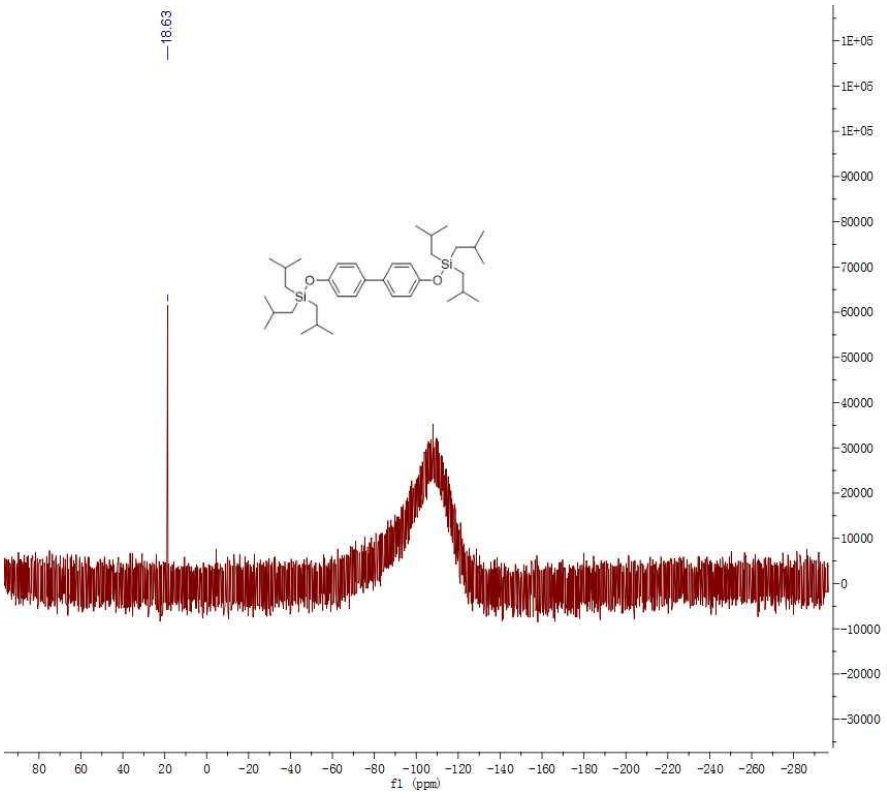
	Parameter	Value
1	Instrument	Avance NEO 400
2	Solvent	CDCl3
3	Temperature	297.6
4	Pulse Sequence	zgig
5	Number of Scans	128
6	Receiver Gain	40.3
7	Relaxation Delay	5.0000
8	Pulse Width	7.0000
9	Spectrometer Frequency	79.50
10	Spectral Width	31250.0
11	Lowest Frequency	-23575.5
12	Nucleus	29Si
13	Acquired Size	32768
14	Spectral Size	65536

4,4'-bis((triisobutylsilyl)oxy)-1,1'-biphenyl (5d)



