

Supporting Information

Atom Vacancies and Electronic Transmission Stark Effects in Boron Nanoflake Junctions

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Contents

Ionization energies, electron affinities and reorganization energies	3
ETSE Shift	4
Dipoles	5
Polarizability and Relative Dielectric Constant	9
Electrode Couplings	12
Cartesian Coordinates	13

Ionization energies, electron affinities and reorganization energies

TABLE S1. The energy processes involved for each step per BNF, from the isolated neutral ground states to their charge transfer state ($N \rightarrow CT$), involving vertical ionization energy (I_{Ev}), vertical electron affinity (EA_v), and the hole (λ_h) and electron reorganization energies (λ_e), in eV.

BNF	$N \rightarrow CT$	I_{Ev}	EA_v	λ_h	λ_e
B ₃₇	D \rightarrow S	6.26	2.90	0.33	0.41
	D \rightarrow T	6.67	2.35	0.18	0.83
B ₃₆	S \rightarrow D	6.73	2.45	0.16	0.23
	T \rightarrow D	5.89	3.13	0.24	0.39
B ₃₅	D \rightarrow S	6.64	3.29	0.15	0.16
	D \rightarrow T	7.69	2.77	0.56	0.17

ETSE Shift

Table S2. Electronic transmission Stark effect (ETSE) shifts (ϑ /eV) of the resonance at the Fermi energy for each of the three BNFs with respect to the bias voltage. These ETSE shifts are referenced to the resonance at zero bias.

Bias (V)	ϑ (B ₃₇)	ϑ (B ₃₆)	ϑ (B ₃₅)
0	0	0	0
0.2	-0.052	0.046	-0.052
0.4	-0.136	0.063	-0.141
0.6	-0.221	-0.017	-0.198
0.8	-0.292	-0.011	-0.088
1.0	-0.273	-0.083	-0.057
-0.2	-0.061	0.041	0.069
-0.4	-0.147	0.051	0.146
-0.6	-0.235	-0.032	0.205
-0.8	-0.313	-0.109	0.219
-1.0	-0.310	-0.174	0.210

Dipoles

The electric field numerical values were chosen to be equivalent to the bias voltage in steps of ± 0.2 eV between a ± 1 eV span. The B_{35} , B_{36} and B_{37} were computed without the sulfur contacts and gold electrodes, in a large box using the Siesta program.

Table S3. B_{37} dipole, in atomic units.

E-field	dipole x	dipole y	dipole z	net dipole
-0.989999	-0.14	0.43	-16.35	-0.14
-0.791999	-0.18	0.50	-13.34	-0.18
-0.593999	-0.23	0.57	-10.33	-0.23
-0.396	-0.28	0.64	-7.31	-0.28
-0.198	-0.34	0.72	-4.04	-0.34
0	-0.43	0.82	-0.21	-0.43
0.198	-0.51	0.91	3.58	-0.51
0.396	-0.59	1.01	7.40	-0.59
0.593999	-0.65	1.10	10.49	-0.65
0.791999	-0.71	1.19	13.50	-0.71
0.989999	-0.77	1.28	16.51	-0.77

Table S4. B_{36} dipoles, in atomic units.

E-field	dipole x	dipole y	dipole z	net dipole
-0.989999	-0.22	0.58	-15.44	-0.22
-0.791999	-0.27	0.64	-12.31	-0.27
-0.593999	-0.33	0.72	-9.21	-0.33
-0.396	-0.39	0.79	-6.13	-0.39
-0.198	-0.44	0.87	-3.06	-0.44
0	-0.50	0.95	0.00	-0.50
0.198	-0.56	1.03	3.06	-0.56
0.396	-0.63	1.12	6.12	-0.63
0.593999	-0.69	1.21	9.20	-0.69
0.791999	-0.76	1.30	12.31	-0.76
0.989999	-0.83	1.40	15.44	-0.83

Table S5. B₃₅ dipoles, in atomic units.

