^{45}Sc(n,γ) E=thermal 1982Ti02

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	S. -c. Wu	NDS 91, 1 (2000)	15-Jul-2000

E=thermal.
Decay scheme from 1982Ti02, except as noted; 99% of primary strength.
Ge(Li) and 2 NaI detectors in pair spectrometer arrangement (1982Ti02); measured Eγ, Iγ.
Ge(Li) detectors, fast n chopper, pol targets and pol n (1980Li07); measured Eγ, Iγ at 2 p-wave and 2 s-wave resonances, and with thermal n in oriented and unoriented targets; $\gamma(\theta)$ with thermal pol n on pol targets.
Ge(Li) detectors (1971DeXX,1972DeZG); measured Eγ, Iγ, $\gamma\gamma$ coin, $\gamma\gamma(\theta)$.
Ge(Li) and NaI detectors (1970Ra02); measured $\gamma\gamma(\theta)$.
Ge(Li) detectors (1968Bo11); measured Eγ, Iγ, $\gamma\gamma$ coin.
Bent quartz crystal spectrometer (1966Va13); measured Eγ, Iγ.
For ^{45}Sc(n,γ) resonances between E(n)=0.005 and 22 keV, see 1978Li30.
Others: 1997Ka47, 1993Ko15, 1972Se19, 1966Be34, 1963Ne18.

^{46}Sc Levels

E(level)†	J$^\pi$‡	$T_{1/2}$	Comments
0.0	4$^+$		
52.011 *1*	6$^+$	10.6 μs *6*	$T_{1/2}$: from $\gamma\gamma$-delayed coin using 2 NaI detectors (1966Ka20).
142.528 *7*	1$^-$	18.75 s	
227.767 *9*	3$^+$		
280.701 *13*	5$^+$		
289.539 *8*	2$^-$		
444.137 *13*	2$^+$		
584.782 *13*	3$^-$		
627.429 *24*	3$^-$		
774.021 *22*	5$^+$		
835.092 *22*	4$^+$		
991.33 *4*	1$^+$		
1088.588 *23*	(3$^+$),4$^+$		
1124.23 *3*	4$^-$		
1270.46 *3*	4$^-$		
1321.12 *3*	3$^+$,(2$^+$,4$^+$)		
1394.18 *4*	2$^+$		
1427.90 *4*	3$^+$,4$^+$,(2$^+$)		
1526.74 *5*	4		
1642.68 *3*	4$^-$		
1692.2 *3*	3$^-$		E(level): observed by 1980Li07 only.
1707.83 *5*	2$^-$,3$^-$,4$^-$		
1763.24 *11*	2$^+$,3$^+$,4$^+$		
1799.44 *7*	2$^+$,3$^+$,4$^+$		
1886.06 *8*	3$^+$,(2$^+$)		
1919.88 *4*	3$^+$		
1921.10 *5*			
2043.45 *4*	3$^-$,(2$^-$)		
2062.25 *5*	(4$^-$)		
2070.31 *9*			
2084.47 *13*			
2114.13 *7*	3,4,(2)		
2119.30 *6*	3$^+$,4$^+$		
2184.9 *10*			E(level): reported by 1980Li07 only; fed by primary γ from capture state, but γ decay not observed.
2203.14 *6*	3$^-$		
2221.71 *11*	2$^+$		

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^{45}Sc(n,γ) E=thermal 1982Ti02 (continued)

^{46}Sc Levels (continued)

E(level)†	J$^{\pi}$‡	Comments
2252.80 *11*	2$^+$,3$^+$,4$^+$	
2291.84 *15*		
2302.58 *11*	2$^+$,3$^+$,(4$^+$)	E(level): fed by primary γ from capture state, but γ decay not observed.
2330.19 *19*		
2366.75 *21*		E(level): reported by 1980Li07 only.
2375.28 *19*		
2395.97 *9*		
2410.45 *4*	4$^+$,(3$^+$)	
2431.17 *15*		
2442.30 *4*	3,4	
2451.11 *12*		
2459.64 *9*	3$^+$	
2486.3 *10*		E(level): reported by 1980Li07 only; fed by primary γ from capture state, but γ decay not observed.
2494.48 *10*		
2521.67 *13*		
2558.91 *14*		
2568.06 *10*	3$^+$,4$^+$	
2589.99 *5*	3$^-$,4$^-$	
2643.05 *18*	3$^-$,4$^-$,(2$^-$)	
2662.72 *10*		
2694.57 *13*		
2705.24 *6*	3$^+$	
2714.09 *9*		
2783.02 *10*	3$^-$,4$^-$	
2833.94 *22*		
2855.98 *11*	2,3,4	
2863.34 *7*	2$^+$,(3$^+$)	
2890.65 *18*		
2940.19 *11*		
2956.71 *11*		
2979.67 *8*	3$^+$,4$^+$	
3002.36 *19*		
3017.06 *7*	4	
3032.02 *13*		
3056.94 *17*	2,3,4,5	
3081.65 *16*		
3094.66 *9*	3$^+$,4$^+$,(2$^+$)	
3136.32 *9*	3$^-$,4$^-$	
3176.54 *10*	4$^+$	
3191.81 *12*		
3204.94 *11*		
3229.84 *17*	2$^+$,3$^+$,4$^+$	
3260.40 *15*		
3278.76 *10*		
3314.10 *7*	2$^+$,3$^+$,4$^+$	
3381.48 *12*		
3396.67 *14*	2$^+$,3$^+$,(4$^+$)	
3414.32 *10*	2$^+$,3$^+$,4$^+$	
3424.54 *8*	3$^+$,(4$^+$)	
3443.28 *14*	2$^+$,3$^+$,4$^+$	
3474.22 *8*	3$^+$,4$^+$,(2$^+$)	
3493.24 *7*	2$^+$	
3550.31 *13*	2$^+$,3$^+$,4$^+$	
3597.07 *10*	2$^+$,3$^+$,4$^+$	
3605.26 *25*		
3620.43 *20*		

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^{45}Sc(n,γ) E=thermal 1982Ti02 (continued)

^{46}Sc Levels (continued)

E(level)†	J$^{\pi}$‡	Comments
3631.97 *14*	2$^+$,3$^+$,4$^+$,5$^+$	
3654.77 *16*		
3675.47 *8*	2$^+$,3$^+$,4$^+$	
3707.38 *16*	3$^+$,4$^+$,(2$^+$)	
3721.42 *20*		
3766.70 *9*	2$^+$,4$^+$	
3785.36 *8*	4$^+$	
3813.81 *22*		
3841.11 *14*	2$^+$,3$^+$,4$^+$	
3868.62 *12*		
3876.65 *12*	2$^+$,3$^+$,4$^+$	
3937.29 *11*		
3945.3 *4*		
4039.69 *9*		
4074.67 *25*		
4081.12 *17*		
4103.8 *3*		
4131.90 *13*		E(level): fed by primary γ from capture state, but γ decay not observed.
4142.61 *9*		
4261.46 *9*		
4294.65 *14*		
4319.09 *16*		
4383.08 *10*		
4432.77 *18*		
4447.83 *21*		
4467.08 *15*		
4522.75 *10*		
4528.54 *14*		
4587.16 *9*		
4606.43 *9*		
4694.59 *11*		
4701.03 *8*		
4719.64 *17*		
4754.3 *1*		
4761.07 *12*		
4787.27 *12*		
4873.4 *5*		
4882.57 *11*		
4961.45 *10*		
5049.44 *17*		
5092.96 *12*		
5301.83 *11*		
5346.16 *13*		
5541.5 *4*		
(8760.68 *13*)		E(level): weighted average of values from 1982Ti02 and 1980Li07. The least square fit results in the value 8760.800 *19*.

† Calculated from γ data using GTOL, a least-squares fitting program (evaluator).

‡ J deduced from combined analysis of circular polarization and angular distributions of γ's using oriented and unoriented nuclei and polarized n; parity from reaction L values (1980Li07).

^{45}Sc(n,γ) E=thermal 1982Ti02 (continued)

γ(^{46}Sc)

All branching ratio information from 1982Ti02. Where additional γ′s are included from 1980Li07 no branching correction has been made.

E_γ[†]	I_γ[‡b]	E_i(level)	J^π_i	E_f	J^π_f	Mult.[#]	α[c]	Comments
52.011[@&] 1	20 2	52.011	6^+	0.0	4^+	E2		I_γ: corrected for internal conversion. Branching=100%.
61.771 1	0.10 2	289.539	2^-	227.767	3^+			E_γ,I_γ: from 1966Va13 only.
142.528[@&] 8	27 2	142.528	1^-	0.0	4^+	E3	0.47 8	I_γ: corrected for internal conversion. Mult.: based on α and $T_{1/2}$. α: determined from γ intensity balance (1982Ti02).
147.010[@&] 7	21.8 19	289.539	2^-	142.528	1^-	M1		
216.367[@&] 10	10.7 7	444.137	2^+	227.767	3^+	M1		
227.767[@&] 16	28.3 24	227.767	3^+	0.0	4^+	M1		
228.707[@&] 22	15.0 18	280.701	5^+	52.011	6^+	M1		
280.721[@&] 18	0.93 7	280.701	5^+	0.0	4^+	M1		
295.239[@&] 13	17.2 11	584.782	3^-	289.539	2^-	M1		
301.75 30	0.010 2	444.137	2^+	142.528	1^-			E_γ,I_γ: from 1966Va13 only.
314.623[@&] 20	0.23 3	1088.588	(3^+),4^+	774.021	5^+	M1		
357.003 30	0.13 3	584.782	3^-	227.767	3^+	E1		E_γ,I_γ: from 1966Va13 only.
391.6[a] 3	0.12 12	2833.94		2442.30	3,4			
399.70[@&] 6	0.91 6	627.429	3^-	227.767	3^+	E1		
402.72[@&] 4	0.44 4	1394.18	2^+	991.33	1^+	M1		
437.486[@] 53	0.15 3	1707.83	2^-,3^-,4^-	1270.46	4^-			
442.410 70	0.33 7	584.782	3^-	142.528	1^-	E2		E_γ,I_γ: from 1966Va13 only.
476.2[a] 2	1.1 1	1799.44	2^+,3^+,4^+	1321.12	3^+,$(2^+$,$4^+)$	M1		
478.08 13	0.32 3	2521.67		2043.45	3^-,(2^-)			
485.994[@&] 21	2.56 15	1321.12	3^+,$(2^+$,$4^+)$	835.092	4^+	M1		
492.9[a] 7	0.13 13	774.021	5^+	280.701	5^+	M1		
496.77[@&] 10	0.08 4	1124.23	4^-	627.429	3^-	M1		
517.1[a] 2	0.49 7	1642.68	4^-	1124.23	4^-	M1		
[x]527.13 16	0.21 3							
539.417[@&] 30	3.26 19	1124.23	4^-	584.782	3^-	M1		
547.11[@&] 4	1.7 1	991.33	1^+	444.137	2^+	M1		
554.53[@&] 3	8.1 5	835.092	4^+	280.701	5^+	M1		
584.79[@&] 3	8.2 5	584.782	3^-	0.0	4^+	E1		
600.22[@&] 18	0.16 2	1921.10		1321.12	3^+,$(2^+$,$4^+)$			
627.48[@&] 4	10.2 6	627.429	3^-	0.0	4^+	E1		
643.08[@&] 5	1.12 7	1270.46	4^-	627.429	3^-	M1		
651.33 25	0.19 3	2714.09		2062.25	(4^-)			
685.77[@&] 6	0.62 4	1270.46	4^-	584.782	3^-	M1		
711.19[@&] 10	0.48 4	1799.44	2^+,3^+,4^+	1088.588	(3^+),4^+	M1		
721.86[@&] 4	2.12 12	774.021	5^+	52.011	6^+	M1		
749.11[&] 13	0.22 3	2070.31		1321.12	3^+,$(2^+$,$4^+)$			
773.92[@&] 4	2.60 15	774.021	5^+	0.0	4^+	M1		
807.80[@&] 6	2.64 15	1088.588	(3^+),4^+	280.701	5^+	M1		

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^{45}Sc(n,γ) E=thermal 1982Ti02 (continued)

γ(^{46}Sc) (continued)

