

Supporting Information

Synthesis, Physical and Electroluminescence Properties of 3,6-Dipyrenylcarbazole End Capped Oligofluorenes

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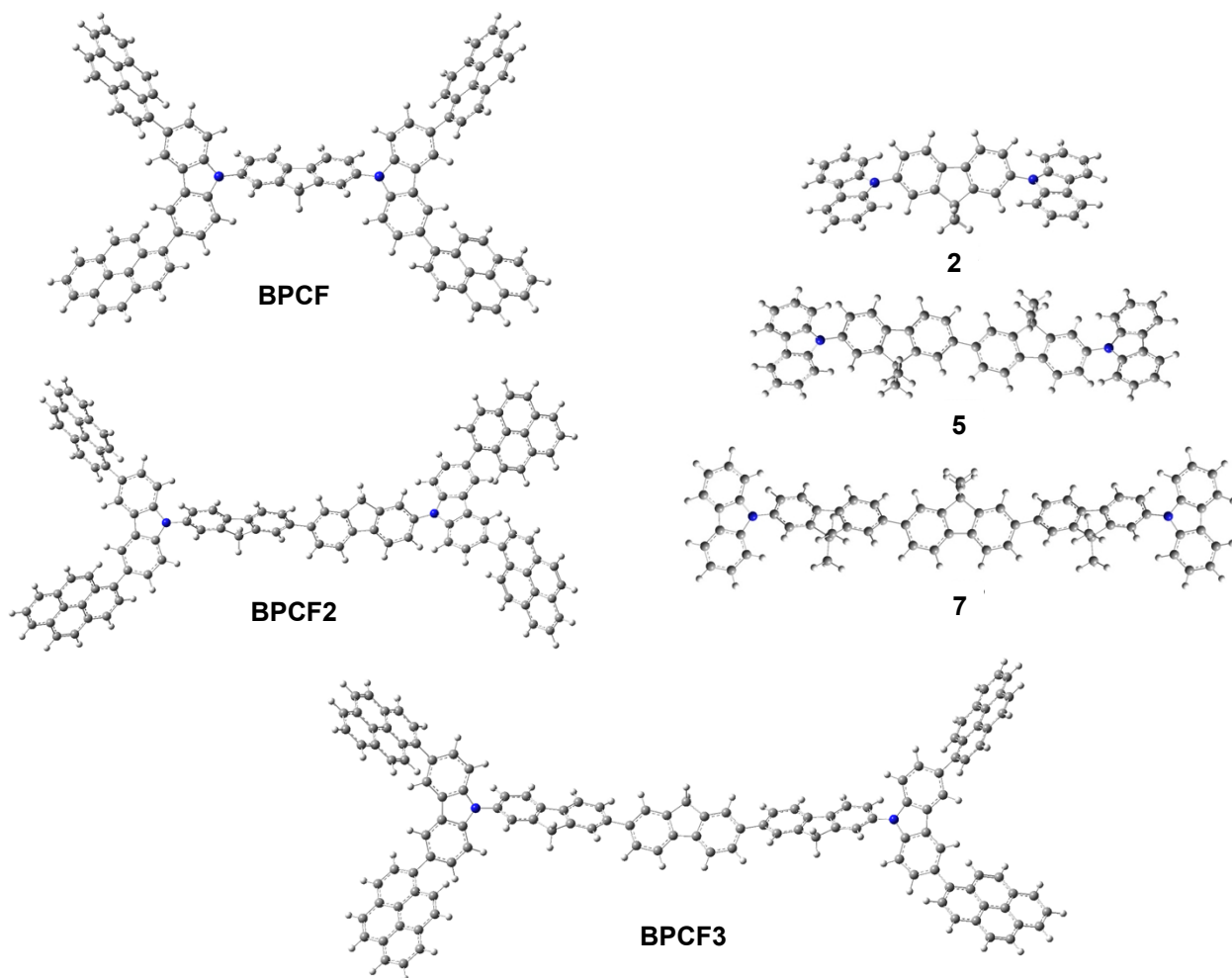


Figure S1 The optimized structures of **BPCF_n**, **2**, **5** and **7** calculated by B3LYP/6-31G(d,p) in CH₂Cl₂ solvent.

Coordinate of the compounds optimized using B3LYP/6-31G(d,p) level of theory.

Compound 2				C	-1.179540	0.175510	0.185193
C	3.016120	-1.150947	-1.441838	C	-2.537425	0.347558	0.419401
C	3.460371	-0.317323	-0.404243	C	-3.460371	-0.317323	-0.404243
C	2.537425	0.347558	0.419402	C	-3.016120	-1.150947	-1.441839
C	1.179540	0.175510	0.185193	C	-1.651971	-1.339366	-1.662776
C	0.733395	-0.670861	-0.850115	C	-0.733395	-0.670861	-0.850115
C	1.651971	-1.339366	-1.662776	H	-2.897699	0.975239	1.228512
H	3.745599	-1.641978	-2.077028	H	-3.745599	-1.641979	-2.077028
H	2.897698	0.975239	1.228513	H	-1.320319	-1.989349	-2.466840
H	1.320319	-1.989349	-2.466840	C	5.539871	1.074709	-0.177064
C	0.000000	0.791758	0.937468	C	5.776603	-1.167712	0.073062

C	5.055140	2.365305	-0.412471	H	0.000000	-0.708340	2.535805
C	6.913959	0.834070	0.085159	H	0.884758	0.776318	2.934906
C	5.563779	-2.544750	0.193299	H	-0.884759	0.776318	2.934906
C	7.064643	-0.597235	0.247164	C	0.000000	2.332833	0.815210
C	5.966222	3.418740	-0.364593	H	0.884901	2.756617	1.300507
H	4.007285	2.543330	-0.626766	H	0.000000	2.645467	-0.232954
C	7.808605	1.911134	0.128068	H	-0.884901	2.756617	1.300507
C	6.666602	-3.348633	0.475421				
H	4.575612	-2.974399	0.073338				
C	8.156372	-1.428204	0.529761	Compound 5			
C	7.329057	3.199273	-0.094327	C	1.162264	1.456762	-0.911301
H	5.613085	4.430170	-0.542523	C	0.722929	0.168359	-0.544996
H	8.862772	1.741853	0.328171	C	1.687113	-0.793453	-0.177471
C	7.951803	-2.801057	0.639746	C	3.035388	-0.465480	-0.182336
H	6.526778	-4.421255	0.571736	C	3.455447	0.829280	-0.547624
H	9.147962	-1.005763	0.664807	C	2.514547	1.794600	-0.913565
N	4.856271	-0.145787	-0.183760	H	0.432258	2.197468	-1.222111
C	-5.776603	-1.167712	0.073063	H	1.364531	-1.783498	0.131631
C	-5.539871	1.074709	-0.177065	H	2.823001	2.793900	-1.207074
C	-5.563778	-2.544750	0.193300	C	4.231465	-1.346838	0.180604
C	-7.064643	-0.597235	0.247165	C	5.389198	-0.371864	-0.033449
C	-5.055141	2.365304	-0.412475	C	6.748176	-0.591014	0.148647
C	-6.913959	0.834070	0.085158	C	7.647935	0.456089	-0.109388
C	-6.666601	-3.348633	0.475424	C	7.179426	1.707696	-0.536213
H	-4.575612	-2.974399	0.073339	C	5.812696	1.932219	-0.701577
C	-8.156372	-1.428204	0.529763	C	4.917288	0.888686	-0.454338
C	-5.966223	3.418740	-0.364597	H	7.126470	-1.548403	0.493494
H	-4.007286	2.543330	-0.626770	H	7.893008	2.497656	-0.745168
C	-7.808606	1.911133	0.128066	H	5.461264	2.905592	-1.030465
C	-7.951802	-2.801057	0.639749	C	-9.813154	0.730209	-0.577744
H	-6.526776	-4.421255	0.571740	C	-9.884550	-0.980841	0.909136
H	-9.147961	-1.005763	0.664809	C	-9.425958	1.678486	-1.530007
C	-7.329057	3.199272	-0.094330	C	-11.159949	0.621514	-0.142412
H	-5.613086	4.430169	-0.542527	C	-9.571506	-2.036273	1.771729
H	-8.862772	1.741853	0.328171	C	-11.205003	-0.469461	0.809150
N	-4.856272	-0.145787	-0.183760	C	-10.407486	2.531043	-2.031836
H	8.789606	-3.456327	0.857097	H	-8.398585	1.748900	-1.869431
H	8.011697	4.042784	-0.062612	C	-12.126775	1.491690	-0.662607
H	-8.011698	4.042783	-0.062615	C	-10.606761	-2.585673	2.525641
H	-8.789604	-3.456327	0.857101	H	-8.558853	-2.415150	1.853646
C	0.000000	0.379892	2.426829	C	-12.227312	-1.040719	1.577962
				C	-11.744531	2.444277	-1.603473

H	-10.130918	3.276693	-2.771365	H	-5.461267	-2.905606	-1.030447
H	-13.161190	1.420258	-0.338776	H	-0.432250	-2.197463	-1.222106
C	-11.922931	-2.098341	2.430891	H	-7.893004	-2.497659	-0.745192
H	-10.388871	-3.407311	3.201527	H	12.706209	2.550822	3.031142
H	-13.242606	-0.660264	1.511499	H	12.483814	-3.125373	-2.013533
N	-9.045790	-0.246615	0.064615	H	-12.483803	3.125299	-2.013675
C	9.884546	0.980873	0.909110	H	-12.706230	-2.550703	3.031216
C	9.813159	-0.730237	-0.577700	C	4.340879	-2.565012	-0.764325
C	9.571496	2.036347	1.771651	H	4.393985	-2.249876	-1.810432
C	11.205003	0.469499	0.809139	H	5.237172	-3.150620	-0.535578
C	9.425963	-1.678558	-1.529920	H	3.471796	-3.220184	-0.647319
C	11.159955	-0.621514	-0.142375	C	4.159278	-1.824149	1.648716
C	10.606744	2.585782	2.525543	H	4.082026	-0.976999	2.336285
H	8.558839	2.415222	1.853537	H	3.287936	-2.469288	1.799914
C	12.227306	1.040794	1.577934	H	5.052824	-2.399533	1.911318
C	10.407491	-2.531129	-2.031720	C	-4.159270	1.824106	1.648763
H	8.398586	-1.748988	-1.869328	H	-4.082014	0.976943	2.336314
C	12.126783	-1.491705	-0.662544	H	-3.287926	2.469241	1.799966
C	11.922915	2.098445	2.430821	H	-5.052813	2.399487	1.911382
H	10.388855	3.407455	3.201386	C	-4.340890	2.565012	-0.764263
H	13.242604	0.660346	1.511491	H	-4.393997	2.249898	-1.810377
C	11.744537	-2.444341	-1.603359	H	-5.237187	3.150609	-0.535501
H	10.130927	-3.276818	-2.771211	H	-3.471812	3.220189	-0.647247
H	13.161202	-1.420256	-0.338730				
N	9.045790	0.246608	0.064617				
C	-4.231466	1.346822	0.180640	Compound 7			
C	-3.035389	0.465472	-0.182315	C	-5.448520	-0.969768	-1.654329
C	-5.389196	0.371847	-0.033421	C	-4.939749	0.024797	-0.794550
C	-1.687116	0.793451	-0.177456	C	-5.843056	0.737852	0.021090
C	-3.455443	-0.829290	-0.547605	C	-7.201176	0.457837	-0.033633
C	-6.748173	0.590996	0.148675	C	-7.691123	-0.540781	-0.899100
C	-4.917283	-0.888701	-0.454318	C	-6.810930	-1.258383	-1.712228
C	-0.722928	-0.168353	-0.544996	H	-4.766320	-1.506854	-2.305711
H	-1.364538	1.783495	0.131656	H	-5.464136	1.489051	0.708084
C	-2.514539	-1.794603	-0.913551	H	-7.174656	-2.025251	-2.390135
C	-7.647936	-0.456100	-0.109378	C	-8.339360	1.098073	0.762481
H	-7.126463	1.548380	0.493540	C	-9.544716	0.329232	0.220669
C	-5.812693	-1.932230	-0.701563	C	-10.881618	0.458905	0.572676
C	-1.162258	-1.456757	-0.911297	C	-11.835083	-0.356033	-0.059535
H	-2.822988	-2.793908	-1.207055	C	-11.440316	-1.293331	-1.026040
C	-7.179425	-1.707702	-0.536214	C	-10.094748	-1.436687	-1.364222
				C	-9.146558	-0.620151	-0.743033