E-field	dipole x	dipole y	dipole z	net dipole
-0.989999	-2.13	0.82	14.63	-2.13
-0.791999	-2.07	0.74	11.61	-2.07
-0.593999	-2.01	0.66	8.60	-2.01
-0.396	-1.96	0.57	5.61	-1.96
-0.198	-1.90	0.50	2.62	-1.90
0	-1.83	0.42	-0.37	-1.83
0.198	-1.77	0.35	-3.35	-1.77
0.396	-1.70	0.29	-6.34	-1.70
0.593999	-1.63	0.23	-9.32	-1.63
0.791999	-1.56	0.17	-12.31	-1.56
0.989999	-1.49	0.11	-15.30	-1.49

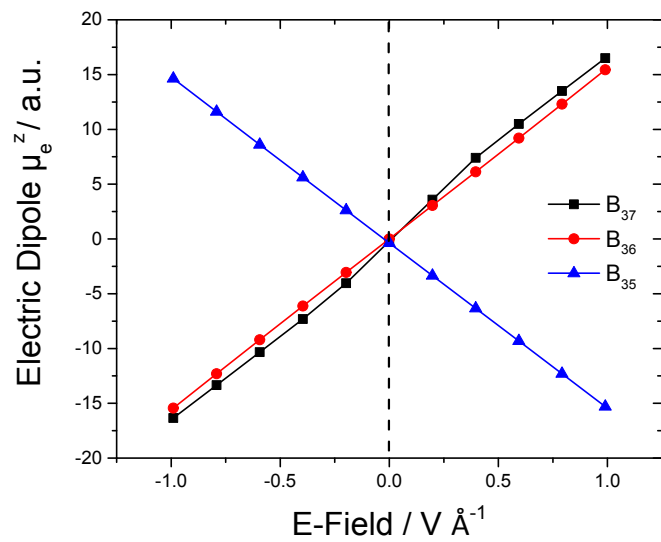


Figure S1. Electric Dipole, z-axis (a.u.) for B₃₇, B₃₆ and B₃₅ across the electric field (V/Å) window.

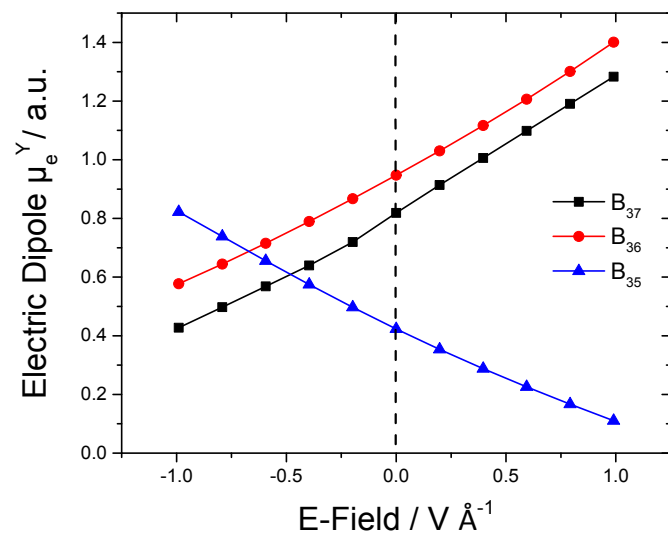


Figure S2. Electric Dipole, y-axis (a.u.) for B_{37} , B_{36} and B_{35} across the electric field ($V/\text{\AA}$) window.

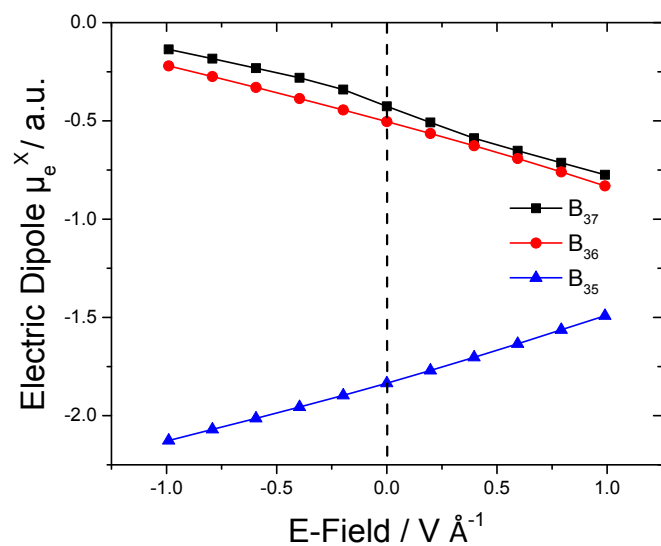


Figure S3. Electric Dipole, x-axis (a.u.) for B_{37} , B_{36} and B_{35} across the electric field ($V/\text{\AA}$) window.