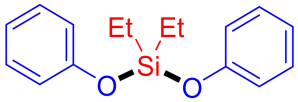


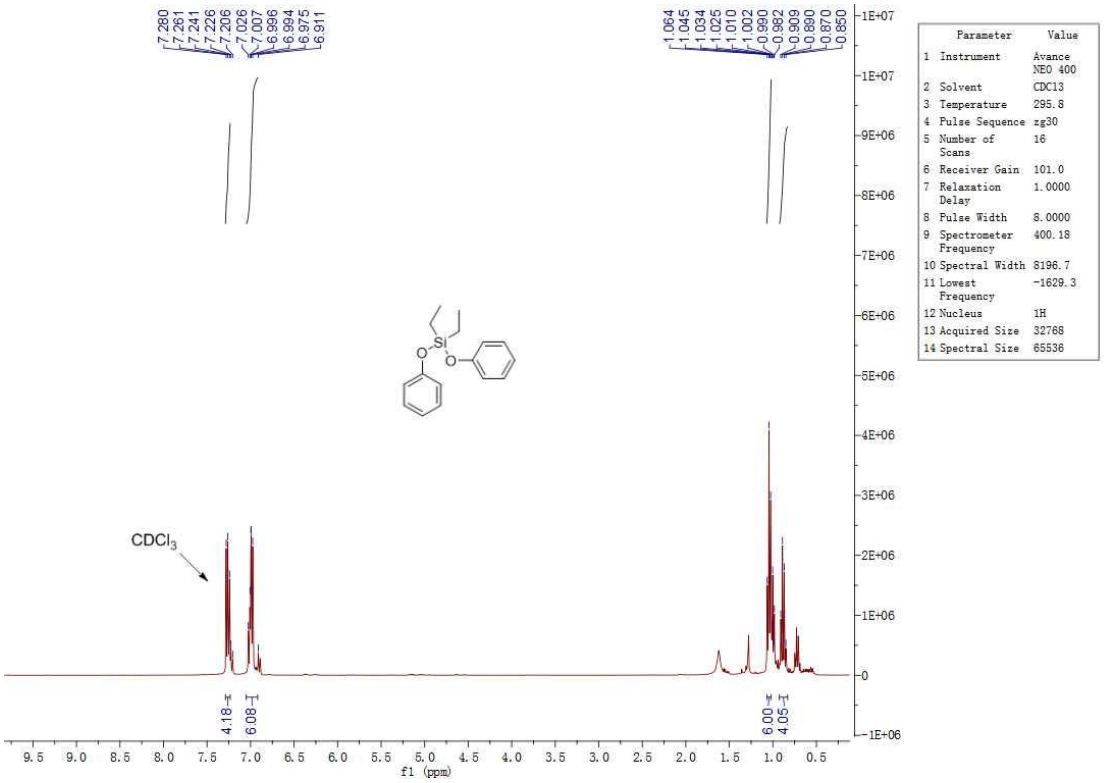




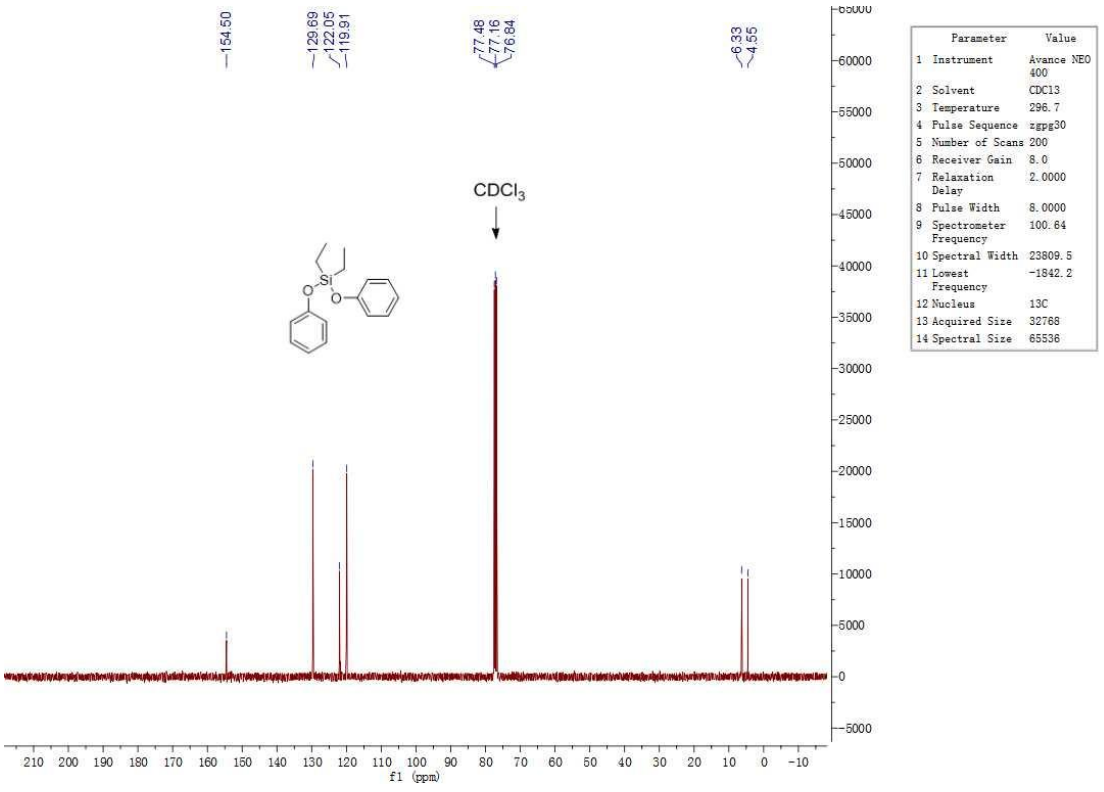
	Parameter	Value
1	Instrument	Avance NEO 400
2	Solvent	CDCl3
3	Temperature	297.7
4	Pulse Sequence	zgig
5	Number of Scans	512
6	Receiver Gain	40.3
7	Relaxation Delay	5.0000
8	Pulse Width	7.0000
9	Spectrometer Frequency	79.50
10	Spectral Width	31250.0
11	Lowest Frequency	-23575.5
12	Nucleus	29Si
13	Acquired Size	32768
14	Spectral Size	65536

