

CSD Space Group Statistics – Space Group Frequency Ordering

Space group frequency ranking for the 1,106,766 CSD structures for which the space group is fully defined. Statistics for enantiomorphous space groups are as reported in the CSD. 868,614 (78 %) of structures adopt centrosymmetric space groups, 238,154 (22 %) adopt non-centrosymmetric space groups, and 179,033 (16 %) structures adopt Sohncke space groups.

Rank	SG No.	Space Group	No. in CSD	% of CSD
1	14	P21/c	379033	34.2
2	2	P-1	276898	25.0
3	15	C2/c	91922	8.3
4	19	P212121	77078	7.0
5	4	P21	56655	5.1
6	61	Pbca	35900	3.2
7	33	Pna21	15163	1.4
8	9	Cc	11478	1.0
9	62	Pnma	11274	1.0
10	1	P1	10749	1.0
11	5	C2	9344	0.8
12	60	Pbcn	9189	0.8
13	148	R-3	9176	0.8
14	29	Pca21	8352	0.8
15	13	P2/c	7197	0.7
16	12	C2/m	5590	0.5
17	11	P21/m	5217	0.5
18	7	Pc	4942	0.4
19	18	P21212	4452	0.4
20	88	I41/a	3946	0.4
21	56	Pccn	3874	0.4
22	43	Fdd2	3681	0.3
23	92	P41212	2083	<0.3
24	167	R-3c	1992	<0.3
25	20	C2221	1946	<0.3
26	96	P43212	1886	<0.3
27	36	Cmc21	1511	<0.3
28	82	I-4	1485	<0.3
29	146	R3	1469	<0.3
30	86	P42/n	1392	<0.3
31	64	Cmca	1350	<0.3
32	114	P-421c	1317	<0.3
33	147	P-3	1239	<0.3
34	70	Fddd	1222	<0.3
35	176	P63/m	1219	<0.3
36	52	Pnna	1178	<0.3
37	41	Aba2	1166	<0.3
38	161	R3c	1103	<0.3
39	63	Cmcm	1079	<0.3

40	57	Pbcm	1077	<0.3
41	152	P3121	1008	<0.3
42	76	P41	987	<0.3
43	205	Pa-3	985	<0.3
44	85	P4/n	949	<0.3
45	225	Fm-3m	897	<0.3
46	78	P43	853	<0.3
47	165	P-3c1	811	<0.3
48	87	I4/m	798	<0.3
49	145	P32	797	<0.3
50	154	P3221	793	<0.3
51	144	P31	791	<0.3
52	173	P63	767	<0.3
53	58	Pnnm	766	<0.3
54	169	P61	711	<0.3
55	122	I-42d	708	<0.3
56	170	P65	696	<0.3
57	166	R-3m	678	<0.3
58	198	P213	671	<0.3
59	45	Iba2	637	<0.3
60	31	Pmn21	629	<0.3
61	142	I41/acd	580	<0.3
62	130	P4/ncc	532	<0.3
63	68	Ccca	523	<0.3
64	155	R32	520	<0.3
65	54	Pcca	518	<0.3
66	163	P-31c	514	<0.3
67	72	Ibam	445	<0.3
68	194	P63/mmc	438	<0.3
69	110	I41cd	434	<0.3
70	8	Cm	398	<0.3
71	159	P31c	383	<0.3
72	217	I-43m	380	<0.3
73	221	Pm-3m	330	<0.3
74	220	I-43d	325	<0.3
75	160	R3m	323	<0.3
=76	34	Pnn2	319	<0.3
=76	55	Pbam	319	<0.3
78	178	P6122	317	<0.3
79	113	P-421m	315	<0.3
80	73	Ibca	314	<0.3
81	59	Pmmn	307	<0.3
82	79	I4	300	<0.3
83	74	Imma	299	<0.3
84	139	I4/mmm	287	<0.3
85	80	I41	268	<0.3
86	179	P6522	262	<0.3
87	143	P3	259	<0.3
88	141	I41/amd	255	<0.3
89	23	I222	247	<0.3