H	-11.201607	1.167779	1.330197	C	-0.000002	-1.400227	-0.974569
H	-12.194501	-1.901007	-1.514671	C	-1.180836	-0.435957	-0.852550
H	-9.800798	-2.167641	-2.111539	C	1.180819	-0.435942	-0.852540
C	14.032599	-1.259562	0.758610	C	-2.538102	-0.721512	-0.890944
C	13.971398	0.940391	0.209716	C	-0.732728	0.888491	-0.671139
C	13.716962	-2.595454	1.026586	C	2.538090	-0.721477	-0.890919
C	15.333783	-0.742466	0.992201	C	0.732693	0.888501	-0.671134
C	13.598223	2.214002	-0.231543	C	-3.484625	0.315148	-0.750542
C	15.295186	0.661743	0.639776	H	-2.880475	-1.746183	-1.005011
C	14.731016	-3.414787	1.518851	C	-1.656389	1.926887	-0.527927
H	12.718082	-2.982537	0.859464	C	3.484594	0.315198	-0.750503
C	16.335165	-1.588151	1.486773	H	2.880483	-1.746141	-1.004987
C	14.568844	3.213899	-0.220680	C	1.656336	1.926911	-0.527908
H	12.589448	2.418629	-0.572249	C	-3.018477	1.632958	-0.569468
C	16.251444	1.685414	0.641299	H	-1.327605	2.953821	-0.396147
C	16.028795	-2.921643	1.745169	C	3.018428	1.633001	-0.569431
H	14.510586	-4.456354	1.733172	H	1.327531	2.953839	-0.396131
H	17.335604	-1.206480	1.669730	H	-3.736730	2.442626	-0.486142
C	15.882161	2.957848	0.213280	H	3.736674	2.442675	-0.486091
H	14.302544	4.211506	-0.557214	C	8.339287	1.098119	0.762665
H	17.268027	1.486865	0.968539	C	7.201124	0.457899	-0.033495
N	13.211458	-0.231515	0.283744	C	9.544659	0.329293	0.220864
C	-14.032528	-1.259532	0.758744	C	5.843000	0.737903	0.021199
C	-13.971460	0.940310	0.209411	C	7.691097	-0.540689	-0.898981
C	-13.716831	-2.595383	1.026850	C	10.881549	0.458954	0.572922
C	-15.333653	-0.742386	0.992569	C	9.146528	-0.620065	-0.742871
C	-13.598365	2.213838	-0.232156	C	4.939724	0.024864	-0.794489
C	-15.295142	0.661754	0.639860	H	5.464048	1.489078	0.708202
C	-14.730764	-3.414628	1.519506	C	6.810935	-1.258270	-1.712160
H	-12.717994	-2.982492	0.859527	C	11.835041	-0.355968	-0.059271
C	-16.334916	-1.587989	1.487523	H	11.201501	1.167795	1.330488
C	-14.568967	3.213752	-0.221230	C	10.094743	-1.436590	-1.364038
H	-12.589664	2.418379	-0.573132	C	5.448521	-0.969667	-1.654289
C	-16.251384	1.685441	0.641428	H	7.174691	-2.025112	-2.390080
C	-16.028485	-2.921439	1.746066	C	11.440297	-1.293248	-1.025808
H	-14.510290	-4.456162	1.733940	H	9.800822	-2.167529	-2.111382
H	-17.335310	-1.206289	1.670663	H	4.766337	-1.506734	-2.305704
C	-15.882183	2.957792	0.213091	H	12.194485	-1.900921	-1.514434
H	-14.302738	4.211300	-0.557997	H	16.795937	-3.587783	2.127693
H	-17.267890	1.486971	0.968955	H	16.613369	3.760274	0.210678
N	-13.211524	-0.231590	0.283422	H	-16.795536	-3.587514	2.128885

H	-16.613385	3.760225	0.210514	C	3.461319	0.110245	-0.337621
C	8.163477	0.873019	2.281584	C	3.019150	0.894310	-1.414544
H	7.261114	1.377134	2.641890	C	1.655449	1.071735	-1.647995
H	8.078476	-0.191955	2.515999	C	0.734032	0.442066	-0.806995
H	9.018045	1.279080	2.832292	H	2.892700	-1.106356	1.354838
C	8.456649	2.610197	0.465394	H	3.750165	1.355261	-2.071144
H	9.315490	3.040395	0.990624	H	1.326294	1.683901	-2.482867
H	8.581559	2.793900	-0.605635	C	-5.537678	-1.265674	-0.011877
H	7.558217	3.137425	0.801665	C	-5.771123	0.982647	0.130551
C	0.000004	-2.438199	0.170674	C	-5.063493	-2.569022	-0.185073
H	0.000002	-1.947173	1.148143	C	-6.903207	-1.015175	0.278259
H	-0.884980	-3.079839	0.109381	C	-5.565239	2.364295	0.178210
H	0.884997	-3.079827	0.109380	C	-7.051513	0.423326	0.373664
C	0.000008	-2.123415	-2.339973	C	-5.970066	-3.614925	-0.044906
H	0.000010	-1.406625	-3.166283	H	-4.024257	-2.766097	-0.425761
H	0.885233	-2.760013	-2.438234	C	-7.793591	-2.084587	0.414852
H	-0.885214	-2.760017	-2.438243	C	-6.661390	3.177536	0.448901
C	-8.163589	0.873012	2.281410	H	-4.582236	2.795345	0.021527
H	-8.078608	-0.191956	2.515856	C	-8.136057	1.262886	0.645211
H	-7.261229	1.377124	2.641726	C	-7.337212	-3.400013	0.254656
H	-9.018165	1.279099	2.832088	H	-5.619897	-4.633811	-0.183181
C	-8.456721	2.610144	0.465169	H	-8.833693	-1.897322	0.665844
H	-8.581619	2.793817	-0.605867	C	-7.956447	2.651794	0.676790
H	-9.315568	3.040354	0.990377	H	-6.512173	4.251427	0.509259
H	-7.558294	3.137382	0.801435	H	-9.122173	0.842245	0.822721

Compound BPCF

H	-0.000090	-2.017292	1.032237	N	-4.857217	-0.048664	-0.104003
C	-3.018960	0.894256	-1.415033	C	5.771130	0.982650	0.131220
C	-3.461310	0.110195	-0.338173	C	5.537656	-1.265665	-0.011278
C	-2.538657	-0.516638	0.514125	C	5.565280	2.364304	0.178959
C	-1.182088	-0.354826	0.268254	C	7.051541	0.423303	0.374182
C	-0.733936	0.442066	-0.807110	C	5.063446	-2.569001	-0.184483
C	-1.655227	1.071705	-1.648271	C	6.903218	-1.015182	0.278718
H	-3.749886	1.355183	-2.071751	C	6.661479	3.177515	0.449523
H	-2.892931	-1.106377	1.354387	H	4.582265	2.795379	0.022421
H	-1.325953	1.683857	-2.483106	C	8.136134	1.262837	0.645616
C	-0.000093	-0.919110	1.029053	C	5.970035	-3.614915	-0.044499
H	-0.000177	-0.607888	2.082185	H	4.024184	-2.766058	-0.425078
C	1.182020	-0.354816	0.268445	C	7.793612	-2.084608	0.415167
C	2.538555	-0.516616	0.514525	C	7.956560	2.651748	0.677256
				H	6.512285	4.251406	0.509939
				H	9.122262	0.842172	0.823004

C	7.337215	-3.400018	0.254901	C	-12.027005	-5.050045	-1.501210
H	5.619849	-4.633792	-0.182792	C	-12.412465	-7.128106	-0.223979
H	8.833733	-1.897364	0.666089	C	-10.728853	-7.949230	1.335326
N	4.857187	-0.048647	-0.103224	H	-11.482781	-3.239881	-2.574891
C	-9.100886	3.543959	1.014938	C	-13.279828	-5.221344	-2.114259
C	-9.486003	4.645777	0.204355	C	-13.658442	-7.257109	-0.860437
C	-9.825796	3.282590	2.189170	C	-11.942772	-8.090355	0.734904
C	-10.569016	5.484373	0.627062	H	-10.381007	-8.685517	2.055712
C	-8.859026	4.945718	-1.057385	C	-14.085558	-6.312760	-1.793403
C	-10.884083	4.085729	2.596951	H	-13.614857	-4.490723	-2.846215
H	-9.527457	2.441284	2.808307	H	-14.289973	-8.107996	-0.617555
C	-10.963526	6.608231	-0.164670	H	-12.579160	-8.940145	0.968945
C	-11.269247	5.202671	1.840451	H	-15.052141	-6.430166	-2.275546
C	-9.240119	6.013189	-1.813460	C	9.101061	3.543870	1.015259
H	-8.070697	4.293011	-1.414654	C	9.486030	4.645757	0.204697
H	-11.411662	3.859827	3.520222	C	9.826205	3.282412	2.189331
C	-10.293724	6.892806	-1.393591	C	10.569126	5.484319	0.627261
C	-12.034342	7.453228	0.266313	C	8.858820	4.945796	-1.056902
C	-12.342797	6.066905	2.247524	C	10.884572	4.085514	2.596972
H	-8.750105	6.210418	-2.763821	H	9.527985	2.441066	2.808471
C	-10.693604	8.004563	-2.154377	C	10.963487	6.608240	-0.164456
C	-12.398130	8.555145	-0.525900	C	11.269592	5.202521	1.840491
C	-12.706833	7.144296	1.498617	C	9.239779	6.013320	-1.812971
H	-12.861891	5.839978	3.175455	H	8.070422	4.293123	-1.414083
C	-11.733172	8.826242	-1.721411	H	11.412335	3.859523	3.520116
H	-10.182286	8.217379	-3.089829	C	10.293459	6.892908	-1.393233
H	-13.210326	9.198035	-0.195931	C	12.034380	7.453206	0.266396
H	-13.519701	7.790489	1.820344	C	12.343211	6.066726	2.247436
H	-12.029510	9.682607	-2.320878	H	8.749596	6.210605	-2.763234
C	-8.236518	-4.569767	0.460843	C	10.693196	8.004726	-2.154006
C	-9.485213	-4.716477	-0.202195	C	12.398019	8.555185	-0.525800
C	-7.828369	-5.568072	1.361122	C	12.707100	7.144182	1.498550
C	-10.312087	-5.848140	0.100492	H	12.862480	5.839724	3.175251
C	-9.953551	-3.794473	-1.204958	C	11.732841	8.826373	-1.721168
C	-8.620393	-6.672908	1.647576	H	10.181705	8.217614	-3.089348
H	-6.874503	-5.452863	1.868029	H	13.210276	9.198052	-0.195934
C	-11.581363	-6.007239	-0.539491	H	13.520020	7.790356	1.820187
C	-9.875291	-6.831496	1.040728	H	12.029066	9.682788	-2.320620
C	-11.160076	-3.950989	-1.818309	C	8.236569	-4.569784	0.460894
H	-9.317142	-2.962438	-1.483375	C	9.485141	-4.716475	-0.202385
H	-8.276369	-7.416828	2.361775	C	7.828562	-5.568121	1.361195

C	10.312073	-5.848144	0.100138
C	9.953296	-3.794478	-1.205247
C	8.620634	-6.672966	1.647478
H	6.874779	-5.452922	1.868261
C	11.581248	-6.007227	-0.540052
C	9.875431	-6.831527	1.040420
C	11.159724	-3.950977	-1.818790
H	9.316820	-2.962471	-1.483584
H	8.276737	-7.416913	2.361712
C	12.026727	-5.050013	-1.501825
C	12.412410	-7.128093	-0.224697
C	10.729043	-7.949271	1.334843
H	11.482297	-3.239877	-2.575435
C	13.279458	-5.221282	-2.115069
C	13.658291	-7.257067	-0.861346
C	11.942869	-8.090371	0.734229
H	10.381313	-8.685586	2.055256
C	14.085254	-6.312692	-1.794355
H	13.614363	-4.490645	-2.847067
H	14.289867	-8.107952	-0.618573
H	12.579291	-8.940172	0.968140
H	15.051763	-6.430074	-2.276652

Compound BPCF2

H	-4.243050	-2.067540	-1.584576
C	-1.218304	-0.255147	1.751659
C	-0.733107	-0.691710	0.501418
C	-1.661492	-0.969893	-0.522857
C	-3.020148	-0.807996	-0.290484
C	-3.488031	-0.363255	0.964119
C	-2.580984	-0.087770	1.990540
H	-0.514136	-0.065239	2.556212
H	-1.307848	-1.284447	-1.501126
H	-2.923453	0.245814	2.966543
C	-4.187595	-1.028686	-1.232325
H	-4.117459	-0.402409	-2.131805
C	-5.380924	-0.658397	-0.374596
C	-6.729425	-0.645811	-0.705223
C	-7.662143	-0.256123	0.269044
C	-7.238271	0.120092	1.552964
C	-5.882107	0.123704	1.877773

C	-4.950757	-0.270036	0.913043
H	-7.070020	-0.918225	-1.699934
H	-7.978905	0.401235	2.294958
H	-5.566010	0.420583	2.873845
C	9.624878	1.112209	-0.214795
C	10.039607	-0.976332	0.556269
C	9.044676	2.273232	-0.733703
C	11.014542	1.048393	0.062058
C	9.946200	-2.296978	1.004792
C	11.278574	-0.285896	0.561662
C	9.871282	3.369916	-0.956474
H	7.985655	2.322655	-0.963640
C	11.823013	2.165300	-0.170283
C	11.111379	-2.921651	1.438984
H	8.996592	-2.820864	1.026144
C	12.433578	-0.934981	1.008386
C	11.260726	3.341187	-0.685180
H	9.438399	4.277104	-1.368211
H	12.883036	2.127619	0.064150
C	12.365459	-2.264269	1.444363
H	11.051899	-3.941490	1.807353
H	13.387727	-0.414837	1.009904
N	9.039988	-0.120760	0.085100
C	-9.894369	0.872744	0.039535
C	-9.805499	-1.325988	-0.493702
C	-9.600335	2.188358	0.409226
C	-11.203283	0.496857	-0.356588
C	-9.417931	-2.650426	-0.715475
C	-11.147926	-0.912018	-0.691659
C	-10.637955	3.115122	0.399025
H	-8.595006	2.486205	0.687425
C	-12.227541	1.448926	-0.361124
C	-10.388701	-3.548764	-1.147641
H	-8.396242	-2.976310	-0.551397
C	-12.103792	-1.835078	-1.126423
C	-11.959424	2.767915	0.026733
H	-10.421329	4.145196	0.665954
H	-13.235413	1.167300	-0.654072
C	-11.736153	-3.167662	-1.356593
H	-10.106793	-4.584343	-1.315296
H	-13.127837	-1.516932	-1.299869

