^{128}Te(n,γ) E=thermal 2003Wi02

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Janos Timar and Zoltan Elekes, Balraj Singh	NDS 121, 143 (2014)	31-May-2014

2003Wi02 (also 1999Bo31): measured Eγ, Iγ, γγ coin using two HPGe detectors.
Additional information 1.
1994SwZZ: measured γγ, γγ(θ). Two levels at 875,(3/2$^+$) and 937,(1/2$^+$) reported. No details are given in this paper. The level at 875 keV is confirmed in 2003Wi02 but the level at 937 keV has not been reported in any of the other studies, thus omitted here.
1991StZX: measured Eγ, Iγ at NIST facility. A total of 18 excited states reported up to 2704 keV above the 105-keV isomer.
1981Ho12: enriched target, measured Eγ, Iγ for about 50 γ rays; but report only eight excited states.
2007ChZX: PGAA database: 23 γ rays listed in this database, mainly from 1981Ho12 and 1999Bo31. In Budapest measurements with natural Te target, eight secondary γ rays were reported.
All data are taken from 2003Wi02 since this work is the most comprehensive. Partial data reported in 1991StZX and 1981Ho12 are generally in agreement with results from 2003Wi02. 1991StZX report ten primary γ rays and 31 secondary γ rays are listed in 1991StZX, but placements of eight γ rays are different from those given in 2003Wi02. 1981Ho12 mention observation of ≈50 γ rays with Iγ>0.3 per 100 n-captures; however, they report only on those γ rays to levels for which L=1 in (d,p). These data are in agreement with those from 2003Wi02.

^{129}Te Levels

Following levels proposed in 1991StZX have not been adopted here: tentative 936.8, 1717.6, 2229.7, 2443.7, 3995.5, and 3745.5. The γ transitions connected with these levels have been placed elsewhere by 2003Wi02.

E(level)[†]	J^π[@]	T$_{1/2}$[@]
0.0	3/2$^+$	
105.49 *5*	11/2$^-$	33.6 d *1*
180.363[‡] *15*	1/2$^+$	
464.62[‡] *4*	9/2$^{(-)}$	
544.606[‡] *25*	5/2$^+$	
633.741[‡] *22*	5/2$^+$	
759.81[‡] *4*	7/2$^-$	
773.215 *22*	1/2$^+$	
812.93[‡] *7*	7/2$^+$	
874.880[‡] *21*	3/2$^+$[&]	
966.86[‡] *7*	5/2$^+$	
1162.20 *5*	(7/2)$^-$	
1221.25[‡] *4*	(5/2$^-$,7/2$^+$)	
1233.83 *9*	3/2$^+$,5/2$^+$	
1281.56 *6*	5/2$^+$	
1303.39 *6*	1/2$^+$	
1317.85 *4*	7/2$^+$	
1421.34 *9*	5/2$^+$	
1559.84 *4*	(3/2)$^-$	
1599.39 *10*	5/2$^+$	
1656.25 *9*	5/2$^+$	
1752.28 *7*	(5/2)$^-$	
1851.53 *6*	5/2$^-$,7/2$^-$	
1868.86 *12*	5/2$^+$	
2040.19[‡] *4*	3/2$^-$	
2221.66 *7*	(3/2,5/2$^+$)	
2267.23 *4*	3/2$^-$	
2360.473[‡] *21*	3/2$^-$	

E(level)[†]	J^π[@]
2379.557[‡] *23*	3/2$^-$
2493.05 *11*	3/2$^-$
2524.76[‡] *3*	1/2$^-$
2581.67 *8*	3/2$^-$
2705.119[‡] *21*	1/2$^-$
3355.46[‡] *10*	3/2$^-$
3429.8 *3*	(3/2)$^-$
3502.58 *8*	(3/2$^-$)
3528.28 *10*	(1/2$^-$)
3546.91 *9*	(3/2$^-$)
3564.51 *9*	1/2$^-$
3638.38 *7*	1/2$^-$
3648.77 *11*	1/2$^-$
3792.41 *4*	3/2$^-$
3852.71 *12*	3/2$^-$
3865.37 *7*	3/2$^-$
4032.59 *16*	3/2$^-$
4087.54 *11*	3/2$^-$
4121.19 *8*	1/2$^-$
4133.50 *9*	3/2$^-$
4175.3 *3*	(1/2)$^-$
4180.67 *18*	(3/2)$^-$
4204.3 *3*	1/2$^-$
4220.61 *14*	3/2$^-$
4240.5 *3*	3/2$^-$
4277.02 *11*	3/2$^-$
4297.80 *22*	1/2$^-$
4356.13 *8*	1/2$^-$

