

CSD Space Group Statistics – Space Group Frequency Ordering

Space group frequency ranking for the 986,061 CSD structures for which the space group is fully defined. Statistics for enantiomorphous space groups are as reported in the CSD. 773,177 (78 %) of structures adopt centrosymmetric space groups, 212,884 (22 %) adopt non-centrosymmetric space groups, and 160,219 (16 %) structures adopt Sohncke space groups.

Rank	SG No.	Space Group	No. in CSD	% of CSD
1	14	P21/c	339542	34.4
2	2	P-1	245703	24.9
3	15	C2/c	82346	8.3
4	19	P212121	69645	7.1
5	4	P21	50570	5.1
6	61	Pbca	32371	3.3
7	33	Pna21	13570	1.4
8	9	Cc	10292	1.0
9	62	Pnma	10268	1.0
10	1	P1	9493	1.0
11	5	C2	8333	0.8
12	60	Pbcn	8245	0.8
13	29	Pca21	7350	0.7
14	148	R-3	6530	0.7
15	13	P2/c	6417	0.7
16	12	C2/m	4949	0.5
17	11	P21/m	4686	0.5
18	7	Pc	4340	0.4
19	18	P21212	4005	0.4
20	88	I41/a	3534	0.4
21	56	Pccn	3460	0.4
22	43	Fdd2	3285	0.3
23	92	P41212	1877	<0.3
24	167	R-3c	1760	<0.3
25	20	C2221	1726	<0.3
26	96	P43212	1699	<0.3
27	82	I-4	1363	<0.3
28	36	Cmc21	1361	<0.3
29	146	R3	1296	<0.3
30	86	P42/n	1249	<0.3
31	64	Cmca	1210	<0.3
32	114	P-421c	1196	<0.3
33	147	P-3	1125	<0.3
34	176	P63/m	1110	<0.3
35	70	Fddd	1080	<0.3
36	52	Pnna	1071	<0.3
37	41	Aba2	1059	<0.3
38	161	R3c	983	<0.3
39	63	Cmcm	973	<0.3

40	57	Pbcm	963	<0.3
41	152	P3121	893	<0.3
42	205	Pa-3	888	<0.3
43	76	P41	882	<0.3
44	85	P4/n	838	<0.3
45	225	Fm-3m	750	<0.3
=46	78	P43	748	<0.3
=46	165	P-3c1	748	<0.3
48	144	P31	723	<0.3
49	145	P32	704	<0.3
50	58	Pnnm	694	<0.3
51	154	P3221	692	<0.3
52	173	P63	690	<0.3
53	87	I4/m	680	<0.3
54	122	I-42d	644	<0.3
55	169	P61	627	<0.3
56	170	P65	598	<0.3
57	198	P213	596	<0.3
=58	31	Pmn21	580	<0.3
=58	166	R-3m	580	<0.3
60	45	Iba2	577	<0.3
61	142	I41/acd	524	<0.3
62	130	P4/ncc	504	<0.3
63	68	Ccca	480	<0.3
64	54	Pcca	474	<0.3
65	155	R32	470	<0.3
66	163	P-31c	457	<0.3
67	72	Ibam	405	<0.3
68	110	I41cd	384	<0.3
69	8	Cm	357	<0.3
70	194	P63/mmc	353	<0.3
71	217	I-43m	348	<0.3
72	159	P31c	344	<0.3
73	220	I-43d	293	<0.3
74	34	Pnn2	287	<0.3
75	59	Pmmn	285	<0.3
76	73	Ibca	281	<0.3
77	178	P6122	279	<0.3
78	79	I4	274	<0.3
79	160	R3m	271	<0.3
80	55	Pbam	269	<0.3
=81	74	Imma	260	<0.3
=81	221	Pm-3m	260	<0.3
83	113	P-421m	257	<0.3
84	80	I41	245	<0.3
85	143	P3	237	<0.3
86	179	P6522	228	<0.3
87	141	I41/amd	224	<0.3
88	23	I222	223	<0.3
89	139	I4/mmm	222	<0.3

