TABLE XVI. DEBYE TEMPERATURES OBTAINED FROM SPECIFIC HEAT DATA (θ^S) AND FROM ELASTIC CONSTANTS (θ^E)[a,b,c]

Element	θ_0^S[a] (°K)	θ_0^E[b] (°K)	Ref.	θ_{298}^E[c] (°K)	Ref.
3 Li	352 ±17	336.3 ±2.1	1	350 ±9	6, 10, 18, 19
4 Be	1160	1462	2	1367	19
6 C(d)	2240 ±5	2240 ±5	3	2010 ±166[d]	6, 10
11 Na	—	—	—	164 ±19	6, 18–20
12 Mg	396 ±54	387 ±1	1, 4	363	19
13 Al	423 ±5	428	1, 5	403 ±8[d]	5, 6, 10, 18, 19
14 Si	647 ±11	649	6	576 ±71	6, 19
19 K	—	—	—	77	18
20 Ca	—	—	—	208	19
22 Ti	—	—	—	373	19
23 V	326 ±54	399	7	394 ±18	6, 7, 19
24 Cr	—	—	—	454 ±1	6, 19
25 Mn	—	—	—	461	19
26 Fe	457 ±12	477	8	466 ±2[d]	6, 19
27 Co	—	—	—	446	19
28 Ni	427 ±14	476.2 ±0.1	1	443 ±17	6, 19
29 Cu	342 ±2	345	1, 9	332 ±6[d]	6, 10, 18, 19
30 Zn	316 ±20	324 ±8	1, 10–12	231[d]	20
31 Ga	—	—	—	89	19
32 Ge	378 ±22	375	10	323 ±48	6, 19
37 Rb	—	—	—	55	19
38 Sr	—	—	—	133	19
39 Y	—	—	—	250	21
40 Zr	—	—	—	231	19
41 Nb	—	—	—	328	19
42 Mo	459 ±11	474	13	454 ±11	6, 19
44 Ru	—	—	—	512	19
45 Rh	—	—	—	478	19
46 Pd	283 ±16	275 ±8	14	264	6, 19
47 Ag	228 ±3	227	1, 9	213 ±2[d]	6 10, 18, 19
48 Cd	252 ±48	212 ±1	15	160 ±8	10, 20
49 In	108.8 ±0.3	111.3 ±1.1	16	85	19
50 Sn(w)	236 ±24	201.6 ±2.6	17	184 ±1	10, 19
51 Sb	—	—	—	187	19
55 Cs	—	—	—	40	19
56 Ba	—	—	—	97	19
57 La	—	—	—	149	21
58 Ce(α)	—	—	—	118[e]	22
58 Ce(γ)	—	—	—	135	21
59 Pr	—	—	—	144	21
60 Nd	—	—	—	147	21
62 Sm	—	—	—	135	21
64 Gd	—	—	—	173	21
65 Tb	—	—	—	173	21

TABLE XVI. DEBYE TEMPERATURES OBTAINED FROM SPECIFIC HEAT DATA (θ^S) AND FROM ELASTIC CONSTANTS (θ^E)[a,b,c]—*Continued*

Element	θ_0^S[a] (°K)	θ_0^E[b] (°K)	Ref.	θ_{298}^E[c] (°K)	Ref.
66 Dy	—	—	—	180	21
67 Ho	—	—	—	183	21
68 Er	—	—	—	191	21
70 Yb	—	—	—	94	21
72 Hf	—	—	—	181	19
73 Ta	247 ±13	262	13	257	19
74 W	388 ±17	384	13	370 ±4[d]	6, 19
75 Re	—	—	—	421	19
76 Os	—	—	—	431	19
77 Ir	—	—	—	414	19
78 Pt	—	—	—	229 ±6	6, 10, 19
79 Au	165 ±1	162	1, 9	160 ±4	6, 10, 18–20
80 Hg	—	—	—	167	19
81 Tl	—	—	—	55	19
82 Pb	102 ±5	105	6	81 ±9	6, 10, 18, 19
83 Bi	—	—	—	113 ±2	10, 19
90 Th	170	164.2	1	158 ±1	6
94 Pu	—	—	—	178 ±1	23

[a] θ_0^S is the Debye temperature at 0°K as determined from specific heat data; values are taken from Table XV.

[b] θ_0^E is the Debye temperature at 0°K as determined from elastic constants.

[c] θ_{298}^E is the Debye temperature at 298°K as determined from elastic constants.

[d] See text for further discussion.

[e] Extrapolated from high pressure data of Voronov *et al.*[23] to zero pressure.

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