Supporting Information for:

Lead and tin β-diketiminato amido/anilido complexes: competitive nucleophilic reactivity at the β-diketiminato γ-carbon

Lisa A.-M. Harris,[a] Eric C. Y. Tam,[a] Martyn P. Coles,[b] and J. Robin Fulton*[b]

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Figure S1. ^{1}H NMR spectrum of [(BDI)PbOC(NPh)(C{C(Me)N-2,6-$iPr_2C_6H_3$}{C(Me)N(H)-2,6-$iPr_2C_6H_3$})] (**9**).

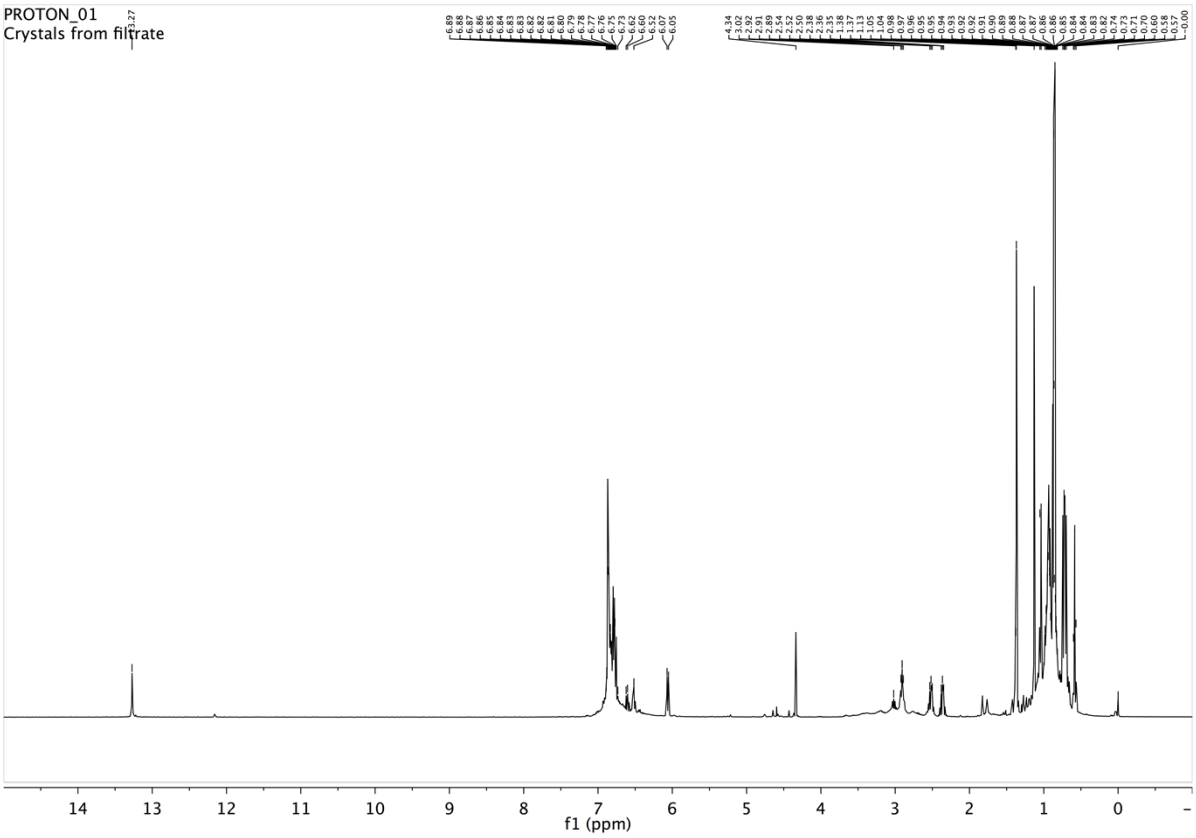

Figure S2. ^{207}Pb NMR spectrum of [(BDI)PbOC(NPh)(C{C(Me)N-2,6-$iPr_2C_6H_3$}{C(Me)N(H)-2,6-$iPr_2C_6H_3$})] (**9**)

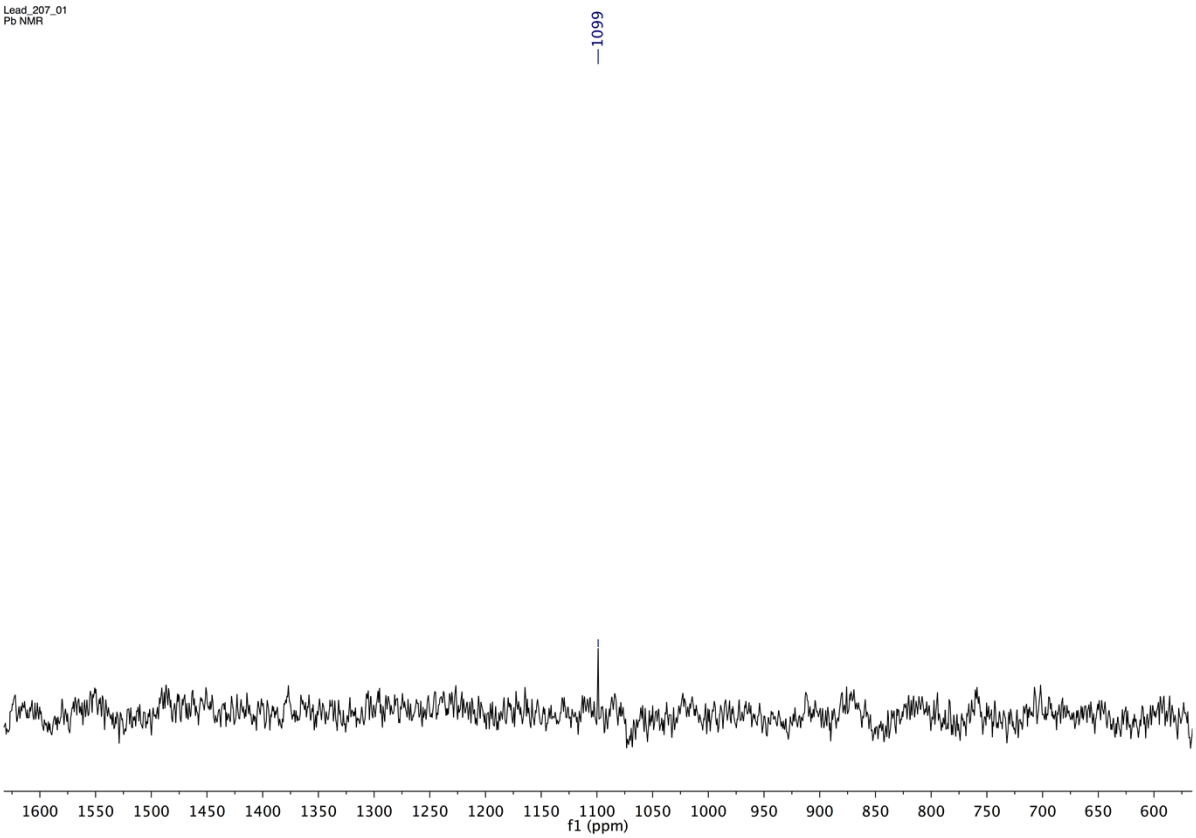

Figure S3. ^{13}C NMR spectrum of [(BDI)PbOC(NPh)(C{C(Me)N-2,6-$iPr_2C_6H_3$}{C(Me)N(H)-2,6-$iPr_2C_6H_3$})] (**9**). L = BDI-H