N	-9.051321	-0.237923	-0.047657	H	15.268972	2.584044	-3.608403
C	13.585960	-2.940190	1.968261	C	16.922542	4.718314	-3.888363
C	14.053450	-4.183970	1.465484	C	17.197808	7.057824	-3.330733
C	14.300600	-2.317536	3.004365	C	15.500859	8.228225	-1.939801
C	15.212196	-4.788749	2.053673	H	13.962924	9.099116	-0.750946
C	13.435563	-4.859364	0.353358	C	17.653035	5.903051	-3.966358
C	15.429542	-2.895893	3.572407	H	17.278863	3.822251	-4.390242
H	13.939352	-1.367271	3.387364	H	17.770391	7.979440	-3.398773
C	15.694758	-6.045221	1.570216	H	16.078170	9.146341	-2.015025
C	15.900889	-4.138791	3.123811	H	18.582427	5.927947	-4.528623
C	13.900416	-6.053308	-0.110155	C	-13.038982	3.794028	-0.018838
H	12.584906	-4.393084	-0.130806	C	-13.371908	4.610263	1.095712
H	15.948188	-2.390645	4.383300	C	-13.752976	3.960687	-1.216577
C	15.036380	-6.698806	0.484255	C	-14.391529	5.608049	0.956137
C	16.843237	-6.654210	2.167289	C	-12.754166	4.458998	2.388155
C	17.052340	-4.773405	3.704091	C	-14.749839	4.919470	-1.353449
H	13.415041	-6.535992	-0.954943	H	-13.494399	3.336266	-2.067096
C	15.525259	-7.933842	0.025547	C	-14.732940	6.450666	2.060157
C	17.294686	-7.891127	1.677058	C	-15.081116	5.766667	-0.285388
C	17.501445	-5.976246	3.250616	C	-13.084987	5.258384	3.440661
H	17.561676	-4.267242	4.520440	H	-12.014844	3.677712	2.522684
C	16.641238	-8.521974	0.618798	H	-15.270702	5.029015	-2.301360
H	15.022146	-8.427785	-0.801917	C	-14.073608	6.291610	3.317118
H	18.166296	-8.353921	2.133047	C	-15.740099	7.456177	1.914963
H	18.373275	-6.444715	3.700458	C	-16.089925	6.783560	-0.401937
H	17.006158	-9.477724	0.252867	H	-12.604035	5.116094	4.405367
C	12.075468	4.571130	-0.893085	C	-14.420850	7.132342	4.388197
C	13.276422	4.585874	-1.653154	C	-16.052540	8.275414	3.012855
C	11.633214	5.767823	-0.305094	C	-16.403181	7.593434	0.646908
C	14.024952	5.804150	-1.759938	H	-16.601581	6.893272	-1.354935
C	13.767761	3.433719	-2.364634	C	-15.398344	8.114171	4.233914
C	12.348968	6.953486	-0.416005	H	-13.917472	7.007410	5.343616
H	10.715878	5.753384	0.276670	H	-16.816286	9.040869	2.900506
C	15.245255	5.838966	-2.505205	H	-17.167498	8.359589	0.543268
C	13.557044	6.997284	-1.127945	H	-15.654458	8.756966	5.071613
C	14.927568	3.469998	-3.078556	C	-12.714262	-4.169001	-1.866979
H	13.186348	2.519453	-2.337184	C	-13.961211	-4.423144	-1.233974
H	11.981681	7.856097	0.065867	C	-12.386425	-4.888858	-3.027696
C	15.718619	4.664419	-3.165729	C	-14.866654	-5.367970	-1.819721
C	15.998694	7.051539	-2.598410	C	-14.352628	-3.799997	0.004450
C	14.332525	8.201739	-1.241001	C	-13.255831	-5.814122	-3.592306

H	-11.433164	-4.691906	-3.510124
C	-16.134339	-5.627227	-1.210036
C	-14.510056	-6.064284	-3.015474
C	-15.558098	-4.052332	0.586923
H	-13.658185	-3.122142	0.487132
H	-12.972472	-6.340942	-4.500066
C	-16.500902	-4.960771	-0.001199
C	-17.043146	-6.558719	-1.804143
C	-15.441181	-6.996964	-3.588354
H	-15.821879	-3.569169	1.524572
C	-17.753176	-5.225427	0.578768
C	-18.285372	-6.790309	-1.189730
C	-16.652839	-7.231360	-3.012997
H	-15.154418	-7.515100	-4.500145
C	-18.634585	-6.129129	-0.012616
H	-18.028097	-4.716580	1.499275
H	-18.975812	-7.496495	-1.644070
H	-17.348043	-7.938242	-3.458994
H	-19.599522	-6.321856	0.448109
C	4.161578	0.722459	1.148194
C	3.004518	-0.109718	0.632532
H	4.083991	1.773877	0.840262
C	5.363218	0.039296	0.528036
C	1.644731	0.043067	0.861602
C	3.484189	-1.148994	-0.192557
C	6.709926	0.350470	0.654673
C	4.947290	-1.059461	-0.255386
C	0.725017	-0.846375	0.268907
H	1.283240	0.863069	1.476350
C	2.585442	-2.039175	-0.786394
C	7.654531	-0.433830	-0.026366
H	7.042143	1.178608	1.273810
C	5.891527	-1.843667	-0.923881
C	1.220581	-1.881009	-0.551254
H	2.935996	-2.851793	-1.417223
C	7.244205	-1.520622	-0.813720
H	5.586602	-2.688823	-1.534612
H	0.523546	-2.587506	-0.992155
H	7.990038	-2.102954	-1.345507
H	4.211331	0.726321	2.245368

Compound BPCF3

H	8.175705	-2.292714	0.459972
C	5.422942	0.316426	-2.573270
C	4.837370	-0.448249	-1.543010
C	5.672986	-0.980506	-0.539708
C	7.040305	-0.747159	-0.579297
C	7.610381	0.020134	-1.617198
C	6.795642	0.554049	-2.619015
H	4.791939	0.710590	-3.364544
H	5.238630	-1.550928	0.277062
H	7.217474	1.141011	-3.430687
C	8.118019	-1.198351	0.386616
H	7.939183	-0.830881	1.406057
C	9.374850	-0.605998	-0.218099
C	10.683789	-0.673249	0.239414
C	11.694753	-0.040528	-0.501783
C	11.384775	0.655087	-1.680842
C	10.066002	0.740081	-2.126785
C	9.058007	0.104903	-1.396307
H	10.933871	-1.194016	1.159080
H	12.184049	1.120448	-2.248839
H	9.838414	1.285459	-3.038389
C	-14.086802	1.730563	-0.869034
C	-14.124852	-0.524011	-1.073387
C	-13.721126	3.078277	-0.811092
C	-15.413521	1.317514	-0.583298
C	-13.816200	-1.866767	-1.309546
C	-15.438753	-0.125157	-0.718038
C	-14.704239	4.005170	-0.478548
H	-12.704148	3.397404	-1.013463
C	-16.382423	2.269544	-0.252576
C	-14.833346	-2.804787	-1.163127
H	-12.819832	-2.173276	-1.610006
C	-16.442091	-1.088241	-0.575748
C	-16.038789	3.626945	-0.194639
H	-14.435654	5.056127	-0.420949
H	-17.405512	1.959984	-0.059147
C	-16.150144	-2.442233	-0.787399
H	-14.613555	-3.848568	-1.366052
H	-17.448048	-0.791577	-0.291409
N	-13.310339	0.607114	-1.163007

C	13.870981	0.992601	0.213671	H	-19.801188	-9.679649	1.563863
C	13.765977	-1.269817	0.216752	H	-21.105990	-8.223776	0.042388
C	13.596185	2.360567	0.127144	H	-17.764151	-10.108919	2.909739
C	15.134444	0.526369	0.658067	C	-17.057874	4.674832	0.093529
C	13.382963	-2.607754	0.085670	C	-17.899762	4.640727	1.237945
C	15.068877	-0.921047	0.655938	C	-17.196789	5.736290	-0.815995
C	14.608852	3.252007	0.467562	C	-18.897724	5.656113	1.406778
H	12.622532	2.723164	-0.184522	C	-17.776265	3.644980	2.271562
C	16.134253	1.443281	0.996063	C	-18.153440	6.730245	-0.649436
C	14.314647	-3.586911	0.416277	H	-16.553080	5.760052	-1.690828
H	12.394324	-2.881599	-0.266855	C	-19.770385	5.630007	2.539677
C	15.986359	-1.924511	0.981323	C	-19.028308	6.706801	0.447146
C	15.887464	2.818469	0.895083	C	-18.603706	3.625546	3.353772
H	14.403071	4.317325	0.424064	H	-16.992569	2.901073	2.186108
H	17.108062	1.092640	1.327092	H	-18.240505	7.527272	-1.383611
C	15.620205	-3.271994	0.864220	C	-19.640592	4.603263	3.524024
H	14.035999	-4.631751	0.313361	C	-20.777635	6.633539	2.697276
H	16.976609	-1.660497	1.341431	C	-20.046252	7.703943	0.632963
N	13.045086	-0.103152	-0.052492	H	-18.481204	2.863281	4.119366
C	-17.231926	-3.461461	-0.686354	C	-20.511728	4.592077	4.626556
C	-17.111557	-4.643348	0.094396	C	-21.627827	6.580825	3.814692
C	-18.421223	-3.243116	-1.401491	C	-20.885184	7.667893	1.704927
C	-18.179920	-5.599304	0.091427	H	-20.133586	8.493998	-0.108813
C	-15.970364	-4.917745	0.929599	C	-21.495211	5.570119	4.766345
C	-19.465904	-4.159125	-1.394382	H	-20.409366	3.809492	5.374149
H	-18.509822	-2.341145	-2.000322	H	-22.394534	7.342589	3.931633
C	-18.071494	-6.806303	0.851282	H	-21.652340	8.427881	1.830647
C	-19.366215	-5.354463	-0.666759	H	-22.161562	5.546566	5.624210
C	-15.871085	-6.065283	1.657386	C	16.937224	3.795237	1.299867
H	-15.177310	-4.180923	0.984715	C	17.369830	4.856189	0.458952
H	-20.364992	-3.960803	-1.972446	C	17.520685	3.658618	2.570154
C	-16.905448	-7.060008	1.636035	C	18.352011	5.780879	0.943869
C	-19.131132	-7.767163	0.833334	C	16.893196	5.030473	-0.889215
C	-20.416754	-6.334861	-0.662248	C	18.481868	4.545507	3.039846
H	-14.998138	-6.240764	2.281401	H	17.186229	2.848156	3.211571
C	-16.815173	-8.255405	2.369318	C	18.790823	6.865488	0.121214
C	-18.996126	-8.949246	1.580732	C	18.907312	5.625002	2.251283
C	-20.304242	-7.489614	0.050446	C	17.316545	6.060919	-1.673664
H	-21.310488	-6.133107	-1.247537	H	16.187169	4.311032	-1.287988
C	-17.849808	-9.189055	2.337865	H	18.899815	4.415544	4.034942
H	-15.926225	-8.444406	2.965880	C	18.267659	7.024901	-1.198148

C	19.760019	7.796097	0.612121	C	-1.260354	0.155354	-1.977714
C	19.881464	6.573083	2.717259	C	2.471562	0.321801	-1.918535
H	16.941285	6.162786	-2.689063	C	0.599091	-1.155659	-1.440558
C	18.708304	8.099983	-1.988562	C	-2.603535	0.470211	-2.125143
C	20.169340	8.857111	-0.213058	C	-0.865206	-1.113734	-1.502555
C	20.287043	7.612606	1.936871	C	3.372167	-0.684793	-1.513294
H	20.290334	6.441078	3.715976	H	2.852208	1.289432	-2.234756
C	19.647154	9.005935	-1.497614	C	1.479431	-2.163073	-1.036353
H	18.308536	8.217088	-2.992682	C	-3.592057	-0.482795	-1.802546
H	20.903970	9.565174	0.162226	H	-2.898091	1.459909	-2.464096
H	21.023566	8.323343	2.303297	C	-1.832846	-2.069231	-1.180352
H	19.976763	9.832504	-2.121062	C	2.851414	-1.920037	-1.075961
C	16.548545	-4.369087	1.257355	H	1.109355	-3.128636	-0.701619
C	17.867294	-4.488852	0.741324	C	-3.180367	-1.747699	-1.334068
C	16.096310	-5.322573	2.184411	H	-1.548521	-3.055440	-0.822753
C	18.713075	-5.546067	1.213274	H	3.537174	-2.710566	-0.785380
C	18.393418	-3.613833	-0.274898	H	-3.930912	-2.499706	-1.109046
C	16.908599	-6.355390	2.636314	H	0.013283	1.334519	-3.297507
H	15.088039	-5.228519	2.577795	C	-8.509265	-0.786358	-0.341399
C	20.049498	-5.676560	0.720725	C	-7.326587	-0.362138	-1.189667
C	18.227872	-6.483407	2.176516	H	-8.631627	-1.877622	-0.319733
C	19.664680	-3.743226	-0.747462	C	-9.673034	-0.100443	-1.027999
H	17.750009	-2.841332	-0.680074	C	-5.982812	-0.674599	-1.040950
H	16.527829	-7.065335	3.366264	C	-7.759517	0.473441	-2.240863
C	20.546530	-4.765758	-0.260757	C	-11.020059	-0.111166	-0.692106
C	20.897284	-6.722686	1.203954	C	-9.213705	0.637209	-2.141086
C	19.100566	-7.525845	2.642216	C	-5.033889	-0.160737	-1.948858
H	20.030234	-3.069678	-1.518768	H	-5.654839	-1.294523	-0.210872
C	21.864050	-4.908110	-0.728142	C	-6.831984	0.990436	-3.149031
C	22.208312	-6.825180	0.709124	C	-11.922650	0.612003	-1.487817
C	20.376807	-7.639249	2.181318	H	-11.382182	-0.656476	0.174675
H	18.715961	-8.227767	3.378059	C	-10.114574	1.362868	-2.925387
C	22.684379	-5.926378	-0.244954	C	-5.484525	0.668635	-2.996967
H	22.238069	-4.213204	-1.475806	H	-7.148102	1.627895	-3.970549
H	22.851905	-7.619249	1.079307	C	-11.470499	1.339885	-2.599018
H	21.026058	-8.432027	2.544525	H	-9.775785	1.931378	-3.786978
H	23.701037	-6.022236	-0.616047	H	-4.766762	1.047944	-3.718174
C	-0.038863	1.011699	-2.248836	H	-12.189329	1.878540	-3.208395
C	1.104659	0.086651	-1.880829	H	-8.403667	-0.468042	0.704465
H	-0.036611	1.929393	-1.645078				

Table S1. The excitation energies (E_{ex}), oscillator strength (f), transition compositions of the two lowest excitations of the compounds calculated by TD-B3LYP/6-31G(d,p) in CH_2Cl_2 solvent.

