Lattice parameters a, b, c (Å) and angles α, β, γ (degrees) of the SICs at compositions n, where n is the number of Si in the primitive cell. Each class is labeled with an absolute index L and a relative index l within each composition. Multiplicities M and lattice types (Lat.), as deduced from the analysis of the residual symmetry group, are reported: Cub = cubic, Tet = tetragonal, Trg = trigonal, Ort = orthorhombic, Mon = monoclinic, Trc = triclinic. Lattice types might not refer to the conventional definition.

n	L	l	M	a	b	c	α	β	γ	Lat.
12	1	1	1	11.946	11.946	11.946	90.00	90.00	90.00	Cub
11	2	1	12	11.958	12.020	12.020	90.00	90.00	90.00	Tet
10	3	1	24	12.041	12.089	12.041	90.08	90.16	89.92	Mon
10	4	2	6	12.098	12.098	11.986	90.00	90.00	90.00	Tet
10	5	3	6	12.095	12.095	11.969	90.00	90.00	90.00	Tet
10	6	4	6	12.112	12.112	11.950	90.00	90.00	90.00	Tet
10	7	5	24	12.028	12.078	12.028	89.86	89.98	90.14	Mon
9	8	1	24	12.120	12.152	12.014	89.70	90.00	90.00	Mon
9	9	2	48	12.106	12.151	12.052	89.90	90.14	90.06	Trc
9	10	3	16	12.086	12.086	12.086	90.01	90.01	90.01	Trg
9	11	4	24	12.179	12.145	12.056	90.00	89.84	90.00	Mon
9	12	5	12	12.194	12.194	11.985	90.00	90.00	90.00	Tet
9	13	6	48	12.121	12.151	12.069	89.94	90.25	89.78	Trc
9	14	7	48	12.107	12.113	12.115	90.44	89.87	89.97	Trc
8	15	1	48	12.209	12.228	12.059	89.74	90.21	89.88	Trc
8	16	2	48	12.248	12.218	12.087	89.94	90.03	89.81	Trc
8	17	3	24	12.159	12.159	12.068	89.85	90.15	90.03	Mon
8	18	4	6	12.202	12.099	12.099	90.00	90.00	90.00	Tet
8	19	5	48	12.202	12.200	12.120	89.56	89.91	90.13	Trc
8	20	6	24	12.215	12.215	12.146	90.40	89.60	89.97	Mon
8	21	7	48	12.167	12.175	12.140	90.32	90.08	89.98	Trc
8	22	8	12	12.204	12.162	12.162	89.37	90.00	90.00	Ort
8	23	9	48	12.177	12.174	12.140	89.90	90.39	90.13	Trc
8	24	10	24	12.196	12.196	12.139	90.00	90.00	90.73	Mon
8	25	11	24	12.226	12.159	12.102	90.00	90.18	90.00	Mon
8	26	12	24	12.210	12.140	12.142	90.00	90.10	90.00	Mon
8	27	13	12	12.212	12.116	12.116	90.06	90.22	89.78	Mon
8	28	14	6	12.261	12.183	12.183	90.00	90.00	90.00	Tet
8	29	15	24	12.223	12.134	12.169	90.00	90.00	90.50	Mon
8	30	16	24	12.195	12.195	12.157	89.56	90.44	89.49	Mon

n	L	l	M	a	b	c	α	β	γ	Lat.