E_γ[†]	I_γ[‡b]	E_i(level)	J^π_i	E_f	J^π_f	Mult.[#]
835.07[@] 4	1.53 9	835.092	4+	0.0	4+	M1
843.46[@&] 6	0.61 4	1124.23	4−	280.701	5+	E1
860.72[@&] 4	1.68 10	1088.588	(3+),4+	227.767	3+	M1
879.36 49	0.02 1	3937.29		3056.94	2,3,4,5	
881.87 31	0.28 4	2203.14	3−	1321.12	3+,(2+,4+)	
899.57[&] 10	0.70 5	1526.74	4	627.429	3−	
929.8[a] 4	0.29 9	1919.88	3+	991.33	1+	E2
929.85 13	0.23 2	3424.54	3+,(4+)	2494.48		
941.6[a] 2	0.47 10	1526.74	4	584.782	3−	
942.43 21	0.14 2	3056.94	2,3,4,5	2114.13	3,4,(2)	
1015.22[&] 4	1.17 7	1642.68	4−	627.429	3−	M1
^{x}1025.82 16	0.17 2					
1057.95[&] 4	1.51 8	1642.68	4−	584.782	3−	M1
1064.8[a] 3	0.21 10	1692.2	3−	627.429	3−	M1
1065.18 15	0.20 2	2459.64	3+	1394.18	2+	
1082.54 6	0.71 4	1526.74	4	444.137	2+	
1088.72 25	0.12 2	1088.588	(3+),4+	0.0	4+	
1123.58[&] 30	1.30 15	1707.83	2−,3−,4−	584.782	3−	M1
1134.57 10	0.45 4	3204.94		2070.31		
1134.7[a] 3	0.37 12	2221.71	2+	1088.588	(3+),4+	E2
1162.15 11	0.38 3	2589.99	3−,4−	1427.90	3+,4+,(2+)	
1166.63[&] 6	1.68 12	1394.18	2+	227.767	3+	M1
^{x}1191.04 37	0.07 2					
1227.79 5	1.52 9	2062.25	(4−)	835.092	4+	
1235.15 16	0.19 2	2070.31		835.092	4+	
1246.71 35	0.08 2	2568.06	3+,4+	1321.12	3+,(2+,4+)	
1251.4[a] 2	0.57 10	1394.18	2+	142.528	1−	E1
1251.67 7	0.50 3	3314.10	2+,3+,4+	2062.25	(4−)	
1268.3[a] 4	0.43 14	2589.99	3−,4−	1321.12	3+,(2+,4+)	E1
1270.43 6	1.19 7	1270.46	4−	0.0	4+	
1285.2[a] 1	1.8 1	2062.25	(4−)	774.021	5+	E1
1285.35 4	1.77 10	1427.90	3+,4+,(2+)	142.528	1−	
1321.8[a] 2	0.91 10	1321.12	3+,(2+,4+)	0.0	4+	M1
1321.87 10	0.75 6	2410.45	4+,(3+)	1088.588	(3+),4+	
1335.07[&] 4	3.15 17	1919.88	3+	584.782	3−	E1
^{x}1355.56 7	0.48 3					
1362.61 15	0.21 2	2451.11		1088.588	(3+),4+	
1375.37 35	0.08 2	3597.07	2+,3+,4+	2221.71	2+	
1405.70 12	0.27 3	2494.48		1088.588	(3+),4+	
1415.67 61	0.05 2	2043.45	3−,(2−)	627.429	3−	
1422.13 20	0.15 2	4701.03		3278.76		
^{x}1474.58 12	0.43 4					
^{x}1479.97 10	0.39 3					
1509.03 16	0.21 2	4701.03		3191.81		
1509.3[a] 2	0.59 17	1799.44	2+,3+,4+	289.539	2−	E1
1519.77 60	0.05 2	3605.26		2084.47		
1552.23 22	0.15 2	4142.61		2589.99	3−,4−	
1575.30[&] 5	1.45 8	2410.45	4+,(3+)	835.092	4+	M1
1591.84[&] 34	0.09 2	3813.81		2221.71	2+	
1592.7[a] 2	0.50 12	2366.75		774.021	5+	
1618.40[&] 19	1.43 40	2203.14	3−	584.782	3−	M1
1649.45 60	0.06 2	3176.54	4+	1526.74	4	

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^{45}Sc(n,γ) E=thermal 1982Ti02 (continued)

γ(^{46}Sc) (continued)

E_γ †	I_γ ‡b	E_i(level)	J_i^π	E_f	J_f^π
1658.30 *11*	0.41 *3*	1886.06	3+,(2+)	227.767	3+
1664.47 *25*	0.20 *2*	2291.84		627.429	3−
1668.00& *50*	0.13 *3*	2442.30	3,4	774.021	5+
1681.46 *23*	0.15 *2*	5301.83		3620.43	
x1691.74 *22*	0.47 *9*				
1693.29& *5*	2.37 *13*	1921.10		227.767	3+
1707.34 *15*	0.38 *4*	1707.83	2−,3−,4−	0.0	4+
1753.86 *6*	0.73 *3*	2043.45	3−,(2−)	289.539	2−
1763.28 *14*	0.27 *3*	1763.24	2+,3+,4+	0.0	4+
1777.27 *28*	0.52 *14*	2221.71	2+	444.137	2+
1799.66 *17*	0.24 *2*	1799.44	2+,3+,4+	0.0	4+
1803.66& *14*	0.30 *3*	2084.47		280.701	5+
1814.89& *6*	1.24 *7*	2442.30	3,4	627.429	3−
1818.46 *21*	0.21 *2*	4039.69		2221.71	2+
1829.73 *6*	0.85 *5*	2119.30	3+,4+	289.539	2−
1857.42& *6*	1.79 *10*	2442.30	3,4	584.782	3−
1870.11& *8*	0.81 *5*	2705.24	3+	835.092	4+
1879.05 *77*	0.05 *2*	2714.09		835.092	4+
1885.93 *11*	0.40 *3*	1886.06	3+,(2+)	0.0	4+
1900.84 *6*	1.31 *7*	2043.45	3−,(2−)	142.528	1−
1913.22 *16*	0.35 *4*	2203.14	3−	289.539	2−
1920.88 *29*	0.18 *3*	2694.57		774.021	5+
1932.34 *51*	0.10 *3*	2221.71	2+	289.539	2−
1940.44 *50*	0.22 *9*	2568.06	3+,4+	627.429	3−
1963.08 *31*	0.22 *2*	2589.99	3−,4−	627.429	3−
1966.66 *16*	0.40 *3*	3493.24	2+	1526.74	4
1970.48 *16*	0.30 *4*	3094.66	3+,4+,(2+)	1124.23	4−
1975.40 *10*	0.44 *3*	2203.14	3−	227.767	3+
2005.19& *6*	1.49 *9*	2589.99	3−,4−	584.782	3−
2020.75 *27*	0.13 *2*	2855.98	2,3,4	835.092	4+
2035.65 *67*	0.07 *2*	4467.08		2431.17	
2058.85 *10*	0.43 *3*	3766.70	2+,4+	1707.83	2−,3−,4−
2079.72 *13*	0.29 *3*	3474.22	3+,4+,(2+)	1394.18	2+
2094.34 *21*	0.29 *3*	2375.28		280.701	5+
2098.47 *88*	0.22 *10*	4882.57		2783.02	3−,4−
2106.25 *10*	0.59 *4*	2395.97		289.539	2−
2109.92 *17*	0.38 *3*	2252.80	2+,3+,4+	142.528	1−
2114.10 *7*	0.87 *5*	2114.13	3,4,(2)	0.0	4+
2129.72& *13*	0.32 *3*	2410.45	4+,(3+)	280.701	5+
2139.7 *12*	0.14 *8*	3229.84	2+,3+,4+	1088.588	(3+),4+
2146.35 *81*	0.20 *9*	2589.99	3−,4−	444.137	2+
x2149.6 *16*	0.13 *10*				
2153.38 *16*	0.26 *2*	3474.22	3+,4+,(2+)	1321.12	3+,(2+,4+)
2169.97 *26*	0.16 *2*	2451.11		280.701	5+
2179.30 *21*	0.21 *2*	2459.64	3+	280.701	5+
2196.92 *21*	0.30 *3*	3032.02		835.092	4+
2200.40 *93*	0.10 *3*	3191.81		991.33	1+
2203.57 *18*	0.41 *5*	2431.17		227.767	3+
2214.25 *26*	0.21 *2*	3204.94		991.33	1+
2243.08& *9*	0.72 *5*	3017.06	4	774.021	5+
2249.04 *42*	0.15 *3*	4319.09		2070.31	
2254.25 *58*	0.12 *4*	2395.97		142.528	1−
2259.75 *46*	0.12 *2*	3094.66	3+,4+,(2+)	835.092	4+
2270.09 *35*	0.20 *4*	2714.09		444.137	2+

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^{45}Sc(n,γ) E=thermal 1982Ti02 (continued)

γ(^{46}Sc) (continued)

$E_γ$[†]	$I_γ$[‡b]	E_i(level)	$J^π_i$	E_f	$J^π_f$
2278.28 *20*	0.20 *2*	2330.19		52.011	6^+
2287.12 *19*	0.23 *2*	2568.06	$3^+,4^+$	280.701	5^+
2291.74 *19*	0.23 *2*	2291.84		0.0	4^+
2299.04 *55*	0.22 *6*	4383.08		2084.47	
2300.63 *29*	0.14 *2*	3136.32	$3^-,4^-$	835.092	4^+
2317.41 *23*	0.17 *2*	2459.64	3^+	142.528	1^-
[x]2327.38 *16*	0.36 *3*				
2331.04 *17*	0.33 *3*	2558.91		227.767	3^+
2340.53 *17*	0.23 *2*	4261.46		1921.10	
2351.79 *26*	0.44 *6*	2979.67	$3^+,4^+$	627.429	3^-
2362.05 *29*	0.45 *7*	3136.32	$3^-,4^-$	774.021	5^+
2373.50 *28*	0.56 *9*	4081.12		1707.83	$2^-,3^-,4^-$
2380.33 *77*	0.22 *8*	2431.17		52.011	6^+
2389.65 *79*	0.20 *8*	2833.94		444.137	2^+
2404.91[&] *21*	0.75 *9*	3493.24	2^+	1088.588	$(3^+),4^+$
2410.38 *25*	0.61 *9*	2410.45	$4^+,(3^+)$	0.0	4^+
2418.72 *56*	0.25 *7*	2863.34	$2^+,(3^+)$	444.137	2^+
2442.56 *31*	0.32 *5*	2442.30	3,4	0.0	4^+
2477.35 *16*	0.68 *7*	2705.24	3^+	227.767	3^+
2497.41 *41*	0.27 *5*	3081.65		584.782	3^-
2501.87 *24*	0.50 *7*	2783.02	$3^-,4^-$	280.701	5^+
2506.52 *40*	0.29 *5*	4882.57		2375.28	
2510.94 *56*	0.21 *5*	4432.77		1921.10	
2529.71 *92*	0.13 *5*	3620.43		1088.588	$(3^+),4^+$
2536.81 *13*	0.09 *6*	2979.67	$3^+,4^+$	444.137	2^+
2547.3 *14*	0.09 *6*	3176.54	4^+	627.429	3^-
2551.32 *60*	0.23 *6*	2694.57		142.528	1^-
2567.7 *17*	0.08 *6*	3191.81		627.429	3^-
2572.01 *90*	0.15 *6*	3017.06	4	444.137	2^+
2578.90 *53*	0.23 *6*	3414.32	$2^+,3^+,4^+$	835.092	4^+
2584.46 *41*	0.31 *6*	4787.27		2203.14	3^-
2600.29 *46*	0.20 *4*	2890.65		289.539	2^-
2607.04 *99*	0.08 *4*	3876.65	$2^+,3^+,4^+$	1270.46	4^-
2614.0 *11*	0.07 *4*	3056.94	2,3,4,5	444.137	2^+
2628.52 *22*	0.43 *6*	2855.98	2,3,4	227.767	3^+
2635.66 *9*	1.88 *12*	2863.34	$2^+,(3^+)$	227.767	3^+
2643.50 *35*	0.26 *4*	2643.05	$3^-,4^-,(2^-)$	0.0	4^+
2651.97 *49*	0.19 *4*	3278.76		627.429	3^-
2662.82 *33*	0.27 *4*	2662.72		0.0	4^+
2667.01 *16*	0.54 *5*	2956.71		289.539	2^-
2678.45 *30*	0.28 *3*	3766.70	$2^+,4^+$	1088.588	$(3^+),4^+$
2693.71 *17*	0.63 *6*	3278.76		584.782	3^-
2697.24 *28*	0.37 *5*	3785.36	4^+	1088.588	$(3^+),4^+$
2708.16 *74*	0.09 *3*	4961.45		2252.80	$2^+,3^+,4^+$
2714.98 *20*	0.40 *5*	3550.31	$2^+,3^+,4^+$	835.092	4^+
2721.41 *23*	0.48 *6*	3002.36		280.701	5^+
[x]2729.31 *55*	0.14 *3*				
2737.8 *17*	0.07 *6*	4961.45		2221.71	2^+
2741.4 *14*	0.06 *4*	4383.08		1642.68	4^-
2759.35 *50*	0.12 *3*	3204.94		444.137	2^+
2768.73 *76*	0.09 *3*	3396.67	$2^+,3^+,(4^+)$	627.429	3^-
2772.84 *84*	0.08 *3*	4694.59		1921.10	
2780.96 *83*	0.07 *3*	3868.62		1088.588	$(3^+),4^+$
2789.43 *23*	0.27 *3*	3017.06	4	227.767	3^+
2797.55 *12*	0.62 *5*	2940.19		142.528	1^-