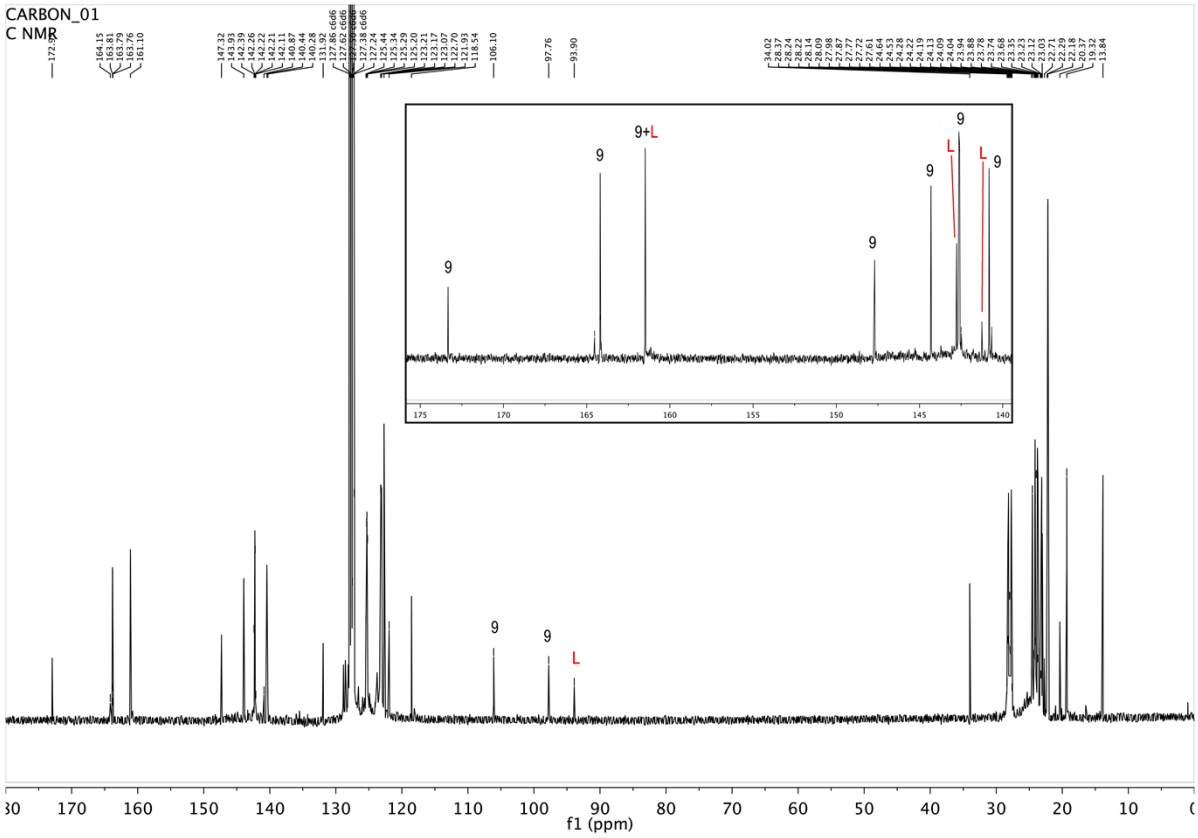

Figure S4. ^{13}C NMR spectrum of [(BDI)SnOC(NPh)(C{C(Me)N-2,6-$iPr_2C_6H_3$}{C(Me)N(H)-2,6-$iPr_2C_6H_3$})] (**12**)

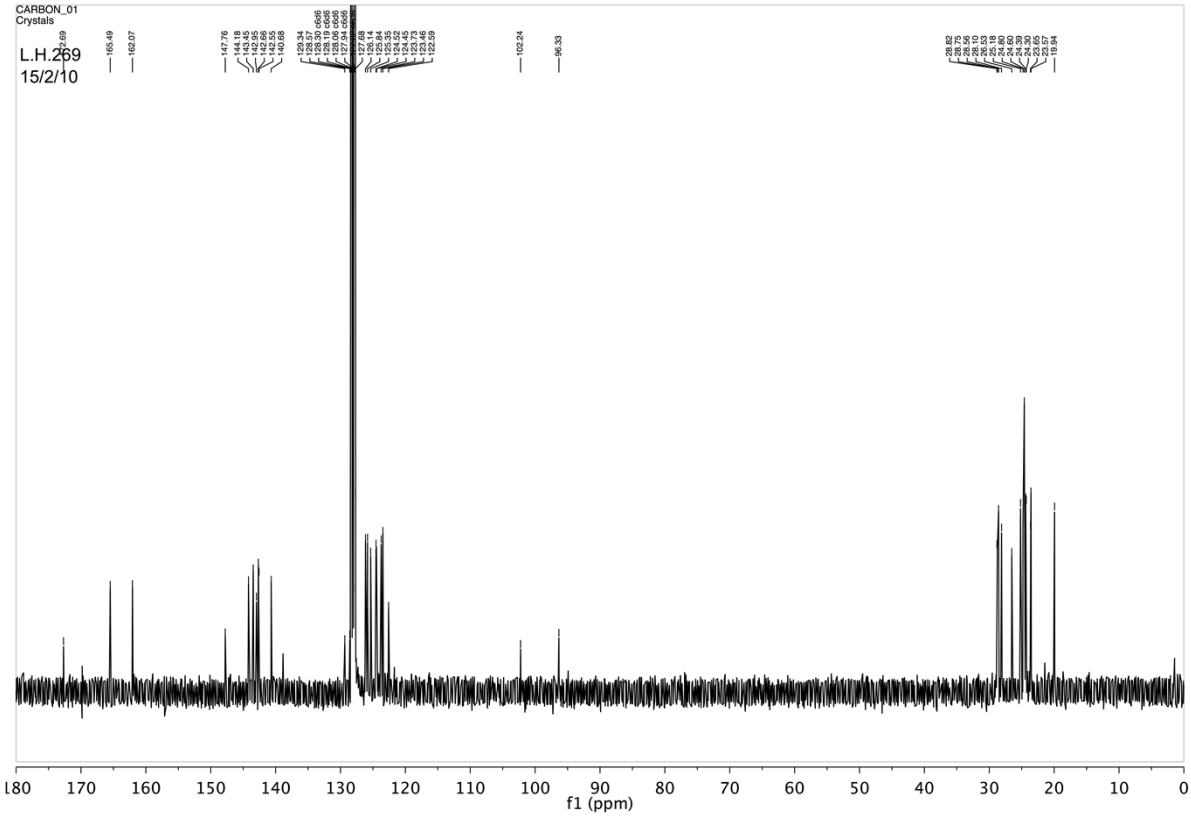

Figure S5. ^{1}H NMR spectrum of [(BDI)SnOC(NPh)(C{C(Me)N-2,6-$iPr_2C_6H_3$}{C(Me)N(H)-2,6-$iPr_2C_6H_3$})] (**12**)

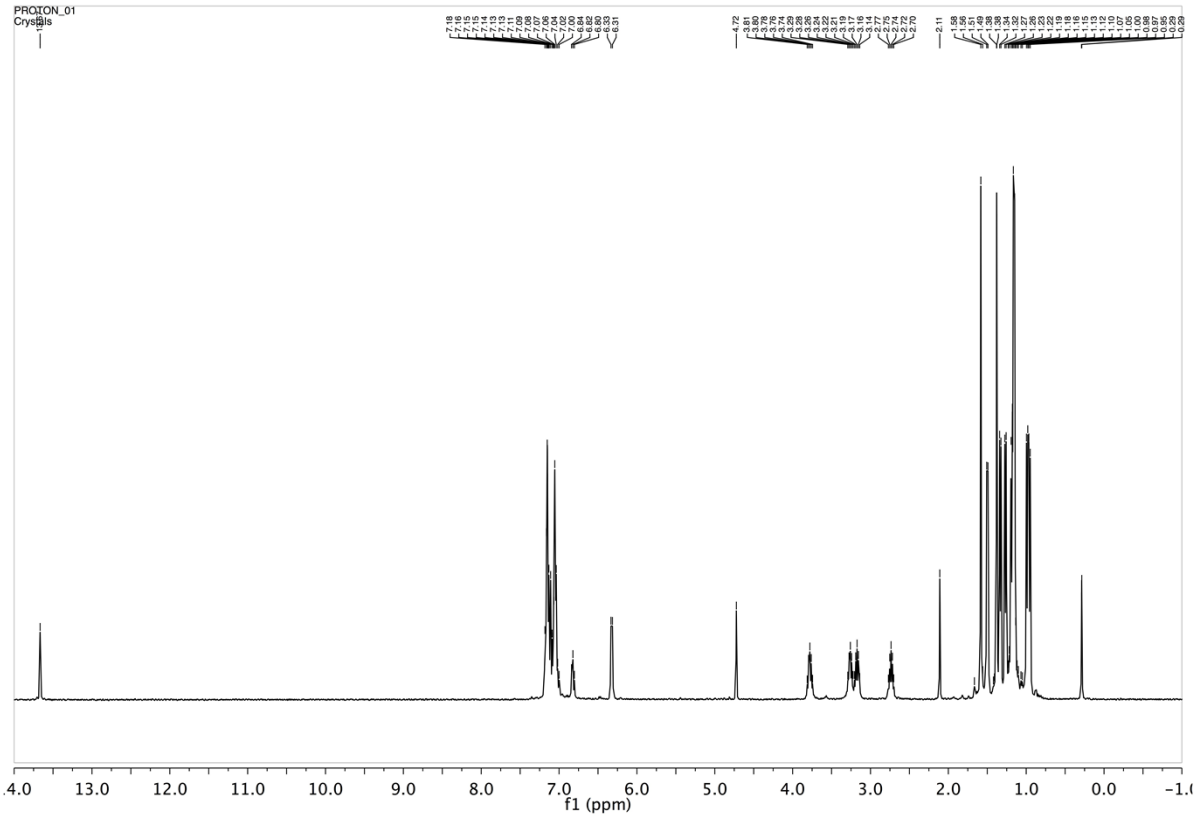

Figure S6. ^{119}Sn NMR spectrum of [(BDI)SnOC(NPh)(C{C(Me)N-2,6-$iPr_2C_6H_3$}{C(Me)N(H)-2,6-$iPr_2C_6H_3$})] (**12**)