diethyldiphenoxysilane (6)



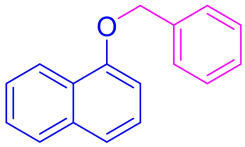


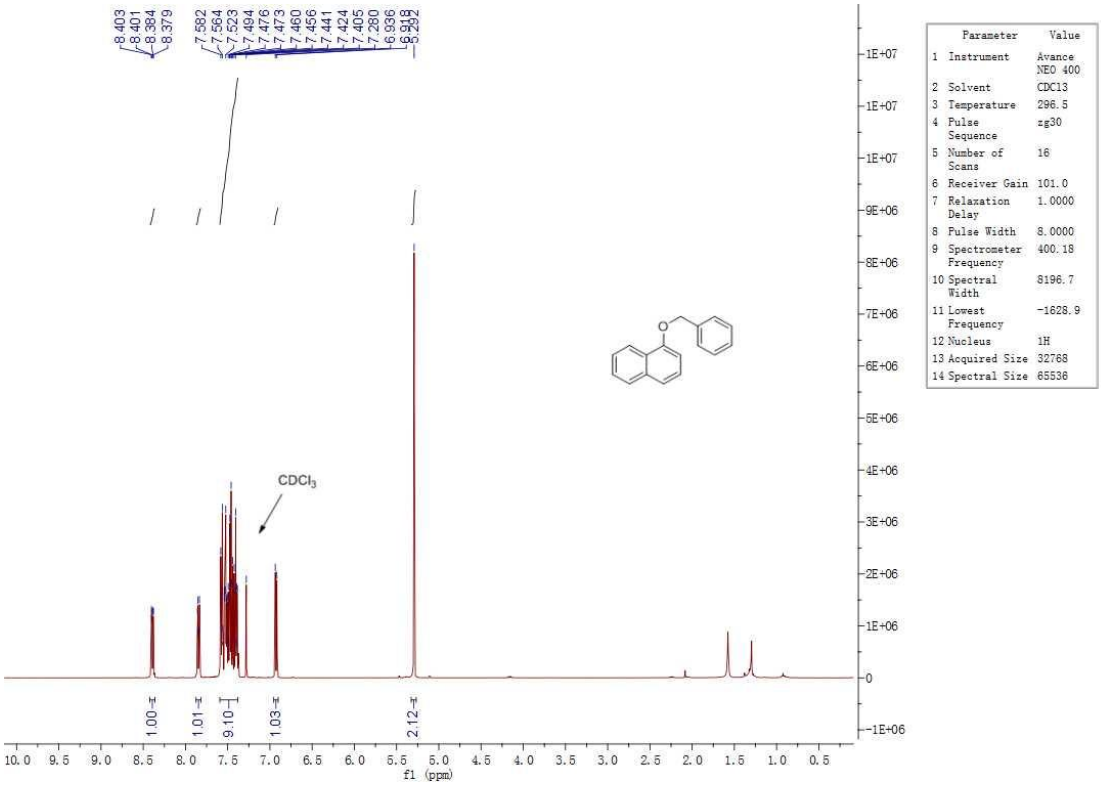
	Parameter	Value
1	Instrument	Avance NEO 400
2	Solvent	CDCl3
3	Temperature	295.8
4	Pulse Sequence	zg30
5	Number of Scans	16
6	Receiver Gain	101.0
7	Relaxation Delay	1.0000
8	Pulse Width	8.0000
9	Spectrometer Frequency	400.18
10	Spectral Width	8196.7
11	Lowest Frequency	-1629.3
12	Nucleus	1H
13	Acquired Size	32768
14	Spectral Size	65536