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^{45}Sc(n,γ) E=thermal 1982Ti02 (continued)

γ(^{46}Sc) (continued)

E_γ[†]	I_γ[‡b]	E_i(level)	J^π_i	E_f	J^π_f
2805.01 *21*	0.30 *4*	3094.66	3$^+$,4$^+$,(2$^+$)	289.539	2$^-$
2814.96 *22*	0.30 *4*	4522.75		1707.83	2$^-$,3$^-$,4$^-$
2819.6 *14*	0.06 *3*	3654.77		835.092	4$^+$
2834.36 *37*	0.41 *7*	3278.76		444.137	2$^+$
2839.75 *62*	0.24 *6*	3424.54	3$^+$,(4$^+$)	584.782	3$^-$
2845.51 *80*	0.17 *6*	3474.22	3$^+$,4$^+$,(2$^+$)	627.429	3$^-$
[x]2852.38 *34*	0.41 *6*				
2871.27 *32*	0.45 *8*	5301.83		2431.17	
2887.30 *60*	0.23 *6*	4528.54		1642.68	4$^-$
2895.32 *26*	0.33 *4*	3176.54	4$^+$	280.701	5$^+$
2901.22 *23*	0.39 *5*	4701.03		1799.44	2$^+$,3$^+$,4$^+$
2908.59 *44*	0.18 *3*	3136.32	3$^-$,4$^-$	227.767	3$^+$
2916.57 *72*	0.09 *3*	4039.69		1124.23	4$^-$
2929.10 *48*	0.15 *3*	5049.44		2119.30	3$^+$,4$^+$
2943.5 *11*	0.06 *3*	4587.16		1642.68	4$^-$
2950.97 *17*	0.48 *5*	4039.69		1088.588	(3$^+$),4$^+$
2963.08 *41*	0.22 *4*	3191.81		227.767	3$^+$
2968.37 *70*	0.15 *4*	3597.07	2$^+$,3$^+$,4$^+$	627.429	3$^-$
2973.5 *14*	0.07 *4*	5301.83		2330.19	
2980.88 *97*	0.13 *5*	3424.54	3$^+$,(4$^+$)	444.137	2$^+$
2990.95 *21*	0.44 *5*	4261.46		1270.46	4$^-$
2995.61 *24*	0.40 *5*	4522.75		1526.74	4
3002.23 *65*	0.19 *5*	3229.84	2$^+$,3$^+$,4$^+$	227.767	3$^+$
3011.89[&] *26*	1.63 *12*	3785.36	4$^+$	774.021	5$^+$
3017.94 *78*	0.15 *5*	4142.61		1124.23	4$^-$
3026.65 *80*	0.16 *5*	3654.77		627.429	3$^-$
3049.47[&] *28*	0.58 *7*	3493.24	2$^+$	444.137	2$^+$
3066.78 *69*	0.13 *4*	3841.11	2$^+$,3$^+$,4$^+$	774.021	5$^+$
3073.76 *80*	0.10 *3*	4961.45		1886.06	3$^+$,(2$^+$)
3081.3 *10*	0.16 *9*	3707.38	3$^+$,4$^+$,(2$^+$)	627.429	3$^-$
[x]3084.21 *45*	0.40 *9*				
3090.34 *34*	0.26 *4*	4081.12		991.33	1$^+$
3102.03 *47*	0.23 *4*	3876.65	2$^+$,3$^+$,4$^+$	774.021	5$^+$
3106.05 *48*	0.24 *4*	3550.31	2$^+$,3$^+$,4$^+$	444.137	2$^+$
3117.33 *25*	0.35 *4*	3260.40		142.528	1$^-$
3125.12 *28*	0.19 *2*	3414.32	2$^+$,3$^+$,4$^+$	289.539	2$^-$
3136.82 *64*	0.07 *2*	3136.32	3$^-$,4$^-$	0.0	4$^+$
3153.45 *32*	0.17 *2*	3597.07	2$^+$,3$^+$,4$^+$	444.137	2$^+$
3158.65 *30*	0.18 *2*	4587.16		1427.90	3$^+$,4$^+$,(2$^+$)
3166.08 *51*	0.14 *3*	4873.4		1707.83	2$^-$,3$^-$,4$^-$
3174.5 *13*	0.05 *2*	4261.46		1088.588	(3$^+$),4$^+$
3185.87 *51*	0.09 *2*	3414.32	2$^+$,3$^+$,4$^+$	227.767	3$^+$
3193.18 *18*	0.30 *3*	4587.16		1394.18	2$^+$
3201.38 *70*	0.19 *5*	3785.36	4$^+$	584.782	3$^-$
3205.83 *62*	0.22 *5*	4294.65		1088.588	(3$^+$),4$^+$
3213.29 *93*	0.12 *4*	3841.11	2$^+$,3$^+$,4$^+$	627.429	3$^-$
3219.18 *48*	0.27 *5*	(8760.68)		5541.5	
3241.1 *14*	0.08 *5*	3868.62		627.429	3$^-$
[x]3245.8 *15*	0.14 *7*				
3249.3 *11*	0.17 *8*	3876.65	2$^+$,3$^+$,4$^+$	627.429	3$^-$
3261.02 *65*	0.21 *5*	3314.10	2$^+$,3$^+$,4$^+$	52.011	6$^+$
3265.55 *17*	0.97 *8*	3493.24	2$^+$	227.767	3$^+$
3274.1 *17*	0.21 *14*	4701.03		1427.90	3$^+$,4$^+$,(2$^+$)
3280.4 *10*	0.35 *15*	3424.54	3$^+$,(4$^+$)	142.528	1$^-$
3303.4 *20*	0.17 *13*	4294.65		991.33	1$^+$

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^{45}Sc(n,γ) E=thermal 1982Ti02 (continued)

$\gamma(^{46}$Sc) (continued)

E_γ †	I_γ ‡b	E_i(level)	J_i^π	E_f	J_f^π
3310.6 *10*	0.35 *14*	3937.29		627.429	3^-
3317.1 *16*	0.22 *14*	4961.45		1642.68	4^-
3323.1 *19*	0.20 *14*	3766.70	$2^+,4^+$	444.137	2^+
3328.3 *10*	0.37 *15*	3381.48		52.011	6^+
3335.6 *17*	0.19 *13*	4761.07		1427.90	$3^+,4^+,(2^+)$
x3341.43 *44*	0.24 *4*				
3351.26 *20*	0.56 *6*	3631.97	$2^+,3^+,4^+,5^+$	280.701	5^+
3359.84 *26*	0.41 *6*	4754.3		1394.18	2^+
3373.5 *13*	0.07 *4*	3424.54	$3^+,(4^+)$	52.011	6^+
3379.11 *66*	0.16 *4*	4701.03		1321.12	$3^+,(2^+,4^+)$
3396.65 *30*	0.43 *6*	3396.67	$2^+,3^+,(4^+)$	0.0	4^+
3403.18 *68*	0.16 *4*	4528.54		1124.23	4^-
3414.90 *24*	0.42 *5*	(8760.68)		5346.16	
3418.83 *55*	0.20 *4*	3707.38	$3^+,4^+,(2^+)$	289.539	2^-
3424.71 *45*	0.16 *3*	3868.62		444.137	2^+
3431.95 *22*	0.30 *3*	3876.65	$2^+,3^+,4^+$	444.137	2^+
3443.14 *24*	0.30 *3*	3443.28	$2^+,3^+,4^+$	0.0	4^+
3458.92 *11*	0.89 *6*	(8760.68)		5301.83	
3478.33 *34*	0.19 *3*	3620.43		142.528	1^-
x3496.74 *46*	0.20 *3*				
3502.9 *11*	0.19 *8*	3785.36	4^+		
3506.0 *13*	0.14 *9*	3785.36	4^+	280.701	5^+
3516.61 *45*	0.17 *3*	4787.27		1270.46	4^-
3525.32 *82*	0.10 *3*	3813.81		289.539	2^-
3530.23 *78*	0.12 *3*	4522.75		991.33	1^+
3543.85 *77*	0.13 *3*	4319.09		774.021	5^+
3551.95 *92*	0.08 *3*	3605.26		52.011	6^+
3557.59 *39*	0.21 *3*	3785.36	4^+	227.767	3^+
3569.62 *91*	0.06 *2*	4694.59		1124.23	4^-
3578.45 *86*	0.06 *2*	3868.62		289.539	2^-
3596.97 *15*	0.46 *4*	3597.07	$2^+,3^+,4^+$	0.0	4^+
3605.57 *57*	0.15 *3*	3605.26		0.0	4^+
3615.51 *53*	0.12 *2*	4606.43		991.33	1^+
3623.12 *11*	0.85 *5*	3675.47	$2^+,3^+,4^+$	52.011	6^+
3636.24 *24*	0.32 *4*	4761.07		1124.23	4^-
3641.14 *47*	0.17 *3*	3868.62		227.767	3^+
x3655.23 *34*	0.21 *3*				
3667.78 *16*	0.33 *3*	(8760.68)		5092.96	
3693.01 *39*	0.12 *2*	4467.08		774.021	5^+
3710.92 *20*	0.29 *3*	(8760.68)		5049.44	
3716.89 *71*	0.10 *2*	3945.3		227.767	3^+
3721.17 *28*	0.27 *3*	3721.42		0.0	4^+
x3731.62 *43*	0.14 *2*				
x3735.82 *41*	0.14 *2*				
3750.05 *21*	0.18 *2*	4039.69		289.539	2^-
3760.6 *12*	0.03 *1*	4039.69		280.701	5^+
3768.51 *73*	0.05 *1*	4761.07		991.33	1^+
3799.12 *10*	0.59 *4*	(8760.68)		4961.45	
3812.62 *18*	0.29 *3*	4587.16		774.021	5^+
3822.44 *16*	0.37 *3*	5092.96		1270.46	4^-
3839.78 *33*	0.15 *2*	4467.08		627.429	3^-
3862.27 *32*	0.19 *2*	4142.61		280.701	5^+
3867.50 *50*	0.13 *2*	3868.62		0.0	4^+
3877.99 *12*	0.62 *4*	(8760.68)		4882.57	
3887.91 *33*	0.16 *2*	(8760.68)		4873.4	
3905.5 *13*	0.04 *2*	5301.83		1394.18	2^+

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^{45}Sc(n,γ) E=thermal 1982Ti02 (continued)

γ(^{46}Sc) (continued)