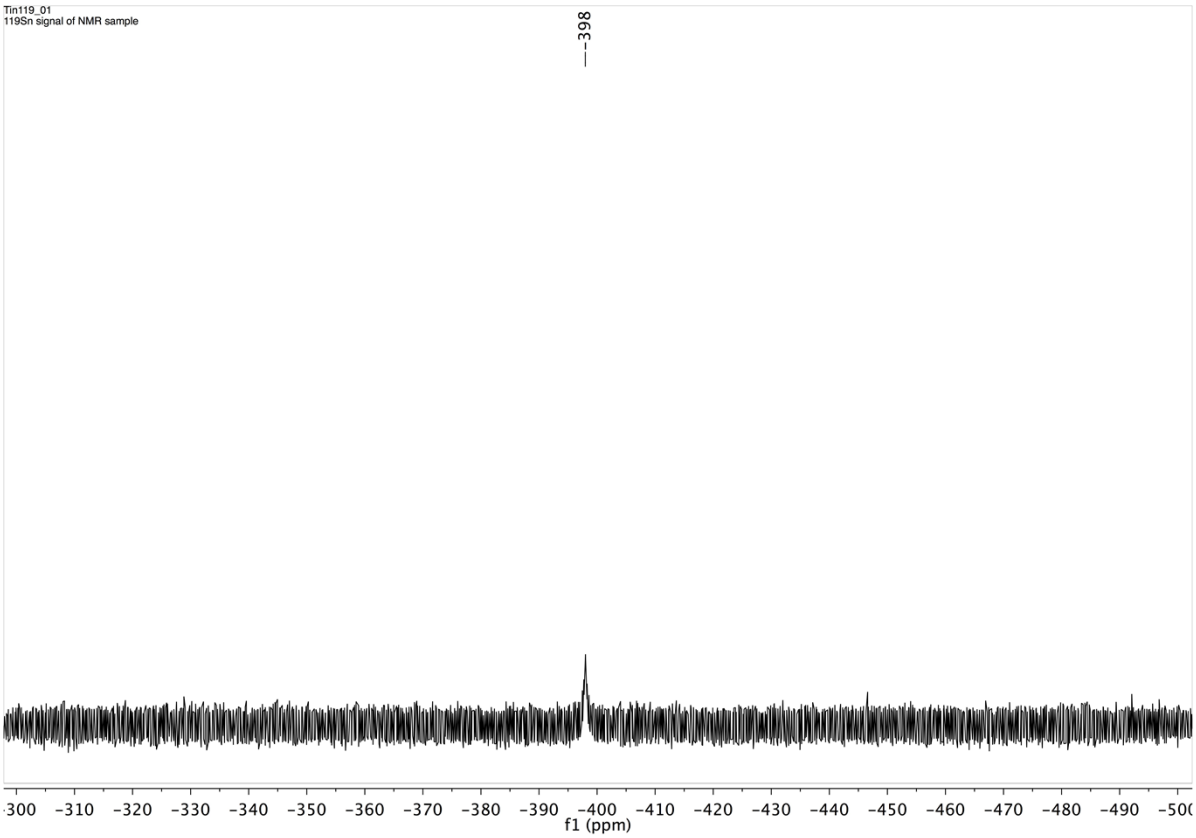

Figure S7. Thermal ellipsoid plot of [(BDI)Pb(N{*i*Pr}$_2$)] (**2**).

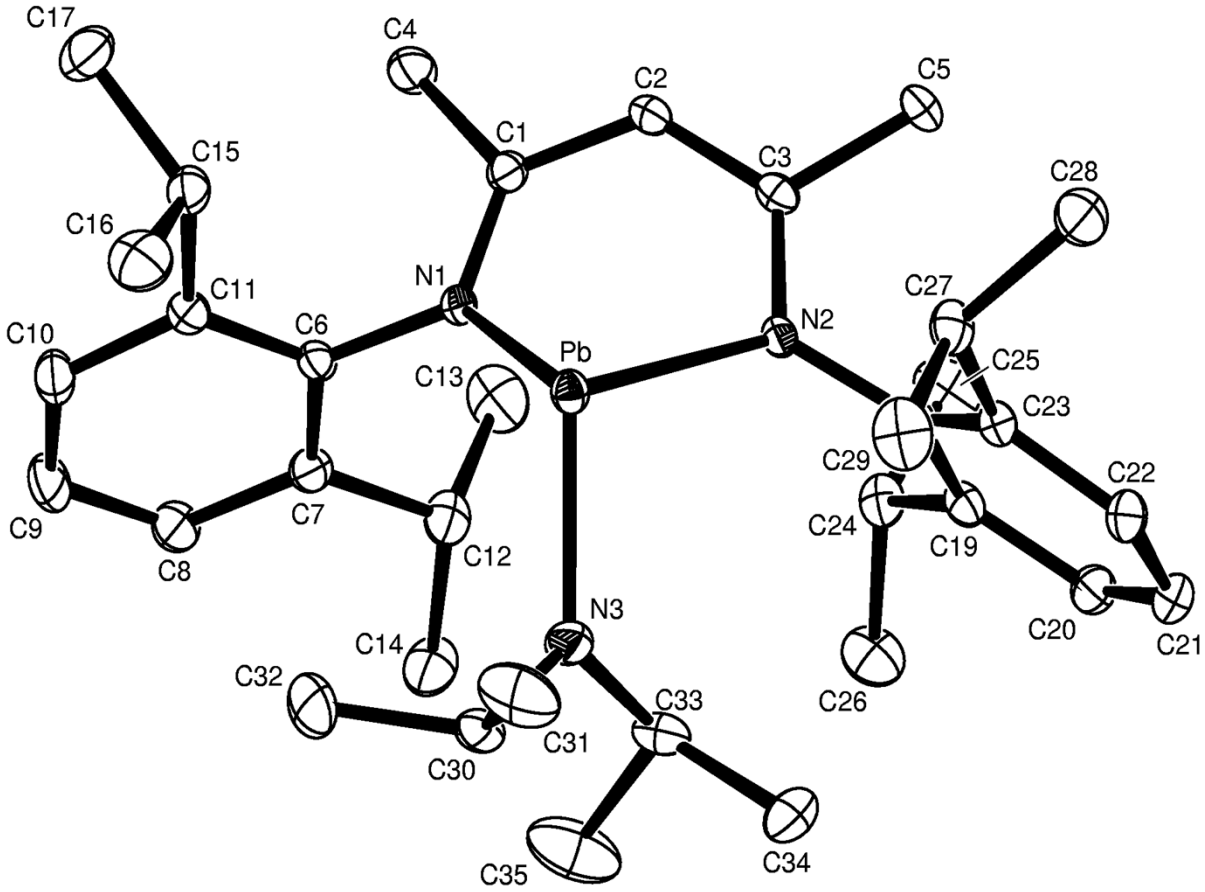

Figure S8. Thermal ellipsoid plot of [(BDI)Pb(NHPh)] (**3**).

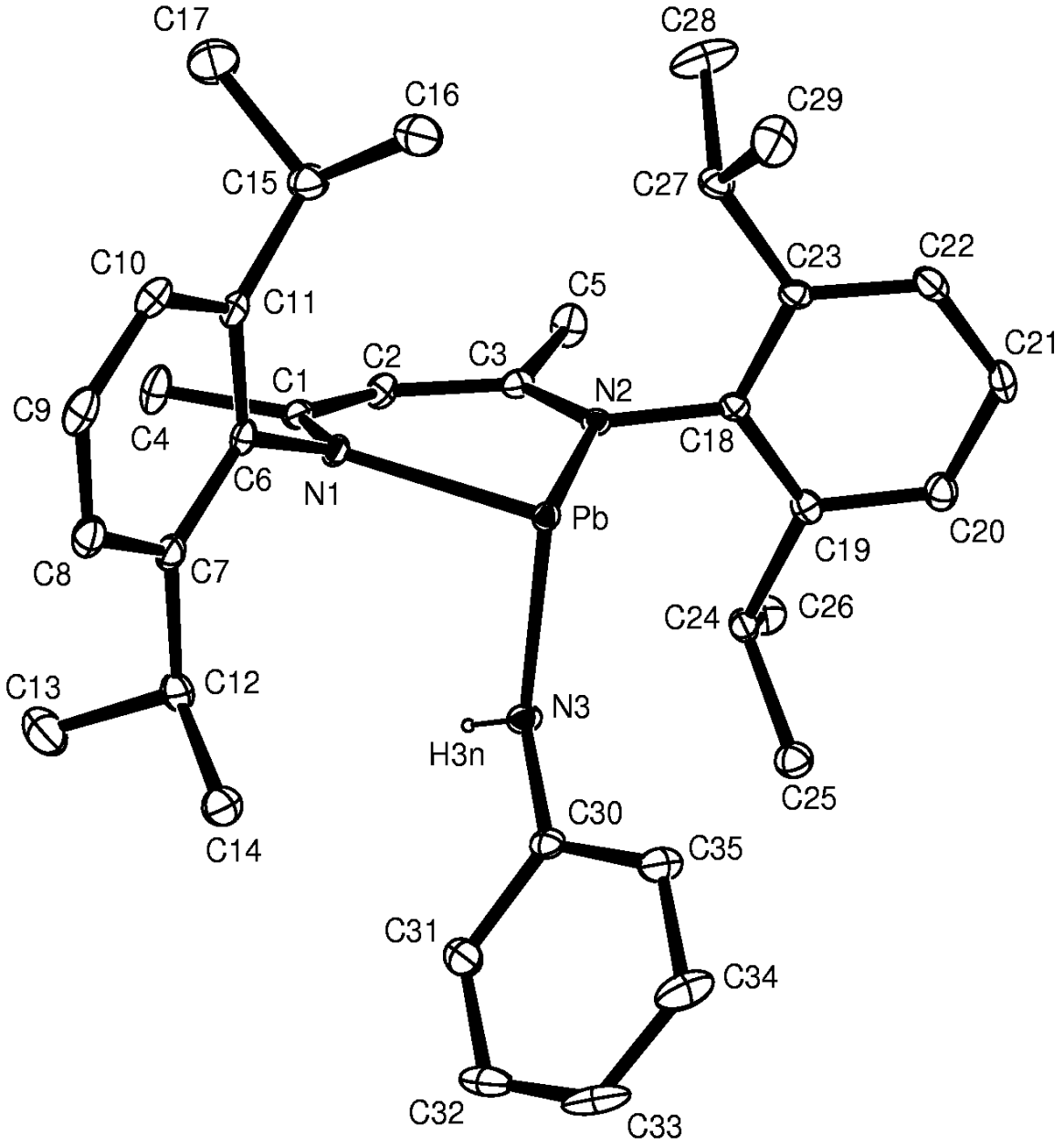

Figure S9. Thermal ellipsoid plot of [(BDI)Pb(NH{2-*i*Pr-C_6H_4})] (**4**).

