Supporting Information

Machine Learning Models for an Increasingly Predictive Description of Electrocatalic Properties of Ag-Pd-Ir Nanoalloy toward Formate Oxidation Reaction

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Detailed computation method

The Gibbs free-energy change (ΔG) for each reaction is calculated as follows:

$$\Delta G = \Delta E + \Delta E_{ZPE} - T\Delta S + eU \quad (1)$$

where ΔE and ΔE_{ZPE} represent total energy and zero point energy, respectively. T and ΔS devote temperature and entropy respectively. e and U are the charge transfer and the electric potential respectively.

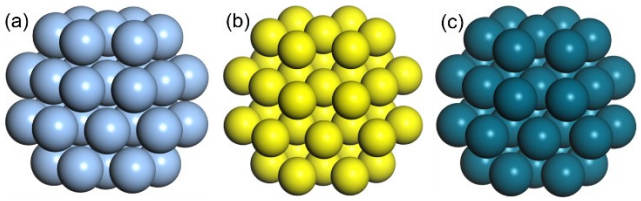

Fig. S1 The structures of AgPd with 38 atoms. (a) Ag_{38}, (b) Ir_{38}, (c) Pd_{38}. Colors: Pd in dark blue, Ag in light blue, and Ir in yellow, respectively.

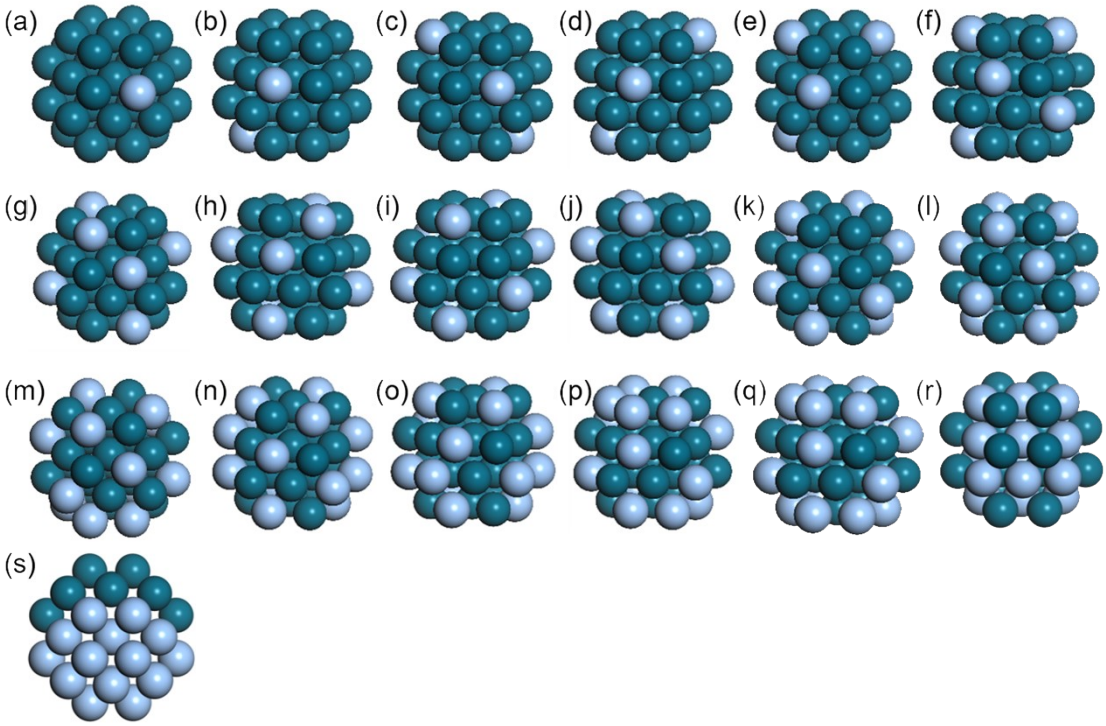

Fig. S2 The structures of AgPd with 38 atoms. (a) Ag_1Pd_{37}, (b) Ag_2Pd_{36}, (c) Ag_3Pd_{35}, (d) Ag_4Pd_{34}, (e) Ag_5Pd_{33}, (f) Ag_6Pd_{32}, (g) Ag_7Pd_{31}, (h) Ag_8Pd_{30}, (i) Ag_9Pd_{29}, (j) $Ag_{10}Pd_{28}$, (k) $Ag_{11}Pd_{27}$, (l) $Ag_{12}Pd_{26}$, (m) $Ag_{13}Pd_{25}$, (n) $Ag_{14}Pd_{24}$, (o) $Ag_{15}Pd_{23}$, (p) $Ag_{16}Pd_{23}$, (q) $Ag_{17}Pd_{21}$, (r) $Ag_{18}Pd_{20}$, (s) $Ag_{19}Pd_{19}$.

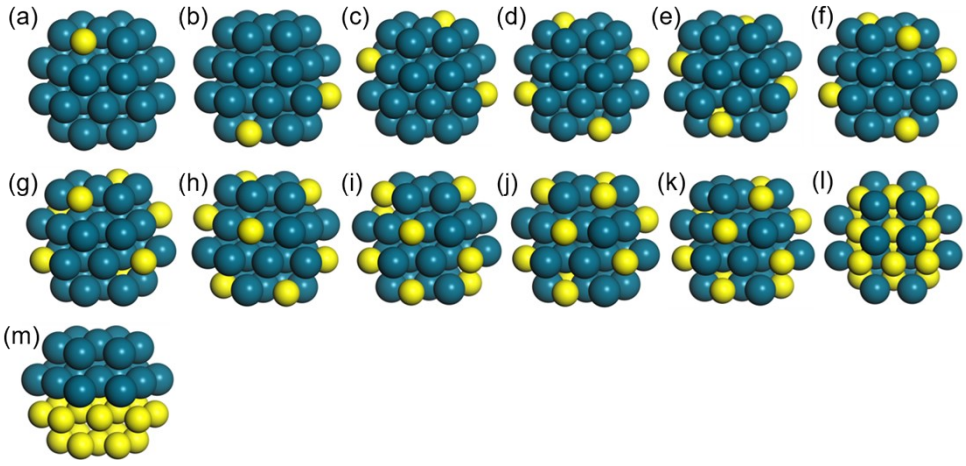

Fig. S3 The structures of IrPd with 38 atoms. (a) Ir_1Pd_{37}, (b) Ir_2Pd_{36}, (c) Ir_3Pd_{35}, (d) Ir_4Pd_{34}, (e) Ir_5Pd_{33}, (f) Ir_6Pd_{32}, (g) Ir_7Pd_{31}, (h) Ir_8Pd_{30}, (i) Ir_9Pd_{29}, (j) $Ir_{10}Pd_{28}$, (k) $Ir_{11}Pd_{27}$, (l) $Ir_{18}Pd_{20}$, (m) $Ir_{19}Pd_{19}$.

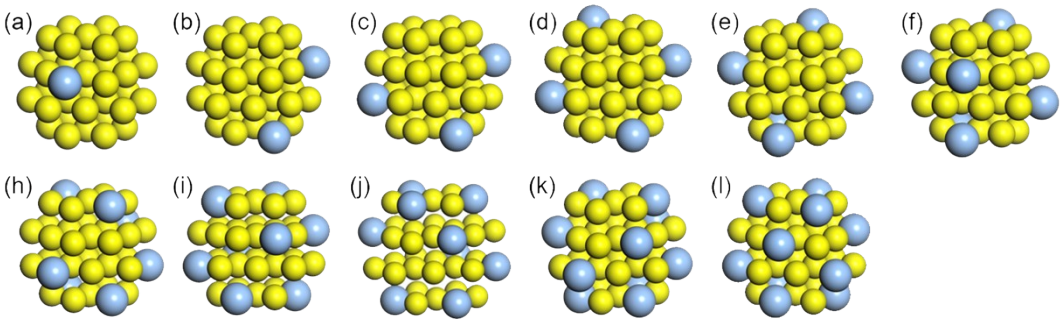

Fig. S4 The structures of AgIr with 38 atoms. (a) Ag_1Ir_{37}, (b) Ag_2Ir_{36}, (c) Ag_3Ir_{35}, (d) Ag_4Ir_{34}, (e) Ag_5Ir_{33}, (f) Ag_6Ir_{32}, (g) Ag_7Ir_{31}, (h) Ag_8Ir_{30}, (i) Ag_9Ir_{29}, (j) $Ag_{10}Ir_{28}$, (k) $Ag_{11}Ir_{27}$, (l) $Ag_{12}Ir_{26}$.