E_γ †	I_γ ‡b	E_i(level)	J^π_i	E_f	J^π_f
3924.46 *43*	0.10 *2*	5049.44		1124.23	4^-
3931.85 *28*	0.18 *2*	4074.67		142.528	1^-
3938.53 *70*	0.06 *2*	4383.08		444.137	2^+
3973.41 *12*	0.33 *2*	(8760.68)		4787.27	
3999.40 *13*	0.33 *2*	(8760.68)		4761.07	
4006.34 *11*	0.44 *3*	(8760.68)		4754.3	
4013.65 *24*	0.15 *1*	4294.65		280.701	5^+
4021.47 *10*	0.45 *3*	4606.43		584.782	3^-
4041.06 *17*	0.28 *3*	(8760.68)		4719.64	
4052.19 *50*	0.09 *2*	4103.8		52.011	6^+
4059.45 *10*	0.94 *5*	(8760.68)		4701.03	
4066.00 *12*	0.51 *3*	(8760.68)		4694.59	
4075.54 *30*	0.15 *2*	5346.16		1270.46	4^-
4083.70 *22*	0.21 *2*	4528.54		444.137	2^+
4093.54 *25*	0.18 *2*	4383.08		289.539	2^-
4109.68 *28*	0.32 *4*	4694.59		584.782	3^-
^{x}4117.0 *10*	0.08 *3*				
4124.75 *86*	0.10 *3*	4961.45		835.092	4^+
4136.55 *86*	0.16 *3*	4719.64		584.782	3^-
4141.8 *18*	0.05 *3*	4587.16		444.137	2^+
4154.39 *20*	0.45 *4*	(8760.68)		4606.43	
4166.56 *58*	0.16 *3*	4447.83		280.701	5^+
4173.08 *16*	0.73 *6*	(8760.68)		4587.16	
4176.8 *10*	0.20 *7*	5301.83		1124.23	4^-
4231.78 *18*	0.32 *3*	(8760.68)		4528.54	
4237.77 *13*	0.58 *4*	(8760.68)		4522.75	
4267.1 *20*	0.07 *4*	4319.09		52.011	6^+
4270.81 *69*	0.16 *5*	5541.5		1270.46	4^-
^{x}4279.66 *76*	0.08 *2*				
4293.60 *18*	0.36 *3*	(8760.68)		4467.08	
4312.70 *22*	0.24 *3*	(8760.68)		4447.83	
4327.75 *19*	0.31 *3*	(8760.68)		4432.77	
4354.76 *16*	0.26 *2*	5346.16		991.33	1^+
4377.54 *10*	0.52 *3*	(8760.68)		4383.08	
^{x}4408.80 *20*	0.19 *2*				
^{x}4422.90 *18*	0.27 *3*				
4433.4 *13*	0.02 *1*	4432.77		0.0	4^+
4441.48 *17*	0.29 *3*	(8760.68)		4319.09	
^{x}4461.28 *31*	0.21 *3*				
4465.86 *17*	0.40 *3*	(8760.68)		4294.65	
^{x}4478.76 *50*	0.07 *1*				
4499.20 *10*	0.69 *4*	(8760.68)		4261.46	
4522.48 *41*	0.17 *2*	4522.75		0.0	4^+
4526.69 *30*	0.26 *3*	4754.3		227.767	3^+
4534.32 *27*	0.23 *2*	4587.16		52.011	6^+
4551.56 *87*	0.07 *2*	4694.59		142.528	1^-
^{x}4563.04 *49*	0.13 *2*				
4575.5 *21*	0.03 *2*	5346.16		774.021	5^+
4582.4 *16*	0.04 *2*	4873.4		289.539	2^-
4589.6 *12*	0.05 *2*	4587.16		0.0	4^+
^{x}4598.96 *22*	0.30 *3*				
4607.93 *89*	0.07 *2*	4606.43		0.0	4^+
4617.91 *10*	0.50 *4*	(8760.68)		4142.61	
4628.65 *12*	0.35 *3*	(8760.68)		4131.90	
4656.96 *30*	0.30 *4*	(8760.68)		4103.8	
4667.8 *10*	0.13 *4*	4719.64		52.011	6^+

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^{45}Sc(n,γ) E=thermal 1982Ti02 (continued)

γ(^{46}Sc) (continued)

E_γ [†]	I_γ [‡b]	E_i(level)	J^π_i	E_f	J^π_f	Comments
4672.7 *10*	0.14 *4*	5301.83		627.429	3⁻	
4680.10 *27*	0.54 *5*	(8760.68)		4081.12		
4685.47 *52*	0.24 *4*	(8760.68)		4074.67		
4701.42 *54*	0.12 *2*	4701.03		0.0	4⁺	
4721.07 *12*	0.92 *6*	(8760.68)		4039.69		
[x]4742.43 *76*	0.16 *4*					
4744[ad]		(8760.68)				ΔE,I_γ: not given by 1980Li07; final state not specified.
[x]4746.65 *64*	0.18 *4*					
[x]4777.38 *46*	0.06 *1*					
4788.55 *89*	0.03 *1*	4787.27		0.0	4⁺	
[x]4800.96 *44*	0.07 *1*					
4815.04 *37*	0.15 *2*	(8760.68)		3945.3		
4823.20 *11*	0.45 *3*	(8760.68)		3937.29		
[x]4837.16 *80*	0.04 *1*					
[x]4854.4 *11*	0.08 *3*					
4870.2 *12*	0.04 *2*	4873.4		0.0	4⁺	
[x]4877.12 *58*	0.12 *2*					
4883.68 *14*	0.62 *4*	(8760.68)		3876.65	2⁺,3⁺,4⁺	
4891.92 *13*	0.60 *4*	(8760.68)		3868.62		
4919.39[&] *14*	0.49 *3*	(8760.68)		3841.11	2⁺,3⁺,4⁺	
4946.69 *28*	0.19 *2*	(8760.68)		3813.81		
4975.27 *8*	2.65 *14*	(8760.68)		3785.36	4⁺	
4993.96 *14*	0.90 *6*	(8760.68)		3766.70	2⁺,4⁺	
5024.9 *17*	0.03 *1*	5301.83		280.701	5⁺	
5038.99 *28*	0.15 *1*	(8760.68)		3721.42		
5053.25 *16*	0.26 *2*	(8760.68)		3707.38	3⁺,4⁺,(2⁺)	
[x]5076.20 *38*	0.08 *1*					
5084.87 *10*	0.56 *3*	(8760.68)		3675.47	2⁺,3⁺,4⁺	
5092.51 *86*	0.03 *1*	5092.96		0.0	4⁺	
5105.70 *16*	0.23 *2*	(8760.68)		3654.77		
5118.2 *11*	0.06 *2*	5346.16		227.767	3⁺	
5128.62 *18*	0.52 *4*	(8760.68)		3631.97	2⁺,3⁺,4⁺,5⁺	
5141.6 *13*	0.16 *6*	(8760.68)		3620.43		
[x]5148.15 *72*	0.16 *3*					
5154.94 *33*	0.29 *3*	(8760.68)		3605.26		
5163.54 *14*	0.82 *5*	(8760.68)		3597.07	2⁺,3⁺,4⁺	
[x]5184.4 *11*	0.06 *2*					
5203.2 *10*	0.08 *2*	5346.16		142.528	1⁻	
5210.06 *17*	0.63 *4*	(8760.68)		3550.31	2⁺,3⁺,4⁺	
[x]5217.10 *46*	0.08 *1*					
[x]5225.64 *29*	0.02 *1*					
[x]5230.12 *76*	0.08 *2*					
5267.42 *8*	1.88 *10*	(8760.68)		3493.24	2⁺	
5286.21[&] *10*	0.67 *4*	(8760.68)		3474.22	3⁺,4⁺,(2⁺)	
5317.19 *16*	0.27 *2*	(8760.68)		3443.28	2⁺,3⁺,4⁺	
5335.85 *8*	1.01 *6*	(8760.68)		3424.54	3⁺,(4⁺)	
5346.18 *10*	0.52 *3*	(8760.68)		3414.32	2⁺,3⁺,4⁺	
[x]5358.27 *67*	0.07 *1*					
5363.81 *16*	0.39 *3*	(8760.68)		3396.67	2⁺,3⁺,(4⁺)	
5378.97 *12*	0.42 *2*	(8760.68)		3381.48		
5445.99 *10*	0.78 *5*	(8760.68)		3314.10	2⁺,3⁺,4⁺	
5481.65 *15*	0.75 *5*	(8760.68)		3278.76		
5499.83 *18*	0.38 *3*	(8760.68)		3260.40		
5530.59 *17*	0.40 *3*	(8760.68)		3229.84	2⁺,3⁺,4⁺	
[x]5546.70 *90*	0.06 *2*					
5555.52 *19*	0.37 *3*	(8760.68)		3204.94		

Continued on next page (footnotes at end of table)

^{45}Sc(n,γ) E=thermal 1982Ti02 (continued)

γ(^{46}Sc) (continued)

E_γ[†]	I_γ[‡b]	E_i(level)	E_f	J^π_f
5568.69 16	0.36 3	(8760.68)	3191.81	
5583.80 11	0.66 4	(8760.68)	3176.54	4^+
[x]5595.0 11	0.04 1			
[x]5606.35 64	0.06 1			
5624.06 9	0.98 6	(8760.68)	3136.32	$3^-,4^-$
[x]5638.89 71	0.06 1			
5665.82 11	0.76 4	(8760.68)	3094.66	$3^+,4^+,(2^+)$
5678.88 17	0.32 2	(8760.68)	3081.65	
[x]5695.8 11	0.04 1			
5703.18 30	0.14 1	(8760.68)	3056.94	2,3,4,5
5728.42 15	0.27 2	(8760.68)	3032.02	
5743.48[&] 9	1.08 6	(8760.68)	3017.06	4
5757.77 30	0.10 1	(8760.68)	3002.36	
5781.48 10	0.56 3	(8760.68)	2979.67	$3^+,4^+$
[x]5792.99 23	0.16 6			
5803.63[&] 14	0.29 2	(8760.68)	2956.71	
5820.15 19	0.23 2	(8760.68)	2940.19	
[x]5859.09 37	0.10 1			
5869.62 19	0.23 2	(8760.68)	2890.65	
5897.22[&] 9	2.24 12	(8760.68)	2863.34	$2^+,(3^+)$
5904.54 14	0.55 4	(8760.68)	2855.98	2,3,4
5926.40[&] 32	0.18 2	(8760.68)	2833.94	
[x]5935.72 90	0.04 1			
[x]5951.4 13	0.03 1			
5977.30[&] 11	0.39 2	(8760.68)	2783.02	$3^-,4^-$
6046.22 10	0.61 3	(8760.68)	2714.09	
6055.11[&] 9	1.50 8	(8760.68)	2705.24	3^+
6065.85 14	0.29 2	(8760.68)	2694.57	
6097.66 10	0.47 3	(8760.68)	2662.72	
6117.51 21	0.21 2	(8760.68)	2643.05	$3^-,4^-,(2^-)$
6170.54[&] 8	2.41 3	(8760.68)	2589.99	$3^-,4^-$
6192.19 12	0.51 3	(8760.68)	2568.06	$3^+,4^+$
6201.35 24	0.32 3	(8760.68)	2558.91	
[x]6206.54 59	0.16 2			
6237.73 34	0.10 1	(8760.68)	2521.67	
6274.0[a] 10	0.24 7	(8760.68)	2486.3	
6300.78 13	0.93 6	(8760.68)	2459.64	3^+
6309.19 28	0.33 3	(8760.68)	2451.11	

E_γ[†]	I_γ[‡b]	E_i(level)	J^π_i	E_f	J^π_f
6318.06 9	3.22 17	(8760.68)		2442.30	3,4
6330.08 59	0.12 2	(8760.68)		2431.17	
6349.84[&] 9	2.76 14	(8760.68)		2410.45	$4^+,(3^+)$
6364.14[&] 14	0.66 4	(8760.68)		2395.97	
6430.77 45	0.07 1	(8760.68)		2330.19	
6457.73 10	0.63 3	(8760.68)		2302.58	$2^+,3^+,(4^+)$
6468.62 55	0.54 9	(8760.68)		2291.84	
6507.35 13	0.47 3	(8760.68)		2252.80	$2^+,3^+,4^+$
6538.78[&] 18	0.28 2	(8760.68)		2221.71	2^+
6557.09[&] 9	2.47 13	(8760.68)		2203.14	3^-
6575.4[a] 10	0.19 7	(8760.68)		2184.9	
6641.17 17	0.65 5	(8760.68)		2119.30	$3^+,4^+$
6646.57 18	0.50 4	(8760.68)		2114.13	3,4,(2)
6675.20 47	0.09 1	(8760.68)		2084.47	
6689.52[&] 36	0.14 1	(8760.68)		2070.31	
6716.78 9	1.72 9	(8760.68)		2043.45	$3^-,(2^-)$
6839.17 12	2.34 15	(8760.68)		1921.10	
6840.38 12	3.34 19	(8760.68)		1919.88	3^+
6874.14 19	0.77 6	(8760.68)		1886.06	$3^+,(2^+)$
6960.49[&] 13	0.24 2	(8760.68)		1799.44	$2^+,3^+,4^+$
6997.11 18	0.13 1	(8760.68)		1763.24	$2^+,3^+,4^+$
7052.62[&] 11	0.35 2	(8760.68)		1707.83	$2^-,3^-,4^-$
7117.45 9	2.09 11	(8760.68)		1642.68	4^-
7233.46 10	0.58 3	(8760.68)		1526.74	4
7332.19[&] 13	0.25 2	(8760.68)		1427.90	$3^+,4^+,(2^+)$
7438.84[&] 16	0.20 2	(8760.68)		1321.12	$3^+,(2^+,4^+)$
7489.58[&] 12	0.44 3	(8760.68)		1270.46	4^-
7635.57[&] 17	2.49 13	(8760.68)		1124.23	4^-
7671.49[&] 24	0.31 3	(8760.68)		1088.588	$(3^+),4^+$
7924.62[&] 15	0.56 3	(8760.68)		835.092	4^+
8132.55[&] 12	2.66 14	(8760.68)		627.429	3^-
8175.21[&] 10	10.02 51	(8760.68)		584.782	3^-
8315.72[&] 12	2.01 11	(8760.68)		444.137	2^+
8470.43[&] 16	0.76 4	(8760.68)		289.539	2^-
8532.19[&] 12	5.16 27	(8760.68)		227.767	3^+
8617.26[&] 17	0.24 2	(8760.68)		142.528	1^-
8759.92[&] 15	0.91 5	(8760.68)		0.0	4^+

† From 1982Ti02, except as noted; authors quote recoil-corrected Eγ; recoil correction removed by evaluator. Uncertainties calculated by combining stated statistical and 10 ppm systematic uncertainties (1982Ti02) in quadrature (evaluator).