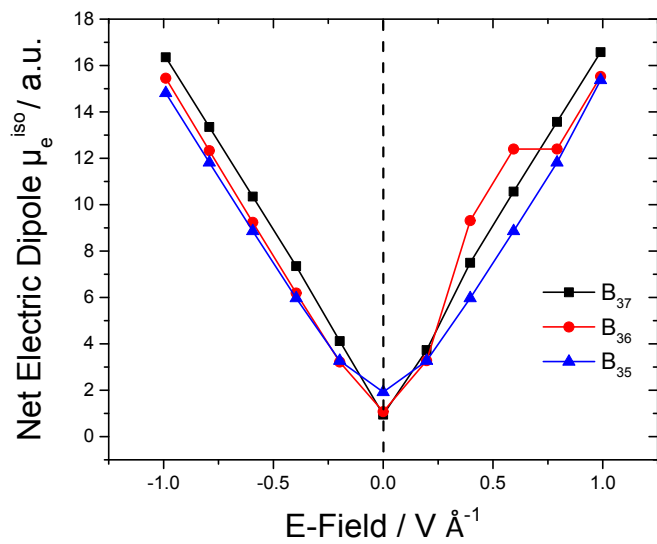


Figure S4. Net Electric Dipole (a.u.) for B_{37} , B_{36} and B_{35} across the electric field ($V/\text{\AA}$) window.

Polarizability and Relative Dielectric Constant

The volumes used were those of the structures, not the volume of the box. The polarizability were computed as the division between the net dipole and E-field. All parameters are in atomic units. The relative dielectric constant were computed for completeness (using the method in reference 54), as a molecular relationship (in radians) between the Bohr volume and the net dipole.

B₃₇

Volume = 345.14 Å³, 652.23 Bohr³.

Table S6.

E-field	α_{iso}	ϵ_{rel}
-0.989999	-16.52	1.46
-0.791999	-16.86	1.35
-0.593999	-17.42	1.25
-0.396	-18.56	1.16
-0.198	-20.81	1.09
0	0	1.02
0.198	18.85	1.08
0.396	18.93	1.17
0.593999	17.79	1.26
0.791999	17.13	1.35
0.989999	16.74	1.47

B₃₆

Volume = 345.37 Å³, 652.65 Bohr³.

Table S7.

E-field	α_{iso}	ϵ_{rel}
-0.989999	-15.61	1.42
-0.791999	-15.57	1.31
-0.593999	-15.55	1.22
-0.396	-15.63	1.14
-0.198	-16.22	1.07
0	0.00	1.02
0.198	16.54	1.07
0.396	23.51	1.22
0.593999	20.88	1.31
0.791999	15.66	1.31
0.989999	15.68	1.43

B₃₅

Volume = 342.79 Å³, 647.78 Bohr³.

Table S8.

E-field	α_{iso}	ϵ_{rel}
-0.989999	-14.96	1.40
-0.791999	-14.92	1.30
-0.593999	-14.92	1.21
-0.396	-15.07	1.13
-0.198	-16.52	1.07
0	0.00	1.04
0.198	16.52	1.07
0.396	15.07	1.13
0.593999	14.92	1.21
0.791999	14.92	1.30
0.989999	15.53	1.43

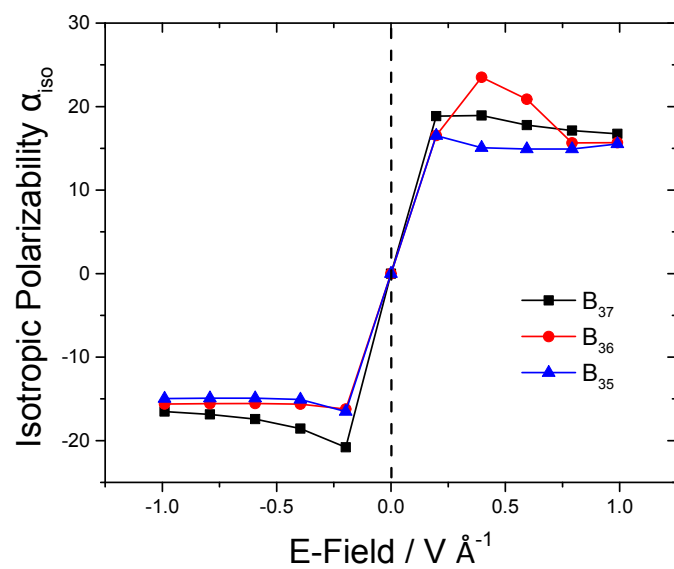


Figure S5. Isotropic polarizability for B₃₇, B₃₆ and B₃₅ across the electric field (V/Å) window.