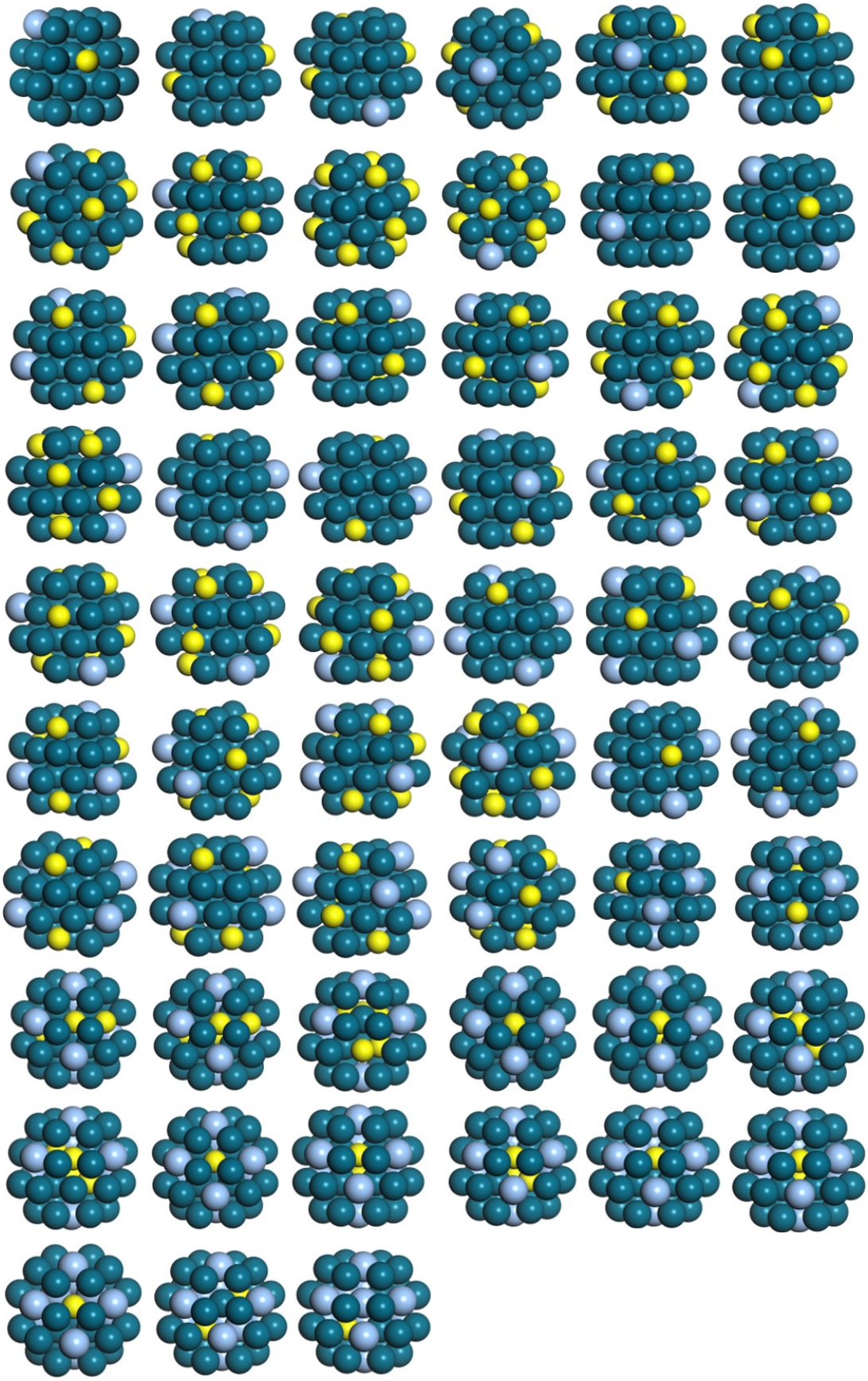

Fig. S5 The structures of AgPdIr with 38 atoms.

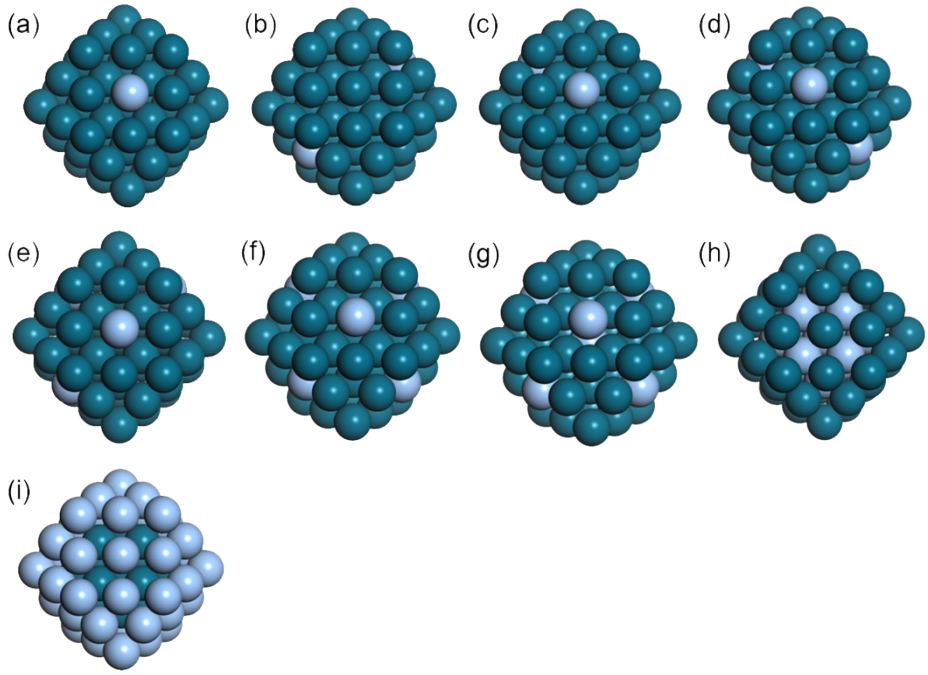

Fig. S6 The structures of AgPd with 55 atoms. (a) Ag_1Pd_{54}, (b) Ag_2Pd_{53}, (c) Ag_3Pd_{52}, (d) Ag_4Pd_{51}, (e) Ag_5Pd_{50}, (f) Ag_6Pd_{49}, (g) Ag_7Pd_{48}, (h) $Ag_{13}Pd_{42}$, (i) $Ag_{42}Pd_{13}$.

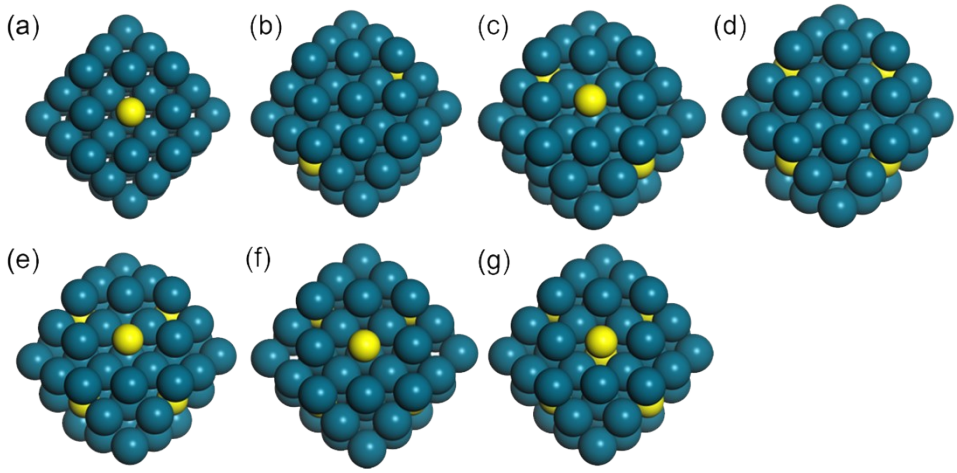

Fig. S7 The structures of AgPd with 55 atoms. (a) Ir_1Pd_{54}, (b) Ir_2Pd_{53}, (c) Ir_3Pd_{52}, (d) Ir_4Pd_{51}, (e) Ir_5Pd_{50}, (f) Ir_6Pd_{49}, (g) Ir_7Pd_{48}.

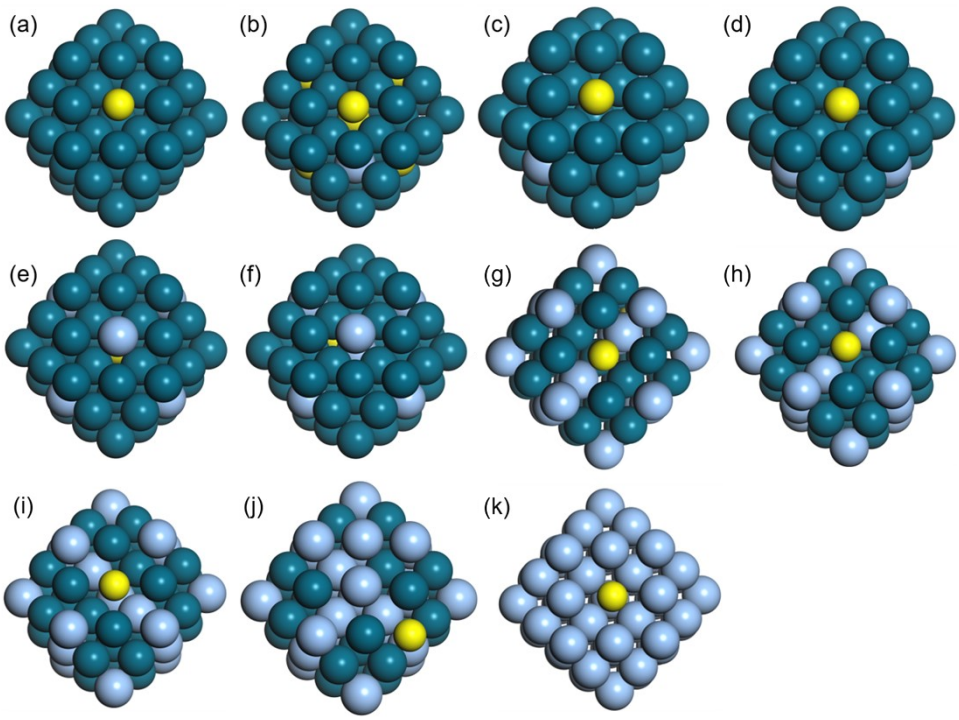

Fig. S8 The structures of AgPdIr with 55 atoms. (a) $Ag_1Ir_1Pd_{53}$, (b) $Ag_1Ir_7Pd_{47}$, (c) $Ag_3Ir_1Pd_{51}$, (d) $Ag_4Ir_4Pd_{51}$, (e) $Ag_6Ir_1Pd_{48}$, (f) $Ag_7Ir_1Pd_{47}$, (g) $Ag_{19}Ir_1Pd_{35}$, (h) $Ag_{19}Ir_2Pd_{34}$, (i) $Ag_{20}Ir_1Pd_{34}$, (j) $Ag_{27}Ir_1Pd_{27}$, (k) $Ag_{54}Ir_1$.