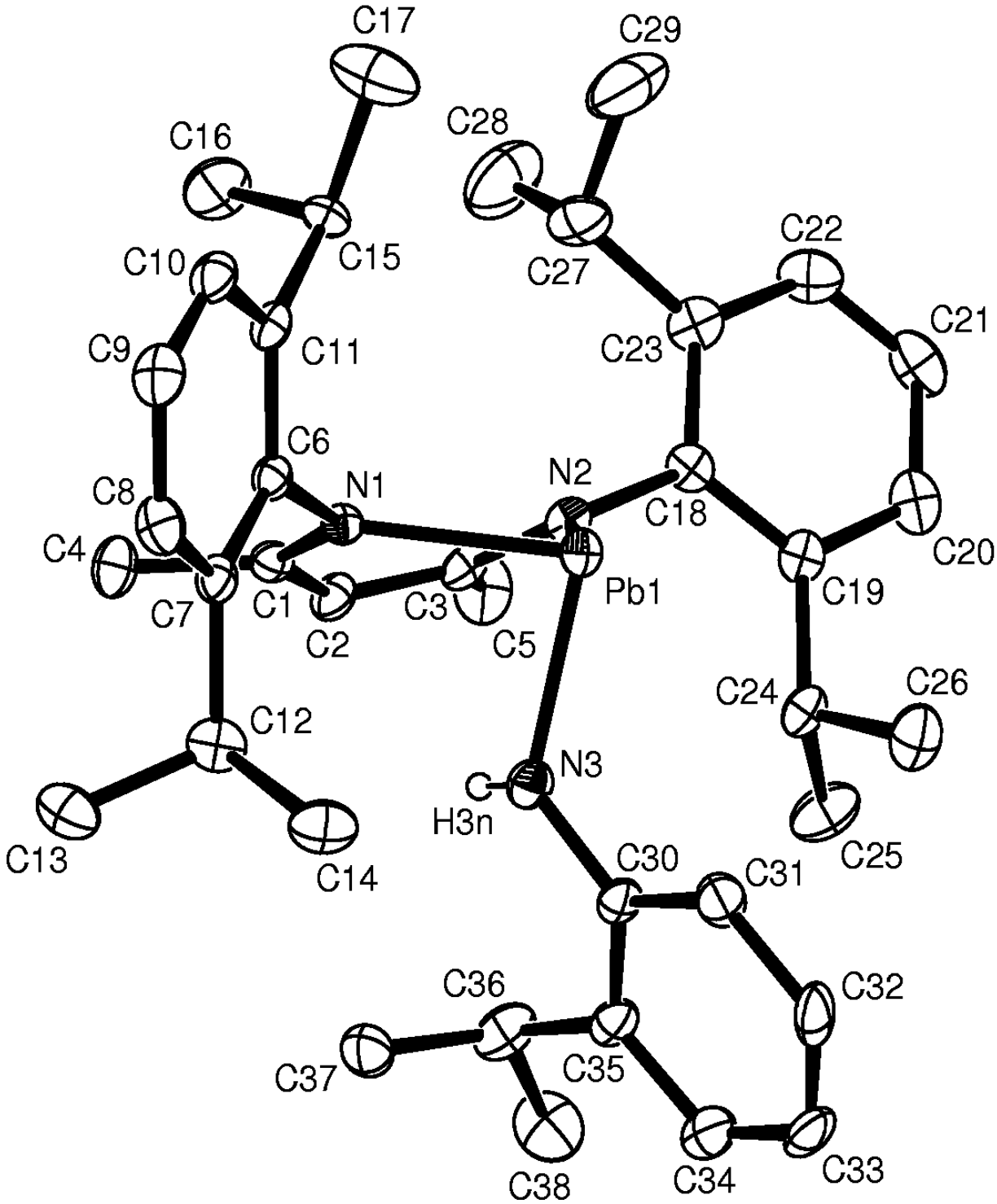

Figure S10. Thermal ellipsoid plot of [(BDI)Pb(NH{2,6-*i*Pr$_2$-C$_6$H$_3$})] (**5**).

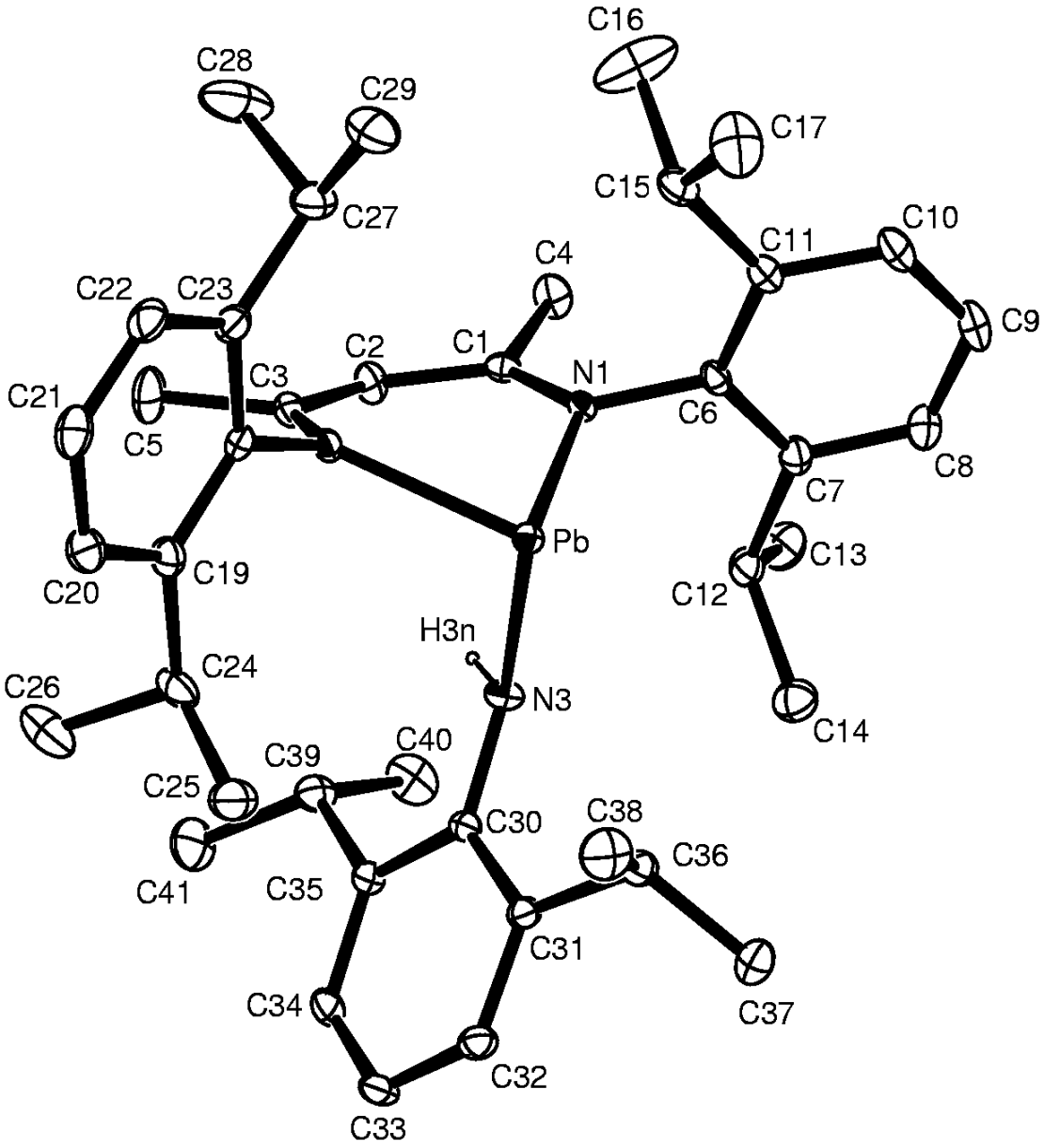

Figure S11. Thermal ellipsoid plot of [IPb(μ-NH(2,6-*i*Pr$_2$C$_6$H$_3$)]$_2$ (**8**).

