Electronic Supplementary Material (ESI) for Dalton Transactions.
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Supporting Informations

Experimental section

4b,8b,12b-Tribromotribenzotriquinacene (1, IUPAC: 4b,8b,12b-tribromo-4b,8b,12b,12d-tetrahydrodibenzo[2,3:4,5]pentaleno[1,6-*ab*]indene

This compound was obtained from tribenzotriquinacene according to a literature protocol.[S1,S2] Yellow solid. ^{1}H NMR (500 MHz, $CDCl_3$): 7.66 (m, 6H), 7.38 (m, 6H), 5.85 (s, 1H).

4b,8b,12b-Trimethyltribenzotriquinacene (2, IUPAC: 4b,8b,12b-trimethyl-4b,8b,12b,12d-tetrahydrodibenzo[2,3:4,5]pentaleno[1,6-*ab*]indene

This compound was obtained from tribromotribenzotriquinacene according to a literature protocol.[S3] Colourless solid. ^{1}H NMR (300 MHz, $CDCl_3$): 7.39 (m, 6H), 7.18 (m, 6H), 3.18 (s, 1H), 1.83 (s, 9H).

4b,8b,12b-Triallyltribenzotriquinacene (IUPAC: 4b,8b,12b-triallyl-4b,8b,12b,12d-tetrahydrodibenzo[2,3:4,5]pentaleno[1,6-*ab*]indene

This compound was obtained from tribromotribenzotriquinacene according to a literature protocol.[S3] Colourless solid. ^{1}H NMR (300 MHz, $CDCl_3$): 7.37 (m, 6H), 7.17 (m, 6H), 5.51 (m, 3H), 5.09 (d, 3H), 5.05 (dd, 3H), 3.69 (s, 1H), 2.82 (d, 6H).

Crystal structure determination

Suitable crystals of the compounds **2**, **3**, **7** and **9**, **16**, **17**, and **18** were obtained by slow evaporation of saturated solutions of *n*-hexane (**2** and **9**), toluene (**3** and **7**), DMF (**18**) and an 10:1 mixture of *n*-pentane/ dichloromethane (**16** and **17**). Compounds **8**, **10**, **12**, **13** and **15** were crystallized by cooling highly concentrated solutions of *n*-hexane to −40 °C. Single crystals were selected, coated with *paratone-N* oil, mounted on glass fibres and transferred onto the goniometer of the

diffractometer into a nitrogen-gas cold-stream solidifying the oil. Data collection was performed on a *SuperNova, Dual, Cu at zero, Atlas* diffractometer (**2**, **7**, **9**, **12**, **13**, **15**, **16**, **17** and **18**) and a SuperNova, Single source at offset, Eos diffractometer (**3** and **10**). The structures were solved by direct methods and refined by full-matrix least-squares cycles (program SHELX-97).[S4] Crystal and refinement details, as well as CCDC numbers are provided in Tables S1-S3. CCDC 1514268-1514279 contain the supplementary crystallographic data for this paper. These data can be obtained free of charge from The Cambridge Crystallographic Data Centre via www.ccdc.ac.uk/data_request/cif.

Table S1. Crystallographic data of **2**, **3**, **7** and **8**.

	2	**3**	**7**	**8**
Formula	$C_{25}H_{22}$	$C_{25}H_{16}Br_6$	$C_{28}H_{34}Si_3$	$C_{31}H_{40}Si_3$
M_w	322.42	795.84	454.82	496.90
Crystal size [mm]	0.32×0.14×0.03	0.08×0.03×0.01	0.26×0.18×0.03	0.15×0.13×0.02
Temperature [K]	100.0(1)	100.0(1)	100.0(1)	100.0(1)
Radiation	Cu-Kα	Mo-Kα	Cu-Kα	Cu-Kα
Crystal system	triclinic	monoclinic	triclinic	trigonal
Space group	$P\bar{1}$	$P2_1/n$	$P\bar{1}$	$R\bar{3}$
a [Å]	8.7550(2)	13.4708(4)	9.3175(3)	10.2006(1)
b [Å]	12.8417(2)	9.3343(2)	10.0431(4)	10.2006(1)
c [Å]	16.3598(3)	18.9329(5)	15.1272(6)	46.3518(6)
α [°]	99.93(1)	90	78.52(1)	90
β [°]	94.50(1)	92.81(1)	89.93(1)	90
γ [°]	97.38(1)	90	66.03(1)	120
V [Å^3]	1787.22(6)	2377.77(11)	1267.56(9)	4176.87(11)
Z	4	4	2	6
ρ_{calcd} [mg mm^{-3}]	1.198	2.223	1.192	1.185
μ [mm^{-1}]	0.506	10.144	1.807	1.684
F(000)	688	1504	488	1608
2θ range [°]	5.5 to 144.0	3.6 to 52.0	6.0 to 133.2	10.2 to 149.7
Index ranges	$-10 \le h \le 10$ $-15 \le k \le 15$ $-20 \le l \le 20$	$-16 \le h \le 16$ $-11 \le k \le 11$ $-23 \le l \le 23$	$-11 \le h \le 11$ $-9 \le k \le 11$ $-17 \le l \le 17$	$-12 \le h \le 12$ $-12 \le k \le 12$ $-57 \le l \le 57$
Total reflns	31757	101948	17086	16974
Unique reflns	7020	3834	3919	1854
R_{int}	0.0273	0.0970	0.0453	0.0234
Reflns [$I>2\sigma(I)$]	6211	4684	4457	1914
Parameters	627	283	286	158
R_1/ wR_2 [$I>2\sigma(I)$]	0.0358/0.0873	0.0276/0.0525	0.0497/0.1303	0.0378/0.1042
R_1/ wR_2 (all data)	0.412/0.0920	0.0415/0.0561	0.0564/0.1360	0.0386/0.1015
$\rho_{max/min}$ [*e* Å^{-3}]	0.26/−0.18	0.67/−0.44	0.63/−0.54	0.76/−0.25
CCDC no.	1514268	1514269	1514270	1514271

Table S2. Crystallographic data of **9**, **10**, **12** and **13**.

	9	**10**	**12**	**13**
Formula	$C_{28}H_{31}F_3Si_3$	$C_{28}H_{31}Cl_3Si_3$	$C_{34}H_{40}Cl_6Si_3$	$C_{34}H_{40}Cl_3F_6SbSi_3$
M_w	508.80	558.15	745.63	875.03
Crystal size [mm]	0.29×0.18×0.56	0.33×0.25×0.14	0.12×0.08×0.04	0.46×0.23×0.05
Temperature [K]	100.0(1)	100.0(1)	100.0(1)	100.0(1)
Radiation	Cu-Kα	Mo-Kα	Cu-Kα	Mo-Kα
Crystal system	monoclinic	trigonal	monoclinic	monoclinic
Space group	$P2_1/c$	$P\bar{3}$	$P2_1/c$	$P2_1/n$
a [Å]	28.6621(1)	10.1259(3)	12.7815(4)	10.2740(2)
b [Å]	9.6455(1)	10.1259(3)	17.1132(5)	26.8362(6)
c [Å]	19.3737(1)	15.3317(9)	17.4795(6)	14.2421(3)
α [°]	90	90	90	90
β [°]	105.72(1)	90	103.75(1)	105.17(1)
γ [°]	90	120	90	90
V [Å^3]	5515.78(4)	1361.41(11)	3713.7(2)	3790.02(14)
Z	8	2	4	4
ρ_{calcd} [mg mm^{-3}]	1.331	1.362	1.334	1.533
μ [mm^{-1}]	2.009	0.486	5.324	1.088
F(000)	2144	584	1552	1768
2θ range [°]	6.41 to 144.0	5.3 to 75.0	7.1 to 150.6	5.1 to 60.2
	$-35 \le h \le 35$	$-17 \le h \le 17$	$-16 \le h \le 15$	$-14 \le h \le 14$
Index ranges	$-11 \le k \le 11$	$-17 \le k \le 17$	$-11 \le k \le 21$	$-37 \le k \le 37$
	$-23 \le l \le 23$	$-26 \le l \le 26$	$-16 \le l \le 21$	$-20 \le l \le 20$
Total reflns	145084	86809	15261	222083
Unique reflns	10125	4491	5606	11143
R_{int}	0.0293	0.0343	0.0315	0.0524
Reflns [$I>2\sigma(I)$]	9609	4796	4684	9358
Parameters	647	138	409	554
R_1/ wR_2 [$I>2\sigma(I)$]	0.0465/0.1224	0.0301/0.0828	0.0676/0.1860	0.347/0.0874
R_1/ wR_2 (all data)	0.0482/0.1239	0.0326/0.0838	0.0881/0.2055	0.0431/0.0931
$\rho_{max/min}$ [e Å^{-3}]	0.91/−0.90	0.62/−0.22	1.38/−1.18	0.74/−0.73
CCDC no.	1514272	1514273	1514274	1514275

Table S3. Crystallographic data of **15**, **16**, **17** and **18**.

	15	**16**	**17**	**18**
Formula	$C_{31}H_{31}Cl_3F_9SbSi_3$	$C_{40}H_{25}I_3$, 1.5 $CHCl_3$	$C_{55}H_{52}Si_3$	$C_{46}H_{28}$
M_w	886.93	1065.35	797.23	580.68
Crystal size [mm]	0.27×0.18×0.12	0.16×0.08×0.02	0.20×0.17×0.13	0.19×0.10×0.02
Temperature [K]	220.0(1)	100.0(1)	100.0(1)	100.0(1)
Radiation	Cu-Kα	Cu-Kα	Cu-Kα	Cu-Kα
Crystal system	trigonal	monoclinic	cubic	monoclinic
Space group	$P\bar{3}$	$P2_1/n$	$Ia\bar{3}$	$P2_1/n$
a [Å]	14.3167(4)	15.4391(2)	27.0972(2)	23.7889(10)
b [Å]	14.3167(4)	18.7068(3)	27.0972(2)	10.4654(4)
c [Å]	10.4492(2)	26.9918(5)	27.0972(2)	27.3953(16)
α [°]	90	90	90	90
β [°]	90	102.99(1)	90	107.90(1)
γ [°]	120	90	90	90
V [$Å^3$]	1854.80(10)	7596.1(2)	19896.3(5)	6490.2(6)
Z	2	8	16	8
ρ_{calcd} [mg mm^{-3}]	1.588	1.863	1.065	1.189
μ [mm^{-1}]	9.426	22.530	1.117	0.512
F(000)	884	4088	6784	2432
2θ range [°]	7.1 to 136.5	5.8 to 133.8	4.6 to 145.0	5.9 to 150.9
Index ranges	$-17 \le h \le 17$ $-17 \le k \le 17$ $-12 \le l \le 12$	$-18 \le h \le 18$ $-22 \le k \le 22$ $-31 \le l \le 32$	$-29 \le h \le 33$ $-33 \le k \le 32$ $-33 \le l \le 30$	$-29 \le h \le 29$ $-8 \le k \le 13$ $-33 \le l \le 31$
Total reflns	65175	130209	82503	28358
Unique reflns	2286	13060	3297	11464
R_{int}	0.0573	0.1130	0.367	0.0422
Reflns [$I>2\sigma(I)$]	1785	10614	2483	7493
Parameters	193	775	184	829
R_1/ wR_2 [$I>2\sigma(I)$]	0.0683/0.2252	0.0509/0.1417	0.0866/0.02836	0.0711/0.1974
R_1/ wR_2 (all data)	0.0746/0.2470	0.0587/0.1466	0.1012/0.2981	0.1025/0.2171
$\rho_{max/min}$ [*e* $Å^{-3}$]	0.72−0.59	0.99/−1.93	0.45/−0.40	0.99/−0.25
CCDC no.	1514276	1514277	1514278	1514279

Crystal structure of 4b,8b,12b-trimethyl-4b,8b,12b,12d-tetrahydrodibenzo-[2,3:4,5]pentaleno[1,6-*ab*]indene (2)

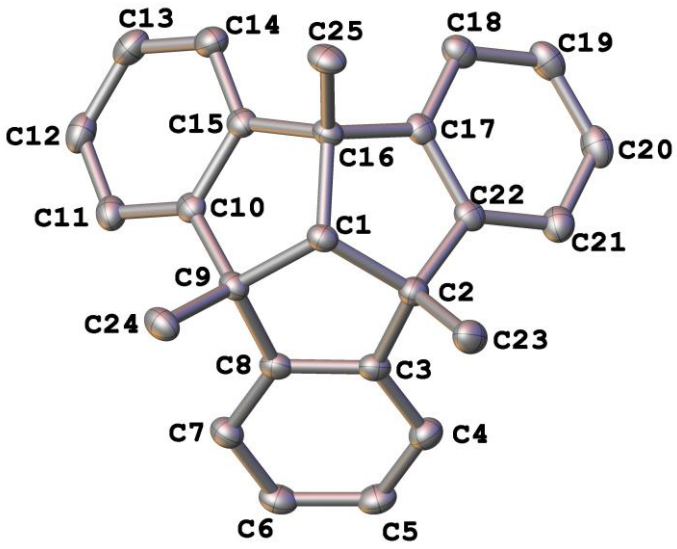

Figure S1 Molecular structure of 4b,8b,12b-trimethyl-4b,8b,12b,12d-tetrahydrodibenzo[2,3:4,5]pentaleno[1,6-*ab*]indene (**2**). Displacement ellipsoids are drawn at 50% probability level. Hydrogen atoms are omitted for clarity. Selected bond lengths [Å] and angles [deg]: C(1)–C(2) 1.562(1), C(2)–C(3) 1.523(1), C(3)–C(4) 1.393(2), C(4)–C(5) 1.392(2), C(5)–C(6) 1.388(2), C(23)–C(2) 1.534(2); C(1)–C(2)–C(3) 103.5(1), C(1)–C(2)–C(23) 113.0(1), C(2)–C(1)–C(9) 108.5(1), C(2)–C(3)–C(4) 127.4(1), C(3)–C(4)–C(5) 119.0(1), C(4)–C(5)–C(6) 120.7(1).