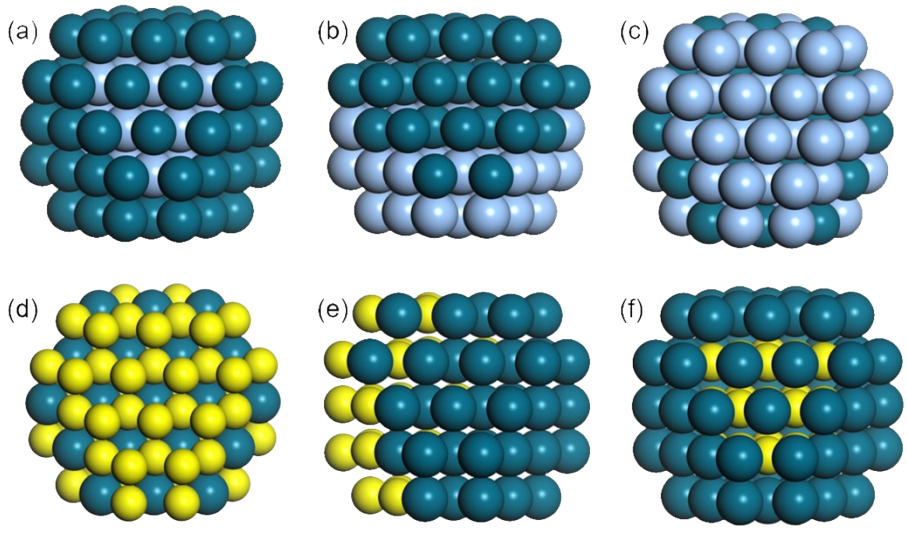

Fig. S9 The structures of Ag-Pd-Ir with 79 atoms. (a) $Ag_{19}Pd_{60}$, (b) $Ag_{45}Pd_{34}$, (c) $Ag_{60}Pd_{19}$, (d) $Pd_{19}Ir_1Pd_{48}$, (e) $Pd_{34}Ir_{45}$, (f) $Pd_{60}Ir_{19}$.

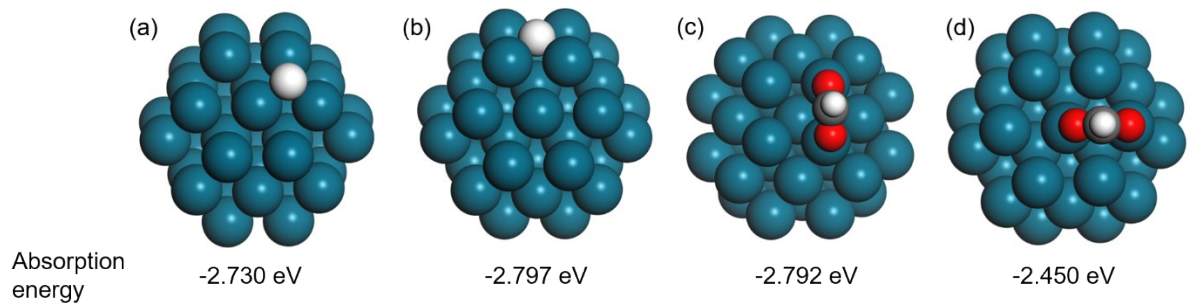

Fig. S10 Adsorption sites of H and HCOO on the surface of Pd_{38} nanocluster. White devotes H atom, and red devotes O atom.

Table S1 Detailed input dates of ML models.

Formula	NA	δ_{AN}	δ_{EN}	X_{EA}	X_{CR}	δ_{VEN}	$X_{Hf,ox}$	δ_{EA}	OP (V)
Pd19Ir19	38	240.25	0	1.062	1.34	0.25	-4.635	0.254016	0.785
Pd34Ir45	79	235.5411	0	1.13256	1.3442	0.2451	-4.8989	0.249037	0.614
Pd20Ir18	38	239.6004	0	1.035792	1.33844	0.249324	-4.53698	0.253329	0.794
Pd19Ir60	79	175.7852	0	1.323072	1.3555 4	0.182919	-5.61143	0.185857	0.792
Pd32Ir6	38	127.8476	0	0.717264	1.31948	0.133036	-3.34566	0.135173	0.584
Pd60Ir19	79	175.5392	0	0.80043	1.32443	0.182663	-3.65671	0.185597	0.591
Pd19Ag19	38	0.25	0.018225	0.9305	1.42	0.25	-1.88	0.138756	0.515
Pd34A	79	0.2451	0.0178	0.9826	1.4354	0.2451	-1.7582	0.1360	0.536

g45			68	5				37	
Pd20Ag18	38	0.249324	0.018176	0.91113	1.41428	0.249324	-1.92524	0.138381	0.726
Pd19Ag60	79	0.182919	0.013335	1.123455	1.47698	0.182919	-1.42934	0.101525	0.781
Pd32Ag6	38	0.133036	0.009698	0.67571	1.34476	0.133036	-2.47508	0.073838	0.586
Pd60Ag19	79	0.249324	0.018176	0.94987	1.42572	0.249324	-1.83476	0.138381	0.616
Ag13Pd42	55	0.180304	0.013144	0.73382	1.36192	0.180304	-2.33936	0.100073	0.61
Pd13Ag42	55	0.180304	0.013144	1.12718	1.47808	0.180304	-1.42064	0.100073	0.778
Pd6Ag32	38	0.133036	0.009698	1.18529	1.49524	0.133036	-1.28492	0.073838	1.109
Ag1Pd37	38	0.025623	0.001868	0.577605	1.31579	0.025623	-2.70421	0.014222	0.663
Ag2Pd36	38	0.049862	0.003635	0.597211	1.321579	0.049862	-2.65842	0.027675	0.691
Ag3Pd35	38	0.072714	0.005301	0.616816	1.327368	0.072714	-2.61263	0.040358	0.682
Ag4Pd34	38	0.09418	0.006866	0.636419	1.333157	0.09418	-2.5668	0.052272	0.674

							5		
Ag5Pd33	38	0.114266	0.00833	0.656026	1.338947	0.114266	-2.52105	0.06342	0.702
Ag6Pd32	38	0.132964	0.009693	0.675632	1.344737	0.132964	-2.47526	0.073798	0.705
Ag7Pd31	38	0.150277	0.010955	0.695237	1.350526	0.150277	-2.42947	0.083408	0.677
Ag8Pd30	38	0.166205	0.012116	0.714842	1.356316	0.166205	-2.38368	0.092248	0.66
Ag9Pd29	38	0.180748	0.013177	0.734447	1.362105	0.180748	-2.33789	0.10032	0.644
Ag10Pd28	38	0.193906	0.014136	0.754053	1.367895	0.193906	-2.29211	0.107623	0.629
Ag11Pd27	38	0.205679	0.014994	0.773658	1.373684	0.205679	-2.24632	0.114157	0.613
Ir1Pd37	38	24.62415	0	0.584527	1.311579	0.025623	-2.84921	0.026035	0.853
Ir2Pd36	38	47.91726	0	0.611053	1.313158	0.049862	-2.94842	0.050663	0.88
Ir3Pd35	38	69.87851	0	0.637579	1.314737	0.072714	-3.04763	0.073882	0.818
Ir4Pd34	38	90.5073	0	0.664102	1.316316	0.09418	-3.1468	0.095693	0.773

							3		
Ir5Pd33	38	109.8096	0	0.690632	1.317895	0.114266	-3.24605	0.116102	0.928
Ir6Pd32	38	127.7786	0	0.717158	1.319474	0.132964	-3.34526	0.1351	0.882
Ir7Pd31	38	144.4165	0	0.743685	1.321053	0.150277	-3.44448	0.152691	0.902
Ir8Pd30	38	159.7228	0	0.77021	1.322632	0.166205	-3.54368	0.168875	0.888
Ir9Pd29	38	173.6987	0	0.796737	1.324211	0.180748	-3.64289	0.183651	0.9
Ir10Pd28	38	186.3435	0	0.823263	1.325789	0.193906	-3.74211	0.197021	0.906
Ir11Pd27	38	197.6573	0	0.84979	1.327368	0.205679	-3.84132	0.208983	0.934
Ag1Ir37	38	23.06112	0.001868	1.559079	1.374211	0.102494	-6.375	0.001772	1.181
Ag2Ir36	38	44.87569	0.003635	1.552158	1.378421	0.199447	-6.23	0.003449	1.217
Ag3Ir35	38	65.44293	0.005301	1.545237	1.382632	0.290857	-6.085	0.00503	1.204
Ag4Ir34	38	84.7623	0.006866	1.538317	1.386842	0.376721	-5.94002	0.006514	1.106
Ag5Ir33	38	102.8394	0.00833	1.531395	1.391053	0.457064	-5.795	0.007904	1.29

Ag6Ir32	38	119.6678	0.009693	1.524474	1.395263	0.531857	-5.65	0.009197	1.231
Ag7Ir31	38	135.2496	0.010955	1.517553	1.399474	0.601109	-5.505	0.010395	1.138
Ag8Ir30	38	149.5843	0.012116	1.510632	1.403684	0.664819	-5.36	0.011496	1.269
Ag9Ir29	38	162.6731	0.013177	1.503711	1.407895	0.722991	-5.215	0.012502	1.27
Ag10Ir28	38	174.5152	0.014136	1.496789	1.412105	0.775623	-5.07	0.013412	1.3
Ag11Ir27	38	185.1109	0.014994	1.489868	1.416316	0.822715	-4.925	0.014227	1.218
Ag1Ir1Pd36	38	24.60665	0.001868	0.604132	1.317368	0.052632	-2.80342	0.039216	0.867
Ag1Ir2Pd35	38	47.85665	0.001868	0.630658	1.318947	0.078255	-2.90263	0.062804	0.858
Ag1Ir3Pd34	38	69.77562	0.001868	0.657184	1.320526	0.102493	-3.00184	0.084984	0.845
Ag1Ir4Pd33	38	90.36357	0.001868	0.683711	1.322105	0.125346	-3.10105	0.105757	0.892
Ag1Ir5Pd32	38	109.6205	0.001868	0.710237	1.323684	0.146814	-3.20026	0.125122	0.875
Ag1Ir6Pd31	38	127.5464	0.001868	0.736763	1.325263	0.166898	-3.29947	0.143081	0.912
Ag1Ir7Pd30	38	144.1413	0.001868	0.763289	1.326842	0.185596	-3.39868	0.159632	0.983