‡ Photon intensity per 100 capture; from 1982Ti02, except as noted. Uncertainties calculated by combining stated statistical and 5% systematic uncertainties (1982Ti02) in quadrature (evaluator).

Based on combined analysis of γ circular pol and γ angular distributions (1980Li07).

@ Weighted average of values from 1982Ti02 and 1966Va13.

& Placement confirmed by $\gamma\gamma$ measurements (1971DeXX).

a Observed by 1980Li07 only.

Continued on next page (footnotes at end of table)

^{45}Sc(n,γ) E=thermal 1982Ti02 (continued)

γ(^{46}Sc) (continued)

[b] Intensity per 100 neutron captures.
[c] Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ-ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.
[d] Placement of transition in the level scheme is uncertain.
[x] γ ray not placed in level scheme.

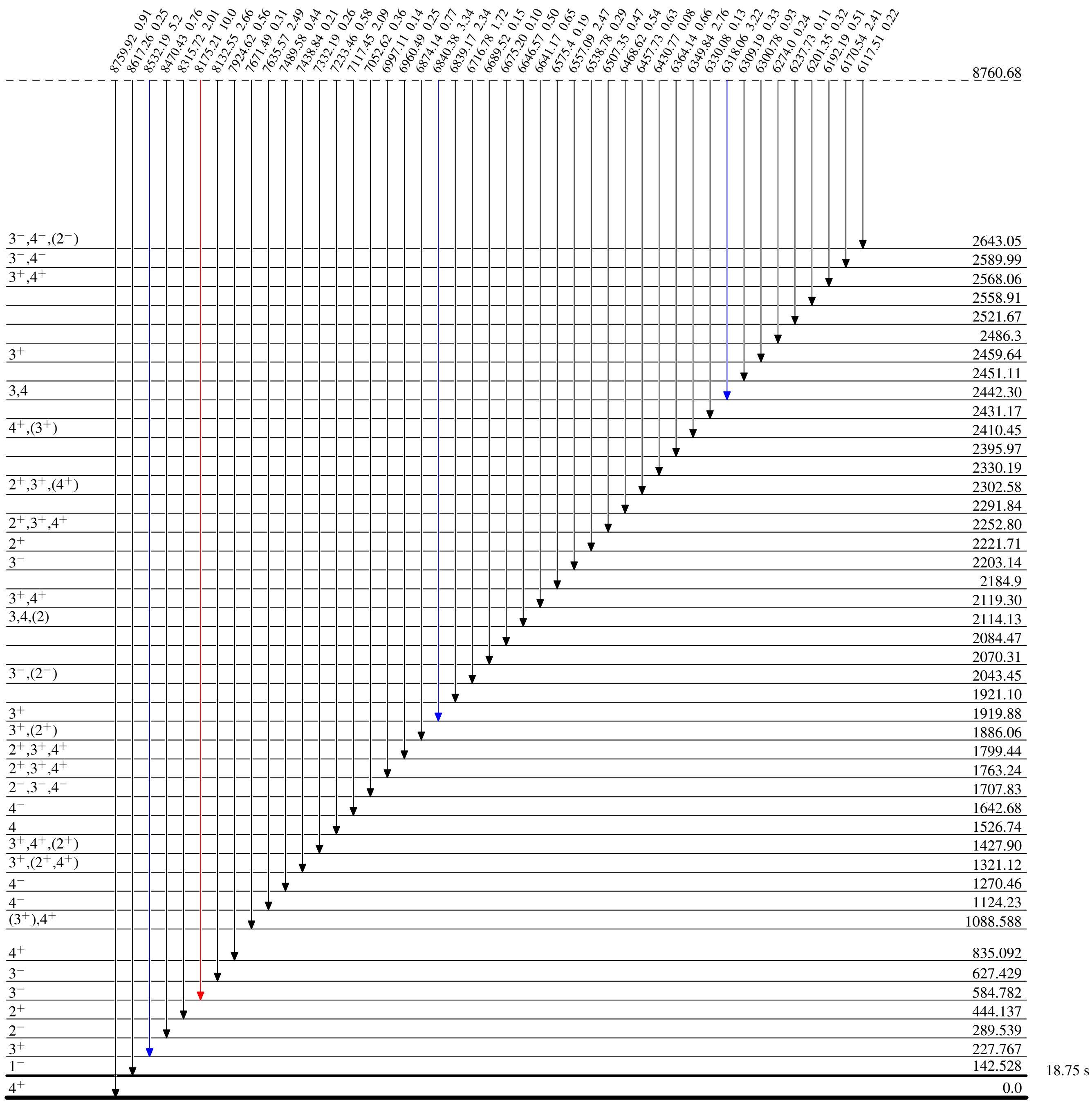
^{45}Sc(n,γ) E=thermal 1982Ti02

Level Scheme

Intensities: Iγ per 100 neutron captures.

Legend

- $I_\gamma < 2\% \times I_\gamma^{max}$
- $I_\gamma < 10\% \times I_\gamma^{max}$
- $I_\gamma > 10\% \times I_\gamma^{max}$



$^{46}_{21}Sc_{25}$

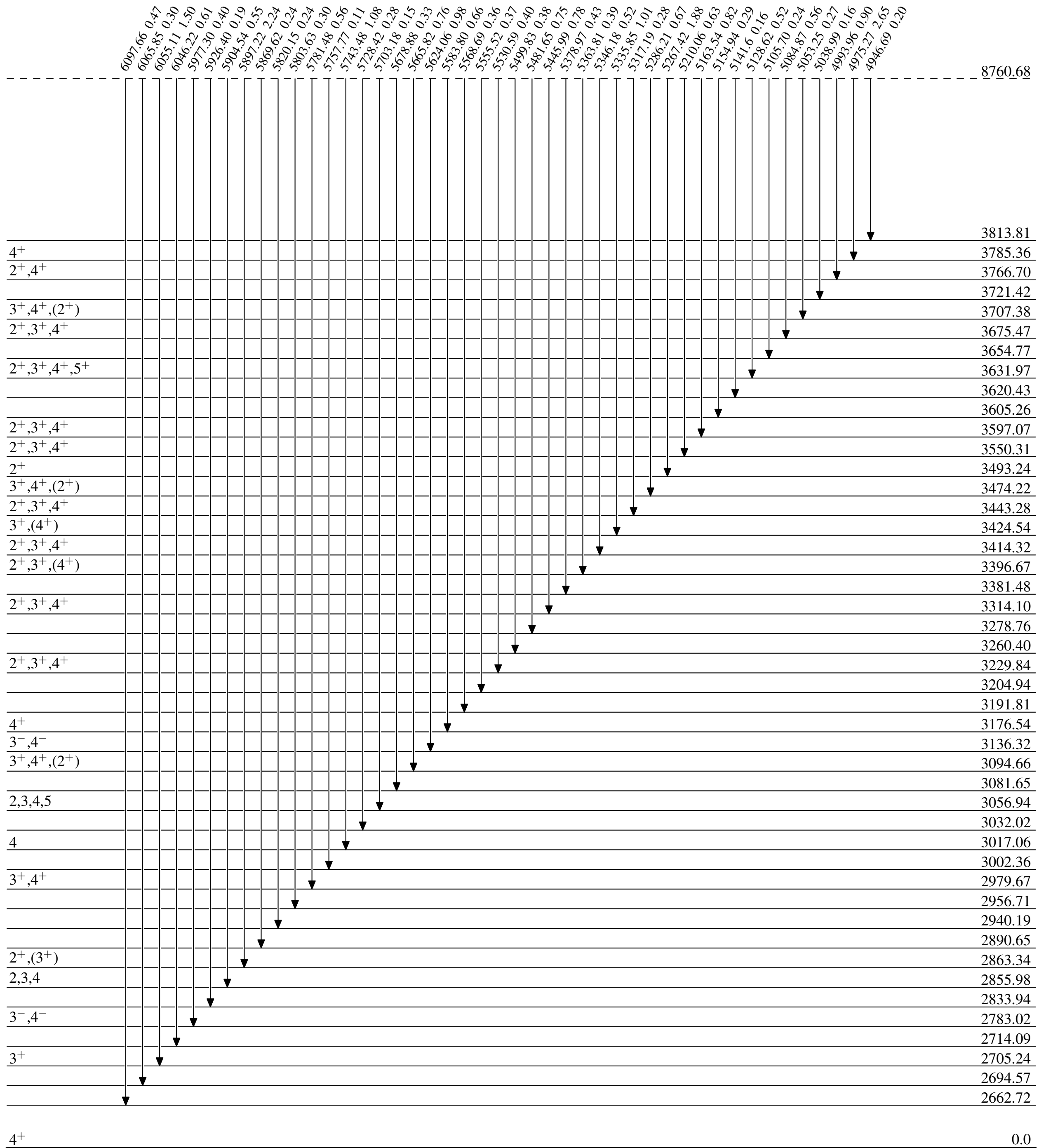
^{45}Sc(n,γ) E=thermal 1982Ti02

Level Scheme (continued)

Intensities: Iγ per 100 neutron captures.

Legend

- $I_\gamma < 2\% \times I_\gamma^{max}$
- $I_\gamma < 10\% \times I_\gamma^{max}$
- $I_\gamma > 10\% \times I_\gamma^{max}$

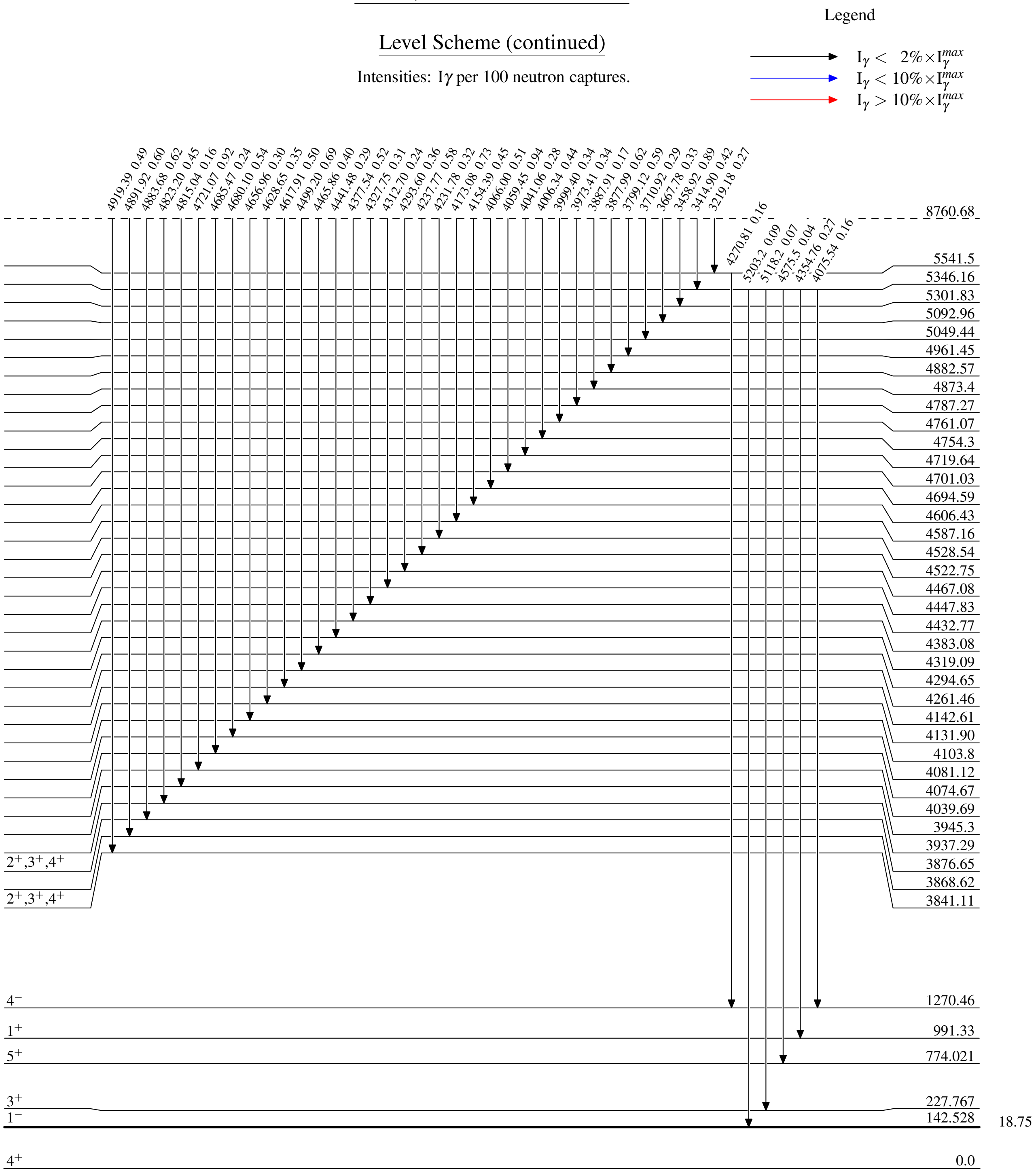


$^{46}_{21}Sc_{25}$

^{45}Sc(n,γ) E=thermal 1982Ti02

Level Scheme (continued)

Intensities: Iγ per 100 neutron captures.