Crystal structure 2,3,6,7,10,11-hexabromo-4b,8b,12b-trimethyl-4b,8b,12b,12d-tetrahydrodibenzo[2,3:4,5]pentaleno[1,6-*ab*]indene (3)

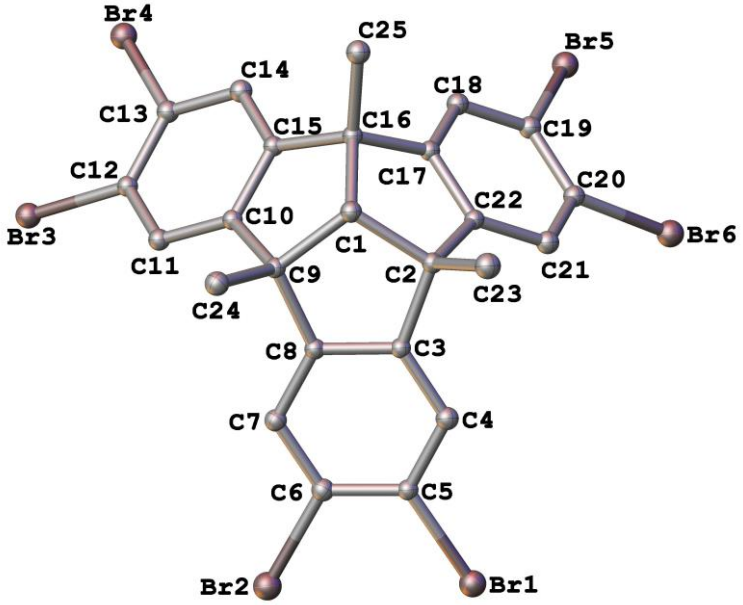

Figure S2 Molecular structure of 2,3,6,7,10,11-hexabromo-4b,8b,12b-trimethyl-4b,8b,12b,12d-tetrahydrodibenzo[2,3:4,5]pentaleno[1,6-*ab*]indene (**3**). Displacement ellipsoids are drawn at 50% probability level. Hydrogen atoms are omitted for clarity. Selected bond lengths [Å] and angles [deg]: C(1)–C(2) 1.566(5), C(2)–C(3) 1.524(5), C(3)–C(4) 1.381(5), C(4)–C(5) 1.390(5), C(5)–C(6) 1.386(5), C(23)–C(2) 1.527(5), C(5)–Br(1) 1.888(4); C(1)–C(2)–C(3) 103.5(3), C(1)–C(2)–C(23) 113.2(3), C(2)–C(1)–C(9) 108.4(3), C(2)–C(3)–C(4) 127.3(3), C(3)–C(4)–C(5) 119.4(3), C(4)–C(5)–C(6) 119.7(3) C(4)–C(5)–Br(1) 119.2(3), Br(1)–C(5)–C(6) 121.1(3).

Crystal structure of 4b,8b,12b-tris(dimethylsilyl)-4b,8b,12b,12d-tetrahydrodibenzo[2,3:4,5]pentaleno[1,6-*ab*]indene (7)

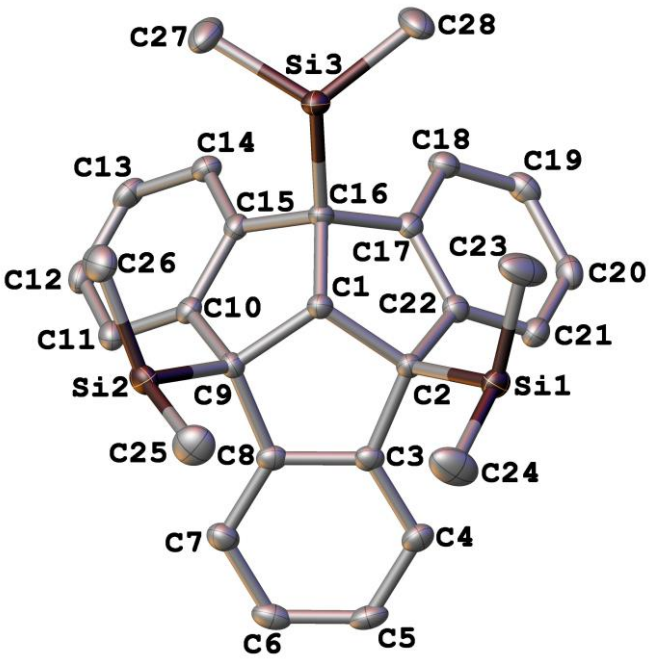

Figure S3 Molecular structure of 4b,8b,12b-tris(dimethylsilyl)-4b,8b,12b,12d-tetrahydrodibenzo[2,3:4,5]pentaleno[1,6-*ab*]indene (**7**). Displacement ellipsoids are drawn at 50% probability level. Hydrogen atoms are omitted for clarity. Selected bond lengths [Å] and angles [deg]: C(1)–C(2) 1.578(3), C(2)–C(3) 1.521(3), C(3)–C(4) 1.389(3), C(4)–C(5) 1.398(4), C(5)–C(6) 1.391(4), Si(1)–C(2) 1.905(2), Si(1)–C(23) 1.854(3); C(1)–C(2)–C(3) 103.9(2), C(1)–C(2)–Si(1) 115.1(2), C(2)–C(1)–C(9) 107.3(2), C(2)–C(3)–C(4) 127.7(2), C(3)–C(4)–C(5) 119.4(2), C(4)–C(5)–C(6) 120.4(2), C(23)–Si(1)–C(24) 109.6(2), C(2)–Si(1)–C(24) 112.9(1).

Crystal structure of 4b,8b,12b-tris(trimethylsilyl)-4b,8b,12b,12d-tetrahydrodibenzo[2,3:4,5]pentaleno[1,6-*ab*]indene (8)

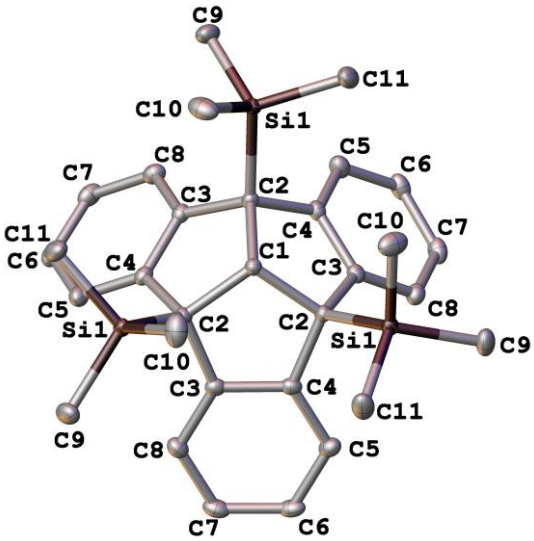

Figure S4 Molecular structure of 4b,8b,12b-tris(trimethylsilyl)-4b,8b,12b,12d-tetrahydrodibenzo[2,3:4,5]pentaleno[1,6-*ab*]indene (**8**). Displacement ellipsoids are drawn at 50% probability level. Hydrogen atoms are omitted for clarity. Selected bond lengths [Å] and angles [deg]: C(1)–C(2) 1.581(2), C(2)–C(3) 1.523(2), C(3)–C(4) 1.396(2), C(4)–C(5) 1.394(2), C(5)–C(6) 1.391(2), Si(1)–C(2) 1.929(2), Si(1)–C(9) 1.869(2); C(1)–C(2)–C(3) 103.5(1), C(2)–C(1)–C(2) 108.1(1), C(1)–C(2)–Si(1) 114.4(1), C(2)–C(3)–C(4) 112.4(1), C(3)–C(4)–C(5) 120.4(2), C(4)–C(5)–C(6) 119.4(2), C(5)–C(6)–C(7) 120.6(2),C(9)–Si(1)–C(10) 109.6(1), C(2)–Si(1)–C(9) 112.8(1), C(9)–Si(1)–C(11) 107.3(1).

Crystal structure of 4b,8b,12b-tris(fluorodimethylsilyl)-4b,8b,12b,12d-tetra-hydrodibenzo[2,3:4,5]pentaleno[1,6-*ab*]indene (9)

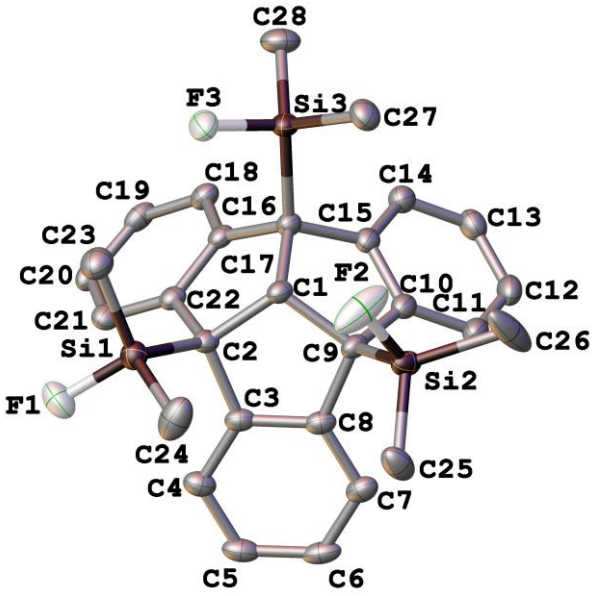

Figure S5 Molecular structure of 4b,8b,12b-tris(fluorodimethylsilyl)-4b,8b,12b,12d-tetrahydrodibenzo[2,3:4,5]pentaleno[1,6-*ab*]indene (**9**). Displacement ellipsoids are drawn at 50% probability level. Disorder of Me_2FSi-group Si(2), F(2), C(25), C(26) on two positions (91:9). Disorder of Si(5), F(5), C(54), F(6), C(56) over two sites with a 50:50 distribution. Because of low resolution the disordered positions of F(6) and C(56) were refined on the same site (EXYZ). All thermal displacement parameters of disordered atoms were constrained (with EADP) to become equal. Hydrogen atoms and minor disordered parts are omitted for clarity. Selected bond lengths [Å] and angles [deg]: C(1)–C(2) 1.574(2), C(2)–C(3) 1.523(2), C(3)–C(4) 1.396(3), C(4)–C(5) 1.390(3), C(5)–C(6) 1.383(3), C(3)–C(8) 1.388(3), Si(1)–C(2) 1.899(2), Si(1)–C(23) 1.828(2), Si(1)–F(1) 1.628(2); C(1)–C(2)–C(3) 103.6(1), C(1)–C(2)–Si(1) 113.4(1), C(2)–C(1)–C(9) 108.2(1), C(2)–C(3)–C(4) 127.3(2), C(3)–C(4)–C(5) 119.4(2), C(4)–C(5)–C(6) 120.2(2), C(23)–Si(1)–C(24) 112.2 (1), C(2)–Si(1)–C(24) 110.8(1), C(2)–Si(1)–F(1) 106.0(1), F(1)–Si(1)–C(23) 106.1(1).