Compounds		E_{ex} (eV/nm)	f	Transition composition
2	$S_0 \rightarrow S_1$	3.52 (352)	1.2856	0.63 (H \rightarrow L)+0.20 (H-4 \rightarrow L)
	$S_0 \rightarrow S_2$	4.36 (284)	0.0053	0.47 (H \rightarrow L+2)+0.44 (H-1 \rightarrow L+1)
5	$S_0 \rightarrow S_1$	3.30 (376)	1.6888	0.69 (H \rightarrow L)
	$S_0 \rightarrow S_2$	3.53 (351)	0.0026	0.69 (H-1 \rightarrow L)
7	$S_0 \rightarrow S_1$	3.19 (388)	2.7264	0.69 (H \rightarrow L)
	$S_0 \rightarrow S_2$	3.44 (360)	0.0137	0.69 (H-1 \rightarrow L)
BPCF	$S_0 \rightarrow S_1$	3.13 (397)	0.0259	0.57 (H \rightarrow L)
	$S_0 \rightarrow S_2$	3.11 (399)	0.9592	0.57 (H \rightarrow L+1)
BPCF2	$S_0 \rightarrow S_1$	3.11 (399)	0.3871	0.51 (H \rightarrow L)+ 0.44 (H-1 \rightarrow L)
	$S_0 \rightarrow S_2$	3.11 (399)	0.5617	0.50 (H \rightarrow L+1)
BPCF3	$S_0 \rightarrow S_1$	3.10 (400)	0.4836	0.51 (H \rightarrow L)+0.44 (H-1 \rightarrow L)
	$S_0 \rightarrow S_2$	3.10 (401)	0.4730	0.48 (H \rightarrow L+1)

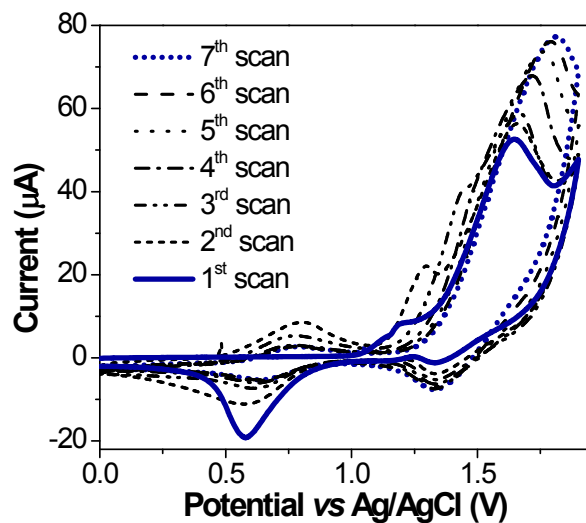


Figure S2. CV traces of BPCF2 measured in $\text{CH}_2\text{Cl}_2/n\text{-Bu}_4\text{NPF}_6$ at scan rate of 50 mV s^{-1}

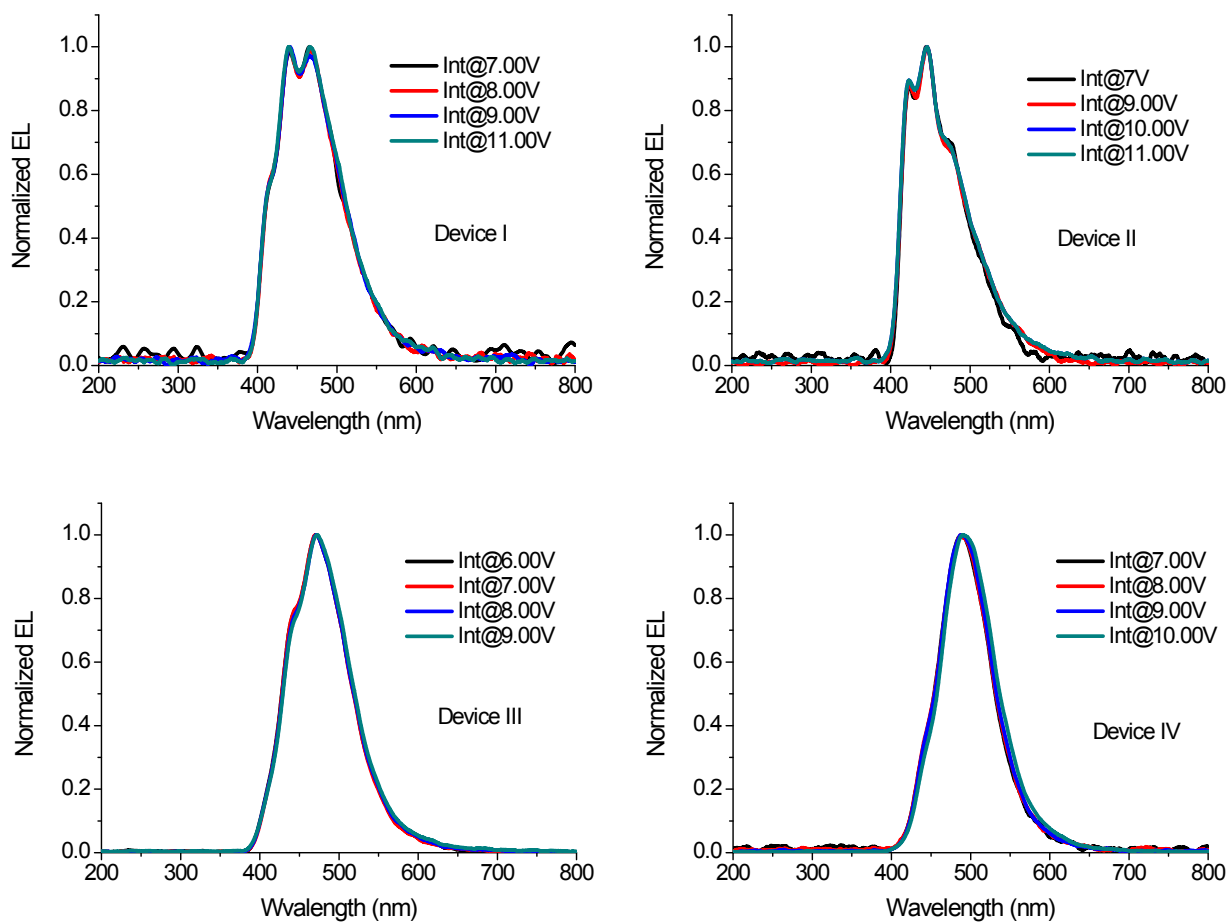
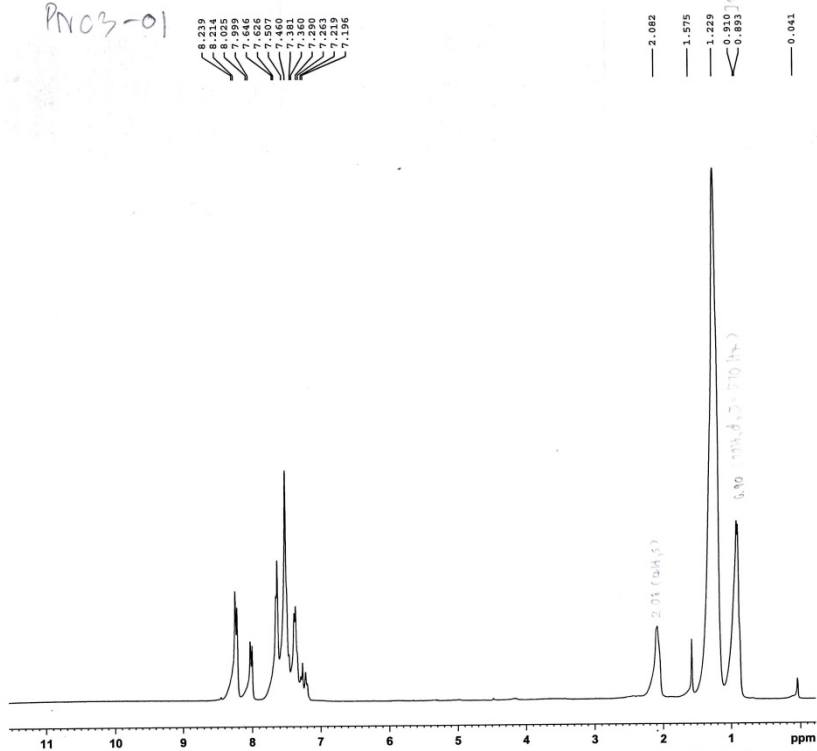


Figure S3. EL spectra of the OLEDs at different applied voltages

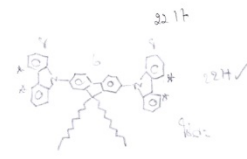
¹H-NMR and ¹³C-NMR spectra Compound 2

PROC-01



8.239
8.214
8.025
7.686
7.626
7.460
7.381
7.280
7.263
7.239

2.082
1.575
1.229
0.910
0.893
0.041

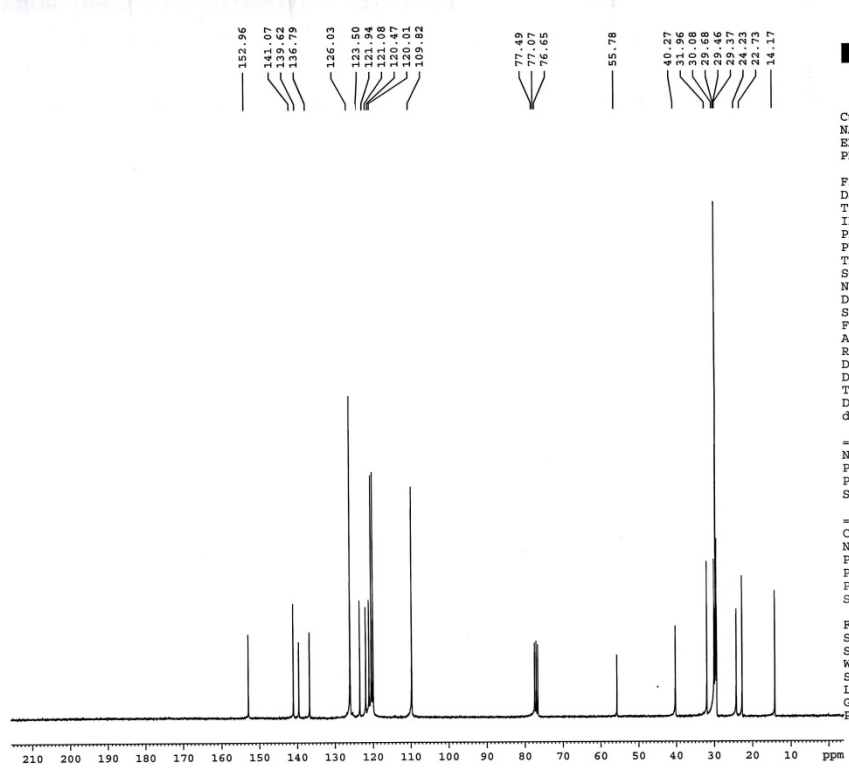


Current Data Parameters
NAME 11nov2011
EXPNO 3050
PROCNO 1

F2 - Acquisition Parameters
Date_ 20140616
Time 15.06
INSTRUM av300
PROBHD 5 mm BBO BB-1H
PULPROG zg
TD 32768
SOLVENT CDCl3
NS 1
DS 0
SWH 4496.403 Hz
FIDRES 0.137219 Hz
AQ 3.6438515 sec
RG 50.8
DW 111.200 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

===== CHANNEL f1 =====
NUC1 1H
P1 16.50 usec
PL1 -0.00 dB
SFO1 300.1313506 MHz

F2 - Processing parameters
SI 16384
SF 300.1300053 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.00



