

Cambridge Structural Database
1 January 2020

CSD Space Group Statistics – Space Group Number 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.

SG No.	Rank	Space Group	No. in CSD	% of CSD
1	10	P1	10085	1.0
2	2	P-1	261118	25.0
3	100	P2	188	<0.3
4	5	P21	53515	5.1
5	11	C2	8849	0.8
6	196	Pm	36	<0.3
7	18	Pc	4659	0.4
8	70	Cm	377	<0.3
9	8	Cc	10872	1.0
10	119	P2/m	146	<0.3
11	17	P21/m	4931	0.5
12	16	C2/m	5275	0.5
13	15	P2/c	6784	0.6
14	1	P21/c	358797	34.3
15	3	C2/c	86939	8.3
16	=191	P222	38	<0.3
17	147	P2221	99	<0.3
18	19	P21212	4243	0.4
19	4	P212121	73291	7.0
20	25	C2221	1834	<0.3
21	162	C222	71	<0.3
22	=199	F222	34	<0.3
23	89	I222	235	<0.3
24	=159	I212121	73	<0.3
25	=217	Pmm2	12	<0.3
26	111	Pmc21	162	<0.3
27	202	Pcc2	31	<0.3
28	215	Pma2	17	<0.3
29	14	Pca21	7825	0.7
30	120	Pnc2	143	<0.3
31	60	Pmn21	604	<0.3
32	103	Pba2	182	<0.3
33	7	Pna21	14387	1.4
34	74	Pnn2	307	<0.3
35	220	Cmm2	10	<0.3
36	28	Cmc21	1424	<0.3
37	130	Ccc2	120	<0.3
38	=188	Amm2	40	<0.3

39	=169	Abm2	60	<0.3
40	96	Ama2	201	<0.3
41	37	Aba2	1113	<0.3
42	=152	Fmm2	85	<0.3
43	22	Fdd2	3496	0.3
44	154	Imm2	82	<0.3
45	59	Iba2	605	<0.3
46	=123	Ima2	141	<0.3
47	195	Pmmm	37	<0.3
48	=164	Pnnn	67	<0.3
49	212	Pccm	21	<0.3
50	=141	Pban	106	<0.3
51	=167	Pmma	65	<0.3
52	36	Pnna	1116	<0.3
53	114	Pmna	156	<0.3
54	65	Pcca	494	<0.3
55	=78	Pbam	297	<0.3
56	21	Pccn	3672	0.4
57	40	Pbcm	1007	<0.3
58	53	Pnnm	729	<0.3
59	=76	Pmmn	298	<0.3
60	12	Pbcn	8727	0.8
61	6	Pbca	34082	3.3
62	9	Pnma	10750	1.0
63	38	Cmcm	1025	<0.3
64	31	Cmca	1276	<0.3
65	=105	Cmmm	180	<0.3
66	=127	Cccm	126	<0.3
67	163	Cmma	69	<0.3
68	63	Ccca	504	<0.3
69	=135	Fmmm	113	<0.3
70	35	Fddd	1141	<0.3
71	117	Immm	148	<0.3
72	68	Ibam	415	<0.3
73	=76	Ibca	298	<0.3
74	=80	Imma	285	<0.3
75	171	P4	59	<0.3
76	43	P41	934	<0.3
77	133	P42	116	<0.3
78	46	P43	796	<0.3
79	=80	I4	285	<0.3
80	84	I41	259	<0.3
81	90	P-4	227	<0.3
82	27	I-4	1440	<0.3
83	183	P4/m	47	<0.3
84	138	P42/m	112	<0.3
85	44	P4/n	890	<0.3
86	30	P42/n	1327	<0.3
87	51	I4/m	736	<0.3
88	20	I41/a	3736	0.4

89	216	P422	13	<0.3
90	148	P4212	98	<0.3
91	=152	P4122	85	<0.3
92	23	P41212	1971	<0.3
93	=221	P4222	9	<0.3
94	95	P42212	204	<0.3
95	151	P4322	89	<0.3
96	26	P43212	1783	<0.3
97	150	I422	93	<0.3
98	108	I4122	173	<0.3
99	=224	P4mm	6	<0.3
100	=224	P4bm	6	<0.3
101	=221	P42cm	9	<0.3
102	=203	P42nm	30	<0.3
103	201	P4cc	33	<0.3
104	=135	P4nc	113	<0.3
105	230	P42mc	2	<0.3
106	140	P42bc	107	<0.3
107	208	I4mm	25	<0.3
108	187	I4cm	41	<0.3
109	173	I41md	56	<0.3
110	67	I41cd	418	<0.3
111	=224	P-42m	6	<0.3
112	=197	P-42c	35	<0.3
113	83	P-421m	264	<0.3
114	32	P-421c	1260	<0.3
115	228	P-4m2	5	<0.3
116	186	P-4c2	42	<0.3
117	=167	P-4b2	65	<0.3
118	107	P-4n2	177	<0.3
119	190	I-4m2	39	<0.3
120	=143	I-4c2	105	<0.3
121	93	I-42m	213	<0.3
122	55	I-42d	673	<0.3
123	=105	P4/mmm	180	<0.3
124	=145	P4/mcc	104	<0.3
125	=199	P4/nbm	34	<0.3
126	=91	P4/nnc	224	<0.3
127	=159	P4/mbm	73	<0.3
128	98	P4/mnc	194	<0.3
129	=91	P4/nmm	224	<0.3
130	62	P4/ncc	517	<0.3
131	=123	P42/mmc	141	<0.3
132	=209	P42/mcm	22	<0.3
133	184	P42/nbc	45	<0.3
134	=169	P42/nnm	60	<0.3
135	=141	P42/mbc	106	<0.3
136	99	P42/mnm	192	<0.3
137	131	P42/nmc	118	<0.3
138	115	P42/ncm	155	<0.3