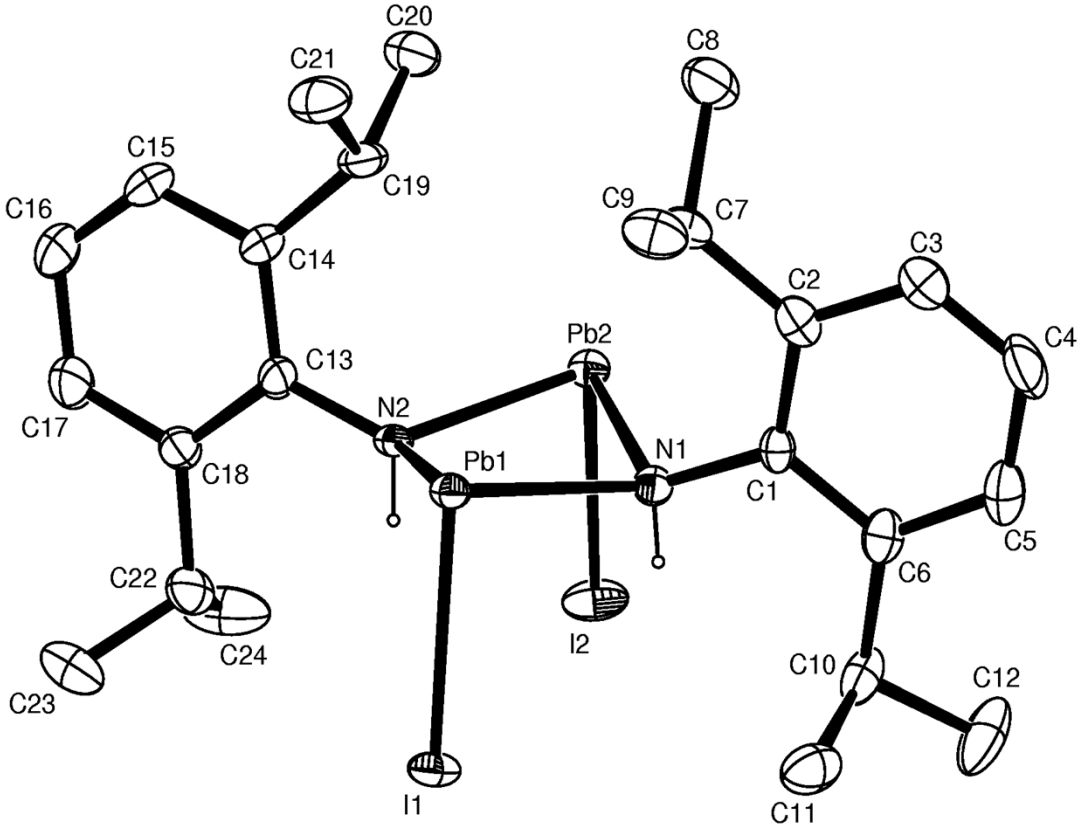

Figure S12. Thermal ellipsoid plot of [(BDI)SnOC(NPh)(C{C(Me)N-2,6-$iPr_2C_6H_3$}{C(Me)N(H){2,6-$iPr_2C_6H_3$})] (**12**).

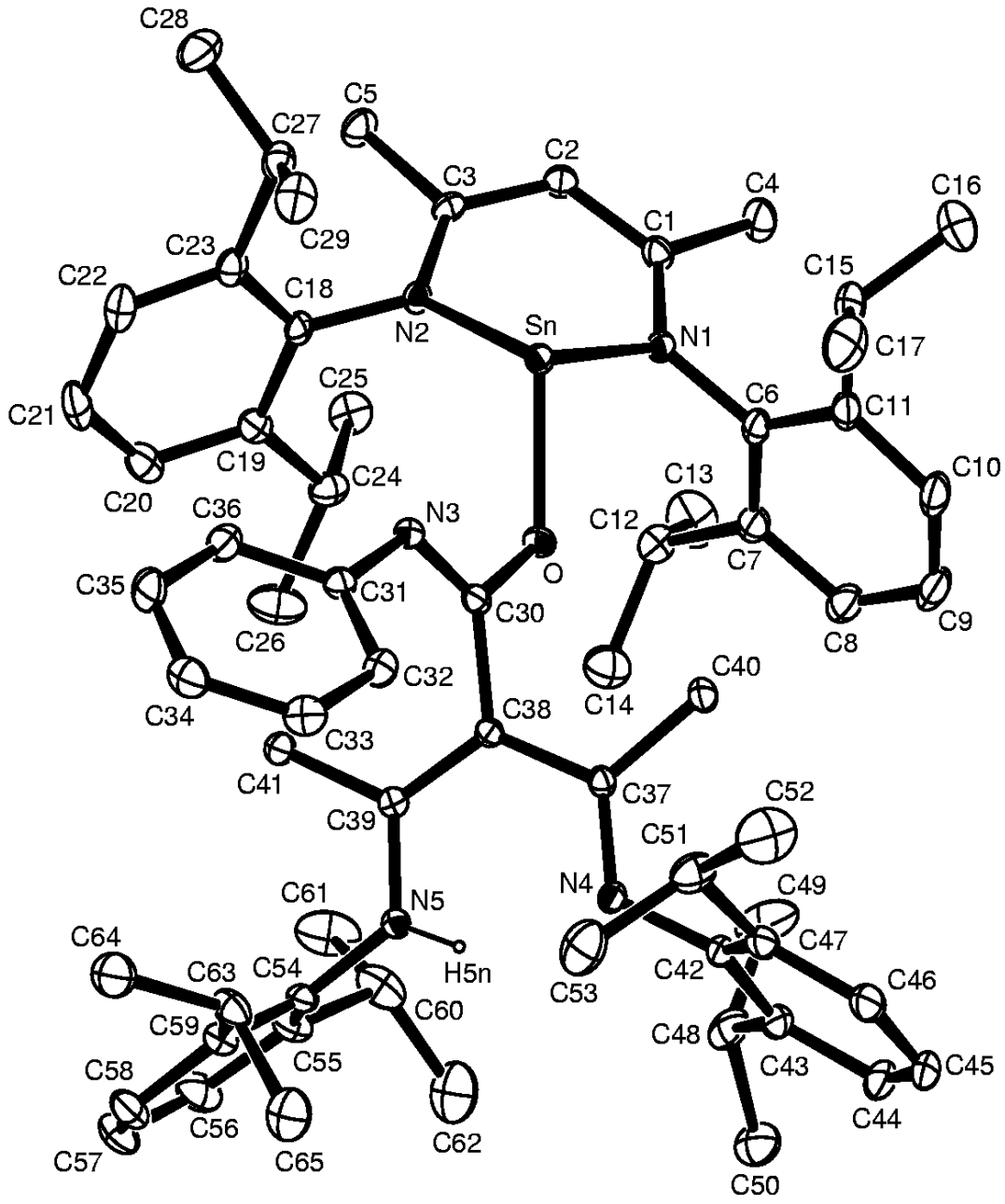

Figure S13. Thermal ellipsoid plot of [(BDI)Pb(OC{=N*t*Bu}{NH(2,6-*i*Pr$_2$-C$_6$H$_3$)})] (**14**).

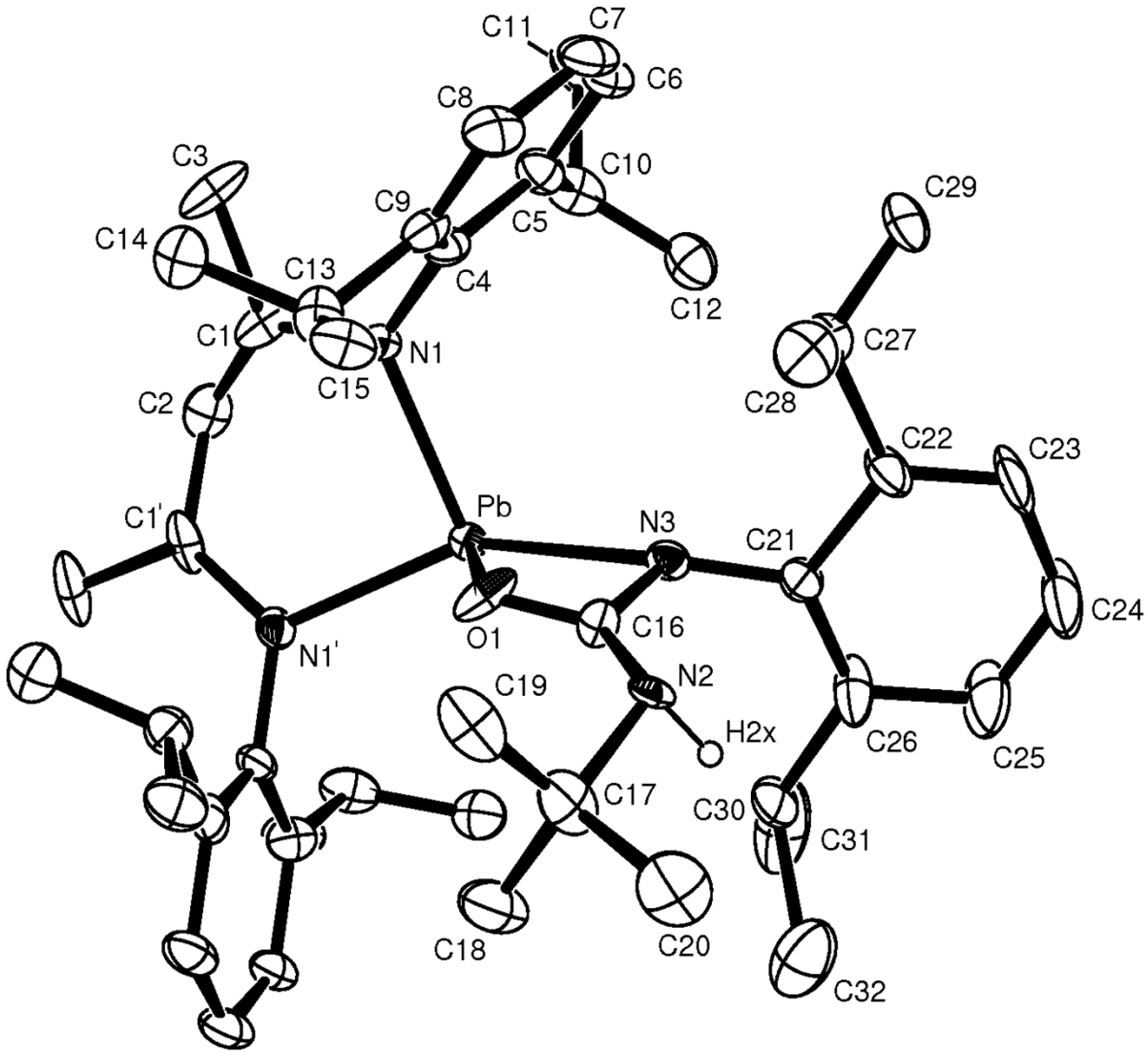

Table S1. Data collection parameters for [(BDI)Pb(OC{=N*t*Bu}{NH(2,6-*i*Pr$_2$-C$_6$H$_3$)})] (**14**).