152.96
141.07
135.52
136.79
126.03
123.50
121.24
121.08
120.91
109.82

77.49
77.07
76.65
55.78
46.27
31.86
30.08
25.68
25.46
24.23
22.73
14.17



Current Data Parameters
NAME 11nov2011
EXPNO 3068
PROCNO 1

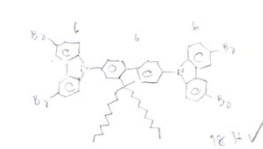
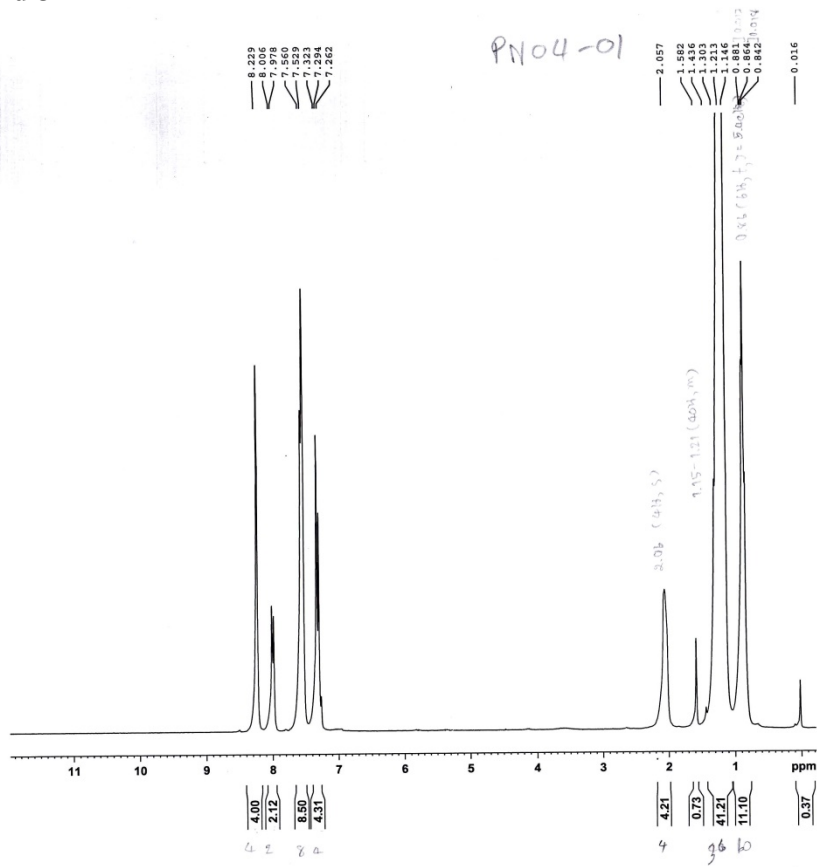
F2 - Acquisition Parameters
Date_ 20140620
Time 13.44
INSTRUM av300
PROBHD 5 mm BBO BB-1H
PULPROG zgdc
TD 65536
SOLVENT CDCl3
NS 4156
DS 2
SWH 17985.611 Hz
FIDRES 0.274439 Hz
AQ 1.8219508 sec
RG 1448.2
DW 27.800 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
d11 0.03000000 sec

===== CHANNEL f1 =====
NUC1 13C
P1 7.80 usec
PL1 -3.00 dB
SFO1 75.4752953 MHz

===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 96.00 usec
PL2 -6.00 dB
PL12 6.00 dB
SFO2 300.1312005 MHz

F2 - Processing parameters
SI 32768
SF 75.4677490 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40

Compound 3

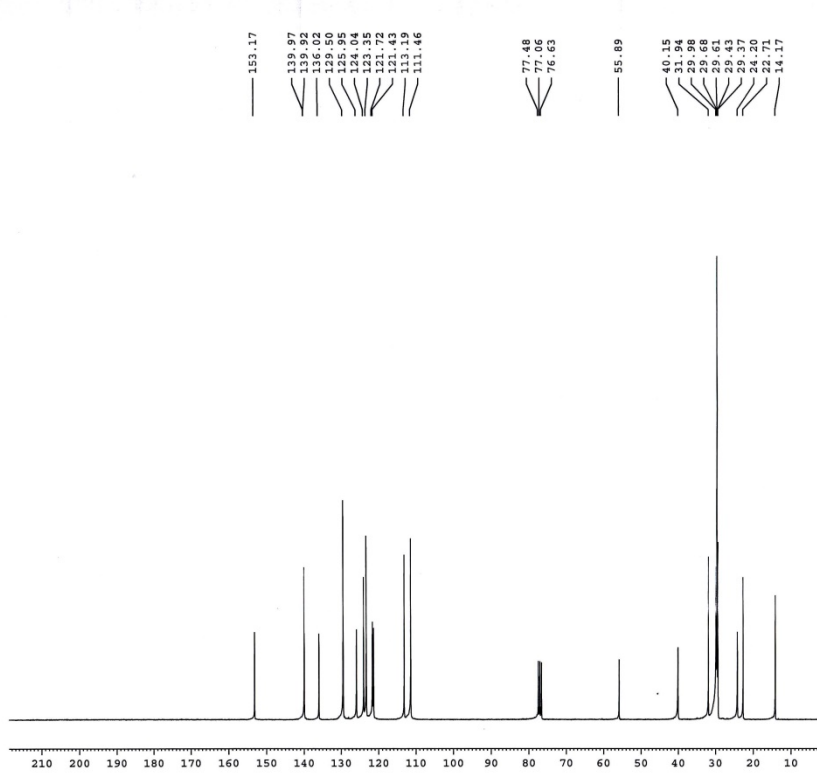


Current Data Parameters
 NAME 11nov2011
 EXPNO 3048
 PROCNO 1

F2 - Acquisition Parameters
 Date 20140616
 Time 14.59
 INSTRUM av300
 PROBHD 5 mm BBO BB-1H
 PULPROG zg
 TD 32768
 SOLVENT CDCl3
 NS 4
 DS 0
 SWH 4496.403 Hz
 FIDRES 0.137219 Hz
 AQ 3.6438515 sec
 RG 64
 DW 111.200 usec
 DE 6.00 usec
 TE 300.0 K
 D1 1.0000000 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 16.50 usec
 PL1 -6.00 dB
 SFO1 300.1313506 MHz

F2 - Processing parameters
 SI 16384
 SF 300.1300053 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.00



Current Data Parameters
 NAME 11nov2011
 EXPNO 3069
 PROCNO 1

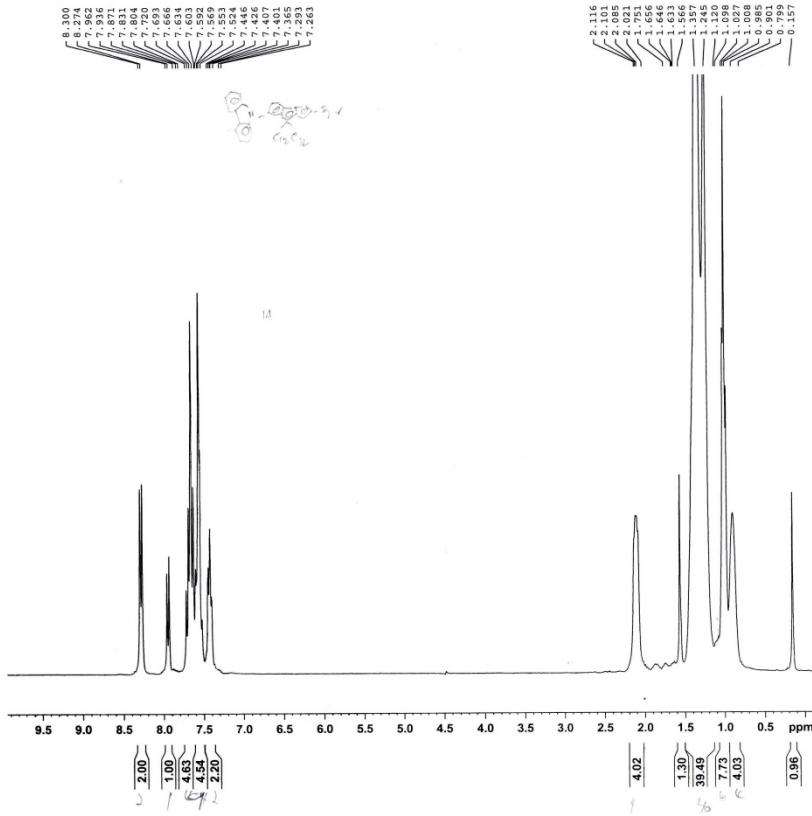
F2 - Acquisition Parameters
 Date 20140620
 Time 18.14
 INSTRUM av300
 PROBHD 5 mm BBO BB-1H
 PULPROG zgdc
 TD 65536
 SOLVENT CDCl3
 NS 18432
 DS 2
 SWH 17985.611 Hz
 FIDRES 0.274439 Hz
 AQ 1.8219508 sec
 RG 1625.5
 DW 27.800 usec
 DE 6.00 usec
 TE 300.0 K
 D1 2.0000000 sec
 d11 0.03000000 sec

===== CHANNEL f1 =====
 NUC1 13C
 P1 7.80 usec
 PL1 -3.00 dB
 SFO1 75.4752953 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 FCPD2 96.00 usec
 PL2 -6.00 dB
 PL12 6.00 dB
 SFO2 300.1312005 MHz

F2 - Processing parameters
 SI 32768
 SF 75.4677490 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40

Compound 4

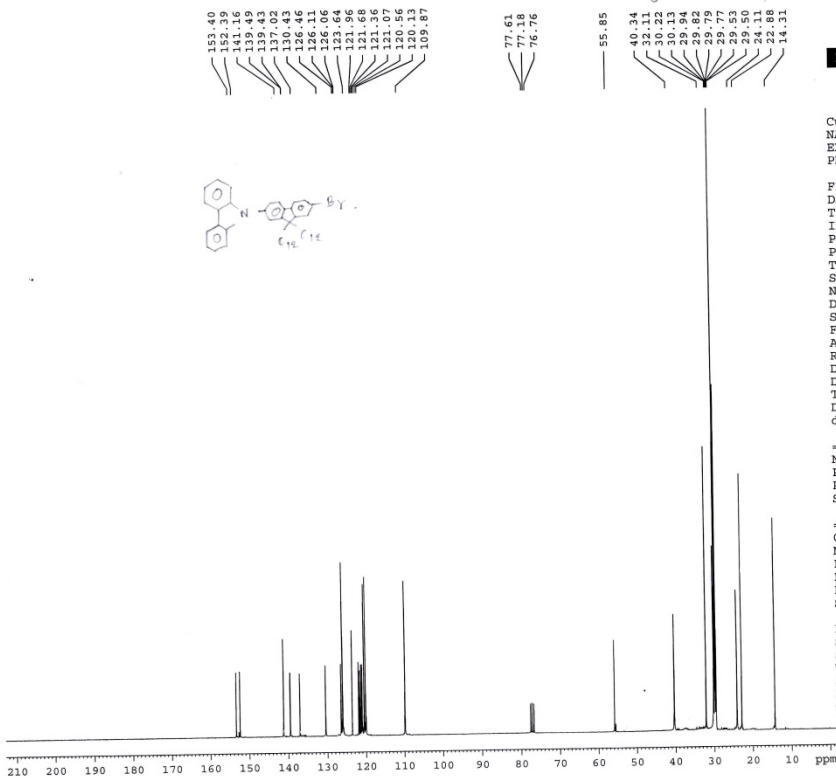


Current Data Parameters
 NAME Nov2010
 EXPNO 3723
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20111021
 Time 15.47
 INSTRUM av300
 PROBHD 5 mm BBO BB-1H
 PULPROG zg
 TD 32768
 SOLVENT CDCl3
 NS 1
 DS 0
 SWH 4496.403 Hz
 FIDRES 0.137219 Hz
 AQ 3.6438515 sec
 RG 11.3
 DW 111.200 usec
 DE 6.00 usec
 TE 300.0 K
 D1 1.00000000 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 16.50 usec
 PL1 -6.00 dB
 SF01 300.1313506 MHz

F2 - Processing parameters
 SI 16384
 SF 300.1300053 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.00



Current Data Parameters
 NAME 11nov2011
 EXPNO 504
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20120315
 Time 20.02
 INSTRUM av300
 PROBHD 5 mm BBO BB-1H
 PULPROG zgdc
 TD 65536
 SOLVENT CDCl3
 NS 1933
 DS 2
 SWH 17985.611 Hz
 FIDRES 0.274439 Hz
 AQ 1.8219508 sec
 RG 4597.6
 DW 27.800 usec
 DE 6.00 usec
 TE 300.0 K
 D1 2.00000000 sec
 d11 0.03000000 sec