Crystal structure of 4b,8b,12b-tris(chlorodimethylsilyl)-4b,8b,12b,12d-tetra-hydrodibenzo[2,3:4,5]pentaleno[1,6-*ab*]indene (10)

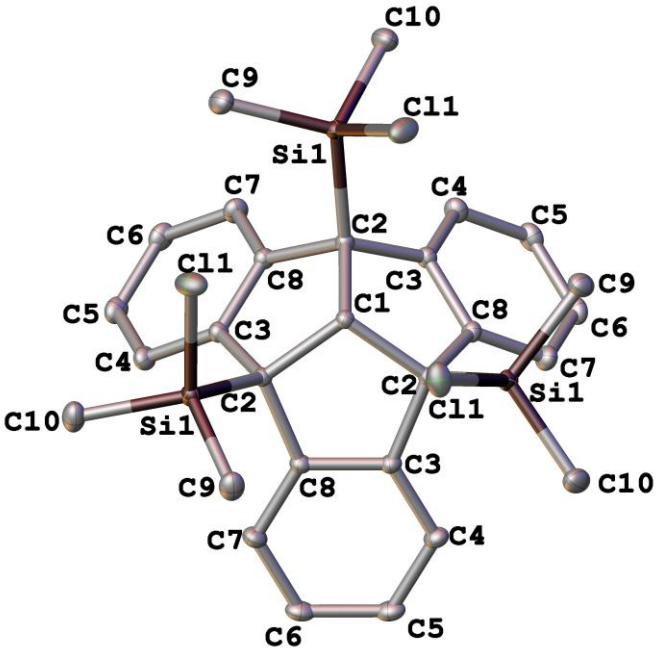

Figure S6 Molecular structure of 4b,8b,12b-tris(chlorodimethylsilyl)-4b,8b,12b,12d-tetrahydrodibenzo[2,3:4,5]pentaleno[1,6-*ab*]indene (**10**). Displacement ellipsoids are drawn at 50% probability level. Disorder of Me_2ClSi group over three positions with a 74:17:9 distribution. Hydrogen atoms and minor disordered parts are omitted for clarity. Selected bond lengths [Å] and angles [deg]: C(1)–C(2) 1.582(1), C(2)–C(3) 1.521(1), C(3)–C(4) 1.397(1), C(4)–C(5) 1.396(1), C(5)–C(6) 1.391(1), C(3)–C(8) 1.398(1), Si(1)–C(2) 1.920(1), Si(1)–C(9) 1.855(1), Si(1)–Cl(1) 2.057(1); C(1)–C(2)–C(3) 103.8(1), C(1)–C(2)–Si(1) 113.8(1), C(2)–C(1)–C(2) 107.7(1), C(2)–C(3)–C(4) 127.9(7), C(3)–C(4)–C(5) 119.6(1), C(4)–C(5)–C(6) 120.7(1), C(2)–C(3)–C(8) 112.3(1), C(9)–Si(1)–C(10) 108.3(3), C(2)–Si(1)–C(9) 111.0(2), C(2)–Si(1)–Cl(1) 108.6(1), Cl(1)–Si(1)–C(9) 108.7(2).

Crystal structure 4b,8b,12b-tris(3-(dichloro(methyl)silyl)propyl)-4b,8b,12b,12d-tetrahydrodibenzo[2,3:4,5]pentaleno[1,6-*ab*]indene (12)

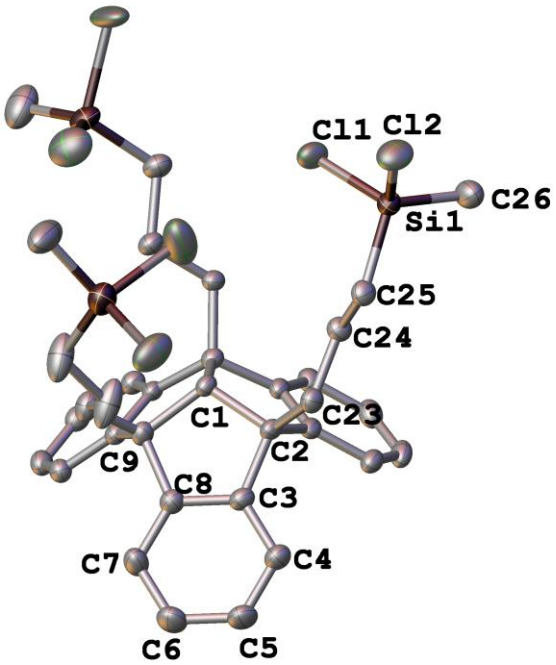

Figure S7 Molecular structure of 4b,8b,12b-tris(3-(dichloro(methyl)silyl)propyl)-4b,8b,12b,12d-tetrahydrodibenzo[2,3:4,5]pentaleno[1,6-*ab*]indene (**12**). Due to insufficient quality of the data, no bond lengths and angles will be discussed.

Crystal structure of 4b,8b,12b-tris(3-(difluoro(methyl)silyl)propyl)-4b,8b,12b,12d-tetrahydrodibenzo[2,3:4,5]pentaleno[1,6-*ab*]indene (13)

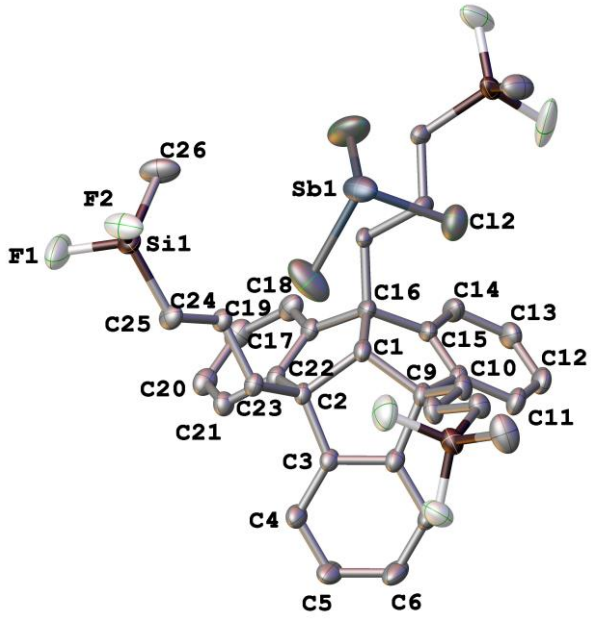

Figure S8 Molecular structure of 4b,8b,12b-tris(3-(difluoro(methyl)silyl)propyl)-4b,8b,12b,12d-tetrahydrodibenzo[2,3:4,5]pentaleno[1,6-*ab*]indene (**13**). Displacement ellipsoids are drawn at 50% probability level. Disorder of $SbCl_3$ over two sites (50:50). Disorder of Si(3), F(5), F(6), C(31), C(32), C(33), C(34) over two sites (50:50). Disorder of F(1), F(2), C(26) over two sites (83:17). Hydrogen atoms and minor disordered parts as well as the labels of $SbCl_3$ and two aliphatic arms are omitted for clarity. Selected bond lengths [Å] and angles [deg]: C(1)–C(2) 1.568(2), C(2)–C(3) 1.518(2), C(3)–C(4) 1.394(2), C(4)–C(5) 1.390(2), C(5)–C(6) 1.395(3), C(2)–C(23) 1.540(2), C(23)–C(24) 1.529(2), C(24)–C(25) 1.533(2), C(25)–Si(1) 1.847(2), Si(1)–C(26) 1.859(7), Si(1)–F(1) 1.587(4); C(1)–C(2)–C(3) 104.0(1), C(2)–C(3)–C(4) 127.6(1), C(3)–C(4)–C(5) 119.4(1), C(4)–C(5)–C(6) 120.2(2), C(2)–C(3)–C(8) 112.1(1), C(2)–C(1)–C(9) 107.7(1), C(1)–C(2)–C(23) 114.4(1), C(2)–C(23)–C(24) 115.2(1), C(23)–C(24)–C(25) 111.5(1), C(24)–C(25)-Si(1) 117.7(1), C(25)-Si(1)-F(1) 107.7(2), C(25)–Si(1)–C(26) 118.4(2), F(1)–Si(1)–C(26) 107.6(2), F(1)–Si(1)–F(2) 104.7(3).

Crystal structure 4b,8b,12b-tris(3-(trifluorosilyl)propyl)-4b,8b,12b,12d-tetra-hydrodibenzo[2,3:4,5]pentaleno[1,6-*ab*]indene (15)

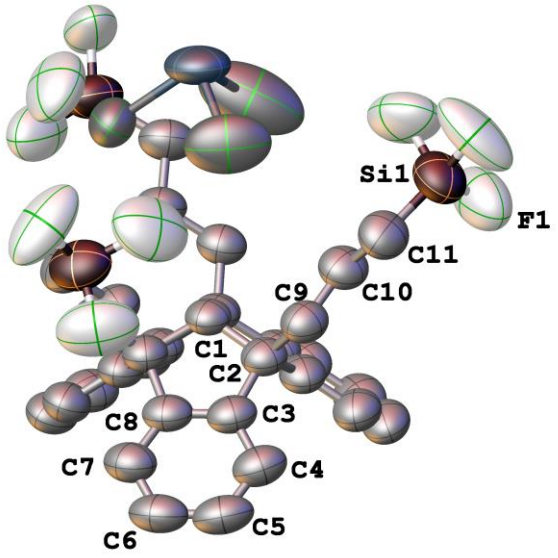

Figure S9 Molecular structure of 4b,8b,12b-tris(3-(trifluorosilyl)propyl)-4b,8b,12b,12d-tetrahydrodibenzo[2,3:4,5]pentaleno[1,6-*ab*]indene (**15**). Due to insufficient quality of the data, no bond lengths and angles will be discussed.

Crystal structure of 4b,8b,12b-tris(4-iodophenyl)-4b,8b,12b,12d-tetrahydrodibenzo[2,3:4,5]pentaleno[1,6-*ab*]indene (16)

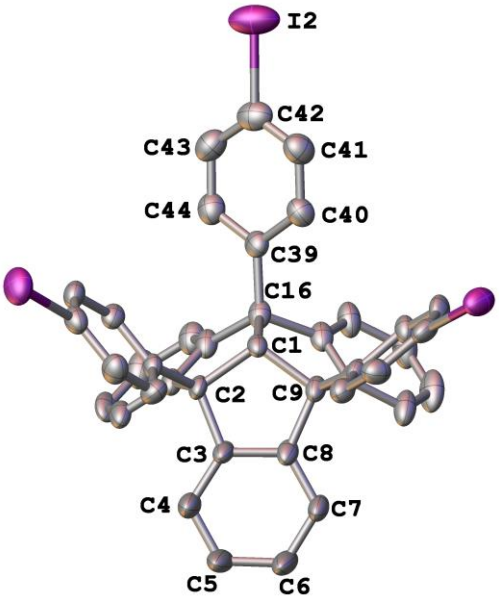

Figure S10 Molecular structure of 4b,8b,12b-tris(4-iodophenyl)-4b,8b,12b,12d-tetrahydrodibenzo[2,3:4,5]pentaleno[1,6-*ab*]indene (**16**). Due to insufficient quality of the data, no bond lengths and angles will be discussed.

