

CSD Space Group Statistics – Space Group Frequency Ordering

Space group frequency ranking for the 1,046,507 CSD structures for which the space group is fully defined. Statistics for enantiomorphous space groups are as reported in the CSD. 821,083 (78 %) of structures adopt centrosymmetric space groups, 225,424 (22 %) adopt non-centrosymmetric space groups, and 169,531 (16 %) structures adopt Sohncke space groups.

Rank	SG No.	Space Group	No. in CSD	% of CSD
1	14	P21/c	358797	34.3
2	2	P-1	261118	25.0
3	15	C2/c	86939	8.3
4	19	P212121	73291	7.0
5	4	P21	53515	5.1
6	61	Pbca	34082	3.3
7	33	Pna21	14387	1.4
8	9	Cc	10872	1.0
9	62	Pnma	10750	1.0
10	1	P1	10085	1.0
11	5	C2	8849	0.8
12	60	Pbcn	8727	0.8
13	148	R-3	8717	0.8
14	29	Pca21	7825	0.7
15	13	P2/c	6784	0.6
16	12	C2/m	5275	0.5
17	11	P21/m	4931	0.5
18	7	Pc	4659	0.4
19	18	P21212	4243	0.4
20	88	I41/a	3736	0.4
21	56	Pccn	3672	0.4
22	43	Fdd2	3496	0.3
23	92	P41212	1971	<0.3
24	167	R-3c	1875	<0.3
25	20	C2221	1834	<0.3
26	96	P43212	1783	<0.3
27	82	I-4	1440	<0.3
28	36	Cmc21	1424	<0.3
29	146	R3	1381	<0.3
30	86	P42/n	1327	<0.3
31	64	Cmca	1276	<0.3
32	114	P-421c	1260	<0.3
33	147	P-3	1170	<0.3
34	176	P63/m	1159	<0.3
35	70	Fddd	1141	<0.3
36	52	Pnna	1116	<0.3
37	41	Aba2	1113	<0.3
38	63	Cmcm	1025	<0.3
39	161	R3c	1021	<0.3

40	57	Pbcm	1007	<0.3
41	152	P3121	952	<0.3
42	205	Pa-3	947	<0.3
43	76	P41	934	<0.3
44	85	P4/n	890	<0.3
45	225	Fm-3m	803	<0.3
46	78	P43	796	<0.3
47	165	P-3c1	776	<0.3
48	144	P31	759	<0.3
49	145	P32	752	<0.3
50	154	P3221	744	<0.3
51	87	I4/m	736	<0.3
52	173	P63	731	<0.3
53	58	Pnnm	729	<0.3
54	169	P61	675	<0.3
55	122	I-42d	673	<0.3
56	170	P65	655	<0.3
57	166	R-3m	635	<0.3
58	198	P213	620	<0.3
59	45	Iba2	605	<0.3
60	31	Pmn21	604	<0.3
61	142	I41/acd	544	<0.3
62	130	P4/ncc	517	<0.3
63	68	Ccca	504	<0.3
64	163	P-31c	495	<0.3
65	54	Pcca	494	<0.3
66	155	R32	492	<0.3
67	110	I41cd	418	<0.3
68	72	Ibam	415	<0.3
69	194	P63/mmc	393	<0.3
70	8	Cm	377	<0.3
71	217	I-43m	370	<0.3
72	159	P31c	359	<0.3
73	220	I-43d	309	<0.3
74	34	Pnn2	307	<0.3
75	178	P6122	305	<0.3
=76	59	Pmmn	298	<0.3
=76	73	Ibca	298	<0.3
=78	55	Pbam	297	<0.3
=78	221	Pm-3m	297	<0.3
=80	74	Imma	285	<0.3
=80	79	I4	285	<0.3
=80	160	R3m	285	<0.3
83	113	P-421m	264	<0.3
84	80	I41	259	<0.3
85	139	I4/mmm	252	<0.3
86	179	P6522	244	<0.3
=87	141	I41/amd	243	<0.3
=87	143	P3	243	<0.3
89	23	I222	235	<0.3