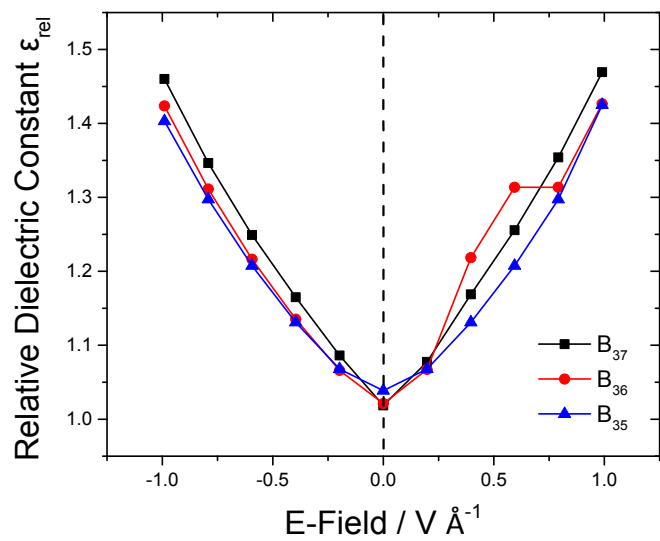


Figure S6. Relative Dielectric Constant for B_{37} , B_{36} and B_{35} across the electric field ($V/\text{\AA}$) window.

Electrode Couplings

The coupling was deduced from FWHM analysis.

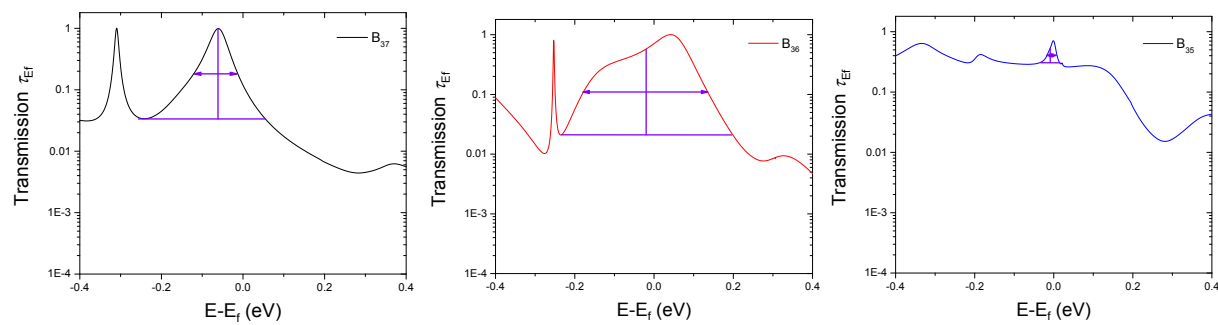


Figure S7. Electrode coupling (eV) from FWHM analysis of the zero-bias resonance at the Fermi energy.

Cartesian Coordinates

Table S9. The Cartesian coordinates of the neutral, ground state isolated molecules.