Identification code	mpc_lh602	
Empirical formula	C46 H68 N4 O Pb	
Formula weight	900.23	
Temperature	173(2) K	
Wavelength	0.71073 Å	
Crystal system	Orthorhombic	
Space group	*P c m n* (No.62)	
Unit cell dimensions	a = 9.3058(1) Å	α= 90°.
	b = 19.5694(3) Å	β= 90°.
	c = 27.4022(4) Å	γ = 90°.
Volume	4990.19(12) Å^3	
Z	4	
Density (calculated)	1.20 Mg/m^3	
Absorption coefficient	3.413 mm^{-1}	
F(000)	1848	
Crystal size	0.12 x 0.06 x 0.06 mm^3	
Theta range for data collection	1.49 to 27.50°.	
Index ranges	-12<=h<=8, -25<=k<=25, -35<=l<=35	
Reflections collected	64880	
Independent reflections	5878 [R(int) = 0.069]	
Completeness to theta = 27.50°	99.7 %	
Absorption correction	Semi-empirical from equivalents	
Max. and min. transmission	0.8214 and 0.6848	
Refinement method	Full-matrix least-squares on F^2	
Data / restraints / parameters	5878 / 67 / 381	
Goodness-of-fit on F^2	1.338	
Final R indices [I>2sigma(I)]	R1 = 0.059, wR2 = 0.195	
R indices (all data)	R1 = 0.075, wR2 = 0.212	
Largest diff. peak and hole	2.08 and -1.76 e.Å^{-3}	

Data collection KappaCCD , Program package WinGX , Abs correction MULTISCAN
Refinement using SHELXL-97 , Drawing using ORTEP-3 for Windows

The molecule lies on a mirror plane. The BDI ligand is disordered and was modelled over two positions with each being constrained to be equal. The hydrogen atom was located on N2; the N-H distance was restrained to be 0.91 Å. Due to the severe disorder, discussion of bond lengths and angles should be treated with care.

Figure S14. Thermal ellipsoid plot of $[C_6H_5CH=C\{(Me)CN\text{-}2,6\text{-}iPr_2C_6H_3\}_2]$ (**15**).

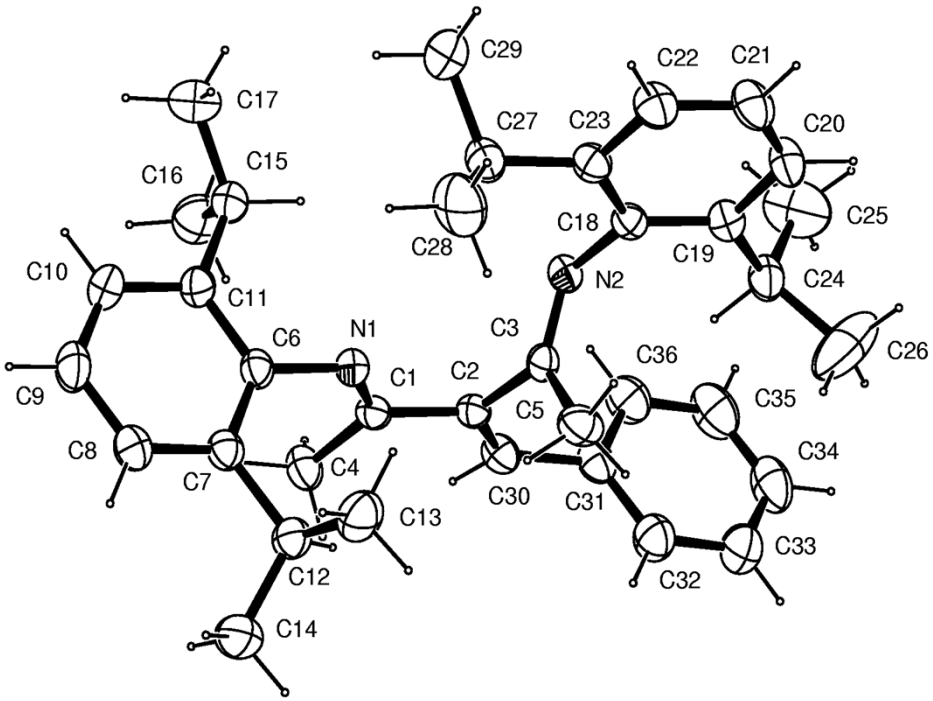

Table S2. Cartesian coordinates of optimized structure of [(BDI)Pb(N{*i*Pr}$_2$)] (**2**) at B3LYP/LANL2DZ/6-31G* level.[1]

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms) X	Y	Z
1	7	0	-1.490366	0.296002	-1.035057
2	7	0	1.603712	0.500616	-0.938251
3	7	0	-0.270365	-1.015186	1.950161
4	6	0	-1.199424	0.669352	-2.295479
5	6	0	0.093982	0.795023	-2.824986
6	1	0	0.123933	1.050304	-3.878597
7	6	0	1.364546	0.871185	-2.184964
8	6	0	-2.337708	0.949586	-3.267601
9	1	0	-2.838351	0.010058	-3.532094
10	1	0	-1.970174	1.411274	-4.186518
11	1	0	-3.100284	1.597715	-2.830829
12	6	0	2.469699	1.420759	-3.079901
13	1	0	3.392300	1.618030	-2.534145
14	1	0	2.142827	2.342664	-3.570804
15	1	0	2.686583	0.694646	-3.873349
16	6	0	-2.817542	0.509440	-0.530642
17	6	0	-3.149530	1.777314	0.022024
18	6	0	-4.442357	1.975610	0.521103
19	1	0	-4.709353	2.943630	0.935943
20	6	0	-5.393290	0.959159	0.503887
21	1	0	-6.389128	1.133154	0.902916
22	6	0	-5.056846	-0.280694	-0.027769
23	1	0	-5.800892	-1.073037	-0.042848
24	6	0	-3.783293	-0.527914	-0.557677
25	6	0	-2.146452	2.931470	0.068573
26	1	0	-1.152378	2.505523	-0.097718
27	6	0	-2.402184	3.964649	-1.049643
28	1	0	-3.405719	4.398561	-0.959240
29	1	0	-2.315478	3.522292	-2.046057
30	1	0	-1.675482	4.783816	-0.985202
31	6	0	-2.125876	3.650919	1.431825
32	1	0	-3.050818	4.211005	1.613073
33	1	0	-1.301399	4.373502	1.460294
34	1	0	-1.991654	2.950010	2.261228
35	6	0	-3.495017	-1.905537	-1.150966
36	1	0	-2.490783	-1.877569	-1.587748
37	6	0	-4.471341	-2.271852	-2.286834
38	1	0	-4.185367	-3.228135	-2.740863
39	1	0	-4.480404	-1.510492	-3.074206
40	1	0	-5.497702	-2.376552	-1.916507
41	6	0	-3.504391	-3.001786	-0.066779
42	1	0	-4.499628	-3.104574	0.381936
43	1	0	-2.801060	-2.770464	0.739878

44	1	0	-3.229319	-3.973349	-0.495613
45	6	0	2.896580	0.641356	-0.342237
46	6	0	3.893259	-0.347158	-0.546101
47	6	0	5.121965	-0.208469	0.114276
48	1	0	5.892537	-0.959885	-0.038211
49	6	0	5.377479	0.869207	0.952917
50	1	0	6.337480	0.958902	1.454422
51	6	0	4.392224	1.835026	1.146504
52	1	0	4.598432	2.674037	1.803188
53	6	0	3.145137	1.743554	0.519118
54	6	0	3.696937	-1.547688	-1.473031
55	1	0	2.693316	-1.485076	-1.904579
56	6	0	4.702004	-1.539801	-2.643979
57	1	0	4.652395	-0.606613	-3.213852
58	1	0	4.494770	-2.369751	-3.330316
59	1	0	5.731993	-1.655312	-2.286638
60	6	0	3.787588	-2.887352	-0.715457
61	1	0	4.780808	-3.031750	-0.274466
62	1	0	3.599786	-3.726213	-1.396642
63	1	0	3.056027	-2.942897	0.097652
64	6	0	2.089660	2.827118	0.736196
65	1	0	1.112596	2.330050	0.707542
66	6	0	2.213170	3.550684	2.088997
67	1	0	3.081551	4.220259	2.114378
68	1	0	2.302638	2.851314	2.925685
69	1	0	1.325204	4.169673	2.260585
70	6	0	2.106737	3.875802	-0.396765
71	1	0	3.084043	4.371476	-0.449429
72	1	0	1.347954	4.647380	-0.215521
73	1	0	1.900685	3.430140	-1.372505
74	6	0	-0.917223	0.137990	2.593399
75	1	0	-1.113893	0.856206	1.790788
76	6	0	-2.284571	-0.220028	3.212750
77	1	0	-2.948534	-0.648745	2.456585
78	1	0	-2.771960	0.671497	3.627754
79	1	0	-2.179447	-0.944872	4.029713
80	6	0	-0.036012	0.862623	3.631140
81	1	0	0.150388	0.240319	4.514460
82	1	0	-0.526727	1.780182	3.979506
83	1	0	0.930287	1.134275	3.197238
84	6	0	0.245956	-2.049669	2.866429
85	1	0	-0.217393	-1.884487	3.849141
86	6	0	1.773095	-1.972554	3.075485
87	1	0	2.307080	-2.183691	2.140080
88	1	0	2.110991	-2.702918	3.823161
89	1	0	2.078467	-0.976476	3.406368
90	6	0	-0.155187	-3.476566	2.445378
91	1	0	-1.241614	-3.563081	2.342857
92	1	0	0.180858	-4.210469	3.188588
93	1	0	0.300040	-3.763315	1.487986
94	82	0	0.057042	-1.247156	-0.163800