90	81	P-4	227	<0.3
=91	126	P4/nnc	224	<0.3
=91	129	P4/nmm	224	<0.3
93	121	I-42m	213	<0.3
94	229	Im-3m	205	<0.3
95	94	P42212	204	<0.3
96	40	Ama2	201	<0.3
97	227	Fd-3m	198	<0.3
98	128	P4/mnc	194	<0.3
99	136	P42/mnm	192	<0.3
100	3	P2	188	<0.3
101	197	I23	186	<0.3
102	182	P6322	183	<0.3
103	32	Pba2	182	<0.3
104	190	P-62c	181	<0.3
=105	65	Cmmm	180	<0.3
=105	123	P4/mmm	180	<0.3
107	118	P-4n2	177	<0.3
108	98	I4122	173	<0.3
109	222	Pn-3n	171	<0.3
110	218	P-43n	163	<0.3
111	26	Pmc21	162	<0.3
=112	204	Im-3	157	<0.3
=112	228	Fd-3c	157	<0.3
114	53	Pmna	156	<0.3
115	138	P42/ncm	155	<0.3
116	206	Ia-3	149	<0.3
117	71	Immm	148	<0.3
118	186	P63mc	147	<0.3
119	10	P2/m	146	<0.3
120	30	Pnc2	143	<0.3
=121	140	I4/mcm	142	<0.3
=121	199	I213	142	<0.3
=123	46	Ima2	141	<0.3
=123	131	P42/mmc	141	<0.3
125	164	P-3m1	136	<0.3
126	203	Fd-3	127	<0.3
=127	66	Cccm	126	<0.3
=127	191	P6/mmm	126	<0.3
129	192	P6/mcc	124	<0.3
130	37	Ccc2	120	<0.3
131	137	P42/nmc	118	<0.3
132	230	Ia-3d	117	<0.3
133	77	P42	116	<0.3
134	196	F23	114	<0.3
=135	69	Fmmm	113	<0.3
=135	104	P4nc	113	<0.3
=135	215	P-43m	113	<0.3
138	84	P42/m	112	<0.3
139	219	F-43c	110	<0.3

140	106	P42bc	107	<0.3
=141	50	Pban	106	<0.3
=141	135	P42/mbc	106	<0.3
=143	120	I-4c2	105	<0.3
=143	158	P3c1	105	<0.3
=145	124	P4/mcc	104	<0.3
=145	150	P321	104	<0.3
147	17	P2221	99	<0.3
148	90	P4212	98	<0.3
149	223	Pm-3n	96	<0.3
150	97	I422	93	<0.3
151	95	P4322	89	<0.3
=152	42	Fmm2	85	<0.3
=152	91	P4122	85	<0.3
154	44	Imm2	82	<0.3
155	226	Fm-3c	81	<0.3
156	171	P62	79	<0.3
157	211	I432	77	<0.3
158	180	P6222	76	<0.3
=159	24	I212121	73	<0.3
=159	127	P4/mbm	73	<0.3
=159	193	P63/mcm	73	<0.3
162	21	C222	71	<0.3
163	67	Cmma	69	<0.3
=164	48	Pnnn	67	<0.3
=164	213	P4132	67	<0.3
166	210	F4132	66	<0.3
=167	51	Pmma	65	<0.3
=167	117	P-4b2	65	<0.3
=169	39	Abm2	60	<0.3
=169	134	P42/nnm	60	<0.3
171	75	P4	59	<0.3
172	216	F-43m	58	<0.3
173	109	I41md	56	<0.3
=174	172	P64	55	<0.3
=174	209	F432	55	<0.3
176	202	Fm-3	54	<0.3
177	201	Pn-3	53	<0.3
178	212	P4332	52	<0.3
179	162	P-31m	51	<0.3
180	175	P6/m	50	<0.3
=181	181	P6422	48	<0.3
=181	189	P-62m	48	<0.3
183	83	P4/m	47	<0.3
184	133	P42/nbc	45	<0.3
185	187	P-6m2	44	<0.3
186	116	P-4c2	42	<0.3
187	108	I4cm	41	<0.3
=188	38	Amm2	40	<0.3
=188	200	Pm-3	40	<0.3

190	119	I-4m2	39	<0.3
=191	16	P222	38	<0.3
=191	174	P-6	38	<0.3
=191	207	P432	38	<0.3
=191	224	Pn-3m	38	<0.3
195	47	Pmmm	37	<0.3
196	6	Pm	36	<0.3
=197	112	P-42c	35	<0.3
=197	185	P63cm	35	<0.3
=199	22	F222	34	<0.3
=199	125	P4/nbm	34	<0.3
201	103	P4cc	33	<0.3
202	27	Pcc2	31	<0.3
=203	102	P42nm	30	<0.3
=203	214	I4132	30	<0.3
205	168	P6	28	<0.3
206	151	P3112	27	<0.3
207	157	P31m	26	<0.3
208	107	I4mm	25	<0.3
=209	132	P42/mcm	22	<0.3
=209	153	P3212	22	<0.3
=209	195	P23	22	<0.3
212	49	Pccm	21	<0.3
213	188	P-6c2	19	<0.3
214	149	P312	18	<0.3
215	28	Pma2	17	<0.3
216	89	P422	13	<0.3
=217	25	Pmm2	12	<0.3
=217	177	P622	12	<0.3
=217	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