

CSD Space Group Statistics – Space Group Frequency Ordering

Space group frequency ranking for the 865,342 CSD structures for which the space group is fully defined. Statistics for enantiomorphous space groups are as reported in the CSD. 677,467 (78 %) of structures adopt centrosymmetric space groups, 187,875 (22 %) adopt non-centrosymmetric space groups, and 141,626 (16 %) structures adopt Sohncke space groups.

Rank	SG No.	Space Group	No. in CSD	% of CSD
1	14	P21/c	298598	34.5
2	2	P-1	213446	24.7
3	15	C2/c	72299	8.4
4	19	P212121	62099	7.2
5	4	P21	44620	5.2
6	61	Pbca	28764	3.3
7	33	Pna21	11967	1.4
8	62	Pnma	9234	1.1
9	9	Cc	9025	1.0
10	1	P1	8306	1.0
11	60	Pbcn	7300	0.8
12	5	C2	7280	0.8
13	29	Pca21	6420	0.7
14	148	R-3	5637	0.7
15	13	P2/c	5591	0.6
16	12	C2/m	4362	0.5
17	11	P21/m	4244	0.5
18	7	Pc	3715	0.4
19	18	P21212	3509	0.4
20	88	I41/a	3138	0.4
21	56	Pccn	3047	0.4
22	43	Fdd2	2938	0.3
23	92	P41212	1677	<0.3
24	20	C2221	1493	<0.3
25	96	P43212	1470	<0.3
26	167	R-3c	1447	<0.3
27	36	Cmc21	1202	<0.3
28	82	I-4	1176	<0.3
29	86	P42/n	1137	<0.3
30	146	R3	1087	<0.3
31	64	Cmca	1084	<0.3
32	114	P-421c	1072	<0.3
33	176	P63/m	1004	<0.3
34	147	P-3	980	<0.3
35	70	Fddd	936	<0.3
36	52	Pnna	922	<0.3
37	41	Aba2	921	<0.3
38	161	R3c	855	<0.3
39	63	Cmcm	844	<0.3

40	57	Pbcm	843	<0.3
41	76	P41	787	<0.3
42	205	Pa-3	781	<0.3
43	152	P3121	765	<0.3
44	85	P4/n	753	<0.3
45	78	P43	652	<0.3
46	144	P31	629	<0.3
47	225	Fm-3m	626	<0.3
48	58	Pnnm	617	<0.3
49	145	P32	610	<0.3
50	173	P63	596	<0.3
51	122	I-42d	587	<0.3
52	154	P3221	586	<0.3
53	87	I4/m	576	<0.3
54	165	P-3c1	564	<0.3
55	169	P61	537	<0.3
56	198	P213	528	<0.3
57	31	Pmn21	525	<0.3
58	45	Iba2	503	<0.3
59	170	P65	499	<0.3
60	166	R-3m	473	<0.3
61	142	I41/acd	455	<0.3
62	68	Ccca	413	<0.3
63	54	Pcca	403	<0.3
=64	155	R32	402	<0.3
=64	130	P4/ncc	402	<0.3
66	163	P-31c	371	<0.3
67	72	Ibam	357	<0.3
68	110	I41cd	346	<0.3
69	8	Cm	312	<0.3
70	159	P31c	297	<0.3
71	217	I-43m	281	<0.3
72	220	I-43d	268	<0.3
73	34	Pnn2	265	<0.3
74	59	Pmmn	260	<0.3
=75	73	Ibca	248	<0.3
=75	160	R3m	248	<0.3
77	178	P6122	246	<0.3
78	79	I4	236	<0.3
79	55	Pbam	231	<0.3
80	194	P63/mmc	228	<0.3
81	113	P-421m	227	<0.3
82	80	I41	219	<0.3
83	143	P3	209	<0.3
84	23	I222	200	<0.3
85	81	P-4	194	<0.3
86	126	P4/nnc	185	<0.3
87	179	P6522	182	<0.3
=88	74	Imma	181	<0.3
=88	129	P4/nmm	181	<0.3