B₃₇ (doublet)			B₃₆ (singlet)			B₃₅ (doublet)					
B	0.2066981600	-0.1178346500	-4.8080115000	B	0.4380555600	-0.4957833300	-5.0703861100	B	0.5983728200	-0.6386756400	-4.6987572300
B	-1.0625104700	-0.8349147200	-4.1592077000	B	-0.8712444400	-1.1083833300	-4.1811861100	B	-0.7973325000	-1.0917949800	-4.0883604200
B	1.4380816600	0.5984170600	-4.0913597500	B	1.5809555600	0.2754166700	-4.0043061100	B	1.7110316500	0.2450052700	-4.0487932100
B	-2.4603084400	-1.2999769200	-3.3907703700	B	0.0103555600	0.1689166700	-3.4627861100	B	-2.1148647800	-1.7378089500	-3.3276010500
B	2.5271117300	1.5299323100	-3.2498290300	B	-2.1563444400	-1.8210833300	-3.4064861100	B	0.1438492400	0.1085386800	-3.2827679000
B	0.0518449500	0.0709681300	-3.1724465800	B	2.8116555600	1.0299166700	-3.2653861100	B	-2.8557219600	1.0359273900	-3.1337107500
B	-3.7569005400	-1.7079760500	-2.5530359300	B	-1.2055444400	-0.5728833300	-2.5867861100	B	-1.2539176000	-0.3867768300	-2.5319294000
B	-0.9278084400	-1.2188258800	-2.5067456200	B	1.2128555600	0.8488166700	-2.5186861100	B	-3.1913194000	-2.5082265100	-2.4622651700
B	1.6009912600	0.2632372600	-2.4050148900	B	-3.2254444400	-2.6104833300	-2.4860861100	B	1.2614815500	1.0060227300	-2.3877507300
B	3.4590634100	2.4325095400	-2.3454376100	B	3.9985555600	1.4949166700	-2.2792861100	B	4.0585289400	1.5433644200	-2.2132570700
B	-2.4061905700	-1.3852627800	-1.6878299400	B	-2.5300444400	-1.2738833300	-1.7621861100	B	-2.4536800500	-1.2209400500	-1.7195508500
B	2.6892452800	1.2010381600	-1.5602494200	B	-0.3175444400	0.6514166700	-1.7527861100	B	-0.2242373100	0.6752197000	-1.6875832900
B	0.1031166100	0.0049786300	-1.5208084400	B	-2.4625555600	1.5933166700	-1.6213861100	B	2.5120070000	1.6430585400	-1.5595489400
B	-3.8976652100	-1.7759391400	-0.9686643200	B	-3.5267444400	-2.4109833300	-0.9331861100	B	-3.5005004300	-2.3412180000	-0.9287999800
B	-0.8942156900	-1.3564702600	-0.8335051400	B	-1.4846444400	-0.1695833300	-0.9184861100	B	-1.5155244600	-0.0474595000	-0.8930433700
B	1.7270995300	0.0219817900	-0.7544532700	B	0.9407555600	1.2489166700	-0.8474861100	B	0.9780281500	1.4448631500	-0.8125620600
B	3.5575903600	2.4442545300	-0.7508153300	B	3.9205555600	1.8082166700	-0.7178611000	B	4.0061063300	1.8722446800	-0.7006136700
B	-2.4426818600	-1.6229425900	-0.0614339900	B	-2.6283444400	-1.1092833300	-0.0915861100	B	-2.6667879500	-0.9743370300	-0.0923331600
B	-0.4063196800	0.2259620900	-0.0240595700	B	2.3079555600	1.7012166700	0.0551138900	B	-3.5721455800	-2.3041652200	0.7282460100
B	2.5382309200	1.3383732000	0.0737325100	B	-3.6221444400	-2.3563833300	0.74004138900	B	-1.5866169000	-0.0108357200	0.7615129800
B	-3.9722731600	-1.7279111400	0.7213902500	B	-1.5530444400	-0.1368333000	0.7916138900	B	0.9071462000	1.4814566200	0.8299918100
B	-0.9673700400	-1.3180512500	0.8758193000	B	0.8760555600	1.2596166700	0.8553138900	B	3.9352465000	1.9060062400	0.9569758900
B	1.6544106600	0.0695159000	0.9015661900	B	3.8478555600	1.8378166700	0.9544138900	B	-2.5906138000	-1.1478959900	1.5555506700
B	3.4832878500	2.4924829700	0.9202958100	B	-2.6915444400	-1.1747833300	1.5905138900	B	-0.3673530700	0.7409670500	1.6316290400
B	-0.0306708100	0.0907787600	1.5216397200	B	-0.4448444400	0.7020166700	1.6742138900	B	-3.3728689600	1.7130775000	1.6949734400
B	-2.5486547800	-1.2931340100	1.5455982700	B	2.3266555600	1.6442166700	1.7402138900	B	-3.3965270200	-2.4023200400	2.2889361800
B	2.5441358300	1.2955018900	1.7199998200	B	-3.5084444400	-2.4224833300	2.3351138900	B	-1.4672080700	-0.2762851500	2.4296504100
B	-3.9711813100	-1.5694935000	2.3055188700	B	-1.4722444400	-0.3958833300	2.5133138900	B	1.0546057000	1.1121623900	2.4410059500
B	-1.1477080900	-1.0765065200	2.4807738200	B	3.8003555600	1.5961166700	2.5303138900	B	-2.3968325000	-1.5925321400	3.2080398500
B	3.2448774200	2.5724477200	2.4979686800	B	0.9907555600	0.9653166700	2.5700138900	B	-0.1381849000	0.2529825300	3.2758350400
B	1.3836805800	0.4045930000	2.5180195900	B	-2.5166444400	-1.5887833300	3.3035138900	B	2.5000606600	1.1731278300	3.3168316600
B	-0.2274003600	0.2518729100	3.1552058000	B	2.5374555600	1.1595166700	3.4360138900	B	-1.1474928600	-0.9122897900	4.0495689800
B	-2.7524293400	-1.1111263100	3.2295119100	B	-0.2815444400	0.3242166700	3.4395138900	B	1.3590254000	0.4229133500	4.1645658900
B	2.2342319900	1.7206391300	3.3669237600	B	-1.2922444400	-0.8431833300	4.1529138900	B	0.1925922700	-0.4318583400	4.7558675300
B	-1.4268168600	-0.5984943400	4.0901473900	B	1.2285555600	0.4825166700	4.1869138900				
B	1.0729458200	0.8360539900	4.1611097500	B	0.0207555600	-0.2998833300	5.1162138900				
B	-0.2183328900	0.1583210900	4.8063943400								