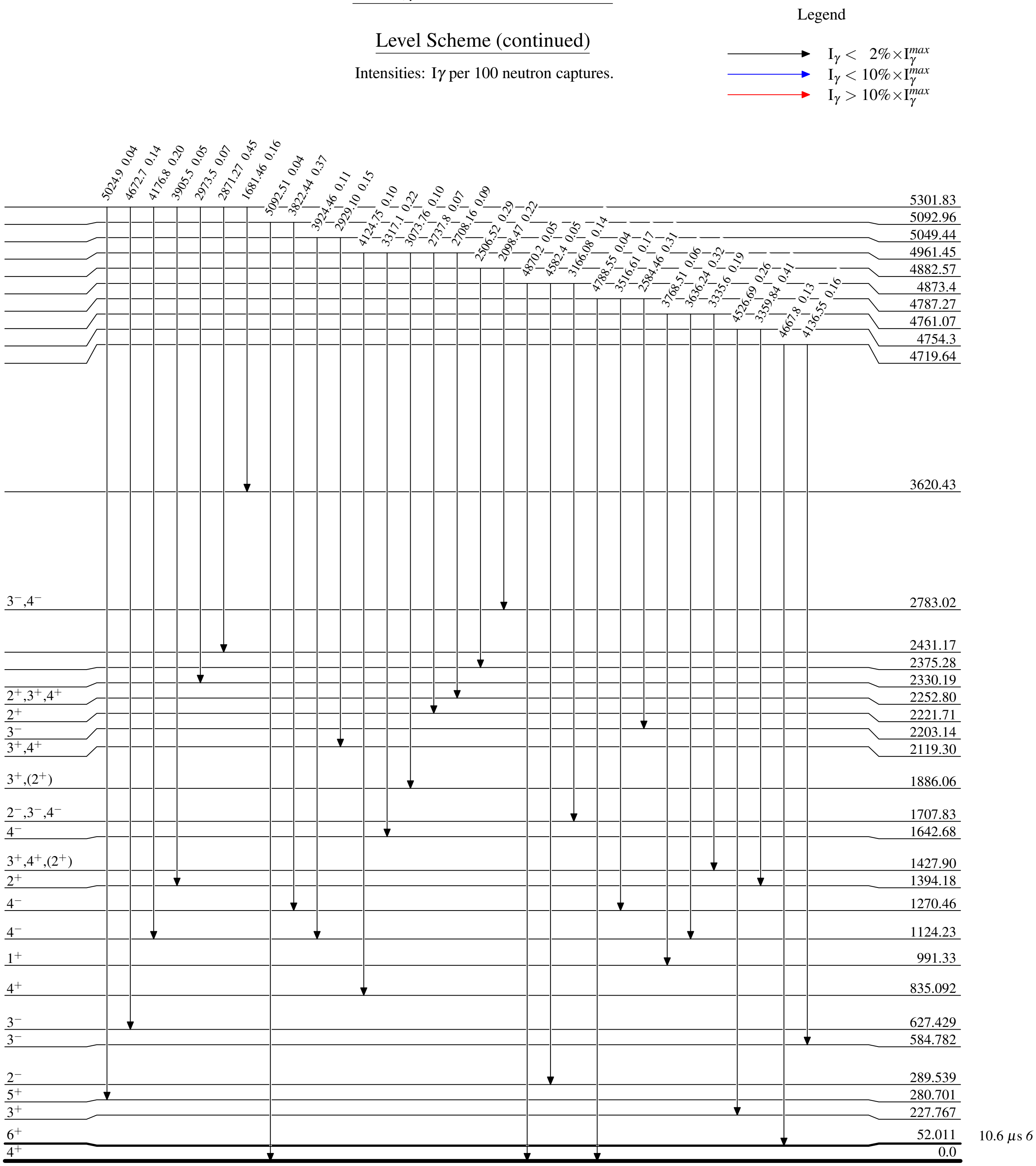


$^{46}_{21}Sc_{25}$

$^{45}Sc(n,\gamma)$ E=thermal 1982Ti02

Level Scheme (continued)

Intensities: Iγ per 100 neutron captures.

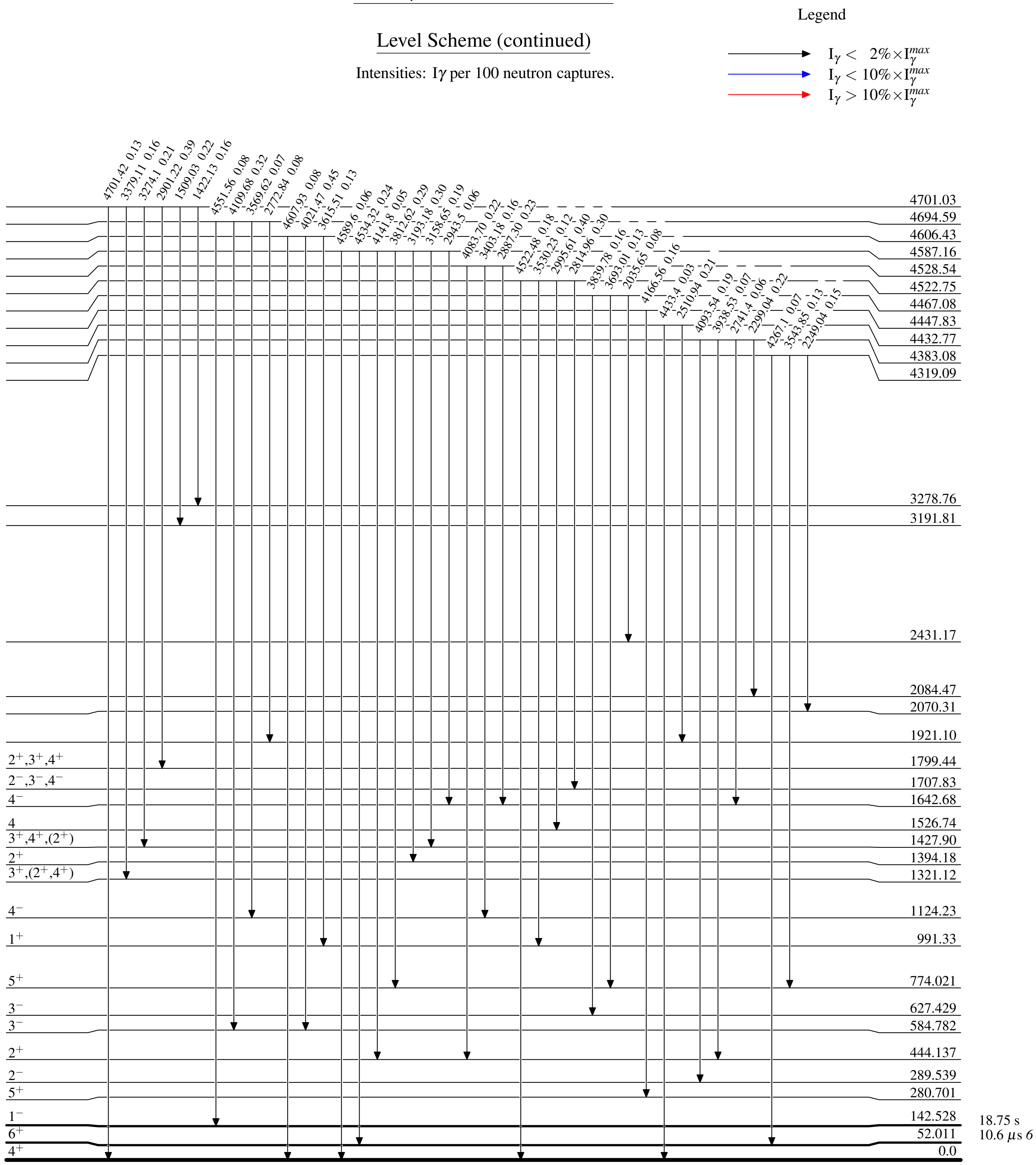


$^{46}_{21}Sc_{25}$

^{45}Sc(n,γ) E=thermal 1982Ti02

Level Scheme (continued)

Intensities: Iγ per 100 neutron captures.

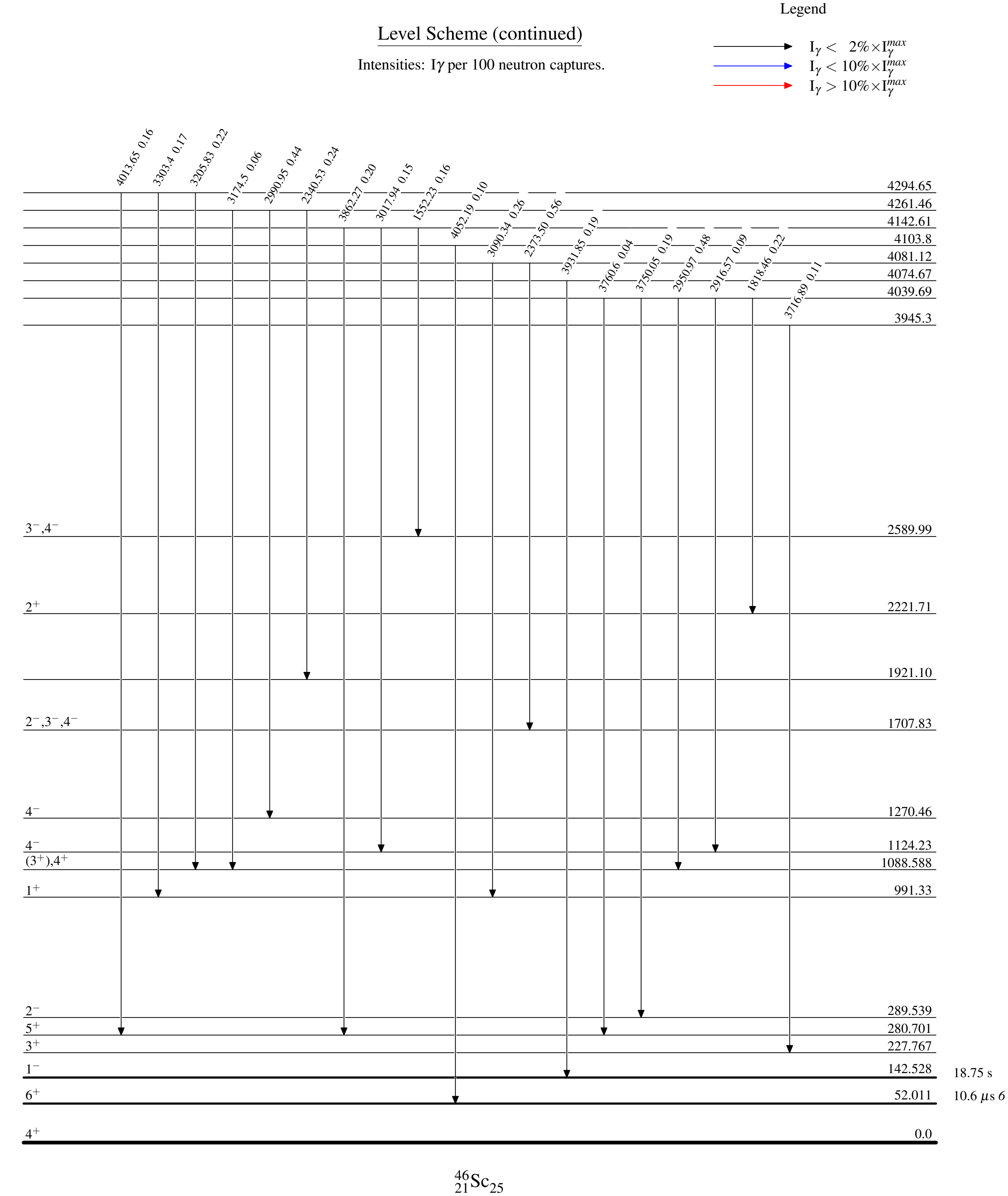


$^{46}_{21}Sc_{25}$

^{45}Sc(n,γ) E=thermal 1982Ti02

Level Scheme (continued)