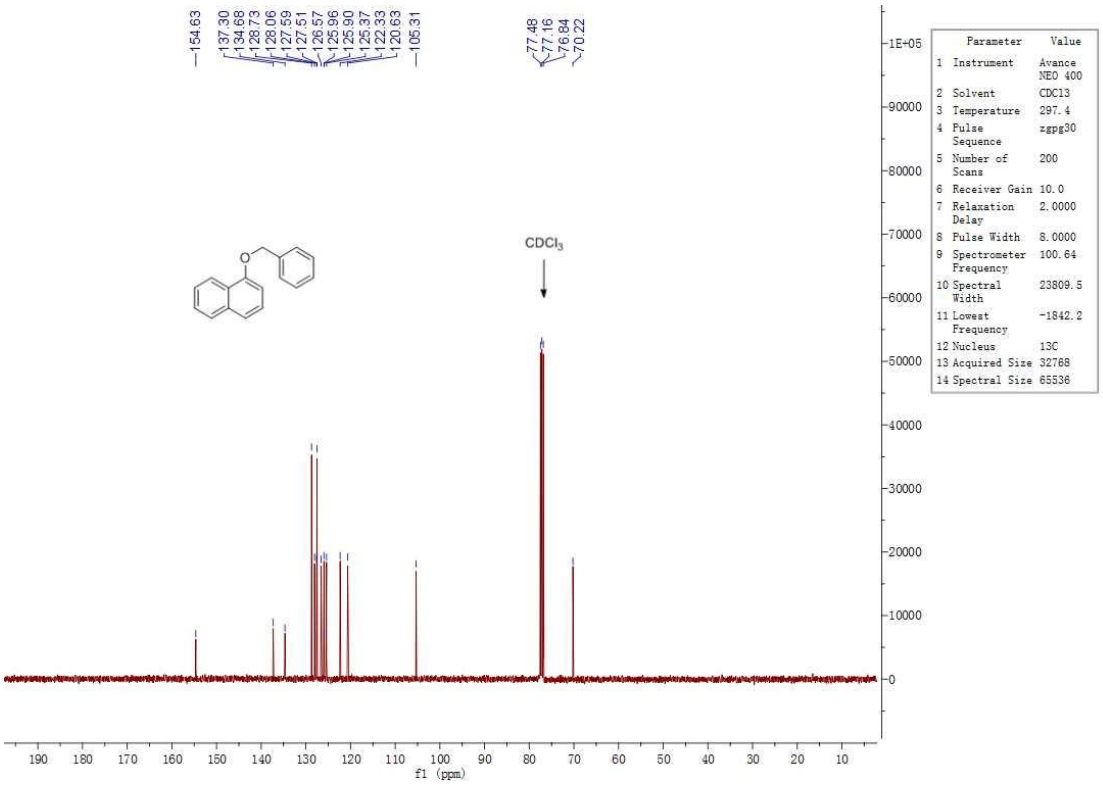


	Parameter	Value
1	Instrument	Avance NEO 400
2	Solvent	CDCl3
3	Temperature	296.7
4	Pulse Sequence	zgpg30
5	Number of Scans	200
6	Receiver Gain	8.0
7	Relaxation Delay	2.0000
8	Pulse Width	8.0000
9	Spectrometer Frequency	100.64
10	Spectral Width	23809.5
11	Lowest Frequency	-1842.2
12	Nucleus	13C
13	Acquired Size	32768
14	Spectral Size	65536

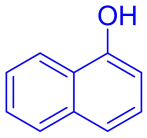
1-(benzyloxy)naphthalene (7)