Crystal structure of 4b,8b,12b-tris(4-((trimethylsilyl)ethynyl)phenyl)-4b,8b,12b,12d-tetrahydrodibenzo[2,3:4,5]pentaleno[1,6-*ab*]indene (17)

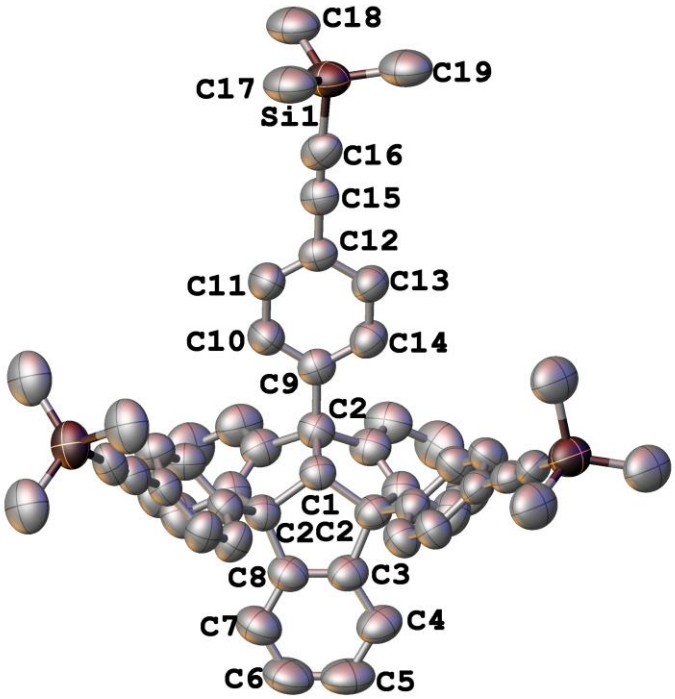

Figure S11 Molecular structure of 4b,8b,12b-tris(4-((trimethylsilyl)-ethynyl)phenyl)-4b,8b,12b,12d-tetrahydrodibenzo[2,3:4,5]pentaleno[1,6-*ab*]indene (**17**). Due to insufficient quality of the data, no bond lengths and angles will be discussed.

Crystal structure of 4b,8b,12b-tris(4-(ethynyl)phenyl)-4b,8b,12b,12d-tetrahydrodibenzo[2,3:4,5]pentaleno[1,6-*ab*]indene (18)

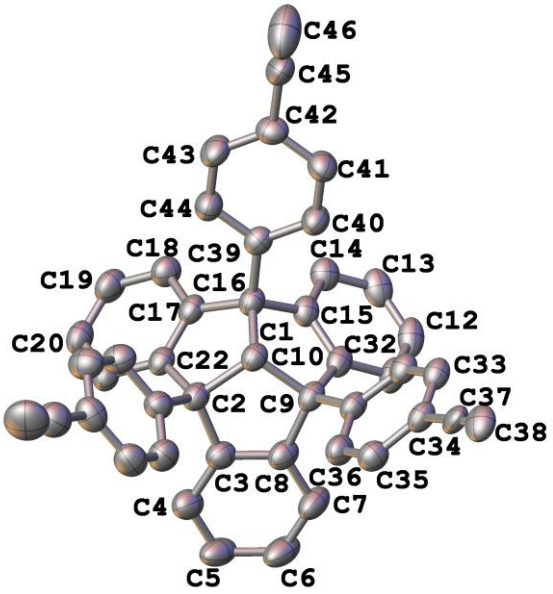

Figure S12 Molecular structure of 4b,8b,12b-tris(4-(ethynyl)phenyl)-4b,8b,12b,12d-tetrahydrodibenzo[2,3:4,5]pentaleno[1,6-*ab*]indene (**18**). Due to insufficient quality of the data, no bond lengths and angles will be discussed.

^{1}H NMR spectrum of compound 5

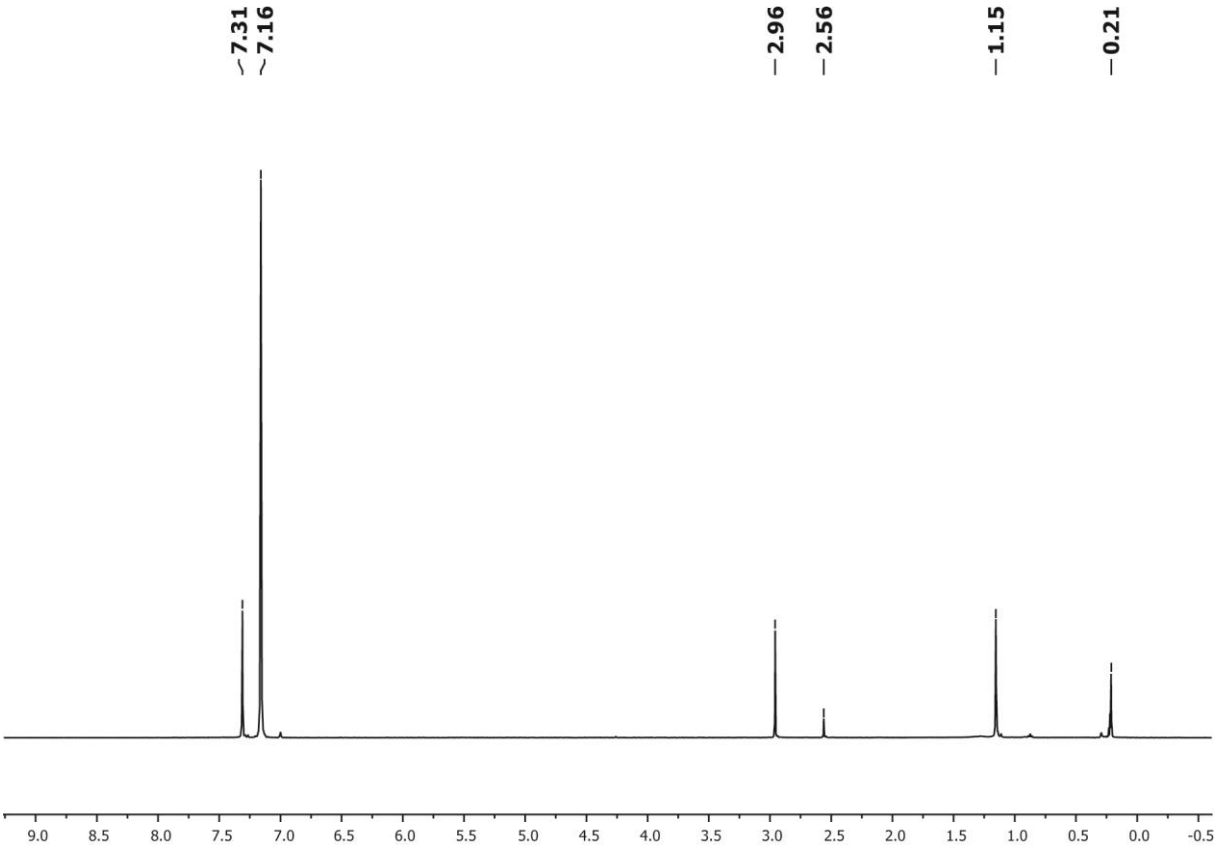

Fig. 13 ^{1}H NMR spectrum of **5** in C_6D_6 at 25 °C. The only major impurity is at 0.21 ppm and can be assigned to silicon grease.

^{1}H NMR spectrum of compound 6

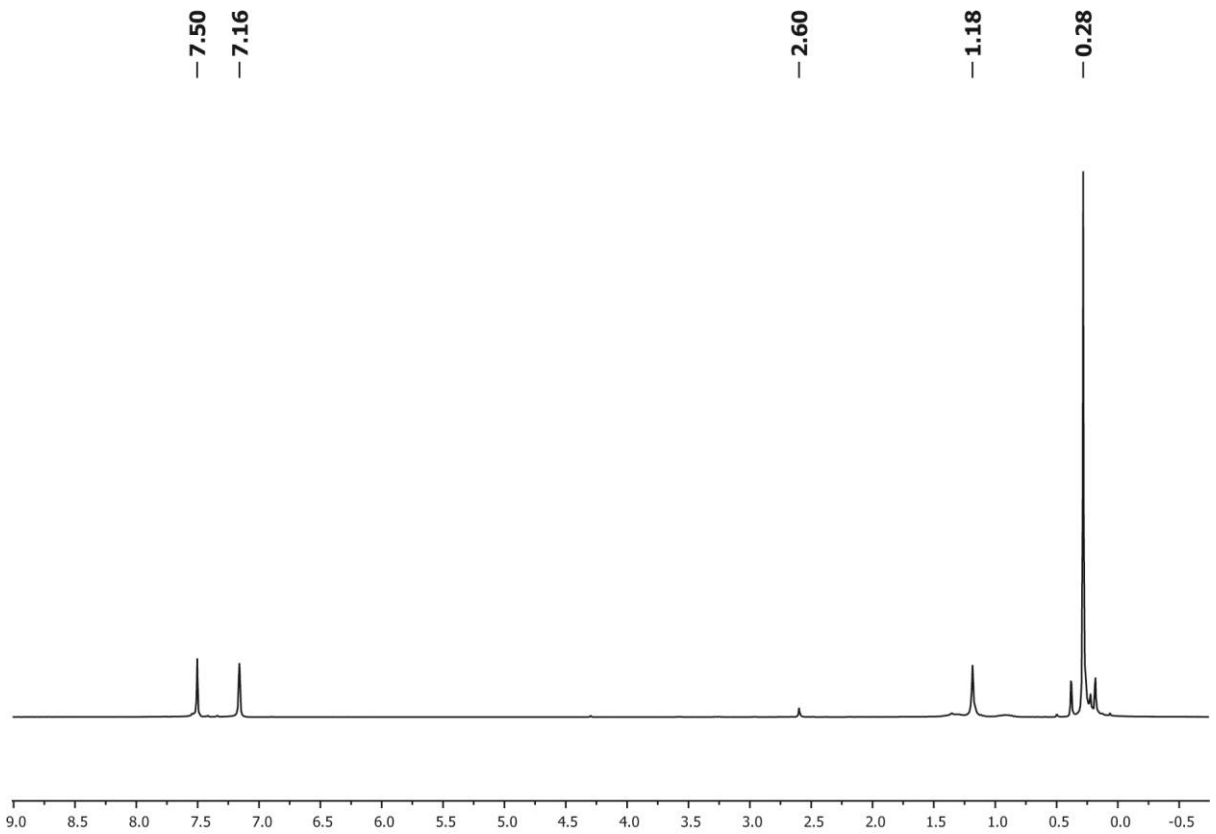

Fig. 14 ^{1}H NMR spectrum of **6** in C_6D_6 at 25 °C.

^{13}C NMR spectrum of compound 6

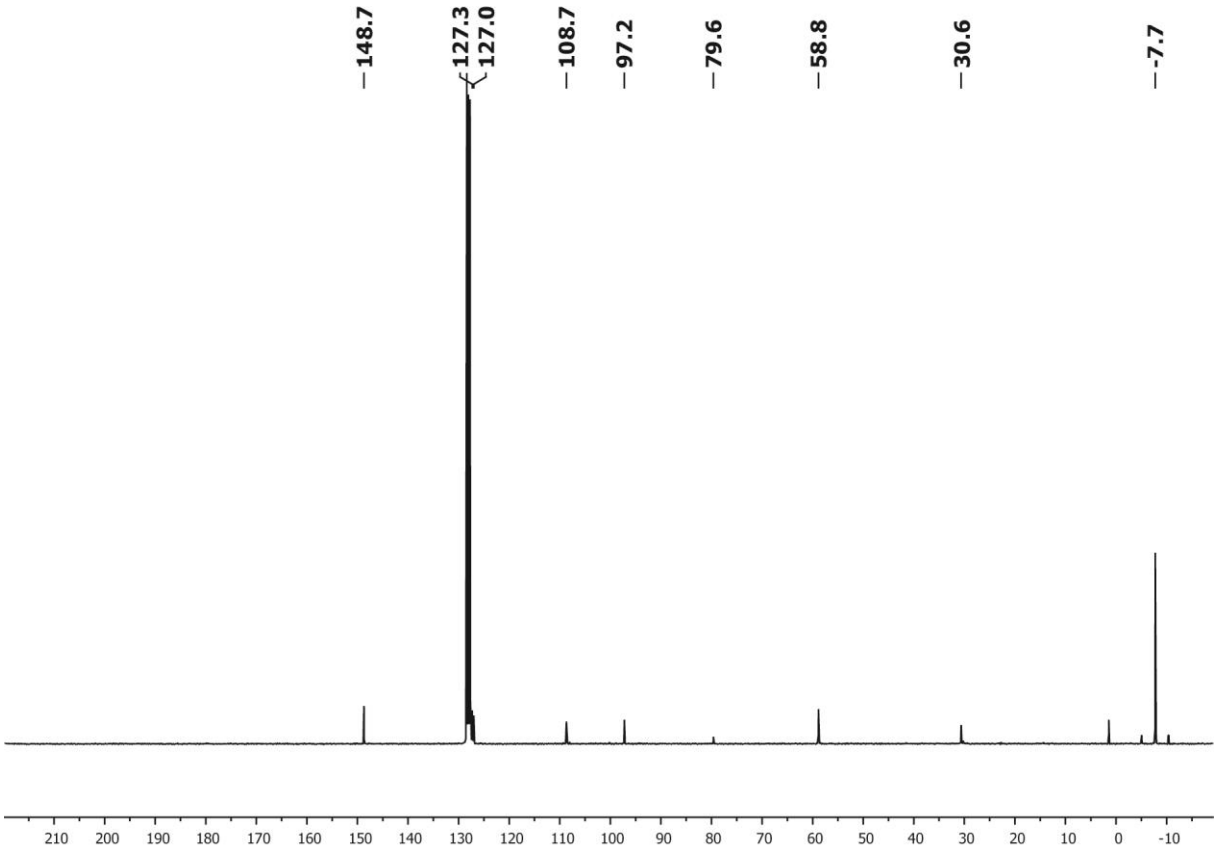

Fig. 15 ^{13}C NMR spectrum of **6** in C_6D_6 at 25 °C.