Ag1Ir8Pd29	38	159.4051	0.001868	0.789816	1.328421	0.202909	-3.49789	0.174776	0.918
Ag1Ir9Pd28	38	173.338	0.001868	0.816342	1.33	0.218837	-3.59711	0.188512	0.973
Ag1Ir10Pd27	38	185.9398	0.001868	0.842868	1.331579	0.23338	-3.69632	0.200841	0.998
Ag2Ir1Pd35	38	24.58795	0.003635	0.623737	1.323158	0.078255	-2.75763	0.051629	0.868
Ag2Ir2Pd34	38	47.79501	0.003635	0.650263	1.324737	0.105263	-2.85684	0.074176	0.891
Ag2Ir3Pd33	38	69.67105	0.003635	0.676789	1.326316	0.130886	-2.95605	0.095316	0.847
Ag2Ir4Pd32	38	90.21607	0.003635	0.703316	1.327895	0.155125	-3.05526	0.115049	0.853
Ag2Ir5Pd31	38	109.4301	0.003635	0.729842	1.329474	0.177978	-3.15447	0.133375	0.918
Ag2Ir6Pd30	38	127.313	0.003635	0.756368	1.331053	0.199446	-3.25368	0.150293	0.873
Ag2Ir7Pd29	38	143.865	0.003635	0.782895	1.332632	0.219529	-3.35289	0.165804	0.816
Ag2Ir8Pd28	38	159.0859	0.003635	0.809421	1.334211	0.238227	-3.45211	0.179908	0.931

Ag2Ir9Pd27	38	172.9758	0.003635	0.835947	1.335789	0.25554	-3.55132	0.192604	0.898
Ag3Ir1Pd34	38	24.56787	0.005301	0.643342	1.328947	0.102493	-2.71184	0.063273	0.833
Ag3Ir2Pd33	38	47.73199	0.005301	0.669868	1.330526	0.130886	-2.81105	0.08478	0.84
Ag3Ir3Pd32	38	69.5651	0.005301	0.696395	1.332105	0.157895	-2.91026	0.10488	0.846
Ag3Ir4Pd31	38	90.06717	0.005301	0.722921	1.333684	0.183518	-3.00947	0.123573	0.834
Ag3Ir5Pd30	38	109.2382	0.005301	0.749447	1.335263	0.207756	-3.10868	0.140858	0.807
Ag3Ir6Pd29	38	127.0783	0.005301	0.775974	1.336842	0.230609	-3.20789	0.156736	0.907
Ag3Ir7Pd28	38	143.5873	0.005301	0.8025	1.338421	0.252078	-3.30711	0.171207	0.926
Ag3Ir8Pd27	38	158.7652	0.005301	0.829026	1.34	0.272161	-3.40632	0.184271	1.074
Ag4Ir1Pd33	38	24.5464	0.006866	0.662947	1.334737	0.125346	-2.66605	0.074148	0.842
Ag4Ir2Pd32	38	47.66759	0.006866	0.689474	1.336316	0.155125	-2.76526	0.094615	0.795

Ag4Ir3Pd31	38	69.45776	0.006866	0.716	1.337895	0.183518	-2.86447	0.113675	0.834
Ag4Ir5Pd29	38	109.045	0.006866	0.769053	1.341053	0.23615	-3.06289	0.147573	0.872
Ag4Ir6Pd28	38	126.8421	0.006866	0.795579	1.342632	0.260388	-3.16211	0.162411	0.92
Ag4Ir4Pd30	38	89.9169	0.006866	0.742526	1.339474	0.210526	-2.96368	0.131328	0.857
Ag5Ir1Pd32	38	24.52355	0.00833	0.682553	1.340526	0.146814	-2.62026	0.084255	0.817
Ag5Ir2Pd31	38	47.6018	0.00833	0.709079	1.342105	0.177978	-2.71947	0.103682	0.814
Ag5Ir3Pd30	38	69.34903	0.00833	0.735605	1.343684	0.207756	-2.81868	0.121702	0.86
Ag6Ir1Pd31	38	24.49931	0.009693	0.702158	1.346316	0.166898	-2.57447	0.093593	0.811
Ag6Ir2Pd30	38	47.53463	0.009693	0.728684	1.347895	0.199446	-2.67368	0.111979	0.841
Ag6Ir3Pd29	38	69.23892	0.009693	0.755211	1.349474	0.230609	-2.77289	0.128959	0.817
Ag5Ir4Pd29	38	89.76524	0.00833	0.762132	1.345263	0.23615	-2.91789	0.138314	0.877

Ag5Ir5Pd28	38	108.8504	0.00833	0.788658	1.346842	0.263158	-3.01711	0.153519	0.934
Ag5Ir6Pd27	38	126.6046	0.00833	0.815184	1.348421	0.288781	-3.11632	0.167317	0.909
Ag7Ir1Pd30	38	24.47368	0.010955	0.721763	1.352105	0.185596	-2.52868	0.102162	0.593
Ag7Ir2Pd29	38	47.46607	0.010955	0.748289	1.353684	0.219529	-2.62789	0.119508	0.569
Ag4Ir7Pd27	38	143.3082	0.006866	0.822105	1.344211	0.283241	-3.26132	0.175842	1.107
Ag6Ir4Pd28	38	89.61219	0.009693	0.781737	1.351053	0.260388	-2.87211	0.144531	0.887
Ag6Ir5Pd27	38	108.6544	0.009693	0.808263	1.352632	0.288781	-2.97132	0.158697	0.904
Ag7Ir3Pd28	38	69.12742	0.010955	0.774816	1.355263	0.252078	-2.72711	0.135448	0.486
Ag7Ir4Pd27	38	89.45776	0.010955	0.801342	1.356842	0.283241	-2.82632	0.14998	0.484
Ag8Ir1Pd29	38	24.44668	0.012116	0.741368	1.357895	0.202909	-2.48289	0.109962	0.546
Ag8Ir2Pd28	38	47.39612	0.012116	0.767895	1.359474	0.238227	-2.58211	0.126269	0.519

Ag8Ir3Pd27	38	69.01454	0.012116	0.794421	1.361053	0.272161	-2.68132	0.141168	0.476
Ag9Ir1Pd28	38	24.41828	0.013177	0.760974	1.363684	0.218837	-2.43711	0.116993	0.59
Ag9Ir2Pd27	38	47.32479	0.013177	0.7875	1.365263	0.25554	-2.53632	0.13226	0.565
Ag10Ir1Pd27	38	24.3885	0.014136	0.780579	1.369474	0.23338	-2.39132	0.123256	0.594
Ag12Pd26	38	0.216066	0.015751	0.793263	1.379474	0.216066	-2.20053	0.119922	0.684
Ag13Pd25	38	0.225069	0.016408	0.812868	1.385263	0.225069	-2.15474	0.124919	0.633
Ag14Pd24	38	0.232687	0.016963	0.832474	1.391053	0.232687	-2.10895	0.129147	0.663
Ag15Pd23	38	0.23892	0.017417	0.852079	1.396842	0.23892	-2.06316	0.132606	0.741
Ag16Pd22	38	0.243767	0.017771	0.871684	1.402632	0.243767	-2.01737	0.135297	0.716
Ag17Pd21	38	0.24723	0.018023	0.891289	1.408421	0.24723	-1.97158	0.137219	0.657
Ag19Pd35Ir1	55	16.99174	0.016484	0.833691	1.387091	0.256529	-2.21745	0.134204	0.942

Ag11Ir1Pd26	38	17.08959	0.011664	0.725327	1.355091	0.185124	-2.47055	0.10148	0.589
Ag11Ir2Pd25	38	33.12198	0.016484	0.852018	1.388182	0.286281	-2.286	0.142237	0.558
Ag19Ir2Pd34	55	16.97653	0.016869	0.847236	1.391091	0.262479	-2.18582	0.136643	0.956
Ag20Ir1Pd34	55	16.97653	0.016869	0.847236	1.391091	0.262479	-2.18582	0.136643	0.952
Ag27Ir1Pd27	55	16.85157	0.018219	0.942055	1.419091	0.28562	-1.96436	0.143443	0.968
Ag3Ir1Pd51	55	17.14512	0.003759	0.616964	1.323091	0.071405	-2.72364	0.045271	0.667
Ag4Ir1Pd50	55	17.1405	0.004916	0.630509	1.327091	0.087934	-2.692	0.053582	0.57
Ag1Ir1Pd53	55	17.1524	0.001301	0.589873	1.315091	0.036364	-2.78691	0.027549	0.801
Ag1Pd54	55	0.017851	0.001301	0.571545	1.314	0.017851	-2.71836	0.009908	0.71
Ag2Pd53	55	0.035041	0.002555	0.585091	1.318	0.035041	-2.68673	0.019449	0.671
Ag3Pd52	55	0.05157	0.003759	0.598636	1.322	0.05157	-2.65509	0.028623	0.741
Ag4Pd53	55	0.082645	0.006025	0.625727	1.33	0.082645	-2.5918	0.04587	0.801

							2		
Ir1Pd54	55	17.15504	0	0.576327	1.311091	0.017851	-2.81855	0.018138	0.766
Ag5Pd50	55	0.082645	0.006025	0.625727	1.33	0.082645	-2.59182	0.04587	0.712
Ag6Pd49	55	0.09719	0.007085	0.639273	1.334	0.09719	-2.56018	0.053943	0.536
Ir2Pd53	55	33.67471	0	0.594655	1.312182	0.035041	-2.88709	0.035604	0.749
Ir3Pd52	55	49.55901	0	0.612982	1.313273	0.05157	-2.95564	0.052399	0.69
Ir4Pd51	55	64.80793	0	0.631309	1.314364	0.067438	-3.02418	0.068521	0.756
Ir5Pd50	55	79.42149	0	0.649636	1.315455	0.082645	-3.09273	0.083972	0.77
Ir6Pd49	55	93.39967	0	0.667964	1.316545	0.09719	-3.16127	0.098751	0.835
Ir7Pd48	55	106.7425	0	0.686291	1.317636	0.111074	-3.22982	0.112859	0.7
Ag7Pd48	55	0.111074	0.008097	0.652818	1.338	0.111074	-2.52855	0.061649	0.524
Ir1Ag54	55	16.06612	0.001301	1.307782	1.527091	0.071405	-1.1101	0.001235	0.964

							8		
Ag1Ir7Pd47	55	106.6169	0.001301	0.699836	1.321636	0.133554	-3.19818	0.119291	0.603
Ir1Ag7Pd47	55	17.12264	0.008097	0.671145	1.339091	0.133554	-2.59709	0.076312	0.621
Ag6Ir1Pd48	55	19.56001	0.007085	0.660273	1.33525	0.122135	-2.63872	0.071256	0.519
Ir38	38	0	0	1.566	1.37	0	-6.52	0	1.018
Ag38	38	0	0	1.303	1.53	0	-1.01	0	1.082
Pd38	38	0	0	0.558	1.31	0	-2.75	0	0.584

Table S2 Detailed parameters of ML models.