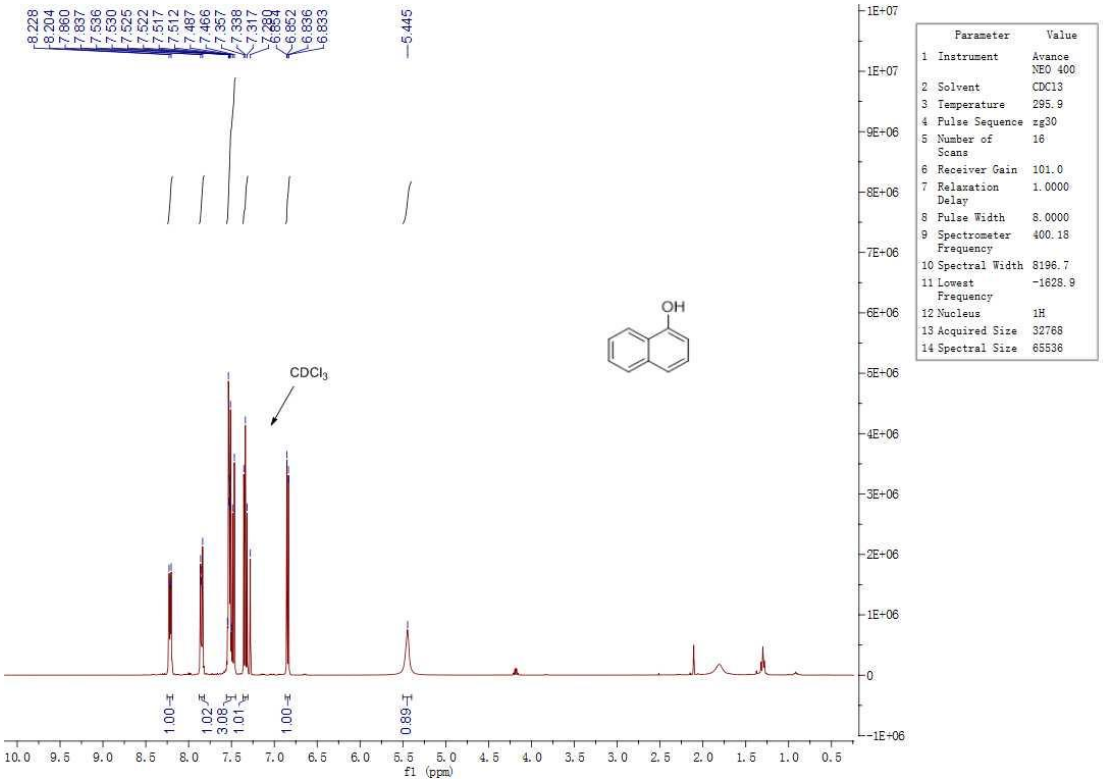


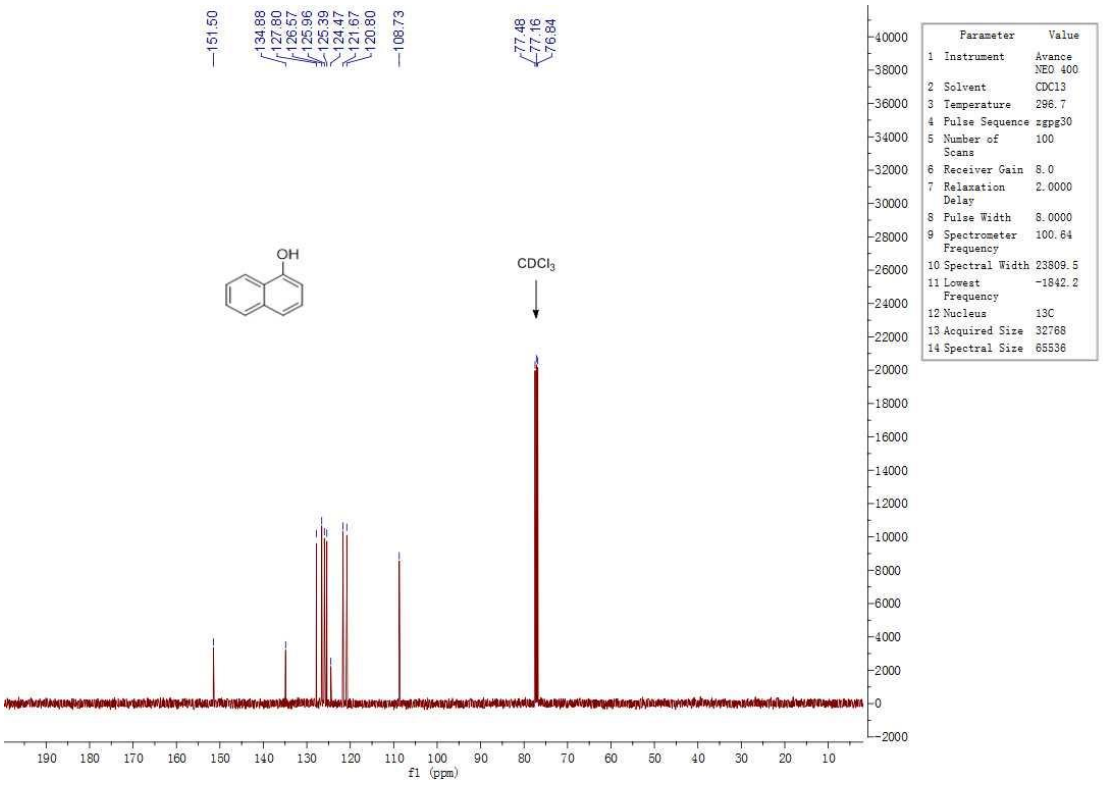




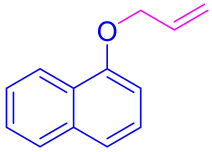
naphthalen-1-ol (8)