EI-MS spectrum of 6

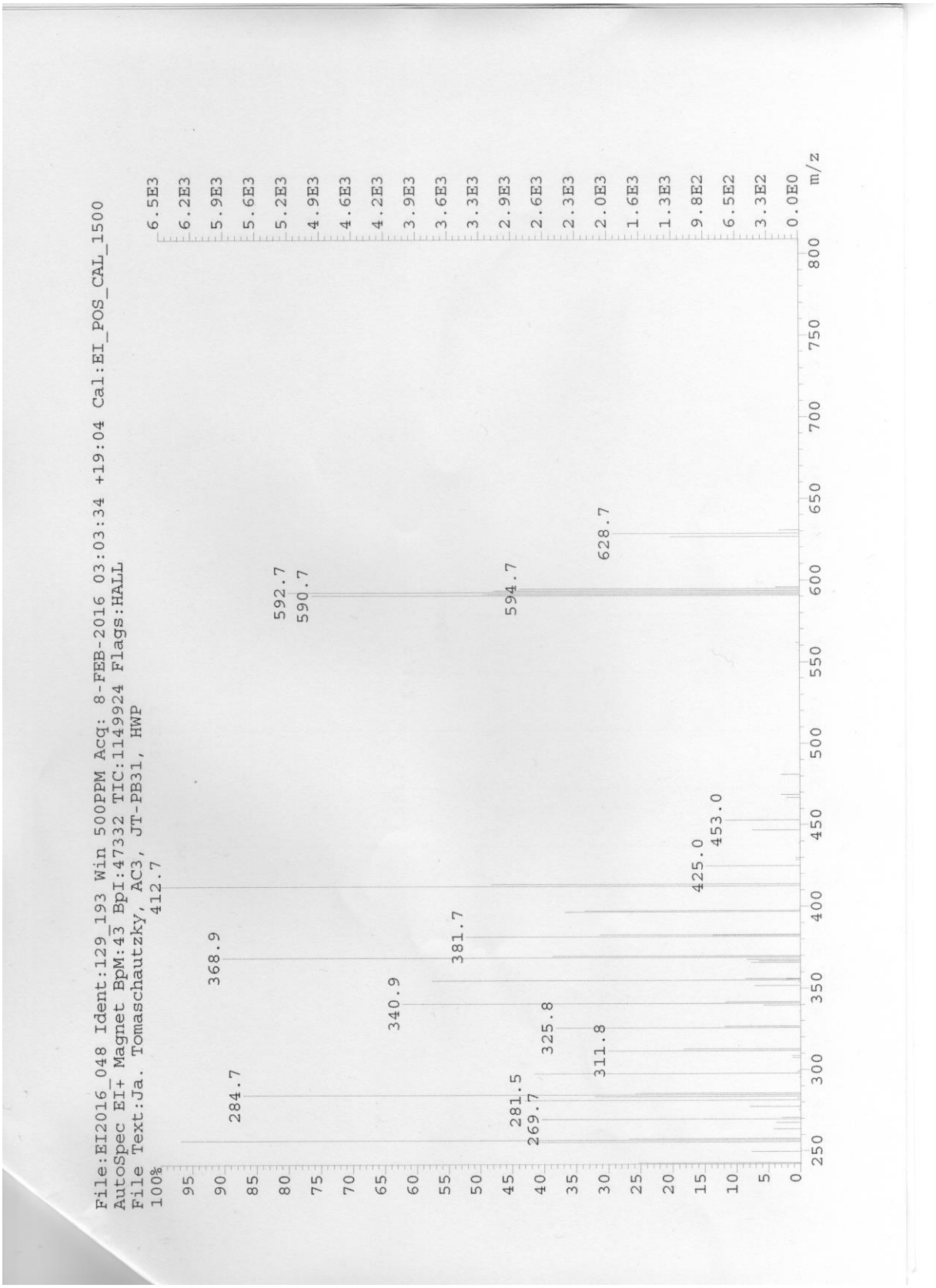

Fig. 16 EI-MS spectrum of **6**.

^{1}H NMR spectrum of compound 8

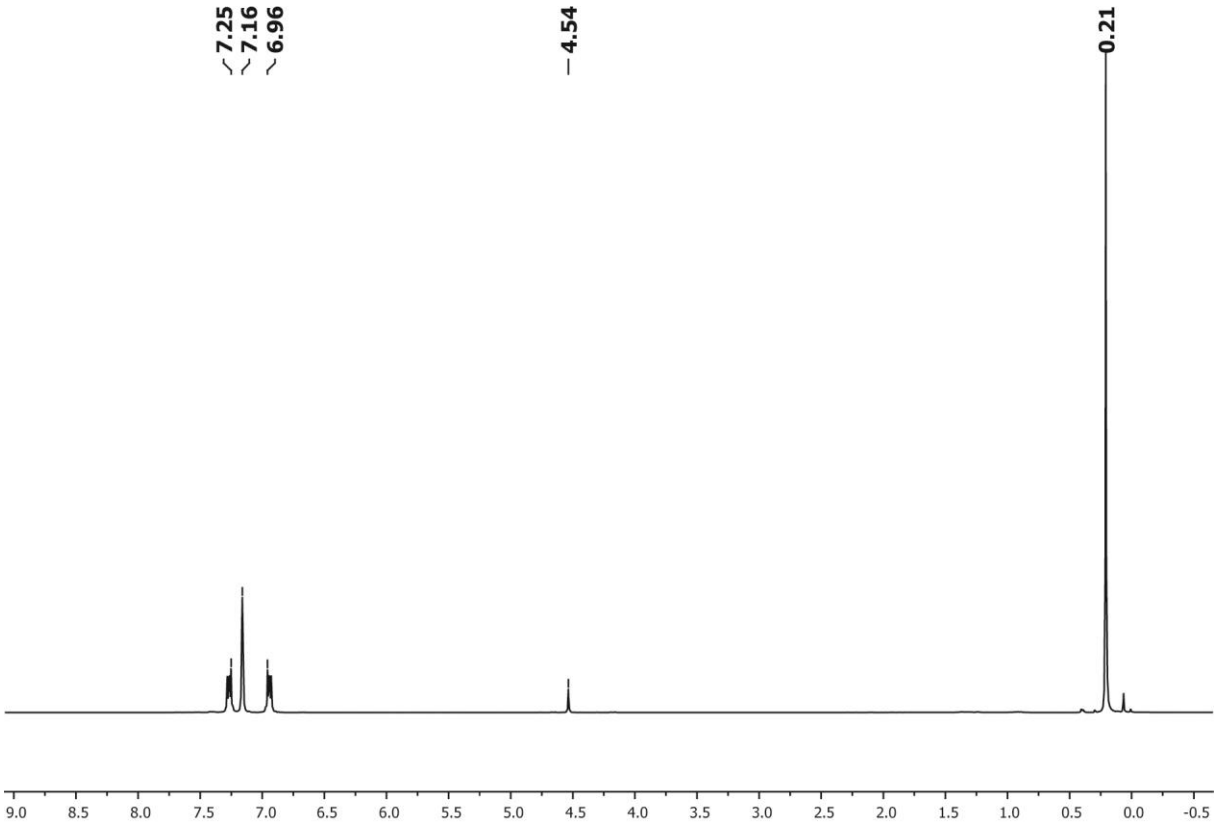

Fig. 17 ^{1}H NMR spectrum of **8** in C_6D_6 at 25 °C.

^{13}C NMR spectrum of compound 8

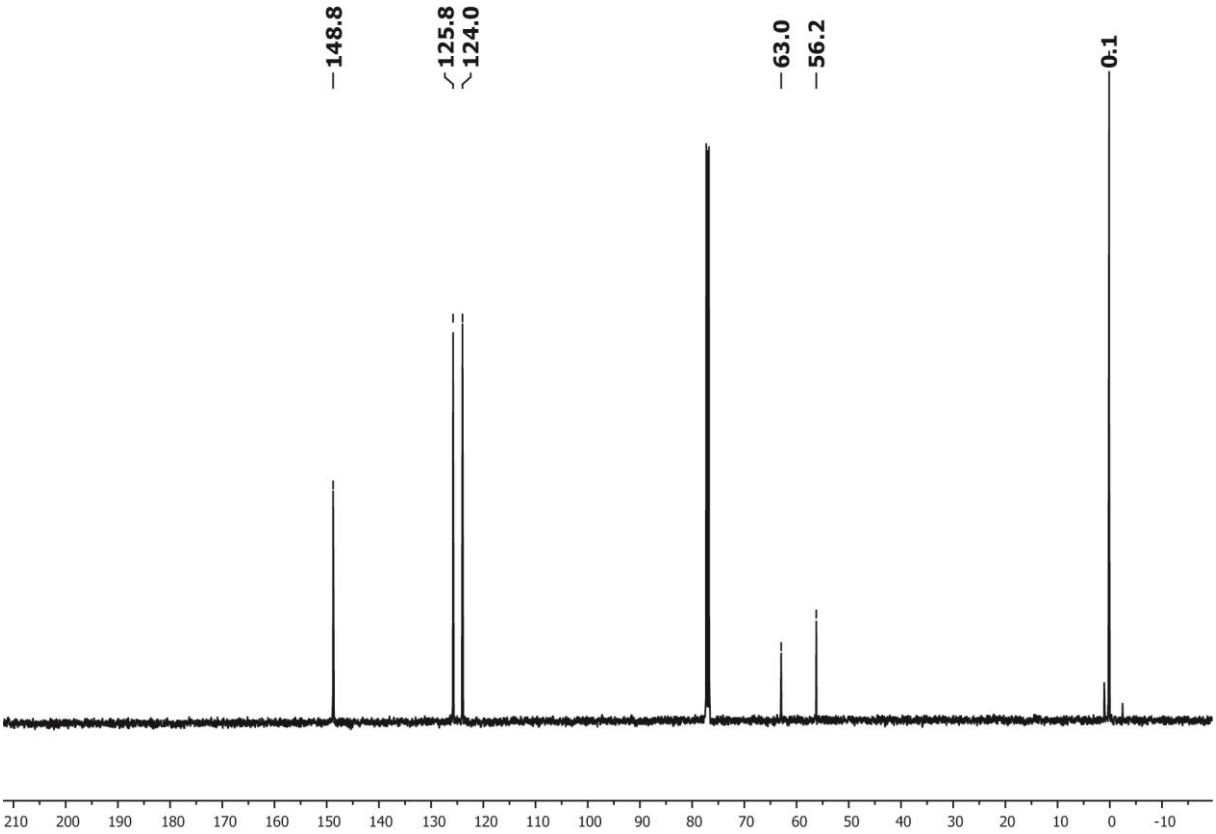

Fig. 18 ^{13}C NMR spectrum of **8** in C_6D_6 at 25 °C.