ML Model	Parameters
RFR	N_estimators: 150 Max_depth: 12 Random_state: 0
GBR	N_estimators: 900 Max_depth: 12 Random_state: 0 Subsample: 0.6 Learning_rate: 0.01
SVR	Kernel: 'rbf' Gamma: 'scale' Degree: 4 C: 7
XGBoost	N_estimators: 150 Max_depth: 9 Colsample_bytree: 0.9
Lasso	Alpha: 0.001 Max_iter: 900 Tol: 0.01

Table S3 R^2, MAE and RMSE for six different sets of training and test data for ML models.

ML Model	Training R^2	Training MAE	Training RMSE	Test R^2	Test MAE	Test RMSE
RFR	0.954	0.029	0.041	0.89	0.055	0.073
GBR	0.999	0.002	0.006	0.88	0.051	0.065
SVR	0.831	0.065	0.077	0.83	0.061	0.077
KNN	0.999	0.001	0.006	0.94	0.041	0.050
XGBoost	0.999	0.001	0.006	0.87	0.053	0.069
Lasso	0.582	0.095	0.122	0.83	0.070	0.078

Table S4 Details about features of 310 structures for prediction.

Formula	NA	δ_{AN}	δ_{EN}	X_{EA}	X_{CR}	δ_{VEN}	$X_{Hf,ox}$	X_{IE}
Ag37Pd1	38	0.025623	0.001868	1.283395	1.52421	0.025623	-1.05579	732.9311
Ag36Pd2	38	0.049862	0.003635	1.263789	1.518421	0.049862	-1.10158	734.8621
Ag35Pd3	38	0.072714	0.005301	1.244184	1.512632	0.072714	-1.14737	736.7931
Ag34Pd4	38	0.09418	0.006866	1.224581	1.506843	0.09418	-1.19315	738.724
Ag23Pd34	55	0.243306	0.017737	0.869545	1.402	0.243306	-2.02236	773.6938
Ag5Ir1Pd49	55	17.13521	0.006025	0.644055	1.331091	0.103802	-2.66036	798.8147
Ag33Pd5	38	0.114266	0.00833	1.204974	1.501053	0.114266	-1.23895	740.6553
Ag32Pd6	38	0.132964	0.009693	1.185368	1.495263	0.132964	-1.28474	742.5863
Ag31Pd7	38	0.150277	0.010955	1.165763	1.489474	0.150277	-1.33053	744.5174
Ag30Pd8	38	0.166205	0.012116	1.146158	1.483684	0.166205	-1.3763	746.4484

							2	
Ag29Pd9	38	0.180748	0.013177	1.126553	1.477895	0.180748	-1.42211	748.3795
Ag19Ir19Pd41	79	172.1356	0.013316	0.979608	1.377342	0.481013	-3.23823	801.3568
Ir18Pd61	79	169.0719	0	0.787671	1.323671	0.175933	-3.60899	818.2354
Ag28Pd10	38	0.193906	0.014136	1.106947	1.472105	0.193906	-1.46789	750.3105
Ag27Pd11	38	0.205679	0.014994	1.087342	1.466316	0.205679	-1.51368	752.2416
Ir37Pd1	38	24.62415	0	1.539473	1.368421	0.025623	-6.42079	863.5897
Ir36Pd2	38	47.91726	0	1.512947	1.366842	0.049862	-6.32158	861.9894
Ir35Pd3	38	69.87851	0	1.486421	1.365263	0.072714	-6.22237	860.3892
Ir34Pd4	38	90.5073	0	1.459898	1.363684	0.09418	-6.12317	858.7891
Ir33Pd5	38	109.8096	0	1.433368	1.362105	0.114266	-6.02395	857.1887
Ir32Pd6	38	127.7786	0	1.406842	1.360526	0.132964	-5.9247	855.5884

							4	
Ir31Pd7	38	144.4165	0	1.380315	1.358947	0.150277	-5.82552	853.9881
Ir30Pd8	38	159.7228	0	1.35379	1.357368	0.166205	-5.72632	852.3879
Ir29Pd9	38	173.6987	0	1.327263	1.355789	0.180748	-5.62711	850.7876
Ir28Pd10	38	186.3435	0	1.300737	1.354211	0.193906	-5.52789	849.1874
Ir27Pd11	38	197.6573	0	1.27421	1.352632	0.205679	-5.42868	847.5871
Ag37Ir1	38	23.06112	0.001868	1.309921	1.525789	0.102494	-1.155	734.5313
Ag13Pd42	55	0.180496	0.013158	0.734091	1.362	0.180496	-2.33873	787.0356
Ag14Pd41	55	0.189752	0.013833	0.747636	1.366	0.189752	-2.30709	785.7015
Ag15Pd40	55	0.198347	0.01446	0.761182	1.37	0.198347	-2.27545	784.3673
Ag16Pd39	55	0.206281	0.015038	0.774727	1.374	0.206281	-2.24382	783.0331
Ag17Pd38	55	0.213554	0.015568	0.788273	1.378	0.213554	-2.21218	781.6989

Ag36Ir2	38	44.87569	0.003635	1.316842	1.521579	0.199447	-1.3	738.0627
Ag35Ir3	38	65.44293	0.005301	1.323763	1.517368	0.290857	-1.445	741.5939
Ag34Ir4	38	84.7623	0.006866	1.330683	1.513158	0.376721	-1.58998	745.1248
Ag33Ir5	38	102.8394	0.00833	1.337605	1.508947	0.457064	-1.735	748.6566
Ag32Ir6	38	119.6678	0.009693	1.344526	1.504737	0.531857	-1.88	752.1879
Ag31Ir7	38	135.2496	0.010955	1.351447	1.500526	0.601109	-2.025	755.7193
Ag30Ir8	38	149.5843	0.012116	1.358368	1.496316	0.664819	-2.17	759.2505
Ag29Ir9	38	162.6731	0.013177	1.365289	1.492105	0.722991	-2.315	762.7818
Ag28Ir10	38	174.5152	0.014136	1.372211	1.487895	0.775623	-2.46	766.3132
Ag27Ir11	38	185.1109	0.014994	1.379132	1.483684	0.822715	-2.605	769.8445
Ag26Ir12	38	194.4598	0.015751	1.386053	1.479474	0.864266	-2.75	773.3758
Ag25Ir13	38	202.5623	0.016408	1.392974	1.475263	0.900277	-2.895	776.9071
Ag24Ir14	38	209.4183	0.016963	1.399895	1.471053	0.930748	-3.04	780.4384
Ag23Ir15	38	215.0277	0.017417	1.406816	1.466842	0.955679	-3.185	783.9697
Ag22Ir16	38	219.3906	0.017771	1.413737	1.462632	0.975069	-3.33	787.5011
Ag21Ir17	38	222.5069	0.018023	1.420658	1.458421	0.98892	-3.475	791.0324

Ag20Ir18	38	224.3767	0.018175	1.427579	1.454211	0.99723	-3.62	794.5637
Ag18Ir1Pd36	55	17.00628	0.01605	0.820145	1.383091	0.249917	-2.24909	781.4704
Ag19Ir1Pd35	55	16.99174	0.016484	0.833691	1.387091	0.256529	-2.21745	780.1362
Ag20Ir1Pd34	55	16.97653	0.016869	0.847236	1.391091	0.262479	-2.18582	778.802
Ag19Ir19	38	225	0.018225	1.4345	1.45	1	-3.765	798.095
Ag18Ir20	38	224.3767	0.018175	1.441421	1.445789	0.99723	-3.91	801.6263
Ag26Pd12	38	0.216066	0.015751	1.067737	1.460526	0.216066	-1.55947	754.1726
Ag25Pd13	38	0.225069	0.016408	1.048132	1.454737	0.225069	-1.60526	756.1037
Ag24Pd14	38	0.232687	0.016963	1.028526	1.448947	0.232687	-1.65105	758.0347
Ag23Pd15	38	0.23892	0.017417	1.008921	1.443158	0.23892	-1.69684	759.9658
Ag22Pd16	38	0.243767	0.017771	0.989316	1.437368	0.243767	-1.74263	761.8968
Ag21Pd17	38	0.24723	0.018023	0.969711	1.431579	0.24723	-1.78842	763.8279

Ag20Pd18	38	0.249307	0.018175	0.950105	1.425789	0.249307	-1.83421	765.7589
Ag19Pd19	38	0.25	0.018225	0.9305	1.42	0.25	-1.88	767.69
Ag18Pd20	38	0.249307	0.018175	0.910895	1.414211	0.249307	-1.92579	769.6211
Ag17Pd21	38	0.24723	0.018023	0.891289	1.408421	0.24723	-1.97158	771.5521
Ag22Pd33	55	0.24	0.017496	0.856	1.398	0.24	-2.054	775.028
Ag8Ir1Pd48	55	17.11537	0.009061	0.684691	1.343091	0.147438	-2.56545	794.8122
Ag9Ir1Pd47	55	17.10744	0.009977	0.698236	1.347091	0.160661	-2.53382	793.478
Ag10Ir1Pd46	55	17.09884	0.010845	0.711782	1.351091	0.173223	-2.50218	792.1438
Ag16Pd22	38	0.243767	0.017771	0.871684	1.402632	0.243767	-2.01737	773.4832
Ag15Pd23	38	0.23892	0.017417	0.852079	1.396842	0.23892	-2.06316	775.4142
Ag14Pd24	38	0.232687	0.016963	0.832474	1.391053	0.232687	-2.10895	777.3453
Ag13Pd25	38	0.225069	0.016408	0.812868	1.385263	0.225069	-2.1547	779.2763