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^{128}Te(n,γ) E=thermal 2003Wi02 (continued)

^{129}Te Levels (continued)

E(level)[†]	J^{π}[@]
4364.57 *6*	1/2⁻
4374.0 *3*	(1/2,3/2,5/2⁺)
4388.93 *10*	1/2⁻
4432.93 *9*	3/2⁻
4588.48 *12*	(1/2,3/2,5/2⁺)
(6082.40[#] *8*)	1/2⁺[a]

[†] From least-squares fit to Eγ data. According to 2003Wi02, a systematic uncertainty of about 80 eV arising from calibration of singles γ spectra should be added in quadrature.
[‡] Level also reported in 1991StZX above the 105-keV isomer.
[#] Statistical uncertainty=0.023 keV. According to statement in 2003Wi02 about systematic uncertainty in calibration of singles spectra, 0.08 keV has been added in quadrature by evaluators. S(n)=6082.41 *8* (2012Wa38).
[@] From Adopted Levels.
[&] 3/2 from γγ(θ) (1994SwZZ).
[a] s-wave capture in 0⁺.

γ(^{129}Te)

All placed gamma rays are from γγ coin data in 2003Wi02, unless stated otherwise.

E_{γ}	I_{γ}[†e]	E_i(level)	J^{π}_i	E_f	J^{π}_f	Comments
[x]149.65 *5*	0.310 *12*					
180.33 *3*	44.0 *4*	180.363	1/2⁺	0.0	3/2⁺	Additional information 4.
[x]188.42 *23*	0.050 *9*					
[x]230.1 *3*	0.040 *10*					
295.27 *4*	1.23 *3*	759.81	7/2⁻	464.62	9/2$^{(-)}$	Additional information 9.
[x]300.81 *14*	0.100 *12*					
330.32 *5*	1.10 *2*	874.880	3/2⁺	544.606	5/2⁺	
338.65 *8*	0.45 *3*	1559.84	(3/2)⁻	1221.25	(5/2⁻,7/2⁺)	
344.55 *10*	0.220 *13*	2705.119	1/2⁻	2360.473	3/2⁻	Additional information 30.
359.19 *5*	7.60 *8*	464.62	9/2$^{(-)}$	105.49	11/2⁻	Additional information 5.
364.26 *10*	0.150 *14*	544.606	5/2⁺	180.363	1/2⁺	
[x]367.90 *7*	0.23 *4*					
[x]380.2 *3*	0.070 *11*					
[x]384.75 *17*	0.110 *11*					
[x]391.6 *4*	0.050 *11*					
[x]416.67 *9*	0.27 *4*					
427.7 *3*	0.050 *9*	4220.61	3/2⁻	3792.41	3/2⁻	
437.4 *4*	0.070 *13*	2705.119	1/2⁻	2267.23	3/2⁻	
[x]439.9 *4*	0.070 *12*					
[x]443.5 *4*	0.060 *13*					
453.33 *3*	1.01 *2*	633.741	5/2⁺	180.363	1/2⁺	Additional information 7.
461.47 *5*	0.65 *3*	1221.25	(5/2⁻,7/2⁺)	759.81	7/2⁻	
480.22[‡] *21*	0.28[‡] *4*	2040.19	3/2⁻	1559.84	(3/2)⁻	
527.90 *8*	0.220 *11*	2379.557	3/2⁻	1851.53	5/2⁻,7/2⁻	
[x]531.46 *20*	0.080 *11*					
544.61 *3*	5.37 *5*	544.606	5/2⁺	0.0	3/2⁺	Additional information 6.
[x]546.98 *16*	0.110 *11*					
590.00 *9*	0.200 *12*	1752.28	(5/2)⁻	1162.20	(7/2)⁻	

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^{128}Te(n,γ) E=thermal 2003Wi02 (continued)

γ(^{129}Te) (continued)