Table S3. Cartesian coordinates of optimized structure of [(BDI)Pb(NH{2,6-*i*Pr$_2$-C$_6$H$_3$})] (**5**) at B3LYP/LANL2DZ/6-31G* level.[1]

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms) X	Y	Z
1	82	0	-0.255077	0.055220	-0.825669
2	7	0	-1.787141	-0.679097	0.757389
3	7	0	0.056920	1.828135	0.681856
4	7	0	1.188349	-1.290770	0.136704
5	1	0	1.024908	-1.235246	1.136012
6	6	0	-1.762404	-0.311505	2.040279
7	6	0	-0.913391	0.671681	2.596051
8	1	0	-0.976826	0.749375	3.674419
9	6	0	-0.174063	1.711583	1.989854
10	6	0	-2.745481	-0.946760	3.011045
11	1	0	-2.560898	-0.610730	4.033171
12	1	0	-2.695647	-2.037389	2.984256
13	1	0	-3.771704	-0.673122	2.740526
14	6	0	0.316258	2.795567	2.937701
15	1	0	1.313310	3.147882	2.665183
16	1	0	0.335901	2.430039	3.967175
17	1	0	-0.349408	3.665465	2.903578
18	6	0	-2.790303	-1.602125	0.282620
19	6	0	-2.586721	-3.004969	0.370651
20	6	0	-3.579829	-3.857608	-0.128769
21	1	0	-3.432259	-4.932117	-0.062885
22	6	0	-4.744724	-3.365184	-0.706226
23	1	0	-5.502621	-4.047612	-1.081757
24	6	0	-4.925608	-1.990516	-0.805276
25	1	0	-5.832130	-1.604083	-1.263142
26	6	0	-3.964153	-1.090795	-0.327924
27	6	0	-1.329325	-3.635746	0.965617
28	1	0	-0.689756	-2.832394	1.336635
29	6	0	-1.640857	-4.584183	2.141803
30	1	0	-0.708035	-4.953870	2.583647
31	1	0	-2.217575	-5.456917	1.813652
32	1	0	-2.214127	-4.091437	2.934757
33	6	0	-0.525344	-4.388832	-0.112831
34	1	0	0.407535	-4.778897	0.310405
35	1	0	-0.261568	-3.727240	-0.941475
36	1	0	-1.094480	-5.235855	-0.514862
37	6	0	-4.228066	0.405022	-0.486415
38	1	0	-3.345082	0.942963	-0.128289
39	6	0	-5.423808	0.869537	0.369283
40	1	0	-5.567931	1.952574	0.273573
41	1	0	-5.271328	0.642779	1.430250
42	1	0	-6.353388	0.380337	0.055104
43	6	0	-4.441051	0.785095	-1.965446

44	1	0	-4.579061	1.866723	-2.069407
45	1	0	-5.328758	0.296784	-2.383442
46	1	0	-3.582602	0.491580	-2.580237
47	6	0	0.567186	3.063558	0.144775
48	6	0	1.949464	3.216596	-0.134058
49	6	0	2.392735	4.426219	-0.686188
50	1	0	3.451768	4.553950	-0.892667
51	6	0	1.513621	5.464230	-0.971757
52	1	0	1.881284	6.393853	-1.398152
53	6	0	0.157574	5.298782	-0.710267
54	1	0	-0.531354	6.107421	-0.940408
55	6	0	-0.340575	4.112850	-0.157732
56	6	0	2.983666	2.130972	0.156018
57	1	0	2.455679	1.238672	0.502991
58	6	0	3.772912	1.739883	-1.109452
59	1	0	4.416713	0.878552	-0.905312
60	1	0	4.407537	2.564024	-1.457226
61	1	0	3.103973	1.471623	-1.933738
62	6	0	3.962218	2.557852	1.269124
63	1	0	4.692398	1.761943	1.454201
64	1	0	3.445716	2.767206	2.212311
65	1	0	4.516718	3.460886	0.986688
66	6	0	-1.845879	3.996984	0.075846
67	1	0	-2.044782	3.025437	0.536992
68	6	0	-2.376722	5.080756	1.035701
69	1	0	-3.445945	4.929913	1.227049
70	1	0	-2.254568	6.085958	0.615685
71	1	0	-1.856422	5.060788	1.999351
72	6	0	-2.617137	4.045608	-1.258056
73	1	0	-3.693292	3.924230	-1.085130
74	1	0	-2.289565	3.253053	-1.939602
75	1	0	-2.469533	5.003939	-1.769534
76	6	0	2.515289	-1.640464	-0.127274
77	6	0	2.930148	-2.007591	-1.441897
78	6	0	4.277656	-2.295647	-1.682758
79	1	0	4.585726	-2.555865	-2.692939
80	6	0	5.230349	-2.273309	-0.669901
81	1	0	6.272130	-2.497881	-0.881453
82	6	0	4.815452	-1.985209	0.629924
83	1	0	5.550045	-1.999388	1.429440
84	6	0	3.487517	-1.673298	0.928910
85	6	0	1.942975	-2.148354	-2.599343
86	1	0	0.932604	-2.047809	-2.188810
87	6	0	2.001615	-3.549673	-3.241639
88	1	0	1.224310	-3.653361	-4.009131
89	1	0	1.849338	-4.332638	-2.491445
90	1	0	2.967853	-3.733904	-3.725141
91	6	0	2.125971	-1.061494	-3.676412
92	1	0	1.380168	-1.169696	-4.474291
93	1	0	3.119906	-1.127873	-4.134689
94	1	0	2.028108	-0.052853	-3.258897
95	6	0	3.063834	-1.434690	2.379118

96	1	0	2.320299	-0.624142	2.391919
97	6	0	2.389756	-2.696357	2.966500
98	1	0	2.000144	-2.503601	3.974246
99	1	0	3.117455	-3.513983	3.033479
100	1	0	1.561660	-3.045832	2.341002
101	6	0	4.196625	-0.980722	3.314504
102	1	0	3.783941	-0.710194	4.293584
103	1	0	4.726604	-0.108605	2.917636
104	1	0	4.932079	-1.775820	3.484152

Table S4. Cartesian coordinates of optimized structure of [(BDI)Pb(N{*i*Pr}$_2$)] (**10**) at B3LYP/LANL2DZ/6-31G* level.[1]

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms) X	Y	Z
1	50	0	0.053293	-1.329605	-0.161074
2	7	0	-1.469145	0.114174	-1.014148
3	7	0	1.555940	0.317307	-0.943817
4	7	0	-0.194761	-1.018293	1.867492
5	6	0	-1.212500	0.449240	-2.295398
6	6	0	0.070260	0.555699	-2.848014
7	1	0	0.094389	0.773885	-3.909818
8	6	0	1.335575	0.653640	-2.205954
9	6	0	-2.368662	0.695939	-3.251826
10	1	0	-2.866108	-0.254498	-3.479288
11	1	0	-2.017957	1.131230	-4.189959
12	1	0	-3.128120	1.352276	-2.822867
13	6	0	2.448218	1.172511	-3.105591
14	1	0	3.364433	1.393250	-2.558678
15	1	0	2.123747	2.073455	-3.635212
16	1	0	2.674165	0.416324	-3.867644
17	6	0	-2.792076	0.349779	-0.495132
18	6	0	-3.117013	1.642052	0.002253
19	6	0	-4.404450	1.863426	0.505745
20	1	0	-4.666514	2.849076	0.880065
21	6	0	-5.356687	0.848902	0.541142
22	1	0	-6.348064	1.041278	0.942849
23	6	0	-5.028845	-0.411279	0.054794
24	1	0	-5.775408	-1.200940	0.074929
25	6	0	-3.761129	-0.684080	-0.477511
26	6	0	-2.121302	2.803939	-0.021226
27	1	0	-1.127658	2.381110	-0.196841
28	6	0	-2.415252	3.790633	-1.171916
29	1	0	-3.420301	4.218811	-1.072781
30	1	0	-2.349635	3.311020	-2.152491
31	1	0	-1.695385	4.618189	-1.158030
32	6	0	-2.074158	3.578624	1.310962
33	1	0	-3.000352	4.136596	1.491746
34	1	0	-1.257213	4.309839	1.288972
35	1	0	-1.912654	2.914646	2.165273
36	6	0	-3.494434	-2.081862	-1.033937
37	1	0	-2.483884	-2.091032	-1.455939
38	6	0	-4.468851	-2.452511	-2.170709
39	1	0	-4.198417	-3.424509	-2.599971
40	1	0	-4.457276	-1.710495	-2.976116
41	1	0	-5.500154	-2.527628	-1.806593
42	6	0	-3.543491	-3.152810	0.073125
43	1	0	-4.546896	-3.227365	0.509409