							4	
Ag12Pd26	38	0.216066	0.015751	0.793263	1.379474	0.216066	-2.20053	781.2074
Ir26Pd12	38	207.6399	0	1.247684	1.351053	0.216066	-5.32947	845.9868
Ir25Pd13	38	216.2916	0	1.221158	1.349474	0.225069	-5.23026	844.3866
Ir24Pd14	38	223.6122	0	1.194632	1.347895	0.232687	-5.13105	842.7863
Ir23Pd15	38	229.6018	0	1.168105	1.346316	0.23892	-5.03184	841.1861
Ir22Pd16	38	234.2604	0	1.141579	1.344737	0.243767	-4.93263	839.5858
Ir21Pd17	38	237.588	0	1.115053	1.343158	0.24723	-4.83342	837.9855
Ir20Pd18	38	239.5845	0	1.088526	1.341579	0.249307	-4.73421	836.3853
Ir19Pd19	38	240.25	0	1.062	1.34	0.25	-4.635	834.785
Ir18Pd20	38	239.5845	0	1.035474	1.338421	0.249307	-4.53579	833.1847
Ag12Pd43	55	0.170579	0.012435	0.720545	1.358	0.170579	-2.37036	788.3698

Ag18Pd37	55	0.220165	0.01605	0.801818	1.382	0.220165	-2.18055	780.3647
Ag19Pd36	55	0.226116	0.016484	0.815364	1.386	0.226116	-2.14891	779.0305
Ir17Pd21	38	237.588	0	1.008947	1.336842	0.24723	-4.43658	831.5845
Ir16Pd22	38	234.2604	0	0.982421	1.335263	0.243767	-4.33737	829.9842
Ir15Pd23	38	229.6018	0	0.955895	1.333684	0.23892	-4.23816	828.3839
Ir14Pd24	38	223.6122	0	0.929368	1.332105	0.232687	-4.13895	826.7837
Ir13Pd25	38	216.2916	0	0.902842	1.330526	0.225069	-4.03974	825.1834
Ir12Pd26	38	207.6399	0	0.876316	1.328947	0.216066	-3.94053	823.5832
Ir1Ag2Pd35	38	24.58814	0.003635	0.623737	1.323158	0.078255	-2.75763	802.1181
Ir1Ag3Pd34	38	24.56806	0.005301	0.643342	1.328947	0.102493	-2.71184	800.1871
Ir1Ag4Pd33	38	24.54659	0.006866	0.662945	1.334736	0.125344	-2.66606	798.2563

Ir1Ag5Pd32	38	24.52374	0.00833	0.682553	1.340526	0.146815	-2.62026	796.325
Ir1Ag6Pd31	38	24.4995	0.009693	0.702158	1.346316	0.166898	-2.57447	794.3939
Ir1Ag7Pd30	38	24.47387	0.010955	0.721764	1.352105	0.185596	-2.52868	792.4629
Ir1Ag8Pd29	38	24.44687	0.012116	0.741368	1.357895	0.202909	-2.4829	790.5319
Ir1Ag9Pd28	38	24.41847	0.013177	0.760974	1.363684	0.218837	-2.43711	788.6008
Ir1Ag10Pd27	38	24.38869	0.014136	0.780579	1.369474	0.23338	-2.39132	786.6697
Ir1Ag11Pd26	38	24.35753	0.014994	0.800185	1.375263	0.246538	-2.34553	784.7387
Ir1Ag12Pd25	38	24.32498	0.015751	0.81979	1.381053	0.258311	-2.29974	782.8076
Ir1Ag13Pd24	38	24.29105	0.016408	0.839395	1.386842	0.268698	-2.25395	780.8766
Ir1Ag14Pd23	38	24.25573	0.016963	0.859	1.392632	0.277701	-2.20816	778.9455
Ag13Ir1Pd41	55	17.06909	0.013158	0.752418	1.363091	0.206942	-2.40727	788.1413
Ag14Ir	55	17.057	0.0138	0.7659	1.3670	0.2168	-	786.80

1Pd40		85	33	64	91	6	2.37564	71
Ag15Ir1Pd39	55	17.04595	0.01446	0.779509	1.371091	0.226116	-2.344	785.4729
Ir1Ag15Pd22	38	24.21902	0.017417	0.878605	1.398421	0.285319	-2.16237	777.0145
Ir1Ag16Pd21	38	24.18093	0.017771	0.898211	1.404211	0.291552	-2.11658	775.0834
Ir1Ag17Pd20	38	24.14146	0.018023	0.917816	1.41	0.296399	-2.07079	773.1524
Ir1Ag18Pd19	38	24.1006	0.018175	0.937421	1.415789	0.299862	-2.025	771.2213
Ir1Ag19Pd18	38	24.05836	0.018225	0.957027	1.421579	0.301939	-1.97921	769.2903
Ir1Ag20Pd17	38	24.01473	0.018175	0.976632	1.427368	0.302632	-1.93342	767.3592
Ir1Ag21Pd16	38	23.96971	0.018023	0.996237	1.433158	0.301939	-1.88763	765.4282
Ir1Ag22Pd15	38	23.92331	0.017771	1.015842	1.438947	0.299862	-1.84184	763.4971
Ir1Ag23Pd14	38	23.87553	0.017417	1.035448	1.444737	0.296399	-1.79605	761.5661
Ir1Ag24Pd13	38	23.82636	0.016963	1.055053	1.450526	0.291552	-1.75026	759.635

Ag3Ir2Pd50	55	33.60331	0.003759	0.635291	1.324182	0.090579	-2.79218	802.5887
Ag12Ir1Pd42	55	17.07967	0.012435	0.738873	1.359091	0.196364	-2.43891	789.4755
Ag16Ir1Pd38	55	17.03339	0.015038	0.793055	1.375091	0.234711	-2.31236	784.1387
Ag17Ir1Pd37	55	17.02017	0.015568	0.8066	1.379091	0.242645	-2.28073	782.8045
Ir1Ag25Pd12	38	23.77581	0.016408	1.074658	1.456316	0.285319	-1.70447	757.704
Ir1Ag26Pd11	38	23.72387	0.015751	1.094263	1.462105	0.277701	-1.65869	755.7729
Ir1Ag27Pd10	38	23.67054	0.014994	1.113869	1.467895	0.268699	-1.6129	753.8419
Ir1Ag28Pd9	38	23.61583	0.014136	1.133474	1.473684	0.258311	-1.56711	751.9108
Ir1Ag29Pd8	38	23.55974	0.013177	1.153079	1.479474	0.246538	-1.52132	749.9797
Ir1Ag30Pd7	38	23.50226	0.012116	1.172684	1.485263	0.23338	-1.47553	748.0487
Ir1Ag31Pd6	38	23.44339	0.010955	1.19229	1.491053	0.218837	-1.42974	746.1176
Ir1Ag3	38	23.383	0.0096	1.2118	1.4968	0.2029	-	744.18

2Pd5		14	93	95	42	09	1.38395	66
Ir1Ag33Pd4	38	23.32151	0.00833	1.2315	1.502632	0.185596	-1.33816	742.2555
Ir1Ag34Pd3	38	23.25849	0.006866	1.251105	1.508421	0.166898	-1.29237	740.3245
Ir1Ag35Pd2	38	23.19409	0.005301	1.270711	1.514211	0.146815	-1.24658	738.3934
Ir1Ag36Pd1	38	23.1283	0.003635	1.290316	1.52	0.125347	-1.20079	736.4624
Ag2Ir1Pd52	55	17.14909	0.002555	0.603418	1.319091	0.054215	-2.75527	802.8173
Ag8Pd47	55	0.124298	0.009061	0.666364	1.342	0.124298	-2.49691	793.7065
Ag9Pd46	55	0.13686	0.009977	0.679909	1.346	0.13686	-2.46527	792.3724
Ag10Pd45	55	0.14876	0.010845	0.693455	1.35	0.14876	-2.43364	791.0382
Ag11Pd44	55	0.16	0.011664	0.707	1.354	0.16	-2.402	789.704
Ag20Pd35	55	0.231405	0.016869	0.828909	1.39	0.231405	-2.11727	777.6964
Ag21Pd34	55	0.236033	0.017207	0.842455	1.394	0.236033	-2.0856	776.3622

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Ag11Ir1Pd45	55	17.08959	0.011664	0.725327	1.355091	0.185124	-2.47055	790.8096
Ag5Ir2Pd48	55	33.5524	0.006025	0.662382	1.332182	0.124298	-2.72891	799.9204
Ag6Ir2Pd47	55	33.52595	0.007085	0.675927	1.336182	0.140165	-2.69727	798.5862
Ag4Ir2Pd49	55	33.57818	0.004916	0.648836	1.328182	0.107769	-2.76055	801.2545
Ag21Ir1Pd33	55	16.96066	0.017207	0.860782	1.395091	0.267769	-2.15418	777.4678
Ag22Ir1Pd32	55	16.94413	0.017496	0.874327	1.399091	0.272397	-2.12255	776.1336
Ag31Ir1Pd23	55	16.76562	0.01793	0.996236	1.435091	0.284298	-1.83782	764.126
Ag32Ir1Pd22	55	16.74248	0.017737	1.009782	1.439091	0.282314	-1.80618	762.7918
Ag2Ir2Pd51	55	33.62777	0.002555	0.621745	1.320182	0.072727	-2.82382	803.9229
Ag7Ir2Pd47	55	33.49884	0.008097	0.689473	1.340182	0.155372	-2.66564	797.252
Ag8Ir2Pd46	55	33.47107	0.009061	0.703018	1.344182	0.169917	-2.634	795.9178