HR-MS (EI) spectrum of 8

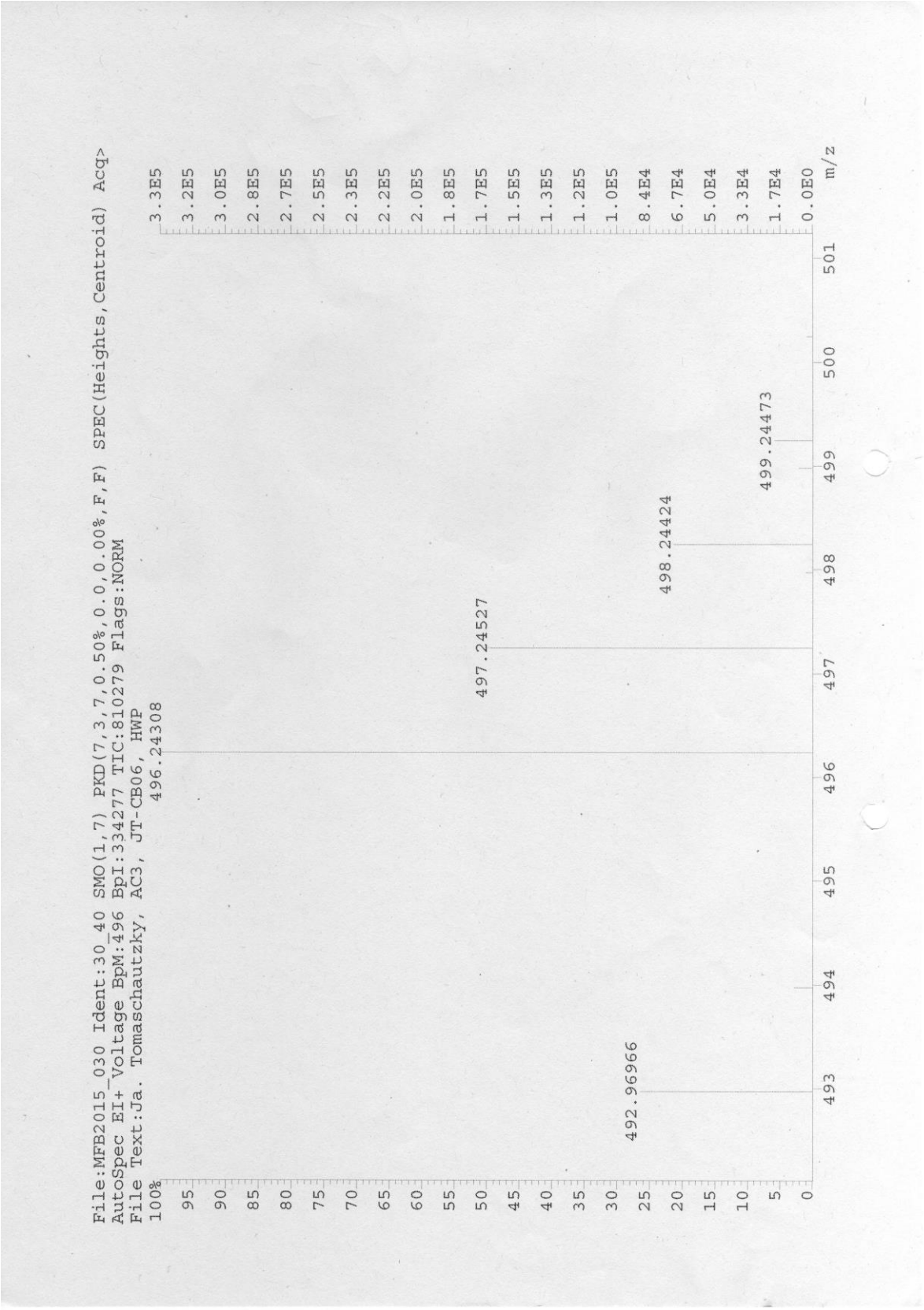

Fig. 19 HR-MS (EI) spectrum of **8**.

^{1}H NMR spectrum of compound 11

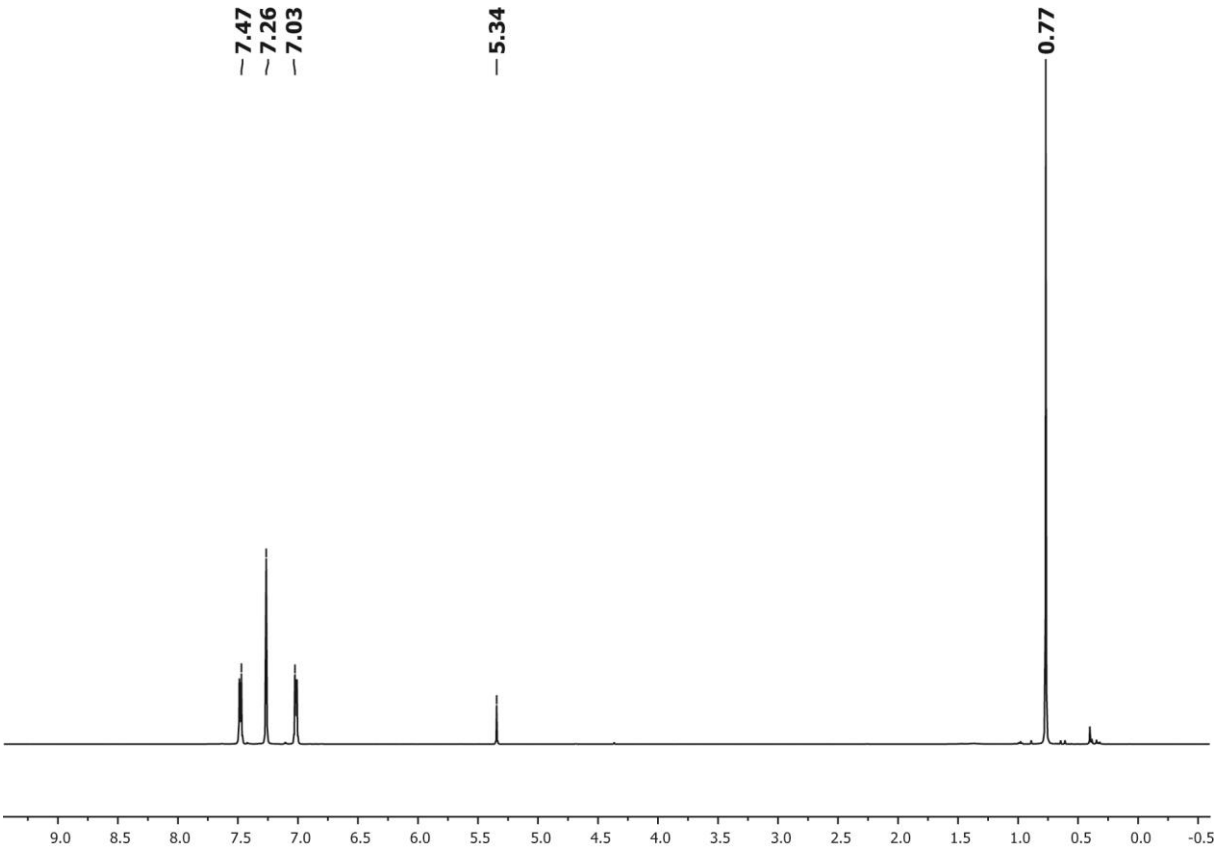

Fig. 20 ^{1}H NMR spectrum of **11** in $CDCl_3$ at 25 °C.

^{13}C NMR spectrum of compound 11

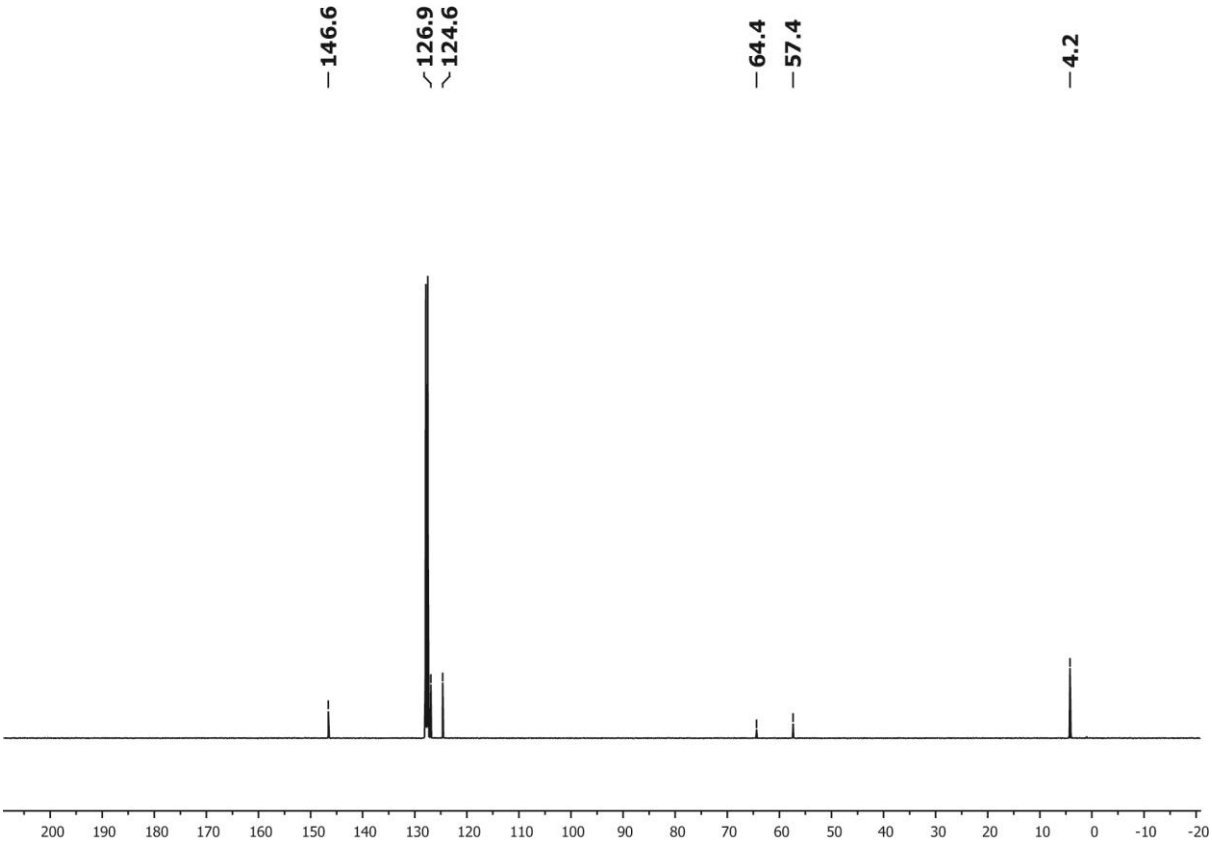

Fig. 21 ^{13}C NMR spectrum of **11** in $CDCl_3$ at 25 °C.