90	81	P-4	239	<0.3
91	126	P4/nnc	236	<0.3
92	129	P4/nmm	230	<0.3
93	121	I-42m	224	<0.3
94	94	P42212	221	<0.3
95	227	Fd-3m	220	<0.3
96	128	P4/mnc	216	<0.3
97	136	P42/mnm	214	<0.3
98	65	Cmmm	212	<0.3
99	40	Ama2	211	<0.3
100	229	Im-3m	210	<0.3
101	197	I23	204	<0.3
102	123	P4/mmm	201	<0.3
103	182	P6322	196	<0.3
104	98	I4122	194	<0.3
105	3	P2	193	<0.3
=106	118	P-4n2	192	<0.3
=106	190	P-62c	192	<0.3
108	32	Pba2	188	<0.3
=109	26	Pmc21	179	<0.3
=109	222	Pn-3n	179	<0.3
111	204	Im-3	172	<0.3
112	218	P-43n	166	<0.3
=113	10	P2/m	165	<0.3
=113	186	P63mc	165	<0.3
115	53	Pmna	163	<0.3
116	228	Fd-3c	161	<0.3
117	138	P42/ncm	160	<0.3
118	46	Ima2	159	<0.3
119	164	P-3m1	158	<0.3
120	206	Ia-3	157	<0.3
=121	30	Pnc2	156	<0.3
=121	140	I4/mcm	156	<0.3
123	71	Immm	152	<0.3
=124	131	P42/mmc	148	<0.3
=124	199	I213	148	<0.3
126	192	P6/mcc	142	<0.3
127	203	Fd-3	138	<0.3
=128	66	Cccm	136	<0.3
=128	69	Fmmm	136	<0.3
130	191	P6/mmm	135	<0.3
131	230	Ia-3d	134	<0.3
132	37	Ccc2	131	<0.3
133	104	P4nc	128	<0.3
=134	77	P42	125	<0.3
=134	196	F23	125	<0.3
136	137	P42/nmc	122	<0.3
137	120	I-4c2	116	<0.3
=138	84	P42/m	115	<0.3
=138	215	P-43m	115	<0.3

140	219	F-43c	113	<0.3
=141	50	Pban	112	<0.3
=141	124	P4/mcc	112	<0.3
=141	135	P42/mbc	112	<0.3
144	106	P42bc	111	<0.3
=145	150	P321	108	<0.3
=145	158	P3c1	108	<0.3
=147	17	P2221	104	<0.3
=147	90	P4212	104	<0.3
149	97	I422	103	<0.3
150	95	P4322	99	<0.3
151	223	Pm-3n	98	<0.3
152	91	P4122	96	<0.3
153	226	Fm-3c	92	<0.3
154	42	Fmm2	88	<0.3
155	180	P6222	87	<0.3
156	171	P62	84	<0.3
157	44	Imm2	83	<0.3
158	127	P4/mbm	82	<0.3
=159	67	Cmma	81	<0.3
=159	211	I432	81	<0.3
161	193	P63/mcm	79	<0.3
162	24	I212121	77	<0.3
163	21	C222	76	<0.3
164	51	Pmma	73	<0.3
165	48	Pnnn	72	<0.3
=166	117	P-4b2	67	<0.3
=166	213	P4132	67	<0.3
168	210	F4132	66	<0.3
=169	39	Abm2	64	<0.3
=169	209	F432	64	<0.3
=171	75	P4	63	<0.3
=171	162	P-31m	63	<0.3
173	134	P42/nnm	62	<0.3
174	201	Pn-3	61	<0.3
175	175	P6/m	60	<0.3
=176	109	I41md	59	<0.3
=176	216	F-43m	59	<0.3
=178	125	P4/nbm	58	<0.3
=178	172	P64	58	<0.3
180	212	P4332	57	<0.3
181	202	Fm-3	54	<0.3
182	181	P6422	52	<0.3
=183	187	P-6m2	50	<0.3
=183	189	P-62m	50	<0.3
185	83	P4/m	49	<0.3
=186	133	P42/nbc	46	<0.3
=186	200	Pm-3	46	<0.3
=188	38	Amm2	45	<0.3
=188	108	I4cm	45	<0.3

190	116	P-4c2	43	<0.3
=191	6	Pm	42	<0.3
=191	174	P-6	42	<0.3
=193	47	Pmmm	41	<0.3
=193	119	I-4m2	41	<0.3
=195	16	P222	39	<0.3
=195	224	Pn-3m	39	<0.3
=197	185	P63cm	38	<0.3
=197	207	P432	38	<0.3
=199	22	F222	36	<0.3
=199	27	Pcc2	36	<0.3
=199	112	P-42c	36	<0.3
202	103	P4cc	35	<0.3
=203	102	P42nm	32	<0.3
=203	168	P6	32	<0.3
205	214	I4132	31	<0.3
206	151	P3112	27	<0.3
=207	107	I4mm	26	<0.3
=207	157	P31m	26	<0.3
=209	153	P3212	25	<0.3
=209	177	P622	25	<0.3
=209	195	P23	25	<0.3
=212	49	Pccm	22	<0.3
=212	132	P42/mcm	22	<0.3
214	28	Pma2	20	<0.3
215	188	P-6c2	19	<0.3
216	149	P312	18	<0.3
217	89	P422	13	<0.3
=218	25	Pmm2	12	<0.3
=218	184	P6cc	12	<0.3
220	35	Cmm2	10	<0.3
=221	93	P4222	9	<0.3
=221	101	P42cm	9	<0.3
223	156	P3m1	8	<0.3
=224	99	P4mm	6	<0.3
=224	100	P4bm	6	<0.3
=224	111	P-42m	6	<0.3
=224	208	P4232	6	<0.3
228	115	P-4m2	5	<0.3
229	183	P6mm	4	<0.3
230	105	P42mc	2	<0.3