

Cambridge Structural Database
1 January 2021

CSD Space Group Statistics – Space Group Number Ordering

Space group frequency ranking for the 1,106,766 CSD structures for which the space group is fully defined. Statistics for enantiomorphous space groups are as reported in the CSD. 868,614 (78 %) of structures adopt centrosymmetric space groups, 238,154 (22 %) adopt non-centrosymmetric space groups, and 179,033 (16 %) structures adopt Sohncke space groups.

SG No.	Rank	Space Group	No. in CSD	% of CSD
1	10	P1	10749	1.0
2	2	P-1	276898	25.0
3	105	P2	193	<0.3
4	5	P21	56655	5.1
5	11	C2	9344	0.8
6	=191	Pm	42	<0.3
7	18	Pc	4942	0.4
8	70	Cm	398	<0.3
9	8	Cc	11478	1.0
10	=113	P2/m	165	<0.3
11	17	P21/m	5217	0.5
12	16	C2/m	5590	0.5
13	15	P2/c	7197	0.7
14	1	P21/c	379033	34.2
15	3	C2/c	91922	8.3
16	=195	P222	39	<0.3
17	=147	P2221	104	<0.3
18	19	P21212	4452	0.4
19	4	P212121	77078	7.0
20	25	C2221	1946	<0.3
21	163	C222	76	<0.3
22	=199	F222	36	<0.3
23	89	I222	247	<0.3
24	162	I212121	77	<0.3
25	=218	Pmm2	12	<0.3
26	=109	Pmc21	179	<0.3
27	=199	Pcc2	36	<0.3
28	214	Pma2	20	<0.3
29	14	Pca21	8352	0.8
30	=121	Pnc2	156	<0.3
31	60	Pmn21	629	<0.3
32	108	Pba2	188	<0.3
33	7	Pna21	15163	1.4
34	=76	Pnn2	319	<0.3
35	220	Cmm2	10	<0.3
36	27	Cmc21	1511	<0.3
37	132	Ccc2	131	<0.3
38	=188	Amm2	45	<0.3

39	=169	Abm2	64	<0.3
40	99	Ama2	211	<0.3
41	37	Aba2	1166	<0.3
42	154	Fmm2	88	<0.3
43	22	Fdd2	3681	0.3
44	157	Imm2	83	<0.3
45	59	Iba2	637	<0.3
46	118	Ima2	159	<0.3
47	=193	Pmmm	41	<0.3
48	165	Pnnn	72	<0.3
49	=212	Pccm	22	<0.3
50	=141	Pban	112	<0.3
51	164	Pmma	73	<0.3
52	36	Pnna	1178	<0.3
53	115	Pmna	163	<0.3
54	65	Pcca	518	<0.3
55	=76	Pbam	319	<0.3
56	21	Pccn	3874	0.4
57	40	Pbcm	1077	<0.3
58	53	Pnnm	766	<0.3
59	81	Pmmn	307	<0.3
60	12	Pbcn	9189	0.8
61	6	Pbca	35900	3.2
62	9	Pnma	11274	1.0
63	39	Cmcm	1079	<0.3
64	31	Cmca	1350	<0.3
65	98	Cmmm	212	<0.3
66	=128	Cccm	136	<0.3
67	=159	Cmma	81	<0.3
68	63	Ccca	523	<0.3
69	=128	Fmmm	136	<0.3
70	34	Fddd	1222	<0.3
71	123	Immm	152	<0.3
72	67	Ibam	445	<0.3
73	80	Ibca	314	<0.3
74	83	Imma	299	<0.3
75	=171	P4	63	<0.3
76	42	P41	987	<0.3
77	=134	P42	125	<0.3
78	46	P43	853	<0.3
79	82	I4	300	<0.3
80	85	I41	268	<0.3
81	90	P-4	239	<0.3
82	28	I-4	1485	<0.3
83	185	P4/m	49	<0.3
84	=138	P42/m	115	<0.3
85	44	P4/n	949	<0.3
86	30	P42/n	1392	<0.3
87	48	I4/m	798	<0.3
88	20	I41/a	3946	0.4