HR-MS (EI) spectrum of 11

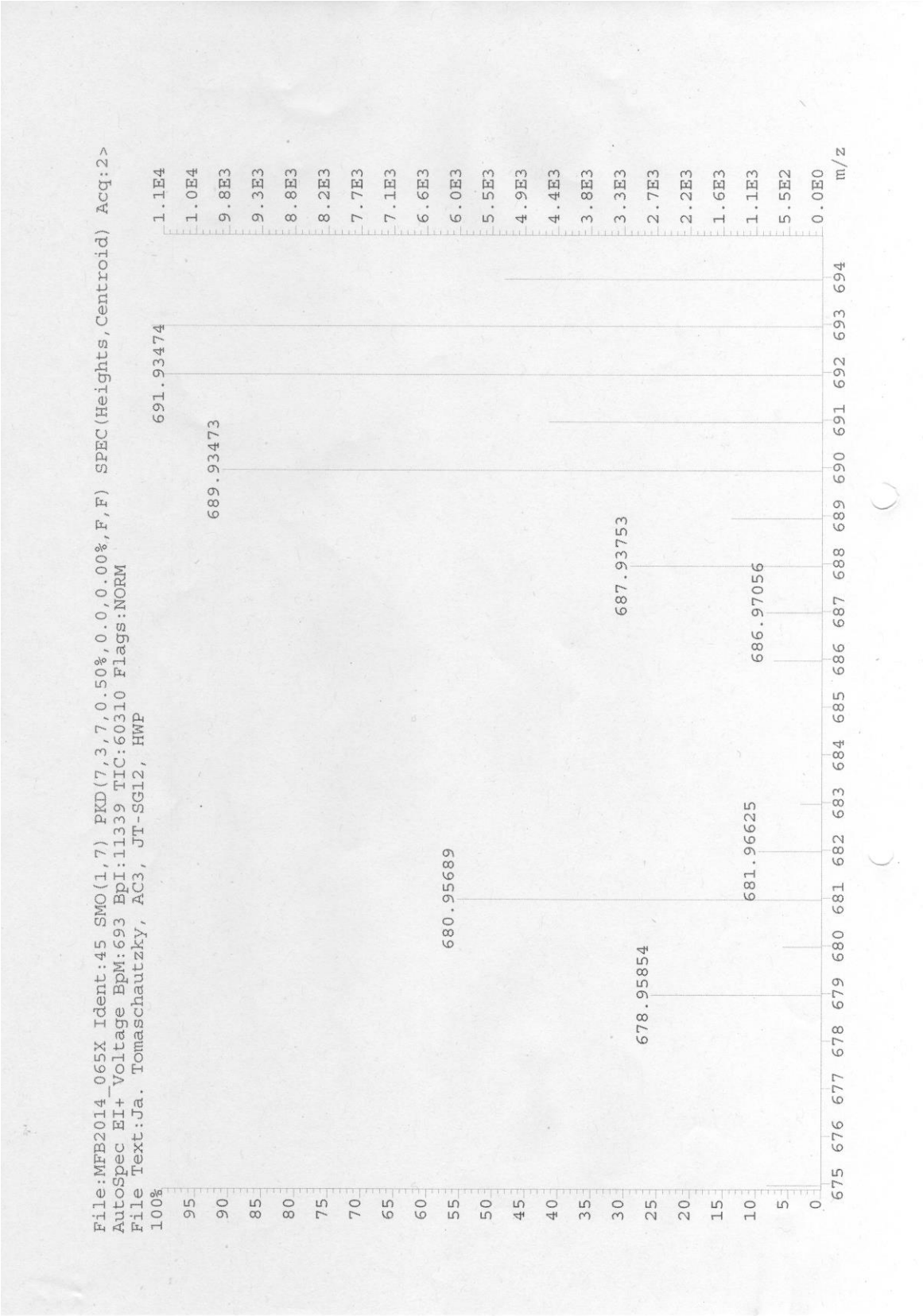

Fig. 22 HR-MS (EI) spectrum of **11**.

^{1}H NMR spectrum of compound 15

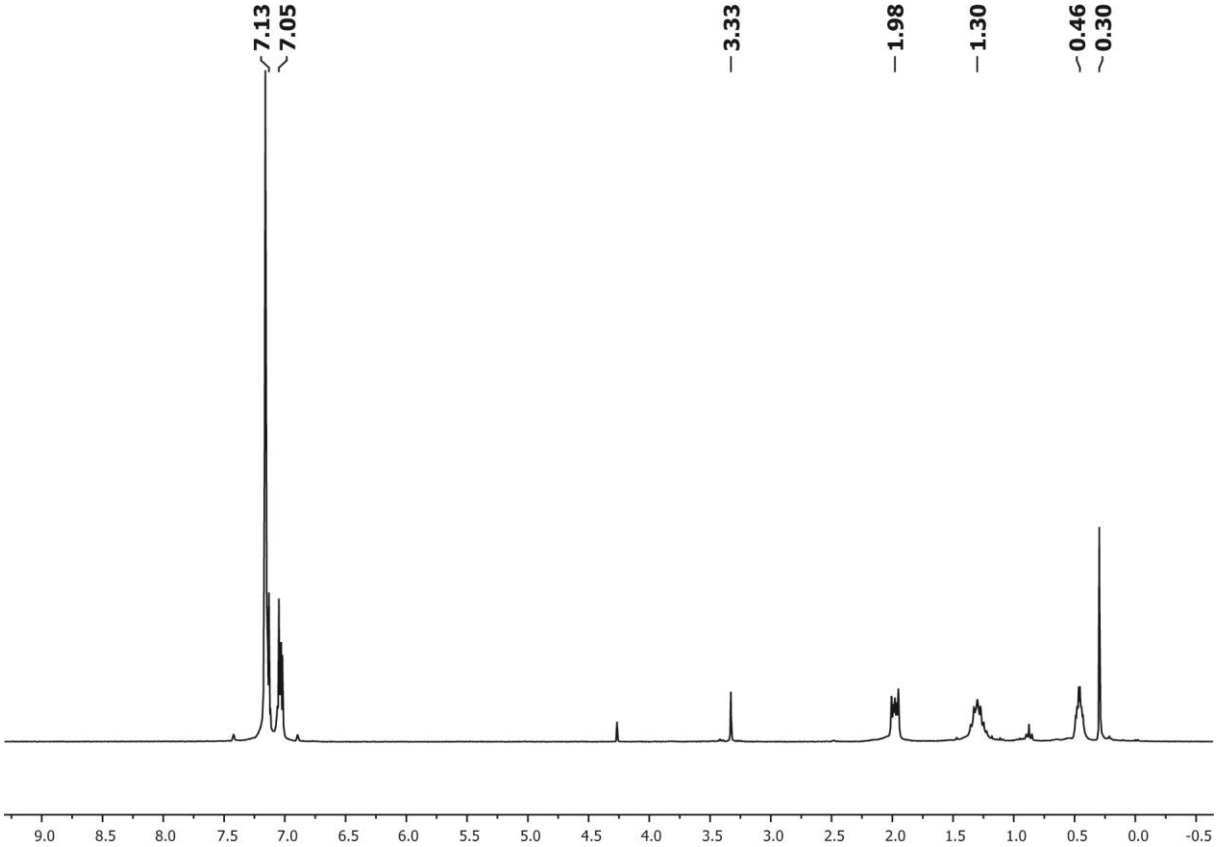

Fig. 23 ^{1}H NMR spectrum of **15** in C_6D_6 at 25 °C.

^{13}C NMR spectrum of compound 15

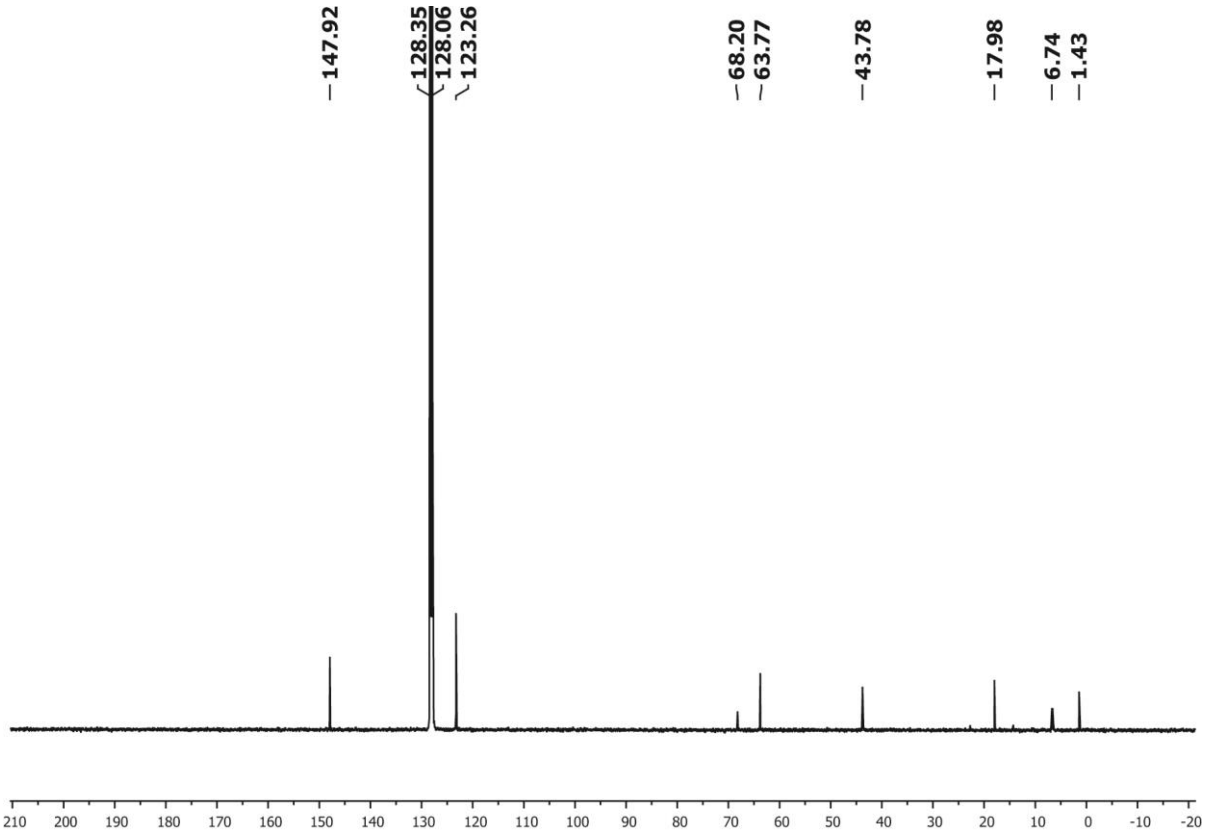

Fig. 24 ^{13}C NMR spectrum of **15** in C_6D_6 at 25 °C.

HR-MS (EI) spectrum of 15

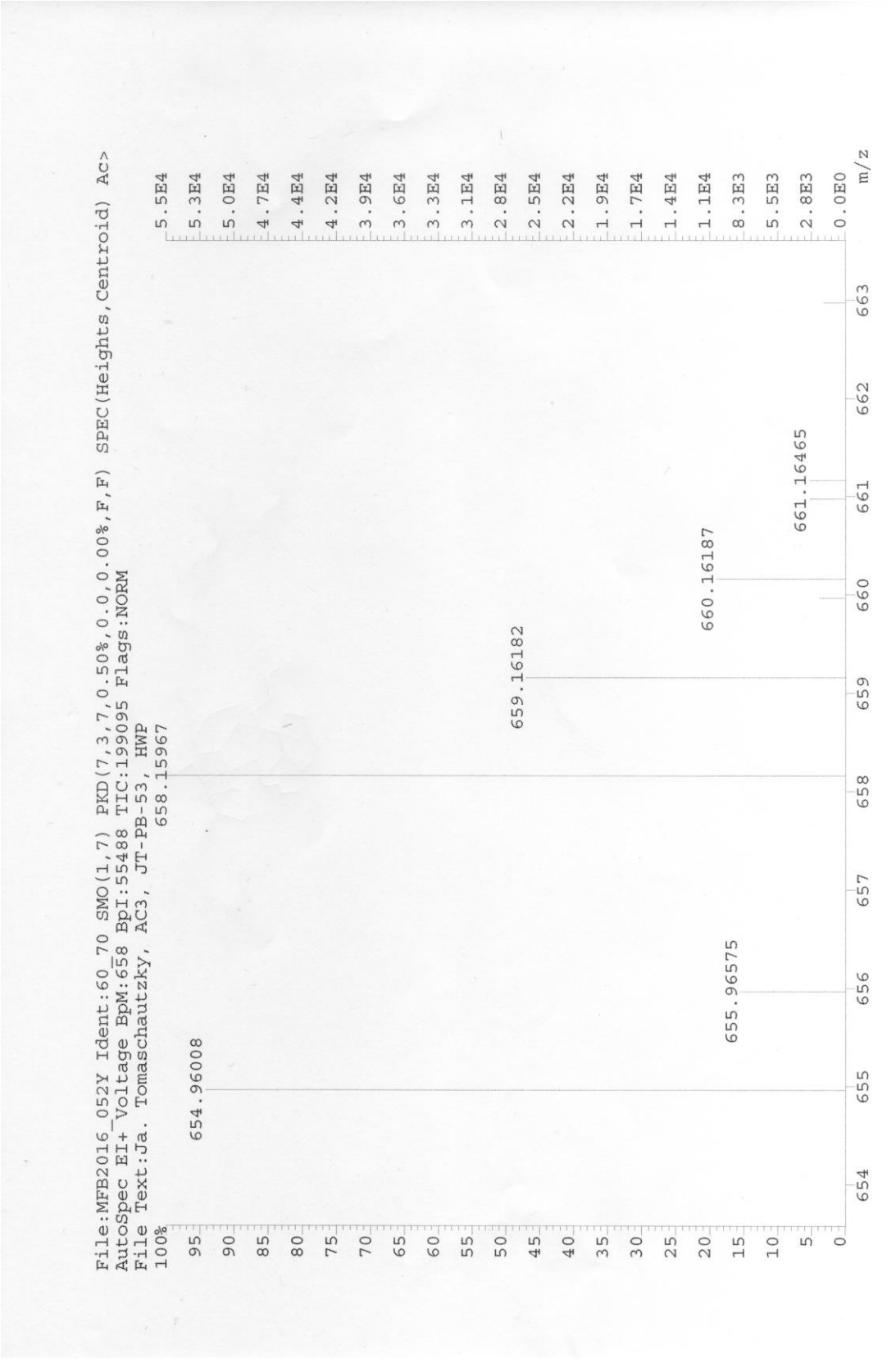

Fig. 25 HR-MS (EI) spectrum of **15**.