8	31	17	48	12.160	12.162	12.129	90.27	90.01	90.03	Trc
8	32	18	3	12.287	12.287	12.010	90.00	90.00	90.00	Tet
7	33	1	48	12.238	12.221	12.151	89.64	90.09	90.16	Trc
7	34	2	48	12.235	12.229	12.210	90.00	90.21	89.74	Trc
7	35	3	48	12.226	12.235	12.202	90.05	90.04	90.53	Trc
7	36	4	48	12.258	12.262	12.191	89.89	89.64	90.19	Trc
7	37	5	24	12.299	12.243	12.251	90.60	90.00	90.00	Mon
7	38	6	48	12.234	12.240	12.135	90.15	90.23	90.03	Trc
7	39	7	48	12.249	12.216	12.238	89.49	90.53	89.82	Trc
7	40	8	24	12.309	12.320	12.106	89.78	90.00	90.00	Mon
7	41	9	48	12.245	12.174	12.225	90.28	90.15	90.28	Trc
7	42	10	24	12.274	12.205	12.157	90.00	90.00	90.19	Mon
7	43	11	48	12.225	12.190	12.190	90.18	90.33	90.00	Trc
7	44	12	12	12.260	12.200	12.200	90.00	90.00	90.00	Tet
7	45	13	12	12.212	12.137	12.137	90.00	90.00	90.00	Tet
7	46	14	24	12.315	12.235	12.215	90.00	90.00	89.62	Mon
7	47	15	48	12.280	12.251	12.177	89.63	89.75	89.96	Trc
7	48	16	48	12.282	12.270	12.172	89.53	90.40	89.75	Trc
7	49	17	48	12.270	12.267	12.183	90.21	89.77	90.04	Trc
7	50	18	48	12.268	12.277	12.163	90.12	90.41	90.42	Trc
7	51	19	48	12.280	12.228	12.249	89.64	89.77	90.95	Trc
7	52	20	48	12.295	12.223	12.137	89.96	90.31	89.84	Trc
6	53	1	12	12.381	12.294	12.294	90.00	90.00	90.00	Tet
6	54	2	48	12.313	12.237	12.302	89.92	90.37	90.12	Trc
6	55	3	48	12.307	12.295	12.256	89.48	90.35	89.90	Trc
6	56	4	48	12.315	12.314	12.227	90.19	90.29	90.30	Trc
6	57	5	8	12.243	12.243	12.243	90.39	90.39	90.39	Trg
6	58	6	48	12.334	12.243	12.294	89.96	90.00	90.79	Trc
6	59	7	12	12.363	12.321	12.222	90.00	90.00	90.00	Ort
6	60	8	24	12.269	12.313	12.313	89.50	90.70	89.30	Mon
6	61	9	48	12.292	12.304	12.204	89.96	90.30	90.43	Trc
6	62	10	24	12.286	12.286	12.254	90.03	89.97	90.30	Mon
6	63	11	48	12.324	12.296	12.273	89.71	89.98	90.46	Trc
6	64	12	48	12.339	12.276	12.295	90.46	90.03	89.79	Trc
6	65	13	12	12.354	12.348	12.214	90.00	90.00	90.00	Ort
6	66	14	48	12.358	12.303	12.303	90.61	90.57	90.32	Trc
6	67	15	48	12.315	12.286	12.205	89.78	90.41	89.81	Trc
6	68	16	24	12.333	12.333	12.204	90.07	89.93	90.05	Mon
6	69	17	12	12.240	12.240	12.287	90.00	90.00	90.00	Tet
6	70	18	24	12.361	12.361	12.208	89.67	90.33	90.01	Mon

n	L	l	M	a	b	c	α	β	γ	Lat.
6	71	19	12	12.324	12.349	12.349	90.00	91.29	90.00	Ort
6	72	20	12	12.375	12.298	12.171	90.00	90.48	90.00	Mon
6	73	21	48	12.323	12.273	12.317	89.51	89.71	90.69	Trc
6	74	22	12	12.293	12.225	12.225	90.00	90.00	90.00	Tet
6	75	23	24	12.287	12.287	12.227	90.09	89.91	90.30	Mon
6	76	24	48	12.316	12.317	12.234	89.70	89.97	90.11	Trc
6	77	25	48	12.287	12.234	12.216	90.16	90.19	90.13	Trc
6	78	26	6	12.319	12.319	12.320	90.00	90.00	90.00	Tet
6	79	27	24	12.341	12.242	12.242	89.63	90.03	89.97	Mon
6	80	28	8	12.299	12.299	12.299	89.56	89.56	89.56	Trg
6	81	29	2	12.191	12.191	12.191	90.00	90.00	90.00	Cub
6	82	30	24	12.324	12.260	12.279	89.66	90.00	90.00	Mon
6	83	31	48	12.322	12.310	12.285	89.78	89.29	90.04	Trc