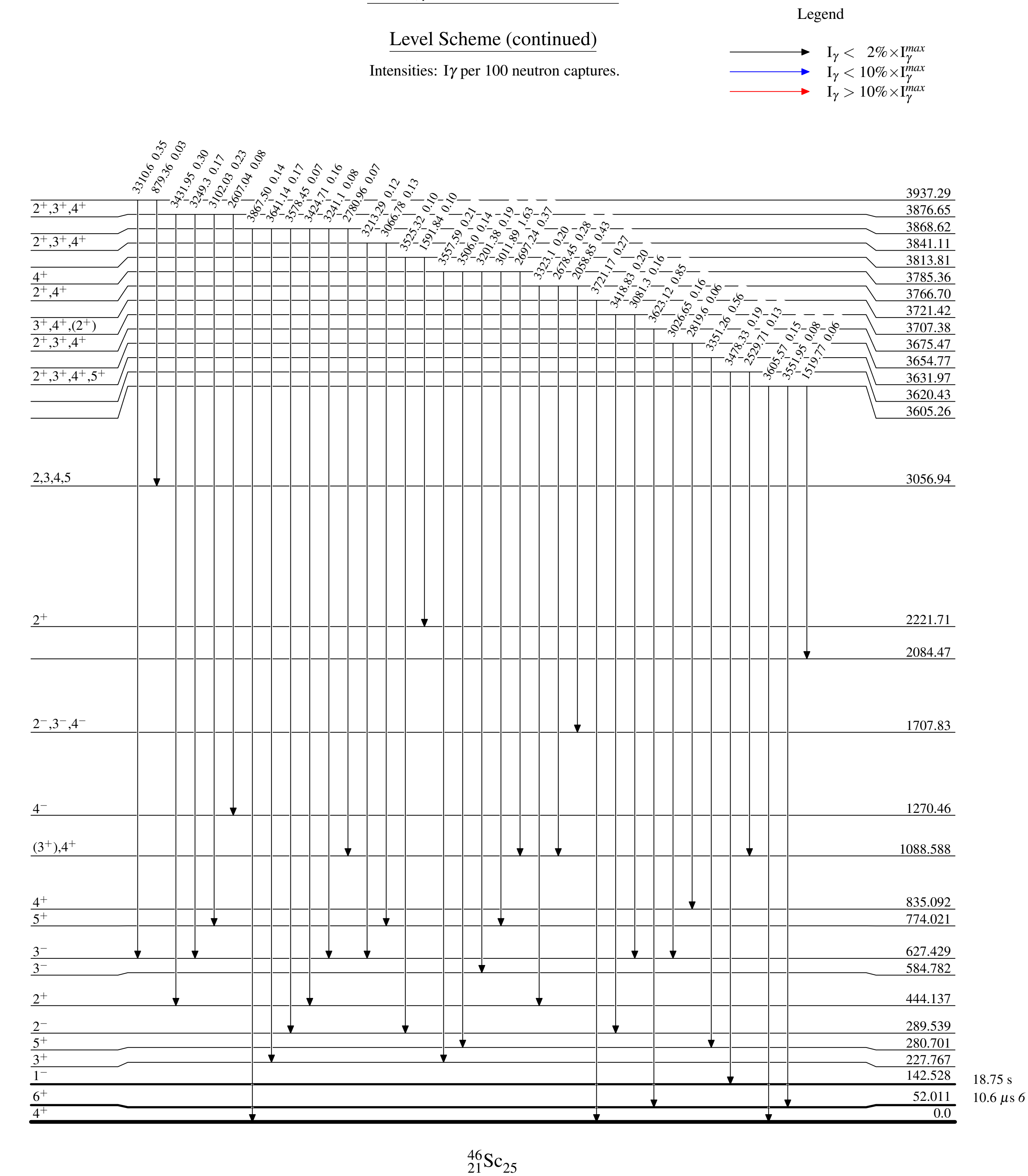
Intensities: Iγ per 100 neutron captures.



^{45}Sc(n,γ) E=thermal 1982Ti02

Level Scheme (continued)

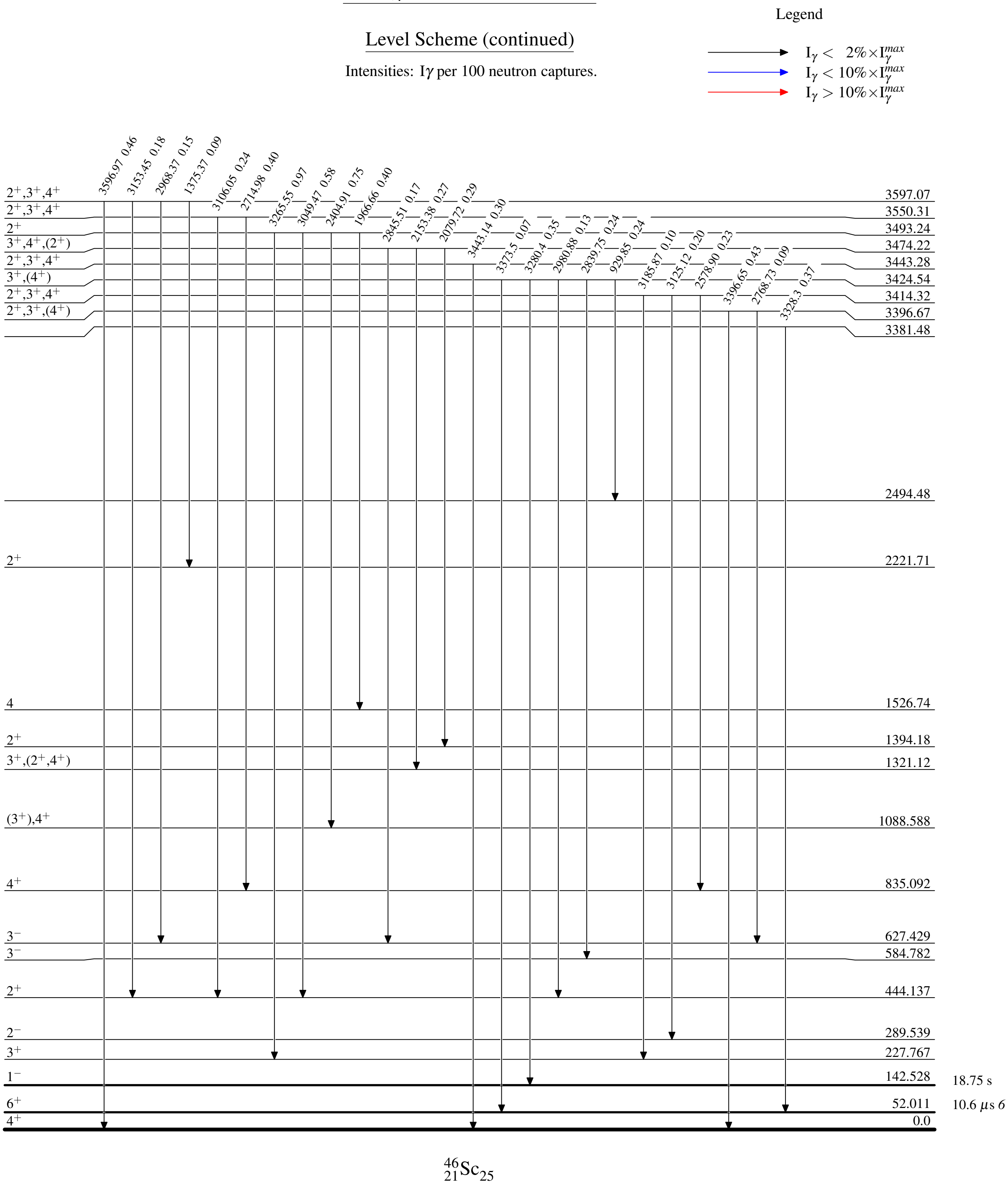
Intensities: Iγ per 100 neutron captures.



^{45}Sc(n,γ) E=thermal 1982Ti02

Level Scheme (continued)

Intensities: Iγ per 100 neutron captures.

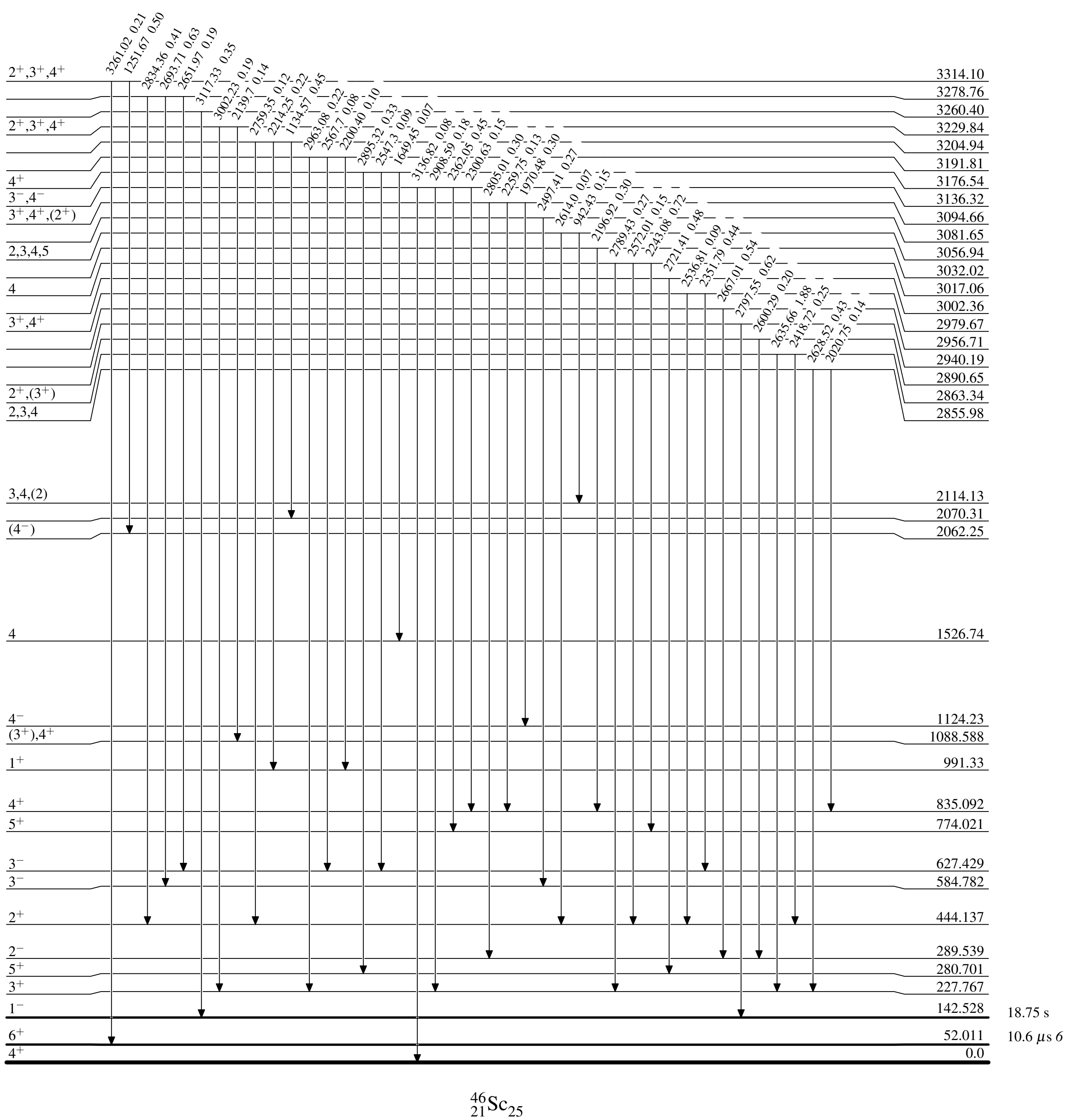


$^{45}Sc(n,\gamma)$ E=thermal 1982Ti02

Level Scheme (continued)

Intensities: Iγ per 100 neutron captures.