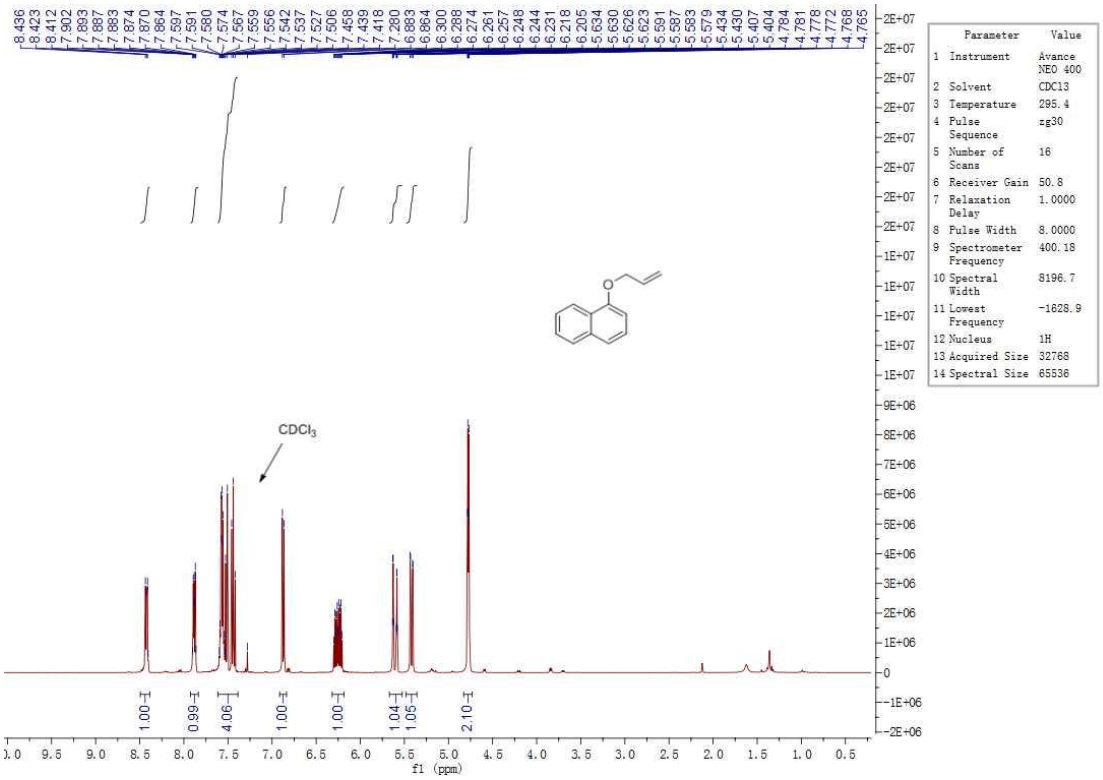




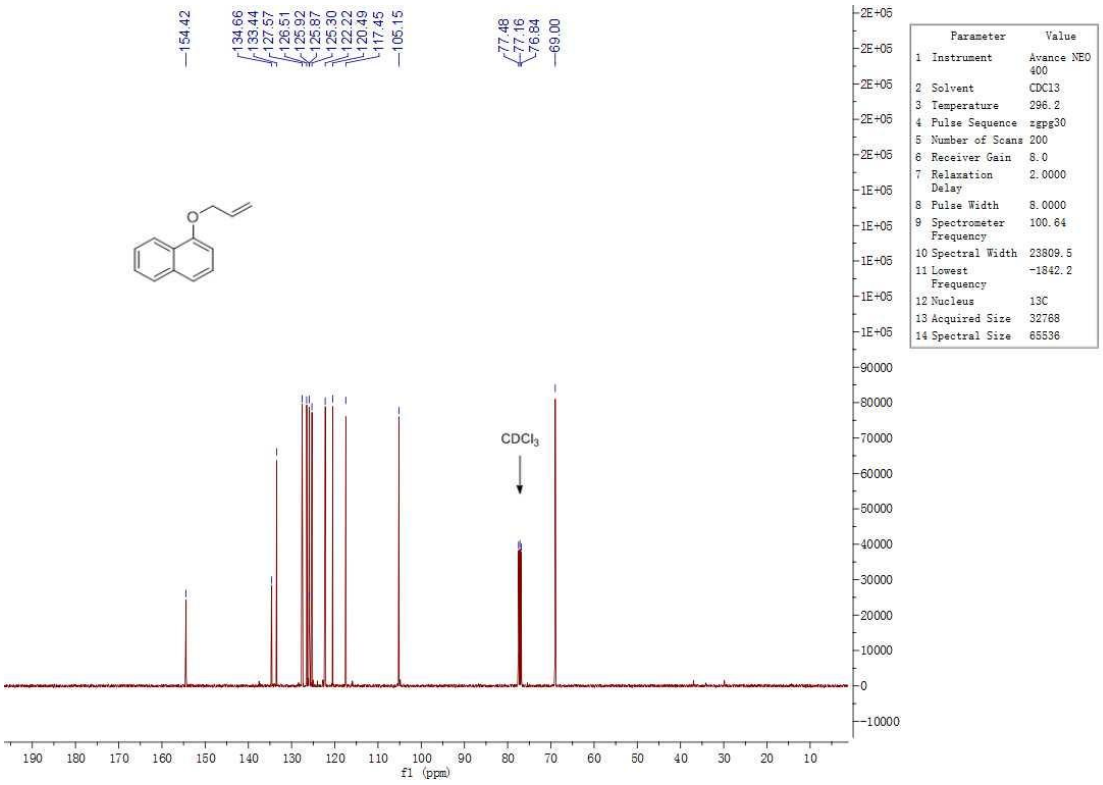


1-(allyloxy)naphthalene (9)





	Parameter	Value
1	Instrument	Avance NEO 400
2	Solvent	CDCl3
3	Temperature	295.4
4	Pulse Sequence	zg30
5	Number of Scans	16
6	Receiver Gain	50.8
7	Relaxation Delay	1.0000
8	Pulse Width	8.0000
9	Spectrometer Frequency	400.18
10	Spectral Width	8196.7
11	Lowest Frequency	-1628.9
12	Nucleus	1H
13	Acquired Size	32768
14	Spectral Size	65536



	Parameter	Value
1	Instrument	Avance NEO 400
2	Solvent	CDCl3
3	Temperature	296.2
4	Pulse Sequence	zgpg30
5	Number of Scans	200
6	Receiver Gain	8.0
7	Relaxation Delay	2.0000
8	Pulse Width	8.0000
9	Spectrometer Frequency	100.64
10	Spectral Width	23809.5
11	Lowest Frequency	-1842.2
12	Nucleus	13C
13	Acquired Size	32768
14	Spectral Size	65536