Au	1.424298	4.164133	34.736180	Au	8.54987	6.626212	34.736180	Au	7.212489	4.164133	34.736480
Au	4.327494	4.164133	34.736180	Au	2.884996	6.626212	34.736180	Au	18.097488	4.164133	34.736480
Au	7.212489	4.164133	34.736180	Au	2.884996	6.626212	34.736180	Au	2.884996	6.626212	34.736480
Au	10.097485	4.164133	34.736180	Au	10.097485	4.164133	34.736180	Au	5.769991	6.626212	34.736480
Au	2.884996	6.626212	34.736180	Au	4.327494	4.164133	34.736180	Au	8.54987	6.626212	34.736480
Au	5.769991	6.626212	34.736180	Au	4.327494	4.164133	34.736180	Au	11.539983	6.626212	34.736480
Au	8.54987	6.626212	34.736180	Au	1.424298	4.164133	34.736180	Au	5.769991	6.626212	34.736480
Au	12.982488	9.161092	34.736180	Au	8.54987	6.626212	34.736180	Au	7.212489	9.161092	34.736480
Au	10.097485	9.161092	34.736180	Au	5.769991	6.626212	34.736180	Au	18.097488	9.161092	34.736480
Au	12.982488	9.161092	34.736180	Au	12.982488	9.161092	34.736180	Au	12.982488	9.161092	34.736480
Au	0.000000	0.000000	37.069700	Au	10.097485	7.495439	37.069700	Au	0.000000	0.000000	37.070300
Au	2.884996	0.000000	37.069700	Au	7.212489	7.495439	37.069700	Au	8.54987	0.000000	37.070300
Au	5.769991	0.000000	37.069700	Au	4.327494	7.495439	37.069700	Au	5.769991	0.000000	37.070300
Au	8.54987	0.000000	37.069700	Au	11.539983	4.996959	37.069700	Au	8.54987	0.000000	37.070300
Au	1.424298	2.498480	37.069700	Au	10.097485	2.498480	37.069700	Au	7.212489	4.996959	37.070300
Au	4.327494	2.498480	37.069700	Au	5.769991	4.996959	37.069700	Au	10.097485	2.498480	37.070300
Au	7.212489	2.498480	37.069700	Au	2.884996	4.996959	37.069700	Au	2.884996	4.996959	37.070300
Au	10.097485	2.498480	37.069700	Au	10.097485	2.498480	37.069700	Au	5.769991	4.996959	37.070300
Au	2.884996	4.996959	37.069700	Au	7.212489	2.498480	37.069700	Au	8.54987	4.996959	37.070300
Au	5.769991	4.996959	37.069700	Au	4.327494	2.498480	37.069700	Au	11.539983	4.996959	37.070300
Au	8.54987	4.996959	37.069700	Au	1.424298	2.498480	37.069700	Au	4.327494	7.495439	37.070300
Au	11.539983	4.996959	37.069700	Au	8.54987	0.000000	37.069700	Au	7.212489	7.495439	37.070300
Au	4.327494	7.495439	37.069700	Au	5.769991	0.000000	37.069700	Au	10.097485	7.495439	37.070300
Au	7.212489	7.495439	37.069700	Au	12.982488	0.000000	37.069700	Au	12.982488	7.495439	37.070300
Au	10.097485	7.495439	37.069700	Au	0.000000	0.000000	37.069700	Au	1.424298	0.832830	39.425300
Au	12.982488	7.495439	37.069700	Au	1.424298	0.832830	39.425300	Au	4.327494	0.832830	39.425300
Au	0.000000	0.832830	39.425300	Au	4.327494	0.832830	39.425300	Au	10.097488	0.832830	39.425300
Au	1.424298	0.832830	39.425300	Au	10.097488	0.832830	39.425300	Au	2.885000	2.331310	39.425300
Au	4.327494	0.832830	39.425300	Au	2.885000	2.331310	39.425300	Au	5.769991	3.313130	39.425300
