

Cambridge Structural Database
1 January 2024

CSD Space Group Statistics – Space Group Number Ordering

Space group number ranking for the 1,294,726 CSD structures for which the space group is fully defined. Statistics for enantiomorphous space groups are as reported in the CSD. 1,014,302 (78 %) of structures adopt centrosymmetric space groups, 280,424 (22 %) adopt non-centrosymmetric space groups, and 211,106 (16 %) structures adopt Sohncke space groups.

SG No.	Rank	Space Group	No. in CSD	% of CSD
1	9	P1	12,922	1.0
2	2	P-1	325,946	25.2
3	105	P2	233	<0.3
4	5	P21	67,053	5.2
5	11	C2	11,072	0.9
6	195	Pm	49	<0.3
7	18	Pc	5,930	0.5
8	72	Cm	456	<0.3
9	8	Cc	13,493	1.0
10	113	P2/m	200	<0.3
11	17	P21/m	5,932	0.5
12	16	C2/m	6,634	0.5
13	15	P2/c	8,444	0.7
14	1	P21/c	440,837	34.0
15	3	C2/c	106,626	8.2
16	=200	P222	41	<0.3
17	154	P2221	113	<0.3
18	19	P21212	5,210	0.4
19	4	P212121	90,094	7.0
20	25	C2221	2,232	<0.3
21	=164	C222	94	<0.3
22	194	F222	51	<0.3
23	87	I222	318	<0.3
24	167	I212121	87	<0.3
25	222	Pmm2	12	<0.3
26	110	Pmc21	222	<0.3
27	=198	Pcc2	42	<0.3
28	214	Pma2	21	<0.3
29	14	Pca21	9,775	0.8
30	120	Pnc2	186	<0.3
31	59	Pmn21	753	<0.3
32	112	Pba2	220	<0.3
33	7	Pna21	17,606	1.4
34	79	Pnn2	376	<0.3
35	221	Cmm2	14	<0.3
36	28	Cmc21	1,775	<0.3
37	135	Ccc2	152	<0.3
38	182	Amm2	67	<0.3

39	170	Abm2	79	<0.3
40	101	Ama2	246	<0.3
41	37	Aba2	1,342	<0.3
42	=158	Fmm2	103	<0.3
43	22	Fdd2	4,281	0.3
44	=164	Imm2	94	<0.3
45	60	Iba2	744	<0.3
46	123	Ima2	181	<0.3
47	=185	Pmmm	62	<0.3
48	=162	Pnnn	97	<0.3
49	213	Pccm	24	<0.3
50	=144	Pban	131	<0.3
51	161	Pmma	100	<0.3
52	36	Pnna	1,368	<0.3
53	117	Pmna	190	<0.3
54	66	Pcca	602	<0.3
55	78	Pbam	384	<0.3
56	21	Pccn	4,534	0.4
57	39	Pbcm	1,248	<0.3
58	53	Pnnm	906	<0.3
59	81	Pmmn	359	<0.3
60	12	Pbcn	10,623	0.8
61	6	Pbca	41,436	3.2
62	10	Pnma	12,905	1.0
63	40	Cmcm	1,237	<0.3
64	31	Cmca	1,573	<0.3
65	89	Cmmm	303	<0.3
66	129	Cccm	165	<0.3
67	150	Cmma	124	<0.3
68	67	Ccca	585	<0.3
69	124	Fmmm	178	<0.3
70	34	Fddd	1,425	<0.3
71	=108	Immm	223	<0.3
72	68	Ibam	534	<0.3
73	84	Ibca	352	<0.3
74	74	Imma	404	<0.3
75	=171	P4	78	<0.3
76	43	P41	1,164	<0.3
77	=137	P42	137	<0.3
78	46	P43	1,036	<0.3
79	83	I4	353	<0.3
80	86	I41	321	<0.3
81	93	P-4	288	<0.3
82	29	I-4	1,718	<0.3
83	=185	P4/m	62	<0.3
84	146	P42/m	127	<0.3
85	45	P4/n	1,120	<0.3
86	30	P42/n	1,633	<0.3
87	48	I4/m	986	<0.3
88	20	I41/a	4,568	0.4