6	84	32	24	12.365	12.264	12.264	90.08	90.33	89.67	Mon
5	85	1	48	12.401	12.354	12.314	89.62	89.78	90.15	Trc
5	86	2	24	12.378	12.333	12.312	90.31	90.00	90.00	Mon
5	87	3	48	12.356	12.299	12.302	89.75	90.33	90.01	Trc
5	88	4	48	12.314	12.355	12.343	89.76	90.49	89.63	Trc
5	89	5	48	12.398	12.345	12.329	89.77	90.36	89.46	Trc
5	90	6	48	12.362	12.320	12.296	89.81	90.11	90.50	Trc
5	91	7	12	12.342	12.342	12.380	90.00	90.00	90.00	Tet
5	92	8	48	12.344	12.393	12.400	90.31	91.16	90.36	Trc
5	93	9	12	12.282	12.282	12.285	90.00	90.00	90.00	Tet
5	94	10	48	12.386	12.346	12.350	90.56	90.60	90.18	Trc
5	95	11	48	12.396	12.376	12.259	89.89	90.45	90.19	Trc
5	96	12	24	12.407	12.380	12.341	89.44	90.00	90.00	Mon
5	97	13	48	12.381	12.386	12.326	89.89	90.43	90.06	Trc
5	98	14	24	12.388	12.412	12.365	90.00	90.69	90.00	Mon
5	99	15	48	12.356	12.354	12.366	90.01	89.36	89.68	Trc
5	100	16	48	12.422	12.326	12.346	89.75	90.14	89.65	Trc
5	101	17	48	12.344	12.351	12.268	90.01	90.21	90.37	Trc
5	102	18	48	12.390	12.306	12.350	89.86	89.90	90.59	Trc
5	103	19	48	12.373	12.340	12.355	89.72	89.84	90.23	Trc
5	104	20	24	12.416	12.332	12.293	90.00	90.31	90.00	Mon
4	105	1	24	12.469	12.433	12.365	89.69	90.00	90.00	Mon
4	106	2	12	12.418	12.418	12.454	90.00	90.00	89.72	Ort
4	107	3	24	12.426	12.433	12.433	89.39	90.50	89.50	Mon
4	108	4	6	12.378	12.378	12.407	90.00	90.00	90.00	Tet
4	109	5	48	12.433	12.356	12.370	89.83	90.04	90.35	Trc
4	110	6	24	12.470	12.470	12.390	89.55	90.45	89.79	Mon

n	L	l	M	a	b	c	α	β	γ	Lat.
4	111	7	24	12.452	12.398	12.377	89.56	90.00	90.00	Mon
4	112	8	24	12.433	12.424	12.433	89.92	91.09	90.08	Mon
4	113	9	48	12.437	12.416	12.404	89.66	90.08	90.09	Trc
4	114	10	48	12.402	12.437	12.437	90.15	90.78	90.14	Trc
4	115	11	48	12.442	12.379	12.386	90.22	90.54	90.23	Trc
4	116	12	24	12.368	12.372	12.372	89.87	90.35	89.65	Mon
4	117	13	6	12.438	12.438	12.473	90.00	90.00	90.00	Tet
4	118	14	12	12.413	12.413	12.327	89.63	90.37	90.27	Mon
4	119	15	48	12.432	12.399	12.396	89.82	89.83	89.75	Trc
4	120	16	24	12.387	12.435	12.461	90.00	91.04	90.00	Mon
4	121	17	3	12.467	12.364	12.364	90.00	90.00	90.00	Tet
4	122	18	48	12.461	12.386	12.384	90.13	90.46	89.91	Trc
3	123	1	48	12.498	12.440	12.445	89.72	90.26	90.10	Trc
3	124	2	48	12.493	12.488	12.465	89.74	90.65	89.84	Trc
3	125	3	24	12.446	12.461	12.485	90.00	90.85	90.00	Mon
3	126	4	24	12.451	12.507	12.528	90.00	89.78	90.00	Mon
3	127	5	48	12.469	12.461	12.533	89.62	90.54	89.73	Trc
3	128	6	12	12.488	12.454	12.454	90.00	90.00	90.00	Tet
3	129	7	16	12.439	12.439	12.439	89.92	89.92	89.92	Trg
2	130	1	6	12.499	12.570	12.570	90.00	90.00	90.00	Tet
2	131	2	6	12.500	12.555	12.555	90.00	90.00	90.00	Tet
2	132	3	6	12.527	12.514	12.514	90.00	90.00	90.00	Tet
2	133	4	24	12.508	12.508	12.560	89.43	90.57	89.81	Mon
2	134	5	24	12.524	12.524	12.588	90.11	89.89	90.04	Mon
1	135	1	12	12.524	12.628	12.628	90.00	90.00	90.00	Tet
0	136	1	1	12.666	12.666	12.666	90.00	90.00	90.00	Cub