Ag9Ir2Pd45	55	33.44264	0.009977	0.716564	1.348182	0.183802	-2.60236	794.5836
Ag10Ir2Pd44	55	33.41355	0.010845	0.730109	1.352182	0.197025	-2.57073	793.2495
Ag11Ir2Pd43	55	33.3838	0.011664	0.743655	1.356182	0.209587	-2.53909	791.9153
Ag12Ir2Pd42	55	33.35339	0.012435	0.7572	1.360182	0.221488	-2.50745	790.5811
Ag13Ir2Pd41	55	33.32231	0.013158	0.770745	1.364182	0.232727	-2.47582	789.2469
Ag14Ir2Pd40	55	33.29058	0.013833	0.784291	1.368182	0.243306	-2.44418	787.9127
Ag15Ir2Pd39	55	33.25818	0.01446	0.797836	1.372182	0.253223	-2.41255	786.5785
Ag16Ir2Pd38	55	33.22512	0.015038	0.811382	1.376182	0.262479	-2.38091	785.2444
Ag17Ir2Pd37	55	33.1914	0.015568	0.824927	1.380182	0.271074	-2.34927	783.9102
Ag18Ir2Pd36	55	33.15702	0.01605	0.838473	1.384182	0.279008	-2.31764	782.576
Ag3Ir3Pd49	55	49.42612	0.003759	0.653618	1.325273	0.109091	-2.86073	803.6944

Ag4Ir3Pd48	55	49.3805	0.004916	0.667164	1.329273	0.126942	-2.82909	802.3602
Ag5Ir3Pd47	55	49.33421	0.006025	0.680709	1.333273	0.144132	-2.79745	801.026
Ag6Ir3Pd46	55	49.28727	0.007085	0.694255	1.337273	0.160661	-2.76582	799.6918
Ag7Ir3Pd45	55	49.23967	0.008097	0.7078	1.341273	0.176529	-2.73418	798.3576
Ag8Ir3Pd44	55	49.1914	0.009061	0.721345	1.345273	0.191736	-2.70255	797.0235
Ag9Ir3Pd43	55	49.14248	0.009977	0.734891	1.349273	0.206281	-2.67091	795.6893
Ag10Ir3Pd42	55	49.09289	0.010845	0.748436	1.353273	0.220165	-2.63927	794.3551
Ag11Ir3Pd41	55	49.04264	0.011664	0.761982	1.357273	0.233388	-2.60764	793.0209
Ag12Ir3Pd40	55	48.99174	0.012435	0.775527	1.361273	0.24595	-2.576	791.6867
Ag13Ir3Pd39	55	48.94017	0.013158	0.789073	1.365273	0.257851	-2.54436	790.3525
Ag14Ir3Pd38	55	48.88793	0.013833	0.802618	1.369273	0.269091	-2.51273	789.0184
Ag15Ir	55	48.835	0.0144	0.8161	1.3732	0.2796	-	787.68

3Pd37		04	6	64	73	69	2.48109	42
Ag16Ir3Pd36	55	48.78149	0.015038	0.829709	1.377273	0.289587	-2.44945	786.35
Ag17Ir3Pd35	55	48.72727	0.015568	0.843255	1.381273	0.298843	-2.41782	785.0158
Ag18Ir3Pd34	55	48.6724	0.01605	0.8568	1.385273	0.307438	-2.38618	783.6816
Ag5Ir4Pd46	55	64.48066	0.006025	0.699036	1.334364	0.163306	-2.866	802.1316
Ag6Ir4Pd45	55	64.41322	0.007085	0.712582	1.338364	0.180496	-2.83436	800.7975
Ag12Ir4Pd39	55	63.99471	0.012435	0.793855	1.362364	0.269752	-2.64455	792.7924
Ag13Ir4Pd38	55	63.92264	0.013158	0.8074	1.366364	0.282314	-2.61291	791.4582
Ag14Ir4Pd37	55	63.84992	0.013833	0.820945	1.370364	0.294215	-2.58127	790.124
Ag15Ir4Pd36	55	63.77653	0.01446	0.834491	1.374364	0.305455	-2.54964	788.7898
Ag16Ir4Pd35	55	63.70248	0.015038	0.848036	1.378364	0.316033	-2.518	787.4556
Ag20Ir4Pd31	55	63.39967	0.016869	0.902218	1.394364	0.351736	-2.39145	782.1189

Ag1Ir2Pd35	38	47.85665	0.001868	0.630658	1.318947	0.078255	-2.90263	805.6495
Ag2Ir2Pd34	38	47.79501	0.003635	0.650263	1.324737	0.105263	-2.85684	803.7184
Ag3Ir2Pd33	38	47.73199	0.005301	0.669868	1.330526	0.130886	-2.81105	801.7874
Ag4Ir2Pd32	38	47.66759	0.006866	0.689474	1.336316	0.155125	-2.76526	799.8563
Ag5Ir2Pd31	38	47.6018	0.00833	0.709079	1.342105	0.177978	-2.71947	797.9253
Ag6Ir2Pd30	38	47.53463	0.009693	0.728684	1.347895	0.199446	-2.67368	795.9942
Ag7Ir2Pd29	38	47.46607	0.010955	0.748289	1.353684	0.219529	-2.62789	794.0632
Ag23Ir1Pd31	55	16.92694	0.017737	0.887873	1.403091	0.276364	-2.09091	774.7995
Ag24Ir1Pd30	55	16.90909	0.01793	0.901418	1.407091	0.279669	-2.05927	773.4653
Ag25Ir1Pd29	55	16.89058	0.018074	0.914964	1.411091	0.282314	-2.02764	772.1311
Ag30Ir1Pd24	55	16.7881	0.018074	0.982691	1.431091	0.28562	-1.86945	765.4602

Ag8Ir2Pd28	38	47.39612	0.012116	0.767895	1.359474	0.238227	-2.58211	792.1321
Ag9Ir2Pd27	38	47.32479	0.013177	0.7875	1.365263	0.25554	-2.53632	790.2011
Ag10Ir2Pd26	38	47.25208	0.014136	0.807105	1.371053	0.271468	-2.49053	788.27
Ag11Ir2Pd25	38	47.17798	0.014994	0.826711	1.376842	0.286011	-2.44474	786.3389
Ag12Ir2Pd24	38	47.10249	0.015751	0.846316	1.382632	0.299169	-2.39895	784.4079
Ag13Ir2Pd23	38	47.02562	0.016408	0.865921	1.388421	0.310942	-2.35316	782.4768
Ag14Ir2Pd22	38	46.94737	0.016963	0.885526	1.394211	0.32133	-2.30737	780.5458
Ag15Ir2Pd21	38	46.86773	0.017417	0.905132	1.4	0.330332	-2.26158	778.6147
Ag16Ir2Pd20	38	46.7867	0.017771	0.924737	1.405789	0.33795	-2.21579	776.6837
Ag17Ir2Pd19	38	46.70429	0.018023	0.944342	1.411579	0.344183	-2.17	774.7526
Ag26Ir1Pd28	55	16.8714	0.018171	0.928509	1.415091	0.284298	-1.996	770.7969
Ag27Ir1Pd27	55	16.85157	0.018219	0.942055	1.419091	0.28562	-1.9643	769.4627

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Ag28Ir1Pd26	55	16.83107	0.018219	0.9556	1.423091	0.286281	-1.93273	768.1285
Ag29Ir1Pd25	55	16.80992	0.018171	0.969145	1.427091	0.286281	-1.90109	766.7944
Ag18Ir2Pd18	38	46.6205	0.018175	0.963947	1.417368	0.34903	-2.12421	772.8216
Ag19Ir2Pd17	38	46.53532	0.018225	0.983553	1.423158	0.352493	-2.07842	770.8905
Ag20Ir2Pd16	38	46.44875	0.018175	1.003158	1.428947	0.354571	-2.03263	768.9595
Ag1Ir3Pd34	38	69.77562	0.001868	0.657184	1.320526	0.102493	-3.00184	807.2497
Ag2Ir3Pd33	38	69.67105	0.003635	0.676789	1.326316	0.130886	-2.95605	805.3187
Ag3Ir3Pd32	38	69.5651	0.005301	0.696395	1.332105	0.157895	-2.91026	803.3876
Ag4Ir3Pd31	38	69.45776	0.006866	0.716	1.337895	0.183518	-2.86447	801.4566
Ag19Ir3Pd33	55	48.61686	0.016484	0.870345	1.389273	0.315372	-2.35455	782.3475
Ag20Ir3Pd32	55	48.56066	0.016869	0.883891	1.393273	0.322645	-2.3229	781.0133

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Ag1Ir4Pd50	55	64.7438	0.001301	0.644855	1.318364	0.087934	-2.99255	807.4684
Ag2Ir4Pd49	55	64.67901	0.002555	0.6584	1.322364	0.107769	-2.96091	806.1342
Ag3Ir4Pd48	55	64.61355	0.003759	0.671945	1.326364	0.126942	-2.92927	804.8
Ag4Ir4Pd47	55	64.54744	0.004916	0.685491	1.330364	0.145455	-2.89764	803.4658
Ag5Ir3Pd30	38	69.34903	0.00833	0.735605	1.343684	0.207756	-2.81868	799.5255
Ag6Ir3Pd29	38	69.23892	0.009693	0.755211	1.349474	0.230609	-2.77289	797.5945
Ag7Ir3Pd28	38	69.12742	0.010955	0.774816	1.355263	0.252078	-2.72711	795.6634
Ag8Ir3Pd27	38	69.01454	0.012116	0.794421	1.361053	0.272161	-2.68132	793.7324
Ag9Ir3Pd26	38	68.90028	0.013177	0.814026	1.366842	0.290859	-2.63553	791.8013
Ag10Ir3Pd25	38	68.78463	0.014136	0.833632	1.372632	0.308172	-2.58974	789.8703
Ag11Ir3Pd24	38	68.66759	0.014994	0.853237	1.378421	0.3241	-2.5439	787.9392

