

CSD Space Group Statistics – Space Group Number Ordering

Space group frequency ranking for the 807,190 CSD structures for which the space group is fully defined. Statistics for enantiomorphous space groups are as reported in the CSD. 631,404 (78.2 %) of structures adopt centrosymmetric space groups, 175,787 (21.8 %) adopt non-centrosymmetric space groups, and 132,700 (16.4 %) structures adopt Sohncke space groups.

SG No.	Rank	Space Group	No. in CSD	% of CSD
1	10	P1	7662	0.9
2	2	P-1	198014	24.5
3	=96	P2	142	<0.3
4	5	P21	41791	5.2
5	12	C2	6826	0.8
6	=202	Pm	21	<0.3
7	18	Pc	3447	0.4
8	69	Cm	293	<0.3
9	9	Cc	8450	1.0
10	111	P2/m	110	<0.3
11	17	P21/m	4023	0.5
12	16	C2/m	4094	0.5
13	14	P2/c	5232	0.6
14	1	P21/c	279041	34.6
15	3	C2/c	67434	8.4
16	=177	P222	35	<0.3
17	=136	P2221	79	<0.3
18	19	P21212	3293	0.4
19	4	P212121	58438	7.2
20	24	C2221	1412	<0.3
21	=152	C222	58	<0.3
22	=188	F222	27	<0.3
23	82	I222	190	<0.3
24	=148	I212121	60	<0.3
25	215	Pmm2	11	<0.3
26	101	Pmc21	131	<0.3
27	=204	Pcc2	19	<0.3
28	=213	Pma2	13	<0.3
29	13	Pca21	5968	0.7
30	113	Pnc2	106	<0.3
31	=55	Pmn21	499	<0.3
32	=92	Pba2	151	<0.3
33	7	Pna21	11145	1.4
34	72	Pnn2	251	<0.3
35	=222	Cmm2	6	<0.3
36	27	Cmc21	1142	<0.3
37	114	Ccc2	105	<0.3
38	=200	Amm2	22	<0.3
39	=160	Abm2	51	<0.3

40	95	Ama2	145	<0.3
41	36	Aba2	869	<0.3
42	144	Fmm2	69	<0.3
43	22	Fdd2	2751	0.3
44	143	Imm2	70	<0.3
45	58	Iba2	468	<0.3
46	109	Ima2	114	<0.3
47	184	Pmmm	30	<0.3
48	=152	Pnnn	58	<0.3
49	206	Pccm	18	<0.3
50	=136	Pban	79	<0.3
51	159	Pmma	52	<0.3
52	37	Pnna	852	<0.3
53	108	Pmna	115	<0.3
54	63	Pcca	382	<0.3
55	79	Pbam	222	<0.3
56	21	Pccn	2848	0.4
57	38	Pbcm	800	<0.3
58	48	Pnnm	568	<0.3
59	73	Pmmn	247	<0.3
60	11	Pbcn	6867	0.9
61	6	Pbca	26951	3.3
62	8	Pnma	8734	1.1
63	40	Cmcm	786	<0.3
64	31	Cmca	1009	<0.3
65	110	Cmmm	111	<0.3
66	125	Cccm	89	<0.3
67	=152	Cmma	58	<0.3
68	=61	Ccca	383	<0.3
69	=148	Fmmm	60	<0.3
70	35	Fddd	874	<0.3
71	=127	Immm	87	<0.3
72	67	Ibam	336	<0.3
73	76	Ibca	230	<0.3
74	88	Imma	171	<0.3
75	169	P4	45	<0.3
76	41	P41	742	<0.3
77	=130	P42	84	<0.3
78	45	P43	619	<0.3
79	77	I4	226	<0.3
80	81	I41	207	<0.3
81	85	P-4	185	<0.3
82	28	I-4	1104	<0.3
83	173	P4/m	38	<0.3
84	=118	P42/m	99	<0.3
85	44	P4/n	710	<0.3
86	29	P42/n	1060	<0.3
87	=52	I4/m	532	<0.3
88	20	I41/a	2927	0.4
89	=219	P422	8	<0.3