E_γ	I_γ[†e]	E_i(level)	J^π_i	E_f	J^π_f	Comments
592.81 3	0.89 2	773.215	1/2+	180.363	1/2+	
x599.34 23	0.100 14					
623.87 20	0.090 12	2493.05	3/2−	1868.86	5/2+	
633.78 3	3.92 4	633.741	5/2+	0.0	3/2+	Additional information 8.
x637.61 21	0.080 11					
641.84 17	0.110 12	2493.05	3/2−	1851.53	5/2−,7/2−	
648.11 10	0.190 11	1421.34	5/2+	773.215	1/2+	
654.30 3	2.85 3	759.81	7/2−	105.49	11/2−	Additional information 10.
x666.98 14	0.180 14					
669.64 8	0.250 13	1303.39	1/2+	633.741	5/2+	
684.6 3	0.170 12	1317.85	7/2+	633.741	5/2+	
689.22[g] 9	0.40[g] 6	1233.83	3/2+,5/2+	544.606	5/2+	
689.22[g] 9	1.01[ga] 9	1851.53	5/2−,7/2−	1162.20	(7/2)−	
694.49 3	2.17 2	874.880	3/2+	180.363	1/2+	Additional information 12.
697.59 3	2.67 3	1162.20	(7/2)−	464.62	9/2(−)	Additional information 16.
704.40 18	0.140 13	2360.473	3/2−	1656.25	5/2+	
707.21 15	0.41 6	2267.23	3/2−	1559.84	(3/2)−	
723.22[‡] 14	0.11[‡] 2	2379.557	3/2−	1656.25	5/2+	
729.97 10	0.190 13	2581.67	3/2−	1851.53	5/2−,7/2−	
736.94 6	0.38 2	1281.56	5/2+	544.606	5/2+	
756.59 3	3.1 3	1221.25	(5/2−,7/2+)	464.62	9/2(−)	Additional information 17.
773.22[g] 3	2.79[g] 20	773.215	1/2+	0.0	3/2+	
773.22[g] 3	0.10[g] 2	1317.85	7/2+	544.606	5/2+	
786.45[g#] 7	0.15[g@] 2	966.86	5/2+	180.363	1/2+	Additional information 14.
786.45[g] 7	0.27[g] 3	1559.84	(3/2)−	773.215	1/2+	
786.45[g] 7	0.27[g] 3	1599.39	5/2+	812.93	7/2+	
800.04 3	0.63 7	1559.84	(3/2)−	759.81	7/2−	
800.40[‡] 20	0.48[‡] 7	2360.473	3/2−	1559.84	(3/2)−	
812.93 7	0.54 2	812.93	7/2+	0.0	3/2+	Additional information 11.
818.86 6	0.430 13	2040.19	3/2−	1221.25	(5/2−,7/2+)	
x857.1 6	0.040 12					
x874.78 4	3.18 3					
874.78 4	3.18 3	874.880	3/2+	0.0	3/2+	Additional information 13.
885.0 3	0.110 14	1851.53	5/2−,7/2−	966.86	5/2+	
x889.0 3	0.090 14					
x916.13 12	0.220 14					
x937.4 3	0.100 14					Additional information 2.
x945.7 4	0.070 13					
966.87 7	1.25 3	966.86	5/2+	0.0	3/2+	Additional information 15.
x981.6 5	0.080 14					
x984.1 4	0.10 2					
992.52 8	0.43 2	1752.28	(5/2)−	759.81	7/2−	
x996.3 4	0.09 2					
1000.26 10	0.340 14	2221.66	(3/2,5/2+)	1221.25	(5/2−,7/2+)	Additional information 20.
x1034.97 9	0.360 15					
1045.83 10	0.36 2	2267.23	3/2−	1221.25	(5/2−,7/2+)	Additional information 21.
1053.36 19	0.36 2	1233.83	3/2+,5/2+	180.363	1/2+	
1056.53 16	0.210 15	1162.20	(7/2)−	105.49	11/2−	
x1072.34 23	0.140 10					
1091.42 23	0.14 2	1851.53	5/2−,7/2−	759.81	7/2−	
1095.47 18	0.26 2	1868.86	5/2+	773.215	1/2+	
1097.9[‡] 3	0.49[‡] 4	2379.557	3/2−	1281.56	5/2+	
1105.46[b] 11	0.20 2	2267.23	3/2−	1162.20	(7/2)−	
1123.01 7	0.57 2	1303.39	1/2+	180.363	1/2+	

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^{128}Te(n,γ) E=thermal 2003Wi02 (continued)

γ(^{129}Te) (continued)