89	217	P422	13	<0.3
90	=147	P4212	104	<0.3
91	152	P4122	96	<0.3
92	23	P41212	2083	<0.3
93	=221	P4222	9	<0.3
94	94	P42212	221	<0.3
95	150	P4322	99	<0.3
96	26	P43212	1886	<0.3
97	149	I422	103	<0.3
98	104	I4122	194	<0.3
99	=224	P4mm	6	<0.3
100	=224	P4bm	6	<0.3
101	=221	P42cm	9	<0.3
102	=203	P42nm	32	<0.3
103	202	P4cc	35	<0.3
104	133	P4nc	128	<0.3
105	230	P42mc	2	<0.3
106	144	P42bc	111	<0.3
107	=207	I4mm	26	<0.3
108	=188	I4cm	45	<0.3
109	=176	I41md	59	<0.3
110	69	I41cd	434	<0.3
111	=224	P-42m	6	<0.3
112	=199	P-42c	36	<0.3
113	79	P-421m	315	<0.3
114	32	P-421c	1317	<0.3
115	228	P-4m2	5	<0.3
116	190	P-4c2	43	<0.3
117	=166	P-4b2	67	<0.3
118	=106	P-4n2	192	<0.3
119	=193	I-4m2	41	<0.3
120	137	I-4c2	116	<0.3
121	93	I-42m	224	<0.3
122	55	I-42d	708	<0.3
123	102	P4/mmm	201	<0.3
124	=141	P4/mcc	112	<0.3
125	=178	P4/nbm	58	<0.3
126	91	P4/nnc	236	<0.3
127	158	P4/mbm	82	<0.3
128	96	P4/mnc	216	<0.3
129	92	P4/nmm	230	<0.3
130	62	P4/ncc	532	<0.3
131	=124	P42/mmc	148	<0.3
132	=212	P42/mcm	22	<0.3
133	=186	P42/nbc	46	<0.3
134	173	P42/nnm	62	<0.3
135	=141	P42/mbc	112	<0.3
136	97	P42/mnm	214	<0.3
137	136	P42/nmc	122	<0.3
138	117	P42/ncm	160	<0.3

139	84	I4/mmm	287	<0.3
140	=121	I4/mcm	156	<0.3
141	88	I41/amd	255	<0.3
142	61	I41/acd	580	<0.3
143	87	P3	259	<0.3
144	51	P31	791	<0.3
145	49	P32	797	<0.3
146	29	R3	1469	<0.3
147	33	P-3	1239	<0.3
148	13	R-3	9176	0.8
149	216	P312	18	<0.3
150	=145	P321	108	<0.3
151	206	P3112	27	<0.3
152	41	P3121	1008	<0.3
153	=209	P3212	25	<0.3
154	50	P3221	793	<0.3
155	64	R32	520	<0.3
156	223	P3m1	8	<0.3
157	=207	P31m	26	<0.3
158	=145	P3c1	108	<0.3
159	71	P31c	383	<0.3
160	75	R3m	323	<0.3
161	38	R3c	1103	<0.3
162	=171	P-31m	63	<0.3
163	66	P-31c	514	<0.3
164	119	P-3m1	158	<0.3
165	47	P-3c1	811	<0.3
166	57	R-3m	678	<0.3
167	24	R-3c	1992	<0.3
168	=203	P6	32	<0.3
169	54	P61	711	<0.3
170	56	P65	696	<0.3
171	156	P62	84	<0.3
172	=178	P64	58	<0.3
173	52	P63	767	<0.3
174	=191	P-6	42	<0.3
175	175	P6/m	60	<0.3
176	35	P63/m	1219	<0.3
177	=209	P622	25	<0.3
178	78	P6122	317	<0.3
179	86	P6522	262	<0.3
180	155	P6222	87	<0.3
181	182	P6422	52	<0.3
182	103	P6322	196	<0.3
183	229	P6mm	4	<0.3
184	=218	P6cc	12	<0.3
185	=197	P63cm	38	<0.3
186	=113	P63mc	165	<0.3
187	=183	P-6m2	50	<0.3
188	215	P-6c2	19	<0.3

189	=183	P-62m	50	<0.3
190	=106	P-62c	192	<0.3
191	130	P6/mmm	135	<0.3
192	126	P6/mcc	142	<0.3
193	161	P63/mcm	79	<0.3
194	68	P63/mmc	438	<0.3
195	=209	P23	25	<0.3
196	=134	F23	125	<0.3
197	101	I23	204	<0.3
198	58	P213	671	<0.3
199	=124	I213	148	<0.3
200	=186	Pm-3	46	<0.3
201	174	Pn-3	61	<0.3
202	181	Fm-3	54	<0.3
203	127	Fd-3	138	<0.3
204	111	Im-3	172	<0.3
205	43	Pa-3	985	<0.3
206	120	Ia-3	157	<0.3
207	=197	P432	38	<0.3
208	=224	P4232	6	<0.3
209	=169	F432	64	<0.3
210	168	F4132	66	<0.3
211	=159	I432	81	<0.3
212	180	P4332	57	<0.3
213	=166	P4132	67	<0.3
214	205	I4132	31	<0.3
215	=138	P-43m	115	<0.3
216	=176	F-43m	59	<0.3
217	72	I-43m	380	<0.3
218	112	P-43n	166	<0.3
219	140	F-43c	113	<0.3
220	74	I-43d	325	<0.3
221	73	Pm-3m	330	<0.3
222	=109	Pn-3n	179	<0.3
223	151	Pm-3n	98	<0.3
224	=195	Pn-3m	39	<0.3
225	45	Fm-3m	897	<0.3
226	153	Fm-3c	92	<0.3
227	95	Fd-3m	220	<0.3
228	116	Fd-3c	161	<0.3
229	100	Im-3m	210	<0.3
230	131	Ia-3d	134	<0.3