139	85	I4/mmm	252	<0.3
140	=121	I4/mcm	142	<0.3
141	=87	I41/amd	243	<0.3
142	61	I41/acd	544	<0.3
143	=87	P3	243	<0.3
144	48	P31	759	<0.3
145	49	P32	752	<0.3
146	29	R3	1381	<0.3
147	33	P-3	1170	<0.3
148	13	R-3	8717	0.8
149	214	P312	18	<0.3
150	=145	P321	104	<0.3
151	206	P3112	27	<0.3
152	41	P3121	952	<0.3
153	=209	P3212	22	<0.3
154	50	P3221	744	<0.3
155	66	R32	492	<0.3
156	223	P3m1	8	<0.3
157	207	P31m	26	<0.3
158	=143	P3c1	105	<0.3
159	72	P31c	359	<0.3
160	=80	R3m	285	<0.3
161	39	R3c	1021	<0.3
162	179	P-31m	51	<0.3
163	64	P-31c	495	<0.3
164	125	P-3m1	136	<0.3
165	47	P-3c1	776	<0.3
166	57	R-3m	635	<0.3
167	24	R-3c	1875	<0.3
168	205	P6	28	<0.3
169	54	P61	675	<0.3
170	56	P65	655	<0.3
171	156	P62	79	<0.3
172	=174	P64	55	<0.3
173	52	P63	731	<0.3
174	=191	P-6	38	<0.3
175	180	P6/m	50	<0.3
176	34	P63/m	1159	<0.3
177	=217	P622	12	<0.3
178	75	P6122	305	<0.3
179	86	P6522	244	<0.3
180	158	P6222	76	<0.3
181	=181	P6422	48	<0.3
182	102	P6322	183	<0.3
183	229	P6mm	4	<0.3
184	=217	P6cc	12	<0.3
185	=197	P63cm	35	<0.3
186	118	P63mc	147	<0.3
187	185	P-6m2	44	<0.3
188	213	P-6c2	19	<0.3

189	=181	P-62m	48	<0.3
190	104	P-62c	181	<0.3
191	=127	P6/mmm	126	<0.3
192	129	P6/mcc	124	<0.3
193	=159	P63/mcm	73	<0.3
194	69	P63/mmc	393	<0.3
195	=209	P23	22	<0.3
196	134	F23	114	<0.3
197	101	I23	186	<0.3
198	58	P213	620	<0.3
199	=121	I213	142	<0.3
200	=188	Pm-3	40	<0.3
201	177	Pn-3	53	<0.3
202	176	Fm-3	54	<0.3
203	126	Fd-3	127	<0.3
204	=112	Im-3	157	<0.3
205	42	Pa-3	947	<0.3
206	116	Ia-3	149	<0.3
207	=191	P432	38	<0.3
208	=224	P4232	6	<0.3
209	=174	F432	55	<0.3
210	166	F4132	66	<0.3
211	157	I432	77	<0.3
212	178	P4332	52	<0.3
213	=164	P4132	67	<0.3
214	=203	I4132	30	<0.3
215	=135	P-43m	113	<0.3
216	172	F-43m	58	<0.3
217	71	I-43m	370	<0.3
218	110	P-43n	163	<0.3
219	139	F-43c	110	<0.3
220	73	I-43d	309	<0.3
221	=78	Pm-3m	297	<0.3
222	109	Pn-3n	171	<0.3
223	149	Pm-3n	96	<0.3
224	=191	Pn-3m	38	<0.3
225	45	Fm-3m	803	<0.3
226	155	Fm-3c	81	<0.3
227	97	Fd-3m	198	<0.3
228	=112	Fd-3c	157	<0.3
229	94	Im-3m	205	<0.3
230	132	Ia-3d	117	<0.3