90	126	P4/nnc	217	<0.3
91	129	P4/nmm	216	<0.3
92	81	P-4	215	<0.3
93	121	I-42m	208	<0.3
94	40	Ama2	193	<0.3
95	229	Im-3m	189	<0.3
96	227	Fd-3m	183	<0.3
97	128	P4/mnc	182	<0.3
=98	94	P42212	176	<0.3
=98	197	I23	176	<0.3
100	136	P42/mnm	173	<0.3
101	118	P-4n2	172	<0.3
=102	3	P2	171	<0.3
=102	190	P-62c	171	<0.3
104	123	P4/mmm	169	<0.3
105	32	Pba2	168	<0.3
106	98	I4122	167	<0.3
107	65	Cmmm	161	<0.3
108	182	P6322	158	<0.3
109	26	Pmc21	153	<0.3
110	218	P-43n	151	<0.3
111	138	P42/ncm	150	<0.3
112	53	Pmna	147	<0.3
=113	206	Ia-3	141	<0.3
=113	228	Fd-3c	141	<0.3
115	186	P63mc	138	<0.3
116	204	Im-3	137	<0.3
117	199	I213	134	<0.3
118	10	P2/m	133	<0.3
119	46	Ima2	132	<0.3
120	30	Pnc2	130	<0.3
121	222	Pn-3n	128	<0.3
122	164	P-3m1	126	<0.3
123	71	Immm	125	<0.3
124	131	P42/mmc	119	<0.3
=125	37	Ccc2	116	<0.3
=125	66	Ccm	116	<0.3
127	203	Fd-3	115	<0.3
128	137	P42/nmc	114	<0.3
129	140	I4/mcm	113	<0.3
130	196	F23	112	<0.3
131	77	P42	111	<0.3
=132	192	P6/mcc	110	<0.3
=132	215	P-43m	110	<0.3
=134	84	P42/m	109	<0.3
=134	230	Ia-3d	109	<0.3
136	104	P4nc	107	<0.3
137	191	P6/mmm	106	<0.3
=138	69	Fmmm	104	<0.3
=138	124	P4/mcc	104	<0.3

=138	219	F-43c	104	<0.3
141	135	P42/mbc	103	<0.3
142	50	Pban	102	<0.3
143	106	P42bc	99	<0.3
=144	120	I-4c2	98	<0.3
=144	150	P321	98	<0.3
146	158	P3c1	94	<0.3
147	17	P2221	92	<0.3
148	90	P4212	89	<0.3
149	223	Pm-3n	88	<0.3
150	97	I422	85	<0.3
151	42	Fmm2	83	<0.3
=152	91	P4122	81	<0.3
=152	95	P4322	81	<0.3
154	44	Imm2	79	<0.3
=155	24	I212121	73	<0.3
=155	127	P4/mbm	73	<0.3
157	171	P62	71	<0.3
158	180	P6222	70	<0.3
159	193	P63/mcm	68	<0.3
160	67	Cmma	67	<0.3
161	226	Fm-3c	66	<0.3
=162	21	C222	65	<0.3
=162	48	Pnnn	65	<0.3
=162	211	I432	65	<0.3
=165	51	Pmma	64	<0.3
=165	117	P-4b2	64	<0.3
=167	134	P42/nnm	58	<0.3
=167	216	F-43m	58	<0.3
=169	39	Abm2	57	<0.3
=169	210	F4132	57	<0.3
=171	75	P4	55	<0.3
=171	213	P4132	55	<0.3
=173	109	I41md	53	<0.3
=173	172	P64	53	<0.3
175	209	F432	50	<0.3
=176	162	P-31m	47	<0.3
=176	175	P6/m	47	<0.3
=178	181	P6422	46	<0.3
=178	201	Pn-3	46	<0.3
=178	202	Fm-3	46	<0.3
=181	83	P4/m	45	<0.3
=181	189	P-62m	45	<0.3
=181	212	P4332	45	<0.3
184	133	P42/nbc	44	<0.3
185	116	P-4c2	41	<0.3
186	108	I4cm	39	<0.3
187	174	P-6	38	<0.3
=188	16	P222	37	<0.3
=188	119	I-4m2	37	<0.3

=188	187	P-6m2	37	<0.3
=188	224	Pn-3m	37	<0.3
=192	47	Pmmm	36	<0.3
=192	200	Pm-3	36	<0.3
=194	6	Pm	35	<0.3
=194	38	Amm2	35	<0.3
196	207	P432	34	<0.3
197	112	P-42c	33	<0.3
=198	22	F222	32	<0.3
=198	103	P4cc	32	<0.3
=198	185	P63cm	32	<0.3
201	214	I4132	30	<0.3
202	102	P42nm	29	<0.3
203	125	P4/nbm	28	<0.3
=204	27	Pcc2	27	<0.3
=204	151	P3112	27	<0.3
=204	168	P6	27	<0.3
207	107	I4mm	22	<0.3
=208	49	Pccm	21	<0.3
=208	132	P42/mcm	21	<0.3
=208	153	P3212	21	<0.3
=208	157	P31m	21	<0.3
=212	149	P312	18	<0.3
=212	188	P-6c2	18	<0.3
=212	195	P23	18	<0.3
215	28	Pma2	16	<0.3
=216	25	Pmm2	12	<0.3
=216	89	P422	12	<0.3
=216	184	P6cc	12	<0.3
219	177	P622	11	<0.3
=220	35	Cmm2	9	<0.3
=220	93	P4222	9	<0.3
=222	101	P42cm	8	<0.3
=222	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	4	<0.3
=228	183	P6mm	4	<0.3
230	105	P42mc	2	<0.3