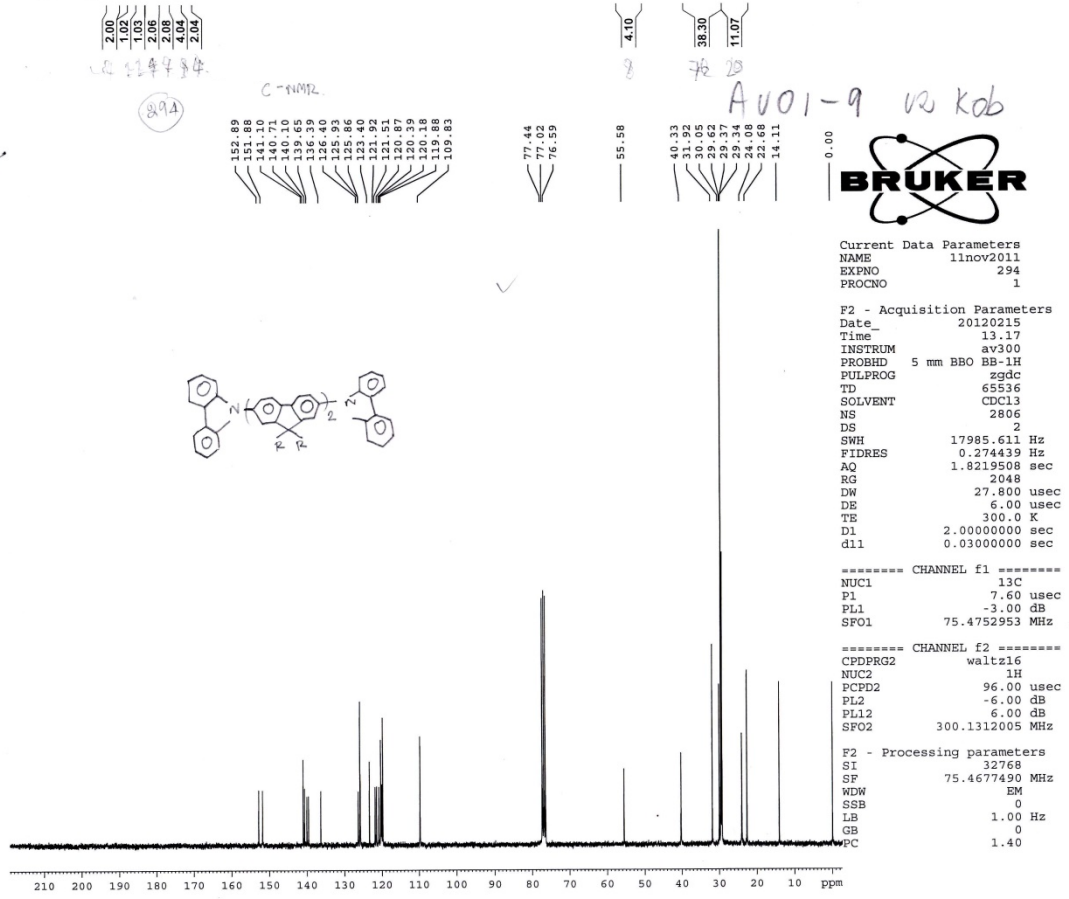
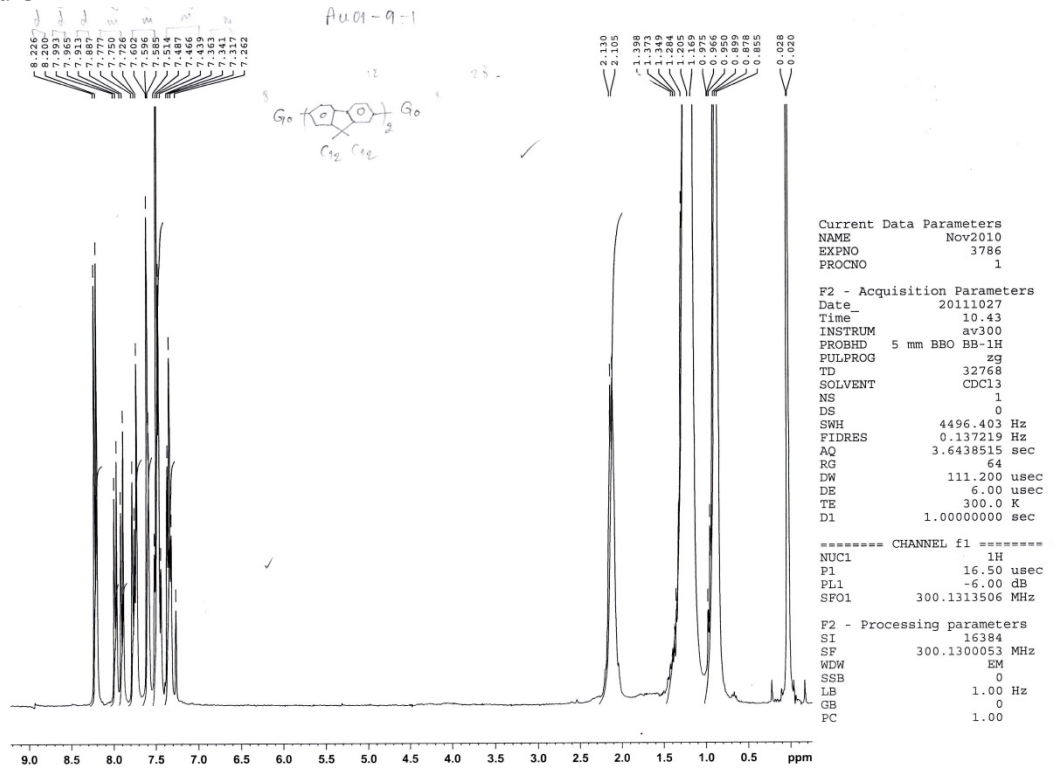
===== CHANNEL f1 =====
 NUC1 13C
 P1 7.60 usec
 PL1 -3.00 dB
 SF01 75.4752953 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 96.00 usec
 PL2 -6.00 dB
 PL12 6.00 dB
 SFO2 300.1312005 MHz

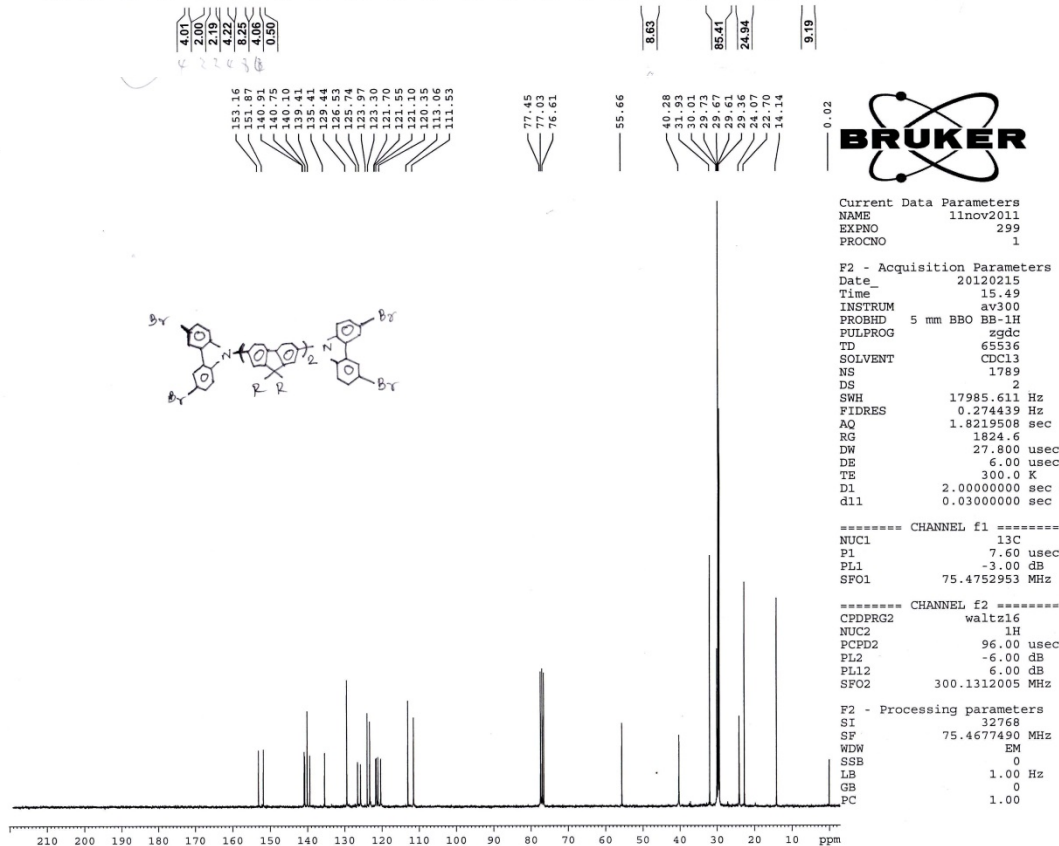
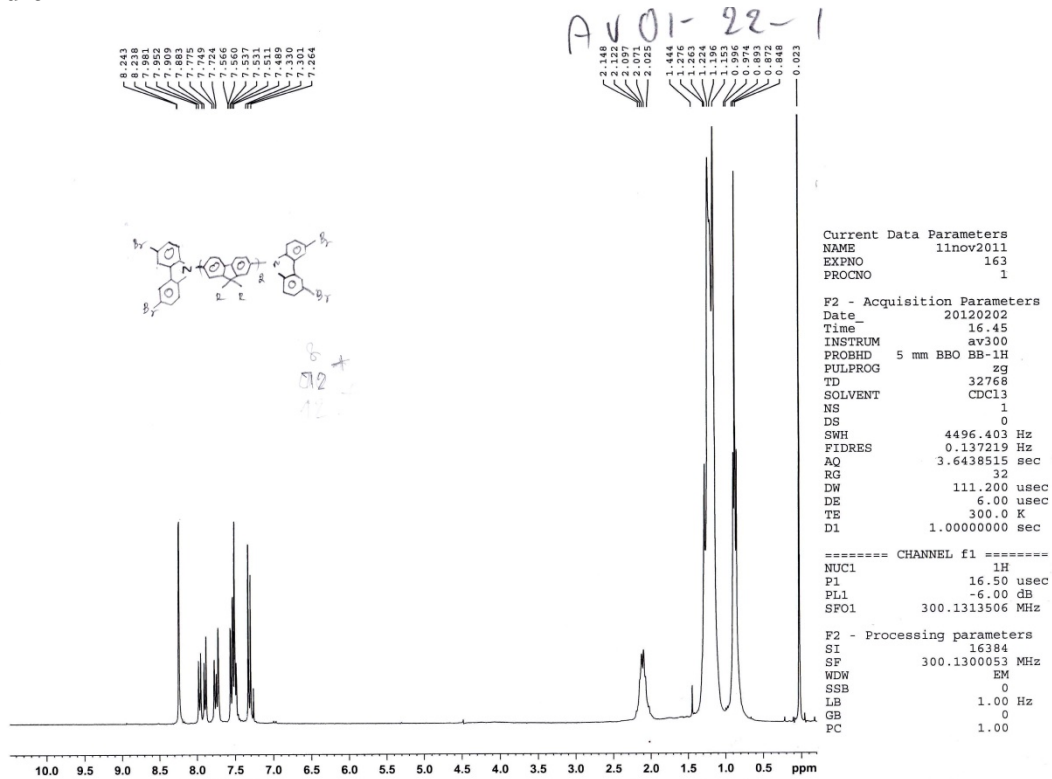
F2 - Processing parameters
 SI 32768
 SF 75.4677490 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.00