^{1}H NMR spectrum of compound 18

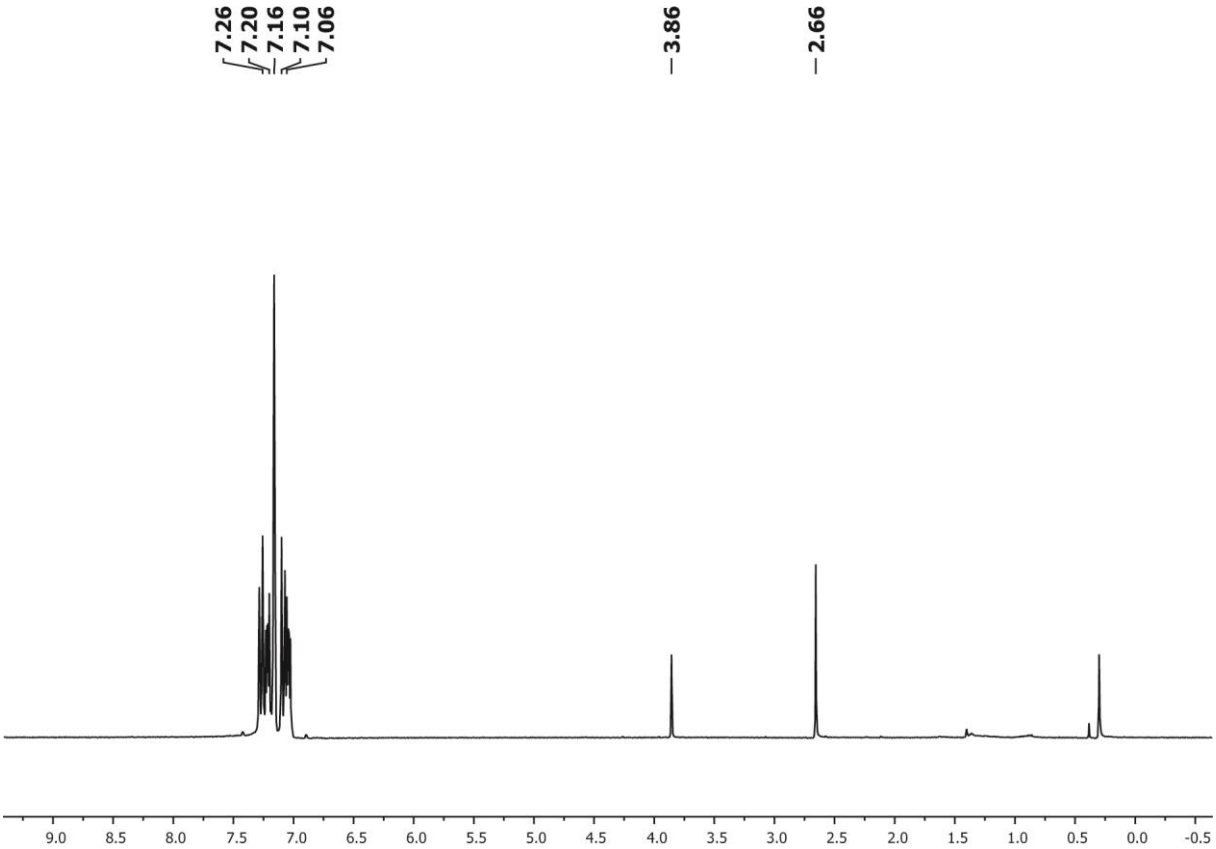

Fig. 26 ^{1}H NMR spectrum of **18** in C_6D_6 at 25 °C.

^{13}C NMR spectrum of compound 18

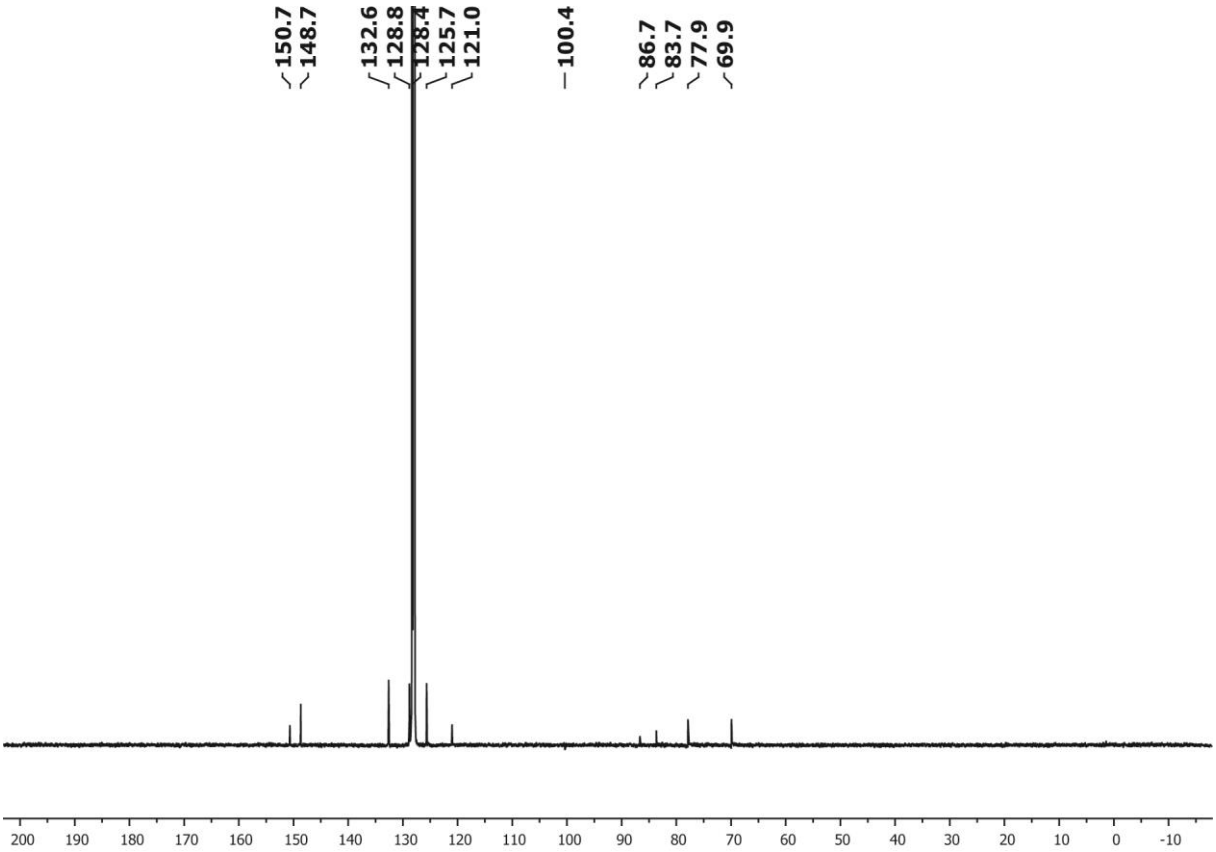

Fig. 27 ^{13}C NMR spectrum of **18** in C_6D_6 at 25 °C.

HR-MS (EI) spectrum of 18

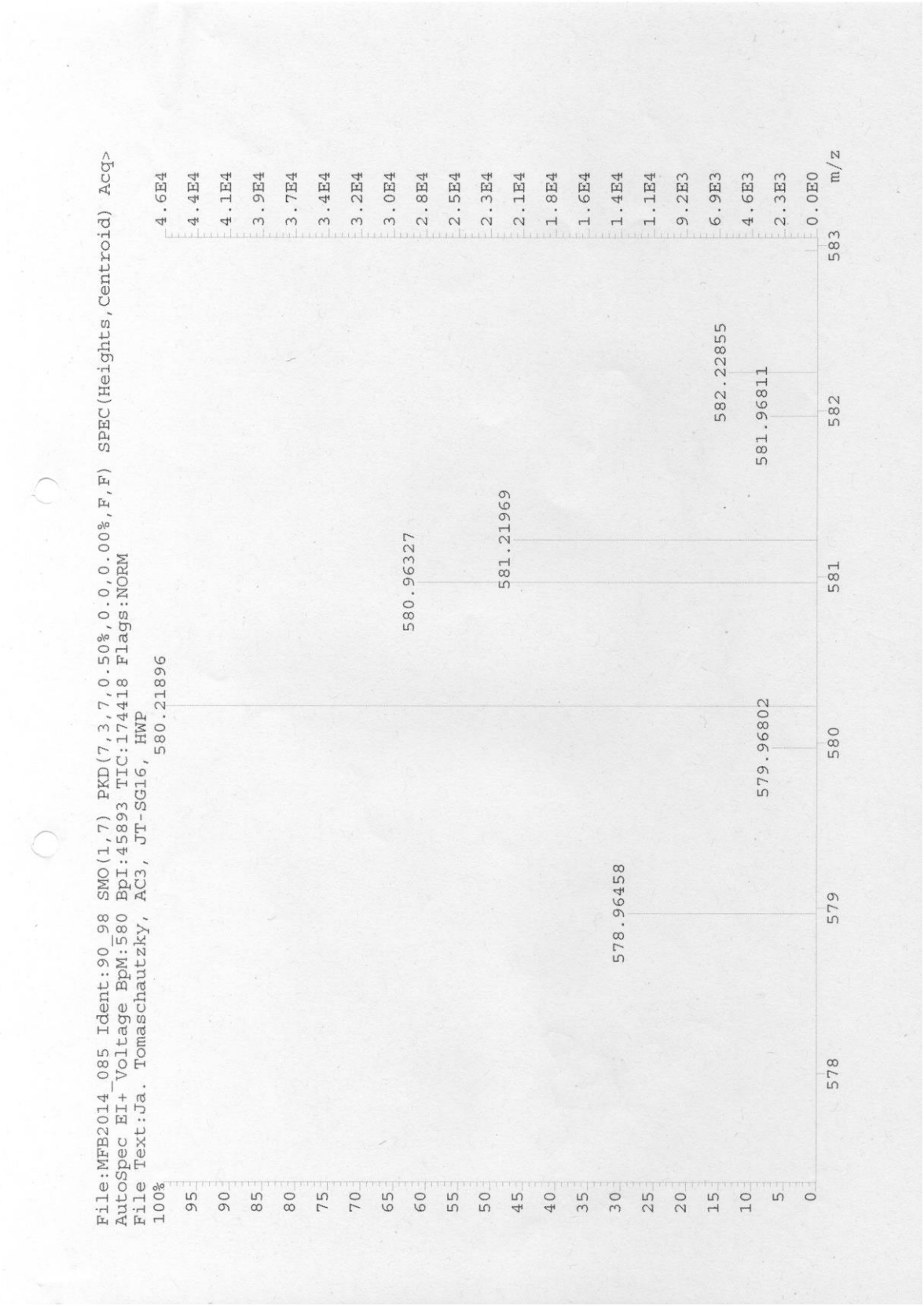

Fig. 28 HR-MS (EI) spectrum of **18**.

References

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[S4] G. M. Sheldrick, *Acta Crystallogr. Sect. A* **2008**, *64*, 112–122.