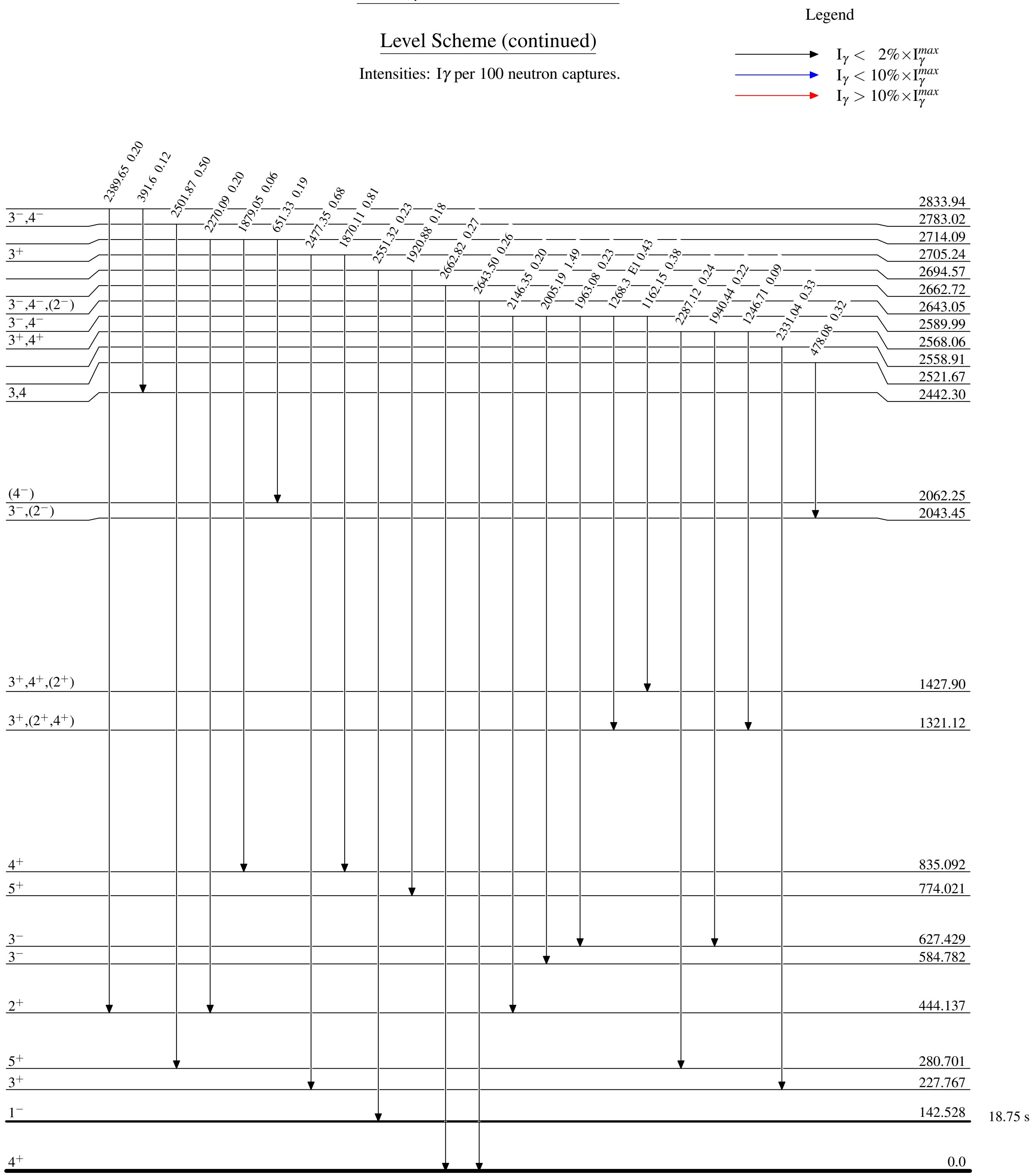
Legend
- $I_\gamma < 2\% \times I_\gamma^{max}$
- $I_\gamma < 10\% \times I_\gamma^{max}$
- $I_\gamma > 10\% \times I_\gamma^{max}$



^{45}Sc(n,γ) E=thermal 1982Ti02

Level Scheme (continued)

Intensities: Iγ per 100 neutron captures.

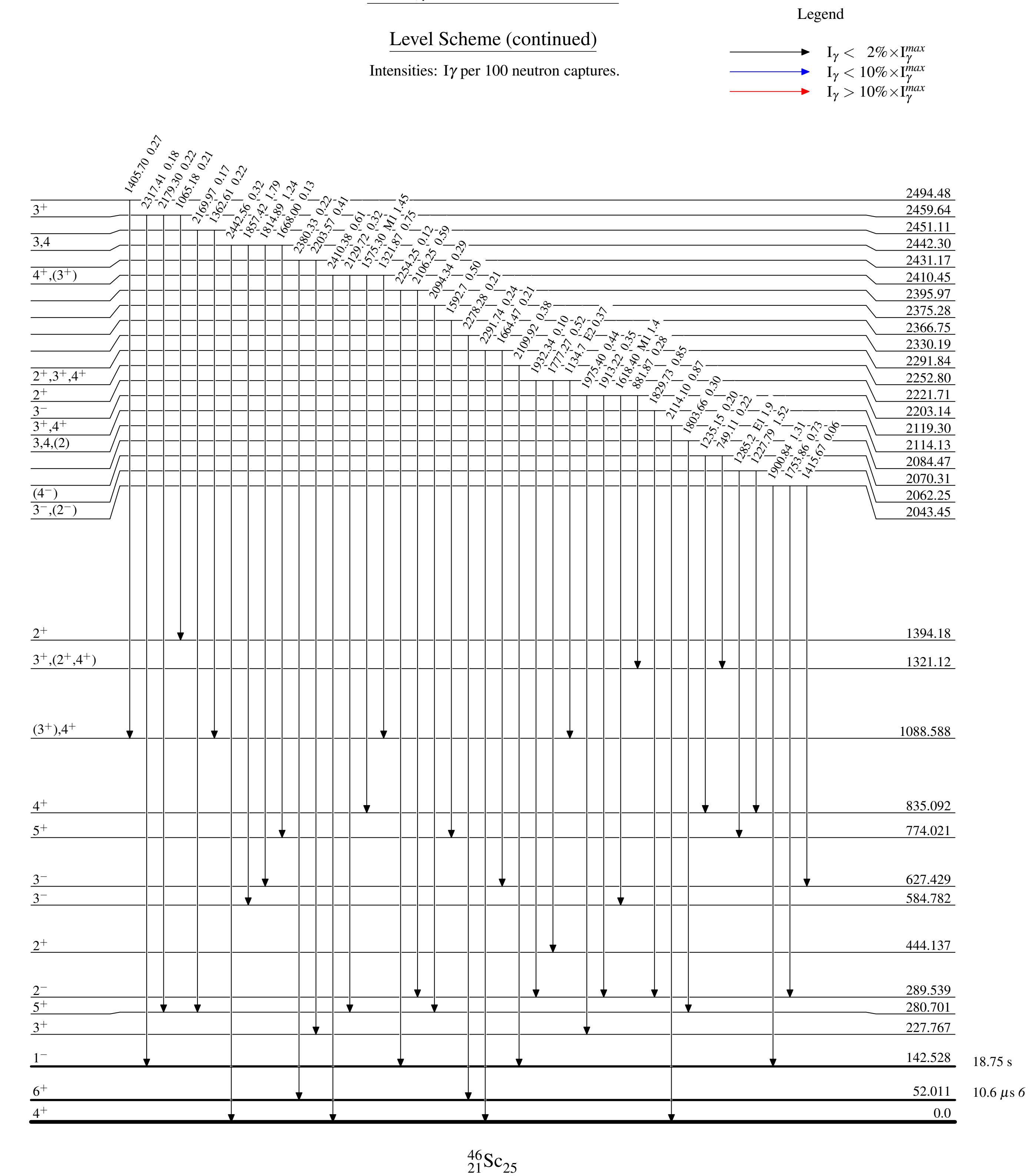


$^{46}_{21}Sc_{25}$

^{45}Sc(n,γ) E=thermal 1982Ti02

Level Scheme (continued)

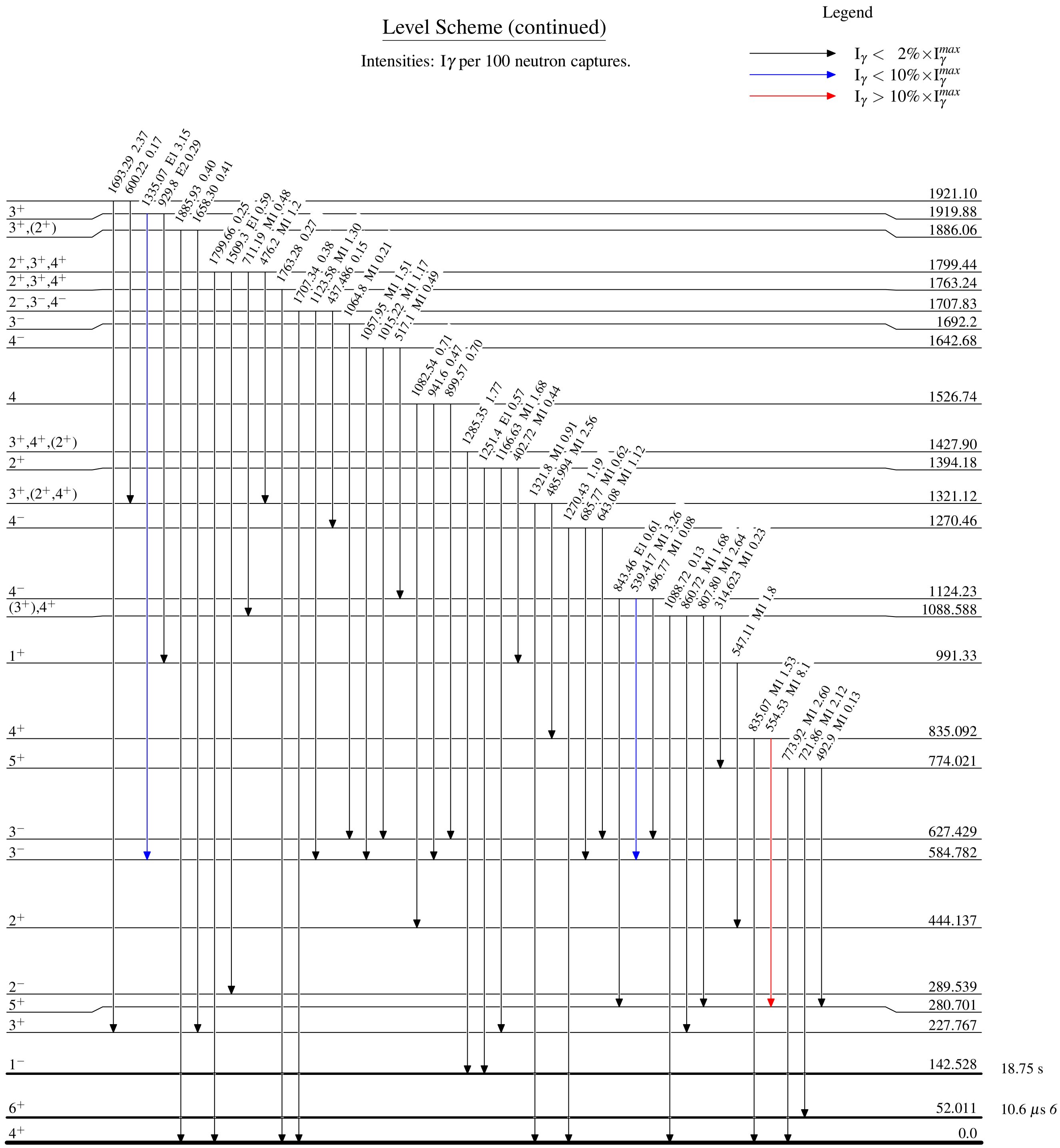
Intensities: Iγ per 100 neutron captures.



^{45}Sc(n,γ) E=thermal 1982Ti02

Level Scheme (continued)

Intensities: Iγ per 100 neutron captures.



$^{46}_{21}Sc_{25}$

^{45}Sc(n,γ) E=thermal 1982Ti02

Level Scheme (continued)

Intensities: Iγ per 100 neutron captures.