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Ag12Ir3Pd23	38	68.54917	0.015751	0.872842	1.384211	0.338643	-2.49816	786.0082
Ag13Ir4Pd22	38	68.42936	0.016408	0.892447	1.39	0.351801	-2.45237	784.0771
Ag14Ir4Pd21	38	68.30817	0.016963	0.912053	1.395789	0.363573	-2.40658	782.1461
Ag15Ir4Pd20	38	68.1856	0.017417	0.931658	1.401579	0.373961	-2.36079	780.215
Ag16Ir4Pd19	38	68.06163	0.017771	0.951263	1.407368	0.382964	-2.315	778.2839
Ag17Ir4Pd18	38	67.93629	0.018023	0.970868	1.413158	0.390582	-2.26921	776.3529
Ag18Ir4Pd17	38	67.80956	0.018175	0.990474	1.418947	0.396814	-2.22342	774.4218
Ag19Ir4Pd16	38	67.68144	0.018225	1.010079	1.424737	0.401662	-2.17763	772.4908
Ag20Ir4Pd15	38	67.55194	0.018175	1.029684	1.430526	0.405125	-2.13184	770.5597
Ir20Pd59	79	181.6984	0	0.81319	1.32519	0.189072	-3.70443	819.7749
Ag34Pd45	79	0.245153	0.017872	0.878633	1.404684	0.245153	-2.00114	772.7987

Ag44Pd35	79	0.246755	0.017988	0.972937	1.432532	0.246755	-1.78089	763.5101
Ag46Pd33	79	0.24323	0.017731	0.991797	1.438101	0.24323	-1.73684	761.6524
Ag45Ir1Pd33	79	11.80868	0.017872	0.995127	1.436076	0.272072	-1.80658	763.351
Ag46Ir1Pd32	79	11.79683	0.017731	1.004557	1.438861	0.270469	-1.78456	762.4222
Ag44Ir1Pd34	79	11.82022	0.017988	0.985696	1.433291	0.273354	-1.82861	764.2799
Ag7Pd26Ir5	38	108.4571	0.010955	0.827868	1.358421	0.313019	-2.92553	798.8639
Ag8Ir6Pd25	38	125.8837	0.012116	0.874	1.365789	0.365651	-2.97895	798.5332
Ag9Ir7Pd24	38	141.892	0.013177	0.920132	1.373158	0.418283	-3.03237	798.2024
Ag7Ir5Pd27	38	108.4571	0.010955	0.827868	1.358421	0.313019	-2.92553	798.8639
Ag9Ir4Pd25	38	89.14474	0.013177	0.840553	1.368421	0.324792	-2.73474	793.4016
Ag8Ir4Pd26	38	89.30194	0.012116	0.820947	1.362632	0.304709	-2.78053	795.3326

Ag7Ir4Pd27	38	89.45776	0.010955	0.801342	1.356842	0.283241	-2.82632	797.2637
Ag6Ir4Pd28	38	89.61219	0.009693	0.781737	1.351053	0.260388	-2.87211	799.1947
Ag5Ir4Pd29	38	89.76524	0.00833	0.762132	1.345263	0.23615	-2.91789	801.1258
Ag4Ir4Pd30	38	89.9169	0.006866	0.742526	1.339474	0.210526	-2.96368	803.0568
Ag3Ir4Pd31	38	90.06717	0.005301	0.722921	1.333684	0.183518	-3.00947	804.9879
Ag2Ir4Pd32	38	90.21607	0.003635	0.703316	1.327895	0.155125	-3.05526	806.9189
Ag1Ir4Pd33	38	90.36357	0.001868	0.683711	1.322105	0.125346	-3.10105	808.85
Ag21Ir4Pd13	38	87.15028	0.018023	1.075816	1.437895	0.457756	-2.18526	770.2289
Ag22Ir4Pd12	38	86.97507	0.017771	1.095421	1.443684	0.459834	-2.13947	768.2979
Ag17Ir4Pd34	55	63.62777	0.015568	0.861582	1.382364	0.32595	-2.48636	786.1215
Ag18Ir4Pd33	55	63.5524	0.01605	0.875127	1.386364	0.335207	-2.45473	784.7873

Ag19Ir4Pd32	55	63.47636	0.016484	0.888673	1.390364	0.343802	-2.42309	783.4531
Ag23Ir4Pd11	38	86.79848	0.017417	1.115026	1.449474	0.460526	-2.09368	766.3668
Ag24Ir4Pd10	38	86.6205	0.016963	1.134632	1.455263	0.459834	-2.04789	764.4358
Ag13Ir3Pd22	38	68.42936	0.016408	0.892447	1.39	0.351801	-2.45237	784.0771
Ag14Ir3Pd21	38	68.30817	0.016963	0.912053	1.395789	0.363573	-2.40658	782.1461
Ag15Ir3Pd20	38	68.1856	0.017417	0.931658	1.401579	0.373961	-2.36079	780.215
Ag16Ir3Pd19	38	68.06163	0.017771	0.951263	1.407368	0.382964	-2.315	778.2839
Ag17Ir3Pd18	38	67.93629	0.018023	0.970868	1.413158	0.390582	-2.26921	776.3529
Ag18Ir3Pd17	38	67.80956	0.018175	0.990474	1.418947	0.396814	-2.22342	774.4218
Ag19Ir3Pd16	38	67.68144	0.018225	1.010079	1.424737	0.401662	-2.17763	772.4908
Ag20Ir3Pd15	38	67.55194	0.018175	1.029684	1.430526	0.405125	-2.13184	770.5597
Ag21Ir	38	67.421	0.0180	1.0492	1.4363	0.4072	-	768.62

3Pd14		05	23	89	16	02	2.08605	87
Ag22Ir3Pd13	38	67.28878	0.017771	1.068895	1.442105	0.407895	-2.04026	766.6976
Ag23Ir3Pd12	38	67.15512	0.017417	1.0885	1.447895	0.407202	-1.99447	764.7666
Ag24Ir3Pd11	38	67.02008	0.016963	1.108105	1.453684	0.405125	-1.94868	762.8355
Ag7Ir4Pd44	55	64.34512	0.008097	0.726127	1.342364	0.197025	-2.80273	799.4633
Ag8Ir4Pd43	55	64.27636	0.009061	0.739673	1.346364	0.212893	-2.77109	798.1291
Ag9Ir4Pd42	55	64.20694	0.009977	0.753218	1.350364	0.228099	-2.73945	796.7949
Ag10Ir4Pd41	55	64.13686	0.010845	0.766764	1.354364	0.242645	-2.70782	795.4607
Ag11Ir4Pd40	55	64.06612	0.011664	0.780309	1.358364	0.256529	-2.67618	794.1265
Ag21Ir2Pd15	38	46.3608	0.018023	1.022763	1.434737	0.355263	-1.98684	767.0284
Ag22Ir2Pd14	38	46.27147	0.017771	1.042368	1.440526	0.354571	-1.94105	765.0974
Ag23Ir	38	46.180	0.0174	1.0619	1.4463	0.3524	-	763.16

2Pd13		75	17	74	16	93	1.89526	63
Ag24Ir2Pd12	38	46.08864	0.016963	1.081579	1.452105	0.34903	-1.84947	761.2353
Ag25Ir2Pd11	38	45.99515	0.016408	1.101184	1.457895	0.344183	-1.80368	759.3042
Ag26Ir2Pd10	38	45.90028	0.015751	1.120789	1.463684	0.33795	-1.75789	757.3732
Ag27Ir2Pd9	38	45.80402	0.014994	1.140395	1.469474	0.330332	-1.71211	755.4421
Ag28Ir2Pd8	38	45.70637	0.014136	1.16	1.475263	0.32133	-1.66632	753.5111
Ag29Ir2Pd7	38	45.60734	0.013177	1.179605	1.481053	0.310942	-1.62053	751.58
Ag30Ir2Pd6	38	45.50693	0.012116	1.199211	1.486842	0.299169	-1.57474	749.6489
Ag31Ir2Pd5	38	45.40512	0.010955	1.218816	1.492632	0.286011	-1.52895	747.7179
Ag25Ir3Pd10	38	66.88366	0.016408	1.127711	1.459474	0.401662	-1.90289	760.9045
Ag26Ir3Pd9	38	66.74584	0.015751	1.147316	1.465263	0.396814	-1.85711	758.9734
Ag27Ir	38	66.606	0.0149	1.1669	1.4710	0.3905	-	757.04

3Pd8		65	94	21	53	82	1.81132	24
Ag28Ir3Pd7	38	66.46607	0.014136	1.186526	1.476842	0.382964	-1.76553	755.1113
Ag19Ir2Pd35	55	33.12198	0.016484	0.852018	1.388182	0.286281	-2.286	781.2418
Ag20Ir2Pd34	55	33.08628	0.016869	0.865564	1.392182	0.292893	-2.25436	779.9076
Ag1Ir3Pd51	55	49.51537	0.001301	0.626527	1.317273	0.071405	-2.924	806.3627
Ag2Ir3Pd50	55	49.47107	0.002555	0.640073	1.321273	0.090579	-2.89236	805.0285
Ag29Ir3Pd6	38	66.3241	0.013177	1.206132	1.482632	0.373961	-1.71974	753.1803
Ag30Ir3Pd5	38	66.18075	0.012116	1.225737	1.488421	0.363573	-1.67395	751.2492
Ag25Ir4Pd9	38	86.44114	0.016408	1.154237	1.461053	0.457756	-2.00211	762.5047
Ag26Ir4Pd8	38	86.26039	0.015751	1.173842	1.466842	0.454294	-1.95632	760.5737
Ag27Ir4Pd7	38	86.07825	0.014994	1.193447	1.472632	0.449446	-1.91053	758.6426
Ag28Ir4Pd6	38	85.89474	0.014136	1.213053	1.478421	0.443213	-1.86474	756.7116

Ag29Ir4Pd5	38	85.70983	0.013177	1.232658	1.484211	0.435596	-1.81895	754.7805
Ag30Ir4Pd4	38	85.52355	0.012116	1.252263	1.49	0.426593	-1.77316	752.8495