44	1	0	-2.844833	-2.919128	0.881723
45	1	0	-3.280456	-4.137405	-0.331977
46	6	0	2.851004	0.476125	-0.344043
47	6	0	3.845568	-0.520078	-0.517995
48	6	0	5.067866	-0.368486	0.152197
49	1	0	5.836741	-1.126387	0.027076
50	6	0	5.320565	0.730444	0.962889
51	1	0	6.275090	0.827928	1.473369
52	6	0	4.343367	1.712168	1.111436
53	1	0	4.552279	2.572499	1.738661
54	6	0	3.101786	1.610611	0.473996
55	6	0	3.671304	-1.728621	-1.440698
56	1	0	2.668463	-1.687002	-1.875680
57	6	0	4.687470	-1.702447	-2.603004
58	1	0	4.637815	-0.766515	-3.168037
59	1	0	4.493235	-2.529709	-3.296256
60	1	0	5.714868	-1.812634	-2.236382
61	6	0	3.781644	-3.068451	-0.687742
62	1	0	4.764780	-3.186752	-0.217129
63	1	0	3.640631	-3.905815	-1.381620
64	1	0	3.022547	-3.152934	0.095371
65	6	0	2.064899	2.724189	0.629698
66	1	0	1.079448	2.243985	0.644617
67	6	0	2.216517	3.540401	1.926255
68	1	0	3.092169	4.199783	1.888413
69	1	0	2.310222	2.905348	2.811564
70	1	0	1.338253	4.181428	2.063341
71	6	0	2.085251	3.698750	-0.568025
72	1	0	3.074203	4.161950	-0.671861
73	1	0	1.352871	4.501642	-0.417162
74	1	0	1.842753	3.202341	-1.509537
75	6	0	-0.758243	0.187317	2.497699
76	1	0	-0.928286	0.897936	1.683040
77	6	0	-2.125885	-0.075420	3.161017
78	1	0	-2.838510	-0.475139	2.434270
79	1	0	-2.544099	0.850489	3.576127
80	1	0	-2.038421	-0.791742	3.987271
81	6	0	0.195413	0.873865	3.496317
82	1	0	0.329161	0.280891	4.408735
83	1	0	-0.203927	1.849309	3.800886
84	1	0	1.179558	1.028597	3.046642
85	6	0	0.269980	-2.055041	2.817976
86	1	0	-0.112077	-1.777003	3.808302
87	6	0	1.805130	-2.115507	2.938612
88	1	0	2.258093	-2.455931	1.999935
89	1	0	2.113989	-2.813720	3.728144
90	1	0	2.222516	-1.130778	3.165971
91	6	0	-0.300424	-3.455581	2.528889
92	1	0	-1.394719	-3.435635	2.522060
93	1	0	0.024324	-4.168343	3.297661
94	1	0	0.037213	-3.844619	1.560747

Table S5. Cartesian coordinates of optimized structure of [(BDI)Sn(NH{2,6-*i*Pr$_2$-C$_6$H$_3$})] **(11)** at B3LYP/LANL2DZ/6-31G* level.[1]

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms) X	Y	Z
1	50	0	-0.278020	0.100466	-0.818487
2	7	0	-1.786312	-0.574041	0.692828
3	7	0	0.130912	1.789550	0.617073
4	7	0	1.069114	-1.245263	0.084338
5	1	0	0.929524	-1.218484	1.087914
6	6	0	-1.768199	-0.220083	1.980759
7	6	0	-0.874282	0.712829	2.550207
8	1	0	-0.934859	0.791695	3.628400
9	6	0	-0.076875	1.697920	1.934639
10	6	0	-2.787486	-0.820322	2.933477
11	1	0	-3.802822	-0.672687	2.551861
12	1	0	-2.716602	-0.361280	3.921340
13	1	0	-2.646103	-1.899033	3.041083
14	6	0	0.517998	2.743667	2.861838
15	1	0	1.578425	2.901180	2.648518
16	1	0	0.407026	2.446515	3.907025
17	1	0	0.023827	3.711408	2.727757
18	6	0	-2.818538	-1.463965	0.202727
19	6	0	-2.690847	-2.870609	0.345114
20	6	0	-3.706096	-3.687856	-0.168935
21	1	0	-3.616899	-4.765792	-0.066555
22	6	0	-4.820202	-3.155803	-0.807654
23	1	0	-5.596541	-3.810959	-1.193881
24	6	0	-4.927814	-1.777800	-0.952756
25	1	0	-5.796877	-1.361766	-1.454598
26	6	0	-3.940696	-0.911928	-0.465082
27	6	0	-1.492013	-3.547360	1.007026
28	1	0	-0.845503	-2.768470	1.417059
29	6	0	-1.899289	-4.488326	2.159872
30	1	0	-1.004802	-4.872669	2.663851
31	1	0	-2.464384	-5.352827	1.793082
32	1	0	-2.519778	-3.987413	2.911243
33	6	0	-0.658937	-4.325177	-0.030675
34	1	0	0.227910	-4.764008	0.441554
35	1	0	-0.317472	-3.665414	-0.830948
36	1	0	-1.242619	-5.139714	-0.476425
37	6	0	-4.132837	0.590024	-0.663150
38	1	0	-3.226219	1.096389	-0.319080
39	6	0	-4.326216	0.946910	-2.150145
40	1	0	-4.404011	2.032211	-2.275640
41	1	0	-5.240533	0.501683	-2.558955
42	1	0	-3.483198	0.593860	-2.753930
43	6	0	-5.304019	1.126480	0.184795

44	1	0	-5.404743	2.211431	0.059438
45	1	0	-5.155170	0.923062	1.251289
46	1	0	-6.253925	0.666479	-0.112225
47	6	0	0.680154	3.010693	0.070996
48	6	0	2.061326	3.118319	-0.226670
49	6	0	2.538177	4.320687	-0.767179
50	1	0	3.597259	4.413606	-0.991119
51	6	0	1.692083	5.393371	-1.020894
52	1	0	2.085690	6.316743	-1.437614
53	6	0	0.334815	5.270216	-0.743356
54	1	0	-0.329495	6.104718	-0.952032
55	6	0	-0.196608	4.092514	-0.204508
56	6	0	3.060960	1.990429	0.016530
57	1	0	2.513774	1.121914	0.392002
58	6	0	3.761201	1.565403	-1.289845
59	1	0	4.379327	0.678076	-1.120009
60	1	0	4.407839	2.363348	-1.674928
61	1	0	3.034863	1.324781	-2.072601
62	6	0	4.116050	2.373671	1.073871
63	1	0	4.811484	1.541297	1.229591
64	1	0	3.661071	2.617986	2.040287
65	1	0	4.703454	3.243370	0.755825
66	6	0	-1.703088	4.024813	0.041813
67	1	0	-1.937030	3.041481	0.459244
68	6	0	-2.484678	4.166101	-1.279670
69	1	0	-3.562127	4.066943	-1.100334
70	1	0	-2.185665	3.400960	-2.003733
71	1	0	-2.315371	5.145684	-1.741966
72	6	0	-2.180278	5.082616	1.057443
73	1	0	-3.255690	4.974524	1.243042
74	1	0	-2.008538	6.100294	0.687862
75	1	0	-1.663381	4.988225	2.018533
76	6	0	2.357745	-1.708623	-0.219143
77	6	0	2.707471	-2.123590	-1.537215
78	6	0	4.024065	-2.517311	-1.803936
79	1	0	4.285811	-2.813436	-2.817133
80	6	0	4.999854	-2.557466	-0.814914
81	1	0	6.015549	-2.864883	-1.048169
82	6	0	4.641327	-2.222176	0.489710
83	1	0	5.391808	-2.283493	1.271753
84	6	0	3.349187	-1.802975	0.813954
85	6	0	1.692116	-2.212447	-2.675989
86	1	0	0.699661	-2.005842	-2.262039
87	6	0	1.622190	-3.634162	-3.271689
88	1	0	0.822598	-3.695869	-4.020356
89	1	0	1.422699	-4.379510	-2.494728
90	1	0	2.559436	-3.912603	-3.767150
91	6	0	1.951764	-1.181359	-3.790777
92	1	0	1.191318	-1.260095	-4.577708
93	1	0	2.933114	-1.340799	-4.253660
94	1	0	1.930221	-0.155750	-3.407211
95	6	0	2.987270	-1.508204	2.271392

96	1	0	2.303139	-0.647407	2.288492
97	6	0	2.247048	-2.708263	2.906665
98	1	0	1.907739	-2.470046	3.922819
99	1	0	2.917668	-3.573819	2.966105
100	1	0	1.374810	-3.012027	2.318217
101	6	0	4.177613	-1.118110	3.163698
102	1	0	3.814916	-0.799047	4.147946
103	1	0	4.756759	-0.295094	2.732552
104	1	0	4.858180	-1.961171	3.329641

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