90	40	Ama2	178	<0.3
91	139	I4/mmm	176	<0.3
92	94	P42212	164	<0.3
=93	121	I-42m	162	<0.3
=93	118	P-4n2	162	<0.3
95	141	I41/amd	159	<0.3
96	32	Pba2	156	<0.3
=97	221	Pm-3m	154	<0.3
=97	197	I23	154	<0.3
99	3	P2	152	<0.3
100	136	P42/mnm	149	<0.3
101	229	Im-3m	148	<0.3
102	123	P4/mmm	141	<0.3
=103	26	Pmc21	138	<0.3
=103	190	P-62c	138	<0.3
105	227	Fd-3m	134	<0.3
106	218	P-43n	131	<0.3
107	182	P6322	129	<0.3
108	53	Pmna	127	<0.3
109	65	Cmmm	124	<0.3
110	204	Im-3	123	<0.3
=111	46	Ima2	121	<0.3
=111	228	Fd-3c	121	<0.3
113	98	I4122	117	<0.3
114	10	P2/m	115	<0.3
115	186	P63mc	112	<0.3
116	138	P42/ncm	111	<0.3
=117	37	Ccc2	108	<0.3
=117	30	Pnc2	108	<0.3
=117	222	Pn-3n	108	<0.3
=117	215	P-43m	108	<0.3
=117	206	Ia-3	108	<0.3
122	84	P42/m	104	<0.3
123	192	P6/mcc	102	<0.3
124	66	Cccm	101	<0.3
125	137	P42/nmc	100	<0.3
=126	128	P4/mnc	98	<0.3
=126	104	P4nc	98	<0.3
128	203	Fd-3	96	<0.3
129	135	P42/mbc	94	<0.3
=130	230	Ia-3d	93	<0.3
=130	164	P-3m1	93	<0.3
132	71	Immm	92	<0.3
=133	219	F-43c	89	<0.3
=133	106	P42bc	89	<0.3
135	50	Pban	88	<0.3
=136	77	P42	87	<0.3
=136	140	I4/mcm	87	<0.3
138	150	P321	86	<0.3
=139	158	P3c1	85	<0.3

=139	120	I-4c2	85	<0.3
=141	69	Fmmm	84	<0.3
=141	196	F23	84	<0.3
143	17	P2221	81	<0.3
144	124	P4/mcc	80	<0.3
145	131	P42/mmc	75	<0.3
146	199	I213	74	<0.3
=147	91	P4122	73	<0.3
=147	42	Fmm2	73	<0.3
=149	44	Imm2	72	<0.3
=149	223	Pm-3n	72	<0.3
151	90	P4212	70	<0.3
152	95	P4322	68	<0.3
153	191	P6/mmm	67	<0.3
154	127	P4/mbm	66	<0.3
155	24	I212121	63	<0.3
156	117	P-4b2	62	<0.3
=157	21	C222	61	<0.3
=157	171	P62	61	<0.3
159	48	Pnnn	60	<0.3
=160	97	I422	58	<0.3
=160	67	Cmma	58	<0.3
=160	193	P63/mcm	58	<0.3
163	51	Pmma	57	<0.3
164	226	Fm-3c	56	<0.3
165	216	F-43m	55	<0.3
166	180	P6222	54	<0.3
167	39	Abm2	52	<0.3
=168	213	P4132	49	<0.3
=168	134	P42/nnm	49	<0.3
170	172	P64	47	<0.3
=171	75	P4	46	<0.3
=171	210	F4132	46	<0.3
173	109	I41md	44	<0.3
174	202	Fm-3	42	<0.3
=175	83	P4/m	39	<0.3
=175	211	I432	39	<0.3
=175	201	Pn-3	39	<0.3
178	133	P42/nbc	37	<0.3
=179	212	P4332	36	<0.3
=179	175	P6/m	36	<0.3
=181	209	F432	35	<0.3
=181	181	P6422	35	<0.3
=181	16	P222	35	<0.3
=184	224	Pn-3m	33	<0.3
=184	162	P-31m	33	<0.3
=184	108	I4cm	33	<0.3
=187	47	Pmmm	32	<0.3
=187	187	P-6m2	32	<0.3
189	185	P63cm	30	<0.3

=190	22	F222	29	<0.3
=190	112	P-42c	29	<0.3
=190	103	P4cc	29	<0.3
=193	200	Pm-3	28	<0.3
=193	119	I-4m2	28	<0.3
=195	189	P-62m	27	<0.3
=195	116	P-4c2	27	<0.3
197	102	P42nm	26	<0.3
=198	214	I4132	25	<0.3
=198	151	P3112	25	<0.3
=200	6	Pm	24	<0.3
=200	38	Amm2	24	<0.3
=200	168	P6	24	<0.3
=203	174	P-6	23	<0.3
=203	125	P4/nbm	23	<0.3
205	27	Pcc2	22	<0.3
=206	49	Pccm	18	<0.3
=206	157	P31m	18	<0.3
=208	153	P3212	17	<0.3
=208	132	P42/mcm	17	<0.3
=210	195	P23	16	<0.3
=210	149	P312	16	<0.3
212	188	P-6c2	15	<0.3
=213	207	P432	14	<0.3
=213	107	I4mm	14	<0.3
215	28	Pma2	13	<0.3
216	25	Pmm2	11	<0.3
217	184	P6cc	10	<0.3
=218	93	P4222	9	<0.3
=218	177	P622	9	<0.3
=220	89	P422	8	<0.3
=220	156	P3m1	8	<0.3
=222	35	Cmm2	6	<0.3
=222	208	P4232	6	<0.3
=222	111	P-42m	6	<0.3
=222	101	P42cm	6	<0.3
=226	99	P4mm	4	<0.3
=226	183	P6mm	4	<0.3
=226	115	P-4m2	4	<0.3
=226	100	P4bm	4	<0.3
230	105	P42mc	2	<0.3