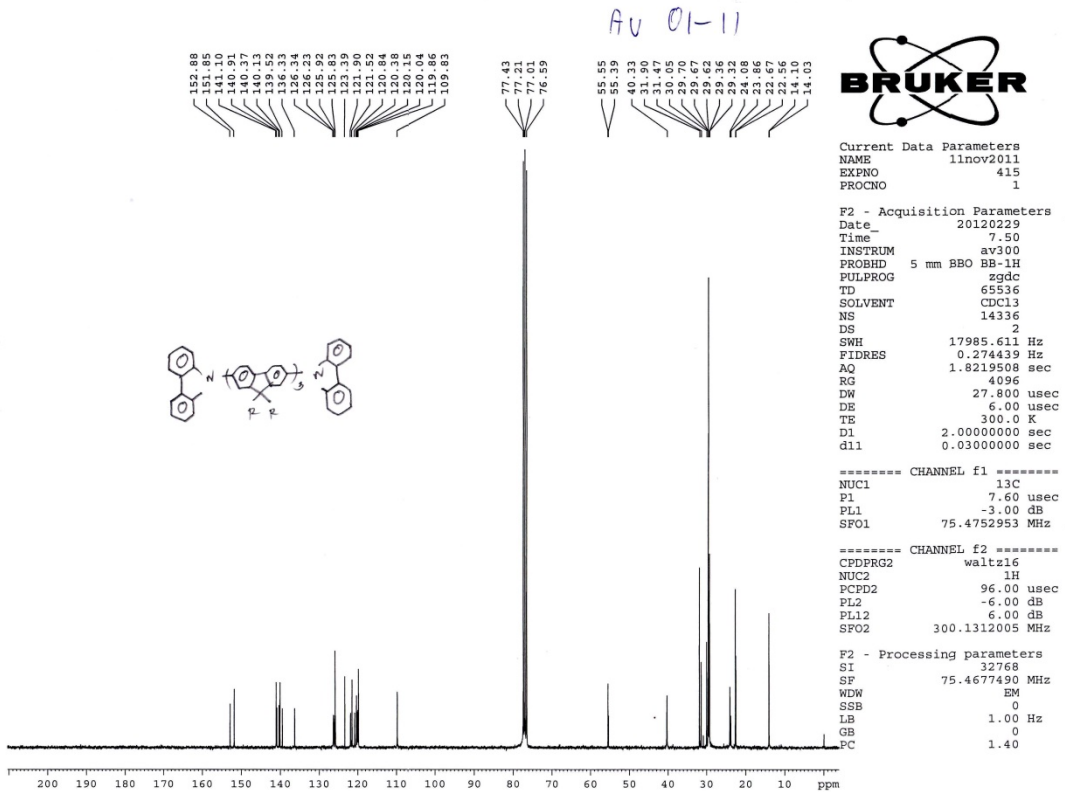
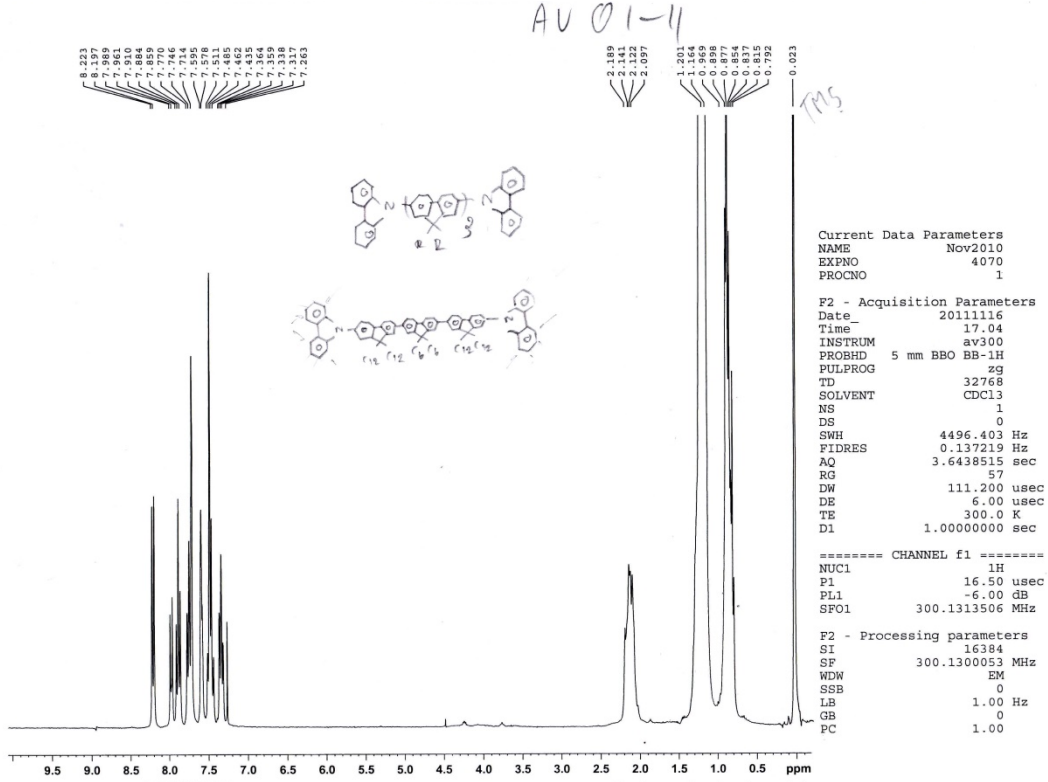
Compound 5



Compound 6

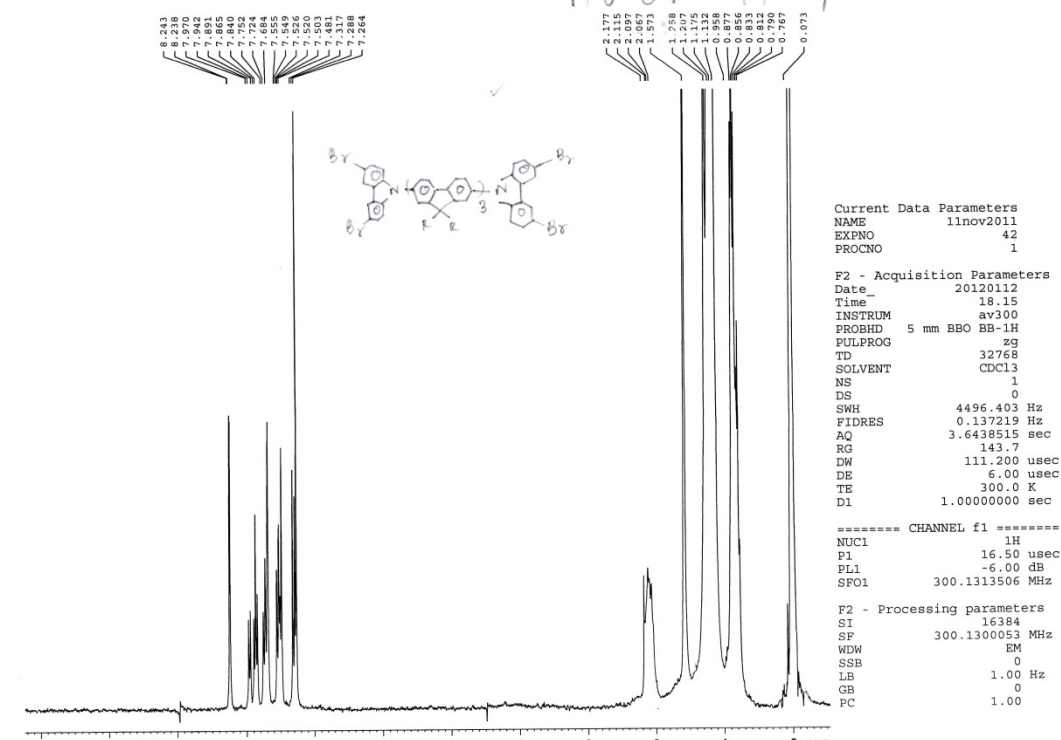


Compound 7



Compound 8

AV 01-19-1 12/1/2011

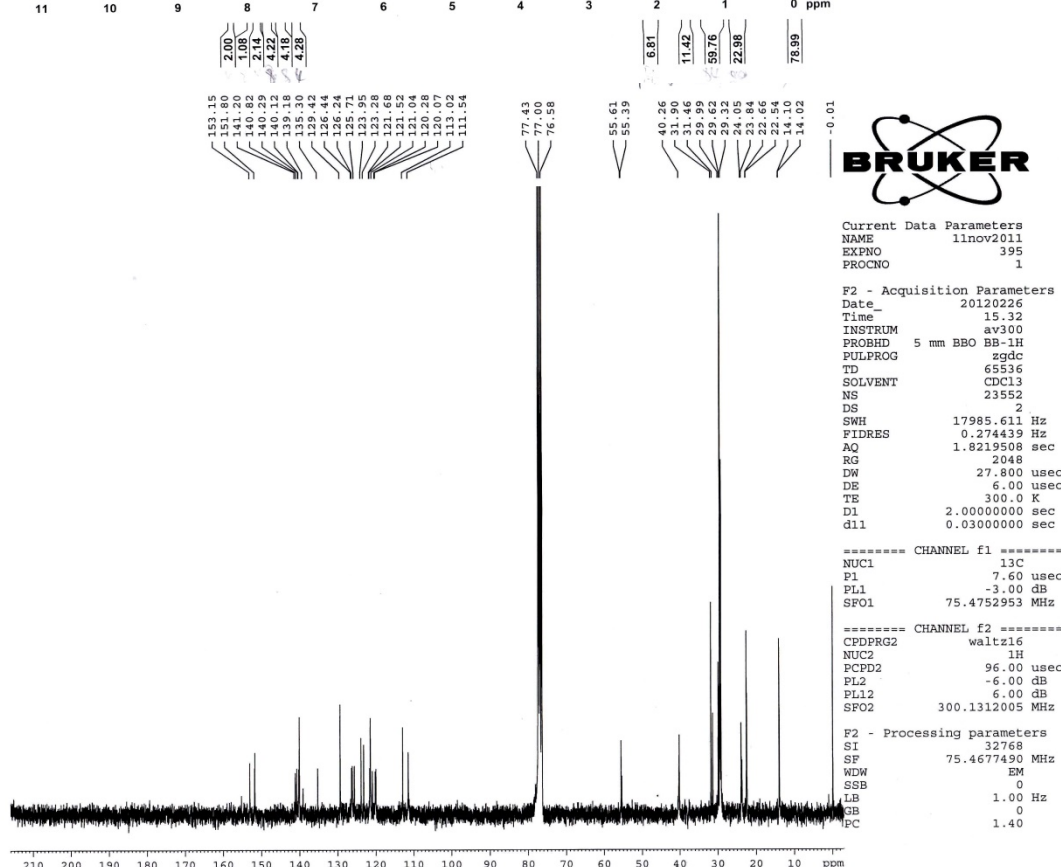


Current Data Parameters
 NAME 11nov2011
 EXPNO 42
 PROCNO 1

F2 - Acquisition Parameters
 Date 20120112
 Time 18.15
 INSTRUM av300
 PROBHD 5 mm BBO BB-1H
 PULPROG zg
 TD 32768
 SOLVENT CDCl3
 NS 1
 DS 0
 SWH 4496.403 Hz
 FIDRES 0.137219 Hz
 AQ 3.6438515 sec
 RG 143.7
 DW 111.200 usec
 DE 6.00 usec
 TE 300.0 K
 D1 1.00000000 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 16.50 usec
 PL1 -6.00 dB
 SFO1 300.1313506 MHz

F2 - Processing parameters
 SI 16384
 SF 300.1300053 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.00



Current Data Parameters
 NAME 11nov2011
 EXPNO 395
 PROCNO 1

F2 - Acquisition Parameters
 Date 20120226
 Time 15.32
 INSTRUM av300
 PROBHD 5 mm BBO BB-1H
 PULPROG zgdc
 TD 65536
 SOLVENT CDCl3
 NS 23552
 DS 2
 SWH 17985.611 Hz
 FIDRES 0.274439 Hz
 AQ 1.8219508 sec
 RG 2048
 DW 27.800 usec
 DE 6.00 usec
 TE 300.0 K
 D1 2.00000000 sec
 d11 0.03000000 sec

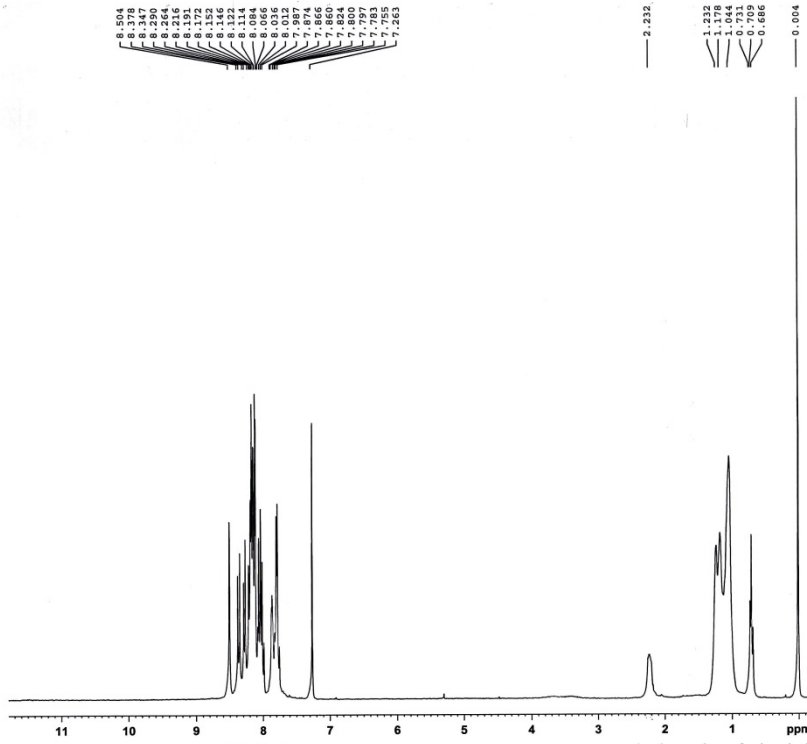
===== CHANNEL f1 =====
 NUC1 13C
 P1 7.60 usec
 PL1 -3.00 dB
 SFO1 75.4752953 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 P1 96.00 usec
 PL2 -6.00 dB
 PL12 6.00 dB
 SFO2 300.1312005 MHz

F2 - Processing parameters
 SI 32768
 SF 75.4677490 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40



BPCF



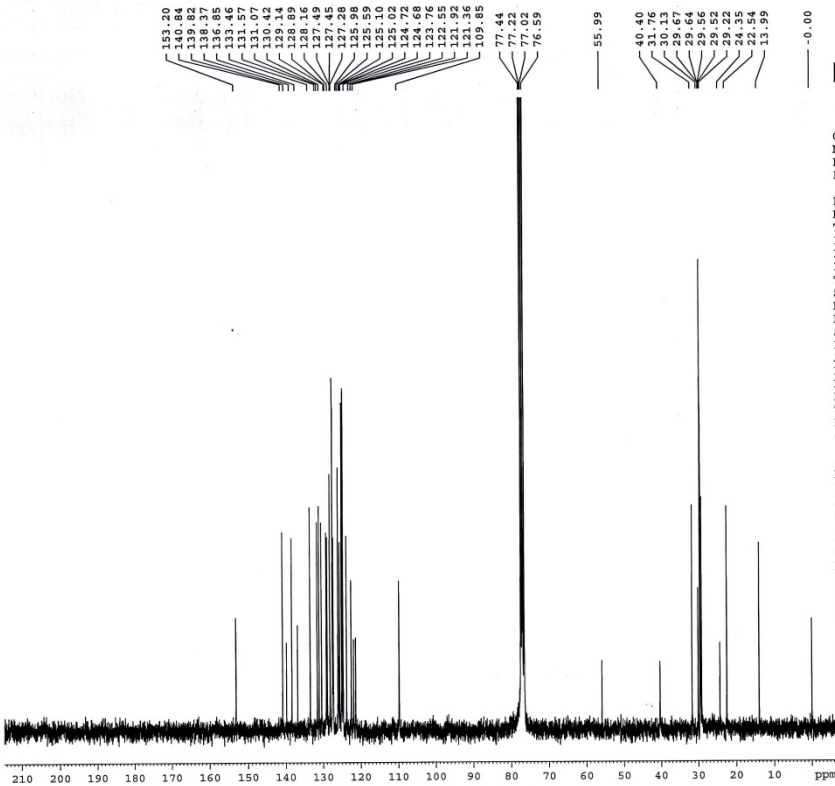
PN 05-01
cphre 4

Current Data Parameters
 NAME 11nov2011
 EXPNO 3076
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20140623
 Time 10.38
 INSTRUM av300
 PROBHD 5 mm BBO BB-1H
 PULPROG zg
 TD 32768
 SOLVENT CDCl3
 NS 8
 DS 0
 SWH 4496.403 Hz
 FIDRES 0.137219 Hz
 AQ 3.6438515 sec
 RG 256
 DW 111.200 usec
 DE 6.00 usec
 TE 300.0 K
 D1 1.00000000 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 16.50 usec
 PL1 -6.00 dB
 SFO1 300.1313506 MHz