89	=216	P422	19	<0.3
90	=139	P4212	134	<0.3
91	=148	P4122	125	<0.3
92	23	P41212	2,419	<0.3
93	223	P4222	10	<0.3
94	96	P42212	266	<0.3
95	152	P4322	119	<0.3
96	26	P43212	2,177	<0.3
97	=137	I422	137	<0.3
98	91	I4122	299	<0.3
99	=224	P4mm	9	<0.3
100	219	P4bm	17	<0.3
101	=224	P42cm	9	<0.3
102	206	P42nm	36	<0.3
103	=200	P4cc	41	<0.3
104	130	P4nc	160	<0.3
105	230	P42mc	3	<0.3
106	142	P42bc	133	<0.3
107	211	I4mm	29	<0.3
108	=190	I4cm	55	<0.3
109	181	I41md	70	<0.3
110	70	I41cd	507	<0.3
111	=224	P-42m	9	<0.3
112	204	P-42c	40	<0.3
113	80	P-421m	373	<0.3
114	33	P-421c	1,450	<0.3
115	228	P-4m2	7	<0.3
116	188	P-4c2	58	<0.3
117	=158	P-4b2	103	<0.3
118	=108	P-4n2	223	<0.3
119	197	I-4m2	47	<0.3
120	=144	I-4c2	131	<0.3
121	103	I-42m	237	<0.3
122	58	I-42d	810	<0.3
123	102	P4/mmm	243	<0.3
124	151	P4/mcc	123	<0.3
125	177	P4/nbm	74	<0.3
126	88	P4/nnc	317	<0.3
127	157	P4/mbm	104	<0.3
128	98	P4/mnc	254	<0.3
129	95	P4/nmm	268	<0.3
130	62	P4/ncc	656	<0.3
131	125	P42/mmc	175	<0.3
132	209	P42/mcm	34	<0.3
133	187	P42/nbc	60	<0.3
134	179	P42/nnm	72	<0.3
135	143	P42/mbc	132	<0.3
136	=99	P42/mnm	247	<0.3
137	128	P42/nmc	167	<0.3
138	127	P42/ncm	173	<0.3

139	75	I4/mmm	395	<0.3
140	126	I4/mcm	174	<0.3
141	85	I41/amd	342	<0.3
142	61	I41/acd	679	<0.3
143	90	P3	300	<0.3
144	50	P31	937	<0.3
145	49	P32	943	<0.3
146	27	R3	1,855	<0.3
147	32	P-3	1,458	<0.3
148	13	R-3	10,441	0.8
149	215	P312	20	<0.3
150	147	P321	126	<0.3
151	=207	P3112	35	<0.3
152	44	P3121	1,130	<0.3
153	210	P3212	30	<0.3
154	51	P3221	923	<0.3
155	63	R32	614	<0.3
156	220	P3m1	16	<0.3
157	212	P31m	28	<0.3
158	=139	P3c1	134	<0.3
159	71	P31c	459	<0.3
160	76	R3m	390	<0.3
161	38	R3c	1,249	<0.3
162	=175	P-31m	75	<0.3
163	65	P-31c	603	<0.3
164	119	P-3m1	188	<0.3
165	52	P-3c1	913	<0.3
166	55	R-3m	859	<0.3
167	24	R-3c	2,398	<0.3
168	205	P6	37	<0.3
169	54	P61	860	<0.3
170	56	P65	824	<0.3
171	=162	P62	97	<0.3
172	=175	P64	75	<0.3
173	47	P63	1,003	<0.3
174	196	P-6	48	<0.3
175	183	P6/m	66	<0.3
176	35	P63/m	1,397	<0.3
177	178	P622	73	<0.3
178	82	P6122	354	<0.3
179	92	P6522	291	<0.3
180	166	P6222	91	<0.3
181	184	P6422	64	<0.3
182	107	P6322	230	<0.3
183	229	P6mm	4	<0.3
184	218	P6cc	18	<0.3
185	=200	P63cm	41	<0.3
186	121	P63mc	184	<0.3
187	193	P-6m2	52	<0.3
188	=216	P-6c2	19	<0.3

189	189	P-62m	57	<0.3
190	=99	P-62c	247	<0.3
191	116	P6/mmm	195	<0.3
192	133	P6/mcc	154	<0.3
193	155	P63/mcm	108	<0.3
194	64	P63/mmc	608	<0.3
195	=207	P23	35	<0.3
196	136	F23	144	<0.3
197	106	I23	231	<0.3
198	57	P213	816	<0.3
199	132	I213	157	<0.3
200	=190	Pm-3	55	<0.3
201	180	Pn-3	71	<0.3
202	=168	Fm-3	80	<0.3
203	131	Fd-3	158	<0.3
204	111	Im-3	221	<0.3
205	42	Pa-3	1,171	<0.3
206	122	Ia-3	182	<0.3
207	192	P432	54	<0.3
208	227	P4232	8	<0.3
209	156	F432	107	<0.3
210	=171	F4132	78	<0.3
211	=158	I432	103	<0.3
212	=173	P4332	77	<0.3
213	=168	P4132	80	<0.3
214	=198	I4132	42	<0.3
215	114	P-43m	199	<0.3
216	=173	F-43m	77	<0.3
217	69	I-43m	515	<0.3
218	104	P-43n	236	<0.3
219	=148	F-43c	125	<0.3
220	77	I-43d	385	<0.3
221	73	Pm-3m	432	<0.3
222	115	Pn-3n	198	<0.3
223	=139	Pm-3n	134	<0.3
224	=200	Pn-3m	41	<0.3
225	41	Fm-3m	1,226	<0.3
226	153	Fm-3c	115	<0.3
227	97	Fd-3m	265	<0.3
228	118	Fd-3c	189	<0.3
229	94	Im-3m	271	<0.3
230	134	Ia-3d	153	<0.3