90	=152	P4212	58	<0.3
91	145	P4122	68	<0.3
92	23	P41212	1574	<0.3
93	=216	P4222	9	<0.3
94	98	P42212	140	<0.3
95	=150	P4322	59	<0.3
96	25	P43212	1364	<0.3
97	=164	l422	48	<0.3
98	132	l4122	83	<0.3
99	229	P4mm	3	<0.3
100	=226	P4bm	4	<0.3
101	=222	P42cm	6	<0.3
102	=195	P42nm	24	<0.3
103	199	P4cc	23	<0.3
104	122	P4nc	95	<0.3
105	230	P42mc	2	<0.3
106	=133	P42bc	82	<0.3
107	=213	l4mm	13	<0.3
108	185	l4cm	29	<0.3
109	=174	l41md	37	<0.3
110	68	l41cd	307	<0.3
111	=222	P-42m	6	<0.3
112	=186	P-42c	28	<0.3
113	80	P-421m	211	<0.3
114	32	P-421c	1003	<0.3
115	=226	P-4m2	4	<0.3
116	=188	P-4c2	27	<0.3
117	157	P-4b2	56	<0.3
118	91	P-4n2	153	<0.3
119	=186	l-4m2	28	<0.3
120	=130	l-4c2	84	<0.3
121	94	l-42m	148	<0.3
122	54	l-42d	520	<0.3
123	100	P4/mmm	134	<0.3
124	=140	P4/mcc	74	<0.3
125	=202	P4/nbm	21	<0.3
126	=86	P4/nnc	175	<0.3
127	146	P4/mbm	64	<0.3
128	124	P4/mnc	90	<0.3
129	=86	P4/nmm	175	<0.3
130	=61	P4/ncc	383	<0.3
131	171	P42/mmc	40	<0.3
132	208	P42/mcm	16	<0.3
133	=179	P42/nbc	34	<0.3
134	=164	P42/nnm	48	<0.3
135	135	P42/mbc	80	<0.3
136	99	P42/mnm	139	<0.3
137	121	P42/nmc	96	<0.3
138	120	P42/ncm	97	<0.3
139	90	l4/mmm	158	<0.3

140	142	I4/mcm	72	<0.3
141	=92	I41/amd	151	<0.3
142	60	I41/acd	412	<0.3
143	83	P3	187	<0.3
144	46	P31	586	<0.3
145	47	P32	575	<0.3
146	30	R3	1020	<0.3
147	34	P-3	930	<0.3
148	15	R-3	5217	0.6
149	=209	P312	15	<0.3
150	=136	P321	79	<0.3
151	=192	P3112	25	<0.3
152	43	P3121	725	<0.3
153	207	P3212	17	<0.3
154	49	P3221	542	<0.3
155	64	R32	367	<0.3
156	=219	P3m1	8	<0.3
157	=209	P31m	15	<0.3
158	=140	P3c1	74	<0.3
159	70	P31c	276	<0.3
160	75	R3m	239	<0.3
161	39	R3c	790	<0.3
162	=192	P-31m	25	<0.3
163	66	P-31c	341	<0.3
164	129	P-3m1	86	<0.3
165	50	P-3c1	537	<0.3
166	65	R-3m	360	<0.3
167	26	R-3c	1294	<0.3
168	=195	P6	24	<0.3
169	57	P61	494	<0.3
170	59	P65	466	<0.3
171	=150	P62	59	<0.3
172	170	P64	45	<0.3
173	51	P63	533	<0.3
174	=200	P-6	22	<0.3
175	176	P6/m	36	<0.3
176	33	P63/m	946	<0.3
177	=219	P622	8	<0.3
178	78	P6122	223	<0.3
179	89	P6522	170	<0.3
180	158	P6222	54	<0.3
181	=177	P6422	35	<0.3
182	=115	P6322	103	<0.3
183	=226	P6mm	4	<0.3
184	=216	P6cc	9	<0.3
185	=188	P63cm	27	<0.3
186	112	P63mc	107	<0.3
187	=181	P-6m2	31	<0.3
188	=209	P-6c2	15	<0.3
189	=188	P-62m	27	<0.3

190	105	P-62c	126	<0.3
191	=164	P6/mmm	48	<0.3
192	123	P6/mcc	94	<0.3
193	=160	P63/mcm	51	<0.3
194	84	P63/mmc	186	<0.3
195	=209	P23	15	<0.3
196	139	F23	77	<0.3
197	=96	I23	142	<0.3
198	=55	P213	499	<0.3
199	=152	I213	58	<0.3
200	=204	Pm3	19	<0.3
201	=181	Pn3	31	<0.3
202	172	Fm3	39	<0.3
203	126	Fd3	88	<0.3
204	117	Im3	102	<0.3
205	42	Pa3	732	<0.3
206	=118	Ia3	99	<0.3
207	=216	P432	9	<0.3
208	225	P4232	5	<0.3
209	=181	F432	31	<0.3
210	=174	F4132	37	<0.3
211	=195	I432	24	<0.3
212	=179	P4332	34	<0.3
213	168	P4132	46	<0.3
214	=195	I4132	24	<0.3
215	=160	P-43m	51	<0.3
216	163	F-43m	50	<0.3
217	71	I-43m	270	<0.3
218	106	P-43n	118	<0.3
219	=127	F-43c	87	<0.3
220	74	I-43d	242	<0.3
221	103	Pm3m	128	<0.3
222	=115	Pn3n	103	<0.3
223	147	Pm3n	61	<0.3
224	=192	Pn3m	25	<0.3
225	=52	Fm3m	532	<0.3
226	=164	Fm3c	48	<0.3
227	104	Fd3m	127	<0.3
228	107	Fd3c	116	<0.3
229	102	Im3m	130	<0.3
230	=133	Ia3d	82	<0.3