F2 - Processing parameters
 SI 16384
 SF 300.1300053 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.00



BRUKER

Current Data Parameters
 NAME 11nov2011
 EXPNO 3077
 PROCNO 1

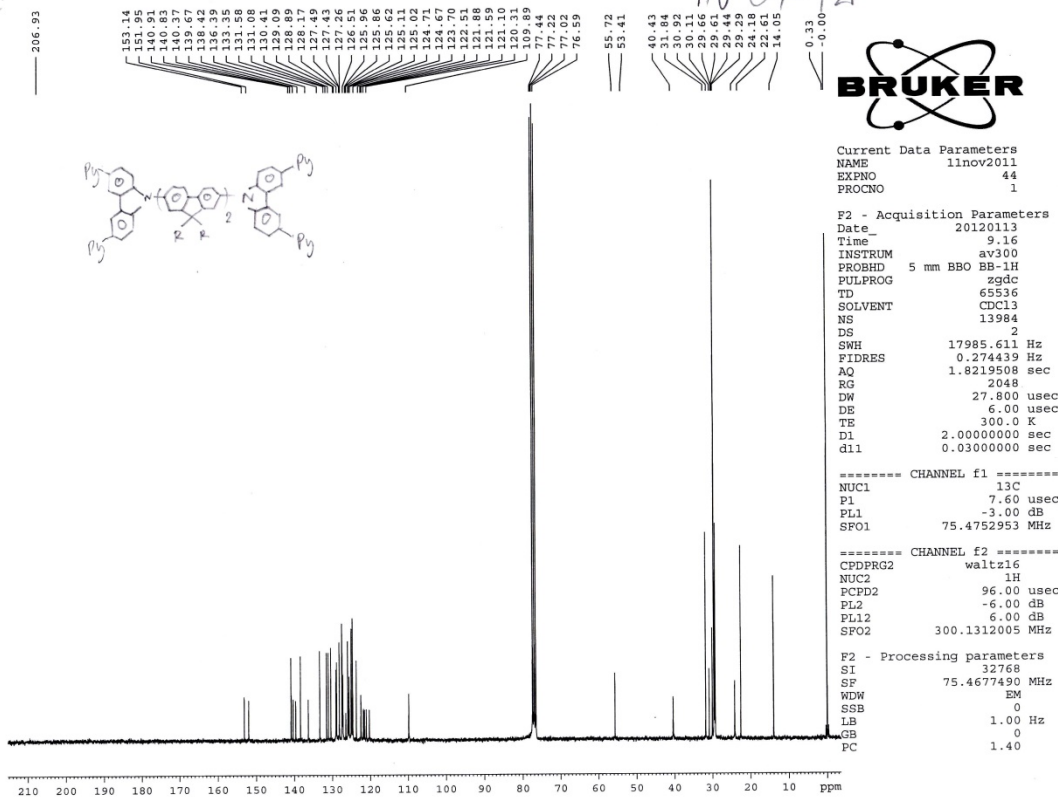
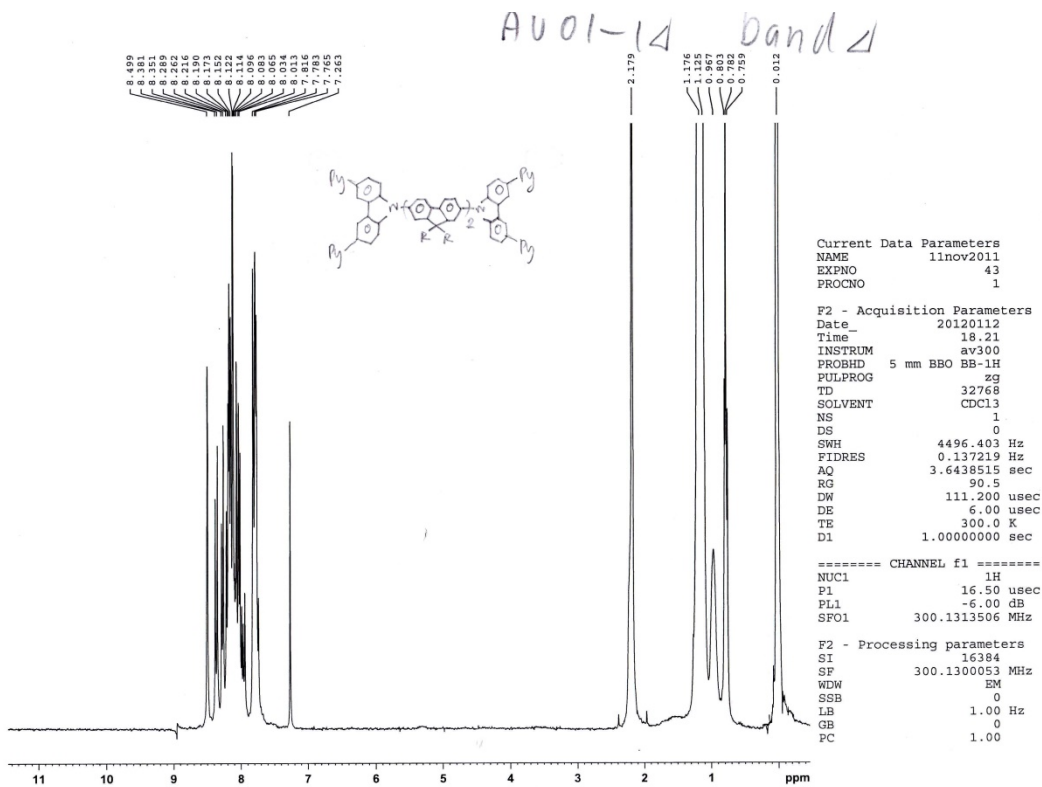
F2 - Acquisition Parameters
 Date_ 20140623
 Time 15.55
 INSTRUM av300
 PROBHD 5 mm BBO BB-1H
 PULPROG zgdc
 TD 65536
 SOLVENT CDCl3
 NS 18432
 DS 2
 SWH 17985.611 Hz
 FIDRES 0.274439 Hz
 AQ 1.8219508 sec
 RG 181
 DW 27.800 usec
 DE 6.00 usec
 TE 300.0 K
 D1 2.00000000 sec
 d11 0.03000000 sec

===== CHANNEL f1 =====
 NUC1 13C
 P1 7.80 usec
 PL1 -3.00 dB
 SFO1 75.4752953 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 96.00 usec
 PL2 -6.00 dB
 PL12 6.00 dB
 SFO2 300.1312005 MHz

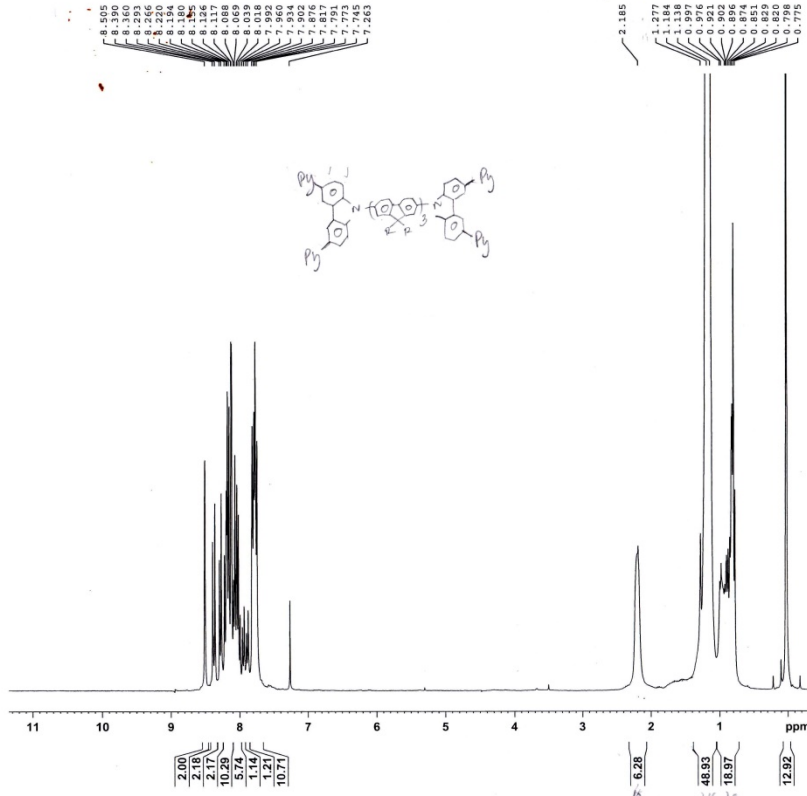
F2 - Processing parameters
 SI 32768
 SF 75.4677490 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40

BPCF2



BPCF3

AU 01-20

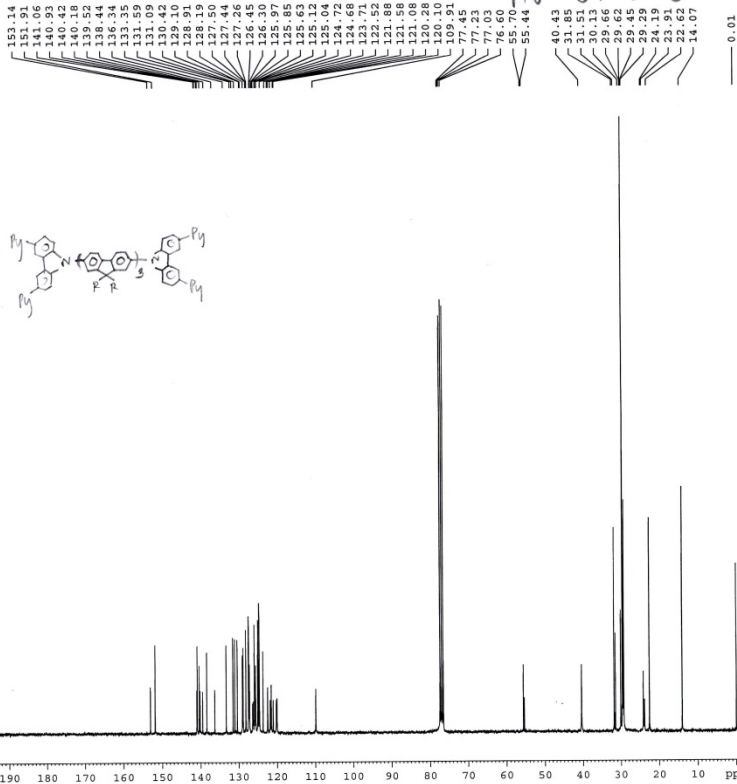


Current Data Parameters
 NAME 11nov2011
 EXPNO 118
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20120127
 Time 17.44
 INSTRUM av300
 PROBHD 5 mm BBO BB-1H
 PULPROG zg
 TD 32768
 SOLVENT CDCl3
 NS 4
 DS 0
 SWH 4496.403 Hz
 FIDRES 0.137219 Hz
 AQ 3.6438515 sec
 RG 90.5
 DW 111.200 usec
 DE 6.00 usec
 TE 300.0 K
 D1 1.00000000 sec

===== CHANNEL f1 =====
 NUC1 1H
 P1 16.50 usec
 PL1 -6.00 dB
 SFO1 300.1313506 MHz

F2 - Processing parameters
 SI 16384
 SF 300.1300053 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.00



BRUKER

Current Data Parameters
 NAME 11nov2011
 EXPNO 154
 PROCNO 1

F2 - Acquisition Parameters
 Date_ 20120202
 Time 9.24
 INSTRUM av300
 PROBHD 5 mm BBO BB-1H
 PULPROG zgdc
 TD 65536
 SOLVENT CDCl3
 NS 12288
 DS 2
 SWH 17985.611 Hz
 FIDRES 0.274439 Hz
 AQ 1.8219508 sec
 RG 4096
 DW 27.800 usec
 DE 6.00 usec
 TE 300.0 K
 D1 2.00000000 sec
 d11 0.03000000 sec

===== CHANNEL f1 =====
 NUC1 13C
 P1 7.60 usec
 PL1 -3.00 dB
 SFO1 75.4752953 MHz

===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 96.00 usec
 PL2 -6.00 dB
 PL12 6.00 dB
 SFO2 300.1312005 MHz

F2 - Processing parameters
 SI 32768
 SF 75.4677490 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.40