

CSD Space Group Statistics – Space Group Frequency Ordering

Space group frequency ranking for the 754,897 CSD structures for which the space group is fully defined. Statistics for enantiomorphous space groups are as reported in the CSD. 589,932 (78.1%) of structures adopt centrosymmetric space groups, 164,965 (21.9%) adopt non-centrosymmetric space groups, and 124,574 (16.5%) structures adopt Sohncke space groups.

Rank	SG No.	Space Group	No. in CSD	% of CSD
1	14	P21/c	261358	34.6
2	2	P-1	184087	24.4
3	15	C2/c	63007	8.3
4	19	P212121	55146	7.3
5	4	P21	39092	5.2
6	61	Pbca	25376	3.4
7	33	Pna21	10438	1.4
8	62	Pnma	8276	1.1
9	9	Cc	7910	1
10	1	P1	7136	0.9
11	60	Pbcn	6461	0.9
12	5	C2	6352	0.8
13	29	Pca21	5575	0.7
14	13	P2/c	4897	0.6
15	148	R-3	4850	0.6
16	12	C2/m	3883	0.5
17	11	P21/m	3817	0.5
18	7	Pc	3212	0.4
19	18	P21212	3096	0.4
20	88	I41/a	2718	0.4
21	56	Pccn	2680	0.4
22	43	Fdd2	2570	0.3
23	92	P41212	1502	<0.3
24	20	C2221	1332	<0.3
25	96	P43212	1290	<0.3
26	167	R-3c	1172	<0.3
27	36	Cmc21	1071	<0.3
28	82	I-4	1018	<0.3
29	86	P42/n	1005	<0.3
30	146	R3	952	<0.3
31	114	P-421c	951	<0.3
32	64	Cmca	936	<0.3
33	147	P-3	891	<0.3
34	176	P63/m	890	<0.3
35	41	Aba2	815	<0.3
35	70	Fddd	815	<0.3
37	52	Pnna	795	<0.3
38	57	Pbcm	758	<0.3
39	63	Cmcm	741	<0.3

40	161	R3c	739	<0.3
41	76	P41	700	<0.3
42	205	Pa3	682	<0.3
43	152	P3121	680	<0.3
44	85	P4/n	661	<0.3
45	78	P43	578	<0.3
46	144	P31	558	<0.3
47	58	Pnm	537	<0.3
48	145	P32	532	<0.3
49	165	P-3c1	516	<0.3
50	87	I4/m	499	<0.3
50	154	P3221	499	<0.3
52	173	P63	498	<0.3
53	122	I-42d	494	<0.3
54	31	Pmn21	481	<0.3
55	169	P61	471	<0.3
56	45	Iba2	445	<0.3
57	225	Fm3m	437	<0.3
58	198	P213	428	<0.3
59	170	P65	414	<0.3
60	142	I41/acd	383	<0.3
61	54	Pcca	362	<0.3
62	68	Ccca	354	<0.3
63	155	R32	344	<0.3
64	130	P4/ncc	342	<0.3
65	166	R-3m	314	<0.3
66	72	Ibam	305	<0.3
67	163	P-31c	290	<0.3
68	8	Cm	281	<0.3
69	110	I41cd	278	<0.3
70	217	I-43m	258	<0.3
71	159	P31c	254	<0.3
72	34	Pnn2	244	<0.3
73	59	Pmmn	237	<0.3
74	220	I-43d	234	<0.3
75	160	R3m	229	<0.3
76	73	Ibca	215	<0.3
77	55	Pbam	213	<0.3
77	178	P6122	213	<0.3
79	79	I4	212	<0.3
80	113	P-421m	207	<0.3
81	80	I41	192	<0.3
82	143	P3	177	<0.3
83	23	I222	173	<0.3
84	81	P-4	171	<0.3
85	129	P4/nmm	167	<0.3
86	194	P63/mmc	166	<0.3
87	179	P6522	165	<0.3
88	126	P4/nnc	161	<0.3
89	74	Imma	148	<0.3