Au	10.097488	0.832830	39.425300	Au	5.769991	3.313130	39.425300	Au	8.549996	3.313130	39.425300
Au	2.885000	2.331310	39.425300	Au	8.549996	3.313130	39.425300	Au	11.539983	3.313130	39.425300
Au	5.769991	3.313130	39.425300	Au	11.539983	3.313130	39.425300	Au	4.327494	5.829790	39.425300
Au	8.549996	3.313130	39.425300	Au	4.327494	5.829790	39.425300	Au	7.212489	5.829790	39.425300
Au	11.539983	3.313130	39.425300	Au	7.212489	5.829790	39.425300	Au	10.097488	5.829790	39.425300
Au	4.327494	5.829790	39.425300	Au	10.097488	5.829790	39.425300	Au	12.982488	5.829790	39.425300
Au	7.212489	5.829790	39.425300	Au	12.982488	5.829790	39.425300	Au	0.000000	8.328270	39.425300
Au	10.097488	5.829790	39.425300	Au	0.000000	8.328270	39.425300	Au	8.549996	8.328270	39.425300
Au	12.982488	5.829790	39.425300	Au	8.549996	8.328270	39.425300	Au	11.539983	8.328270	39.425300
Au	0.000000	8.328270	39.425300	Au	11.539983	8.328270	39.425300	Au	14.424988	8.328270	39.425300
Au	8.549996	8.328270	39.425300	Au	14.424988	8.328270	39.425300	Au	2.885000	1.665650	41.780900
Au	11.539983	8.328270	39.425300	Au	2.885000	1.665650	41.780900	Au	5.769991	1.665650	41.780900
Au	14.424988	8.328270	39.425300	Au	5.769991	1.665650	41.780900	Au	8.549996	1.665650	41.780900
Au	0.000000	1.665650	41.780900	Au	8.549996	1.665650	41.780900	Au	1.424298	4.164130	41.780900
Au	1.665650	4.164130	41.780900	Au	1.424298	4.164130	41.780900	Au	4.327494	4.164130	41.780900
Au	4.164130	4.164130	41.780900	Au	4.327494	4.164130	41.780900	Au	7.212489	4.164130	41.780900
Au	8.328270	4.164130	41.780900	Au	7.212489	4.164130	41.780900	Au	10.097488	4.164130	41.780900
Au	11.539983	4.164130	41.780900	Au	10.097488	4.164130	41.780900	Au	12.982488	4.164130	41.780900
Au	14.424988	4.164130	41.780900	Au	12.982488	4.164130	41.780900	Au	0.000000	6.626210	41.780900
Au	0.000000	6.626210	41.780900	Au	0.000000	6.626210	41.780900	Au	5.769991	6.626210	41.780900
Au	6.626210	9.161090	41.780900	Au	5.769991	6.626210	41.780900	Au	8.549996	6.626210	41.780900
Au	1.665650	9.161090	41.780900	Au	8.549996	6.626210	41.780900	Au	11.539983	6.626210	41.780900
Au	4.164130	9.161090	41.780900	Au	11.539983	6.626210	41.780900	Au	14.424988	6.626210	41.780900
Au	8.328270	9.161090	41.780900	Au	14.424988	6.626210	41.780900	Au	2.885000	9.161090	41.780900
Au	11.539983	9.161090	41.780900	Au	2.885000	9.161090	41.780900	Au	5.769991	9.161090	41.780900
Au	14.424988	9.161090	41.780900	Au	5.769991	9.161090	41.780900	Au	8.549996	9.161090	41.780900
Au	0.000000	9.161090	41.780900	Au	8.549996	9.161090	41.780900	Au	11.539983	9.161090	41.780900
Au	9.161090	11.539980	41.780900	Au	11.539983	9.161090	41.780900	Au	14.424988	9.161090	41.780900