90	118	P-4n2	147	<0.3
91	32	Pba2	144	<0.3
92	121	I-42m	143	<0.3
93	141	I41/amd	141	<0.3
94	139	I4/mmm	140	<0.3
95	94	P42212	136	<0.3
96	3	P2	134	<0.3
97	40	Ama2	133	<0.3
97	197	I23	133	<0.3
99	136	P42/mnm	131	<0.3
100	26	Pmc21	126	<0.3
101	190	P-62c	121	<0.3
102	229	Im3m	120	<0.3
103	123	P4/mmm	118	<0.3
104	227	Fd3m	116	<0.3
105	218	P-43n	115	<0.3
106	46	Ima2	110	<0.3
107	221	Pm3m	108	<0.3
108	228	Fd3c	107	<0.3
109	186	P63mc	105	<0.3
110	30	Pnc2	104	<0.3
111	10	P2/m	102	<0.3
112	53	Pmna	101	<0.3
113	65	Cmmm	100	<0.3
113	222	Pn3n	100	<0.3
115	37	Ccc2	97	<0.3
116	182	P6322	96	<0.3
117	137	P42/nmc	95	<0.3
118	192	P6/mcc	91	<0.3
118	204	Im3	91	<0.3
120	84	P42/m	90	<0.3
120	104	P4nc	90	<0.3
122	138	P42/ncm	89	<0.3
123	206	Ia3	88	<0.3
124	66	Cccm	85	<0.3
124	71	Immm	85	<0.3
126	164	P-3m1	82	<0.3
127	98	I4122	81	<0.3
127	203	Fd3	81	<0.3
129	77	P42	80	<0.3
129	219	F-43c	80	<0.3
131	106	P42bc	79	<0.3
131	128	P4/mnc	79	<0.3
133	17	P2221	76	<0.3
133	135	P42/mbc	76	<0.3
135	50	Pban	73	<0.3
135	120	I-4c2	73	<0.3
135	150	P321	73	<0.3
135	230	Ia3d	73	<0.3
139	124	P4/mcc	70	<0.3

139	158	P3c1	70	<0.3
139	196	F23	70	<0.3
142	44	Imm2	69	<0.3
143	42	Fmm2	68	<0.3
144	140	I4/mcm	64	<0.3
145	127	P4/mbm	62	<0.3
146	91	P4122	59	<0.3
147	171	P62	58	<0.3
148	21	C222	57	<0.3
148	24	I212121	57	<0.3
150	48	Pnnn	56	<0.3
150	67	Cmma	56	<0.3
150	69	Fmmm	56	<0.3
150	90	P4212	56	<0.3
154	95	P4322	54	<0.3
155	117	P-4b2	53	<0.3
155	180	P6222	53	<0.3
157	51	Pmma	51	<0.3
157	199	I213	51	<0.3
159	193	P63/mcm	50	<0.3
160	215	P-43m	49	<0.3
160	216	F-43m	49	<0.3
162	39	Abm2	48	<0.3
163	97	I422	46	<0.3
164	223	Pm3n	45	<0.3
165	172	P64	44	<0.3
165	226	Fm3c	44	<0.3
167	134	P42/nm	43	<0.3
167	191	P6/mmm	43	<0.3
169	75	P4	42	<0.3
170	213	P4132	39	<0.3
171	83	P4/m	38	<0.3
172	202	Fm3	37	<0.3
173	210	F4132	36	<0.3
174	16	P222	35	<0.3
174	109	I41md	35	<0.3
176	181	P6422	33	<0.3
177	131	P42/mmc	31	<0.3
177	133	P42/nbc	31	<0.3
179	47	Pmmm	30	<0.3
179	175	P6/m	30	<0.3
181	209	F432	29	<0.3
181	212	P4332	29	<0.3
183	108	I4cm	28	<0.3
184	112	P-42c	27	<0.3
184	116	P-4c2	27	<0.3
184	119	I-4m2	27	<0.3
184	201	Pn3	27	<0.3
188	22	F222	25	<0.3
188	185	P63cm	25	<0.3

190	102	P42nm	23	<0.3
190	151	P3112	23	<0.3
190	189	P-62m	23	<0.3
190	214	I4132	23	<0.3
190	224	Pn3m	23	<0.3
195	38	Amm2	22	<0.3
195	168	P6	22	<0.3
195	174	P-6	22	<0.3
195	211	I432	22	<0.3
199	6	Pm	21	<0.3
199	103	P4cc	21	<0.3
201	125	P4/nbm	20	<0.3
202	49	Pccm	17	<0.3
202	162	P-31m	17	<0.3
204	27	Pcc2	15	<0.3
204	153	P3212	15	<0.3
204	187	P-6m2	15	<0.3
207	195	P23	14	<0.3
207	200	Pm3	14	<0.3
209	28	Pma2	13	<0.3
209	107	I4mm	13	<0.3
209	132	P42/mcm	13	<0.3
209	157	P31m	13	<0.3
213	25	Pmm2	11	<0.3
213	188	P-6c2	11	<0.3
215	149	P312	9	<0.3
215	184	P6cc	9	<0.3
217	93	P4222	8	<0.3
217	156	P3m1	8	<0.3
219	89	P422	7	<0.3
219	177	P622	7	<0.3
221	35	Cmm2	6	<0.3
221	101	P42cm	6	<0.3
221	111	P-42m	6	<0.3
224	207	P432	5	<0.3
224	208	P4232	5	<0.3
226	115	P-4m2	4	<0.3
226	183	P6mm	4	<0.3
228	99	P4mm	3	<0.3
228	100	P4bm	3	<0.3
230	105	P42mc	2	<0.3