Au	1.665650	11.539980	41.780900	Au	14.424988	9.161090	41.780900	Au	0.000000	1.136500	44.136500
Au	4.164130	11.539980	41.780900	Au	0.000000	1.136500	44.136500	Au	5.769991	0.000000	44.136500
Au	8.328270	11.539980	41.780900	Au	5.769991	0.000000	44.136500	Au	8.549996	0.000000	44.136500
Au	11.539983	11.539980	41.780900	Au	8.549996	0.000000	44.136500	Au	11.539983	0.000000	44.136500
Au	14.424988	11.539980	41.780900	Au	11.539983	0.000000	44.136500	Au	14.424988	0.000000	44.136500
Au	0.000000	1.136500	44.136500	Au	14.424988	0.000000	44.136500	Au	2.885000	2.498480	44.136500
Au	1.136500	2.498480	44.136500	Au	2.885000	2.498480	44.136500	Au	5.769991	2.498480	44.136500
Au	2.498480	2.498480	44.136500	Au	5.769991	2.498480	44.136500	Au	8.549996	2.498480	44.136500
Au	5.769991	2.498480	44.136500	Au	8.549996	2.498480	44.136500	Au	11.539983	2.498480	44.136500
Au	8.549996	2.498480	44.136500	Au	11.539983	2.498480	44.136500	Au	14.424988	2.498480	44.136500
Au	11.539983	2.498480	44.136500	Au	14.424988	2.498480	44.136500	Au	0.000000	1.665650	48.847700
Au	14.424988	2.498480	44.136500	Au	0.000000	1.665650	48.847700	Au	2.885000	1.665650	48.847700
Au	0.000000	1.665650	48.847700	Au	2.885000	1.665650	48.847700	Au	5.769991	1.665650	48.847700
Au	1.665650	4.164130	48.847700	Au	5.769991	1.665650	48.847700	Au	8.549996	4.164130	48.847700
Au	4.164130	4.164130	48.847700	Au	8.549996	4.164130	48.847700	Au	11.539983	4.164130	48.847700
Au	8.328270	4.164130	48.847700	Au	11.539983	4.164130	48.847700	Au	14.424988	4.164130	48.847700
Au	11.539983	4.164130	48.847700	Au	14.424988	4.164130	48.847700	Au	0.000000	6.626210	48.847700
Au	14.424988	4.164130	48.847700	Au	0.000000	6.626210	48.847700	Au	5.769991	6.626210	48.847700
Au	0.000000	6.626210	48.847700	Au	5.769991	6.626210	48.847700	Au	8.549996	6.626210	48.847700
Au	6.626210	9.161090	48.847700	Au	8.549996	6.626210	48.847700	Au	11.539983	6.626210	48.847700
Au	9.161090	9.161090	48.847700	Au	11.539983	6.626210	48.847700	Au	14.424988	6.626210	48.847700
Au	11.539983	9.161090	48.847700	Au	14.424988	6.626210	48.847700	Au	0.000000	9.161090	48.847700
Au	14.424988	9.161090	48.847700	Au	0.000000	9.161090	48.847700	Au	5.769991	9.161090	48.847700
Au	0.000000	9.161090	48.847700	Au	5.769991	9.161090	48.847700	Au	8.549996	9.161090	48.847700
Au	9.161090	11.539980	48.847700	Au	8.549996	9.161090	48.847700	Au	11.539983	9.161090	48.847700
Au	1.665650	11.539980	48.847700	Au	11.539983	9.161090	48.847700	Au	14.424988	9.161090	48.847700
Au	4.164130	11.539980	48.847700	Au	14.424988	9.161090	48.847700	Au	0.000000	1.203300	51.203300
Au	8.328270	11.539980	48.847700	Au	0.000000	1.203300	51.203300	Au	2.885000	0.000000	51.203300
Au	11.539983	11.539980	48.847700	Au	2.885000	0.000000	51.203300	Au	5		