Eγ	Iγ[†e]	Ei(level)	$J^π_i$	E_f	$J^π_f$	Comments
x1126.10 *24*	0.10 *2*					
1139.21 *13*	0.39 *3*	2360.473	3/2−	1221.25	(5/2−,7/2+)	
x1150.17 *23*	0.13 *2*					
x1155.57 *15*	0.23 *2*					
1158.37 *12*	0.83 *4*	2379.557	3/2−	1221.25	(5/2−,7/2+)	
x1208.3 *3*	0.12 *2*					
x1211.9 *3*	0.13 *2*					
1221.23 *13*	0.13 *2*	1221.25	(5/2−,7/2+)	0.0	3/2+	
x1232.4 *3*	0.21 *2*					
1234.5 *3*	0.26 *2*	1868.86	5/2+	633.741	5/2+	
x1253.87 *21*	0.18 *2*					
x1273.5 *3*	0.11 *1*					
1281.59 *10*	0.39 *3*	1281.56	5/2+	0.0	3/2+	
1287.62 *18*	0.20 *2*	1752.28	(5/2)−	464.62	9/2(−)	
x1301.5 *4*	0.18 *2*					
1303.6 *4*	0.23 *2*	1303.39	1/2+	0.0	3/2+	
1318.54[&] *22*	0.16 *2*	1317.85	7/2+	0.0	3/2+	
1324.6 *3*	0.21 *2*	1868.86	5/2+	544.606	5/2+	
x1338.8 *3*	0.15 *2*					
x1342.2 *5*	0.10 *2*					
x1358.1 *7*	0.10 *2*					
1360.4 *4*	0.17 *3*	2581.67	3/2−	1221.25	(5/2−,7/2+)	
1379.33 *19*	0.18 *3*	1559.84	(3/2)−	180.363	1/2+	
1401.4 *3*	0.13 *2*	2705.119	1/2−	1303.39	1/2+	
1412.4 *5*	0.08 *2*	2379.557	3/2−	966.86	5/2+	
x1418.07 *21*	0.33 *2*					
1421.36 *15*	0.48 *2*	1421.34	5/2+	0.0	3/2+	
x1439.7 *4*	0.15 *2*					
1470.9[d] *4*	0.27 *4*	2705.119	1/2−	1233.83	3/2+,5/2+	
1485.48 *16*	0.33 *2*	2360.473	3/2−	874.880	3/2+	
1493.91[g] *12*	0.29[g] *4*	2267.23	3/2−	773.215	1/2+	
1493.91[g] *12*	0.45[g] *5*	(6082.40)	1/2+	4588.48	(1/2,3/2,5/2+)	
1504.3 *3*	0.57 *9*	2379.557	3/2−	874.880	3/2+	Additional information 25.
x1514.2 *4*	0.16 *2*					
1526.4 *6*	0.11 *3*	2493.05	3/2−	966.86	5/2+	
x1529.55 *22*	0.15 *3*					
x1541.1 *3*	0.16 *2*					
x1549.0 *5*	0.10 *2*					
x1556.53 *5*	0.11 *2*					
1559.66 *21*	0.39 *2*	1559.84	(3/2)−	0.0	3/2+	
x1569.84 *23*	0.28 *4*					
1586.7 *5*	0.14 *4*	2360.473	3/2−	773.215	1/2+	
1606.60 *13*	0.60 *5*	2379.557	3/2−	773.215	1/2+	
x1617.95 *16*	0.52 *5*					
1619.5[‡] *6*	0.34[‡] *4*	2379.557	3/2−	759.81	7/2−	
1633.6 *3*	0.26 *5*	2267.23	3/2−	633.741	5/2+	
1649.47[gc] *9*	0.31[g] *9*	2524.76	1/2−	874.880	3/2+	Additional information 28.
1649.47[g] *9*	0.48[g] *10*	(6082.40)	1/2+	4432.93	3/2−	
1656.29 *13*	0.52 *5*	1656.25	5/2+	0.0	3/2+	
1677.29 *15*	0.48 *5*	2221.66	(3/2,5/2+)	544.606	5/2+	
x1682.50 *23*	0.31 *5*					
1693.45 *10*	0.93 *7*	(6082.40)	1/2+	4388.93	1/2−	
1708.4[f] *3*	0.50[f] *7*	4087.54	3/2−	2379.557	3/2−	
1708.4[f] *3*	0.50[f] *7*	(6082.40)	1/2+	4374.0	(1/2,3/2,5/2+)	

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^{128}Te(n,γ) E=thermal 2003Wi02 (continued)

γ(^{129}Te) (continued)

E_γ	I_γ [†e]	E_i(level)	J^π_i	E_f	J^π_f	Comments
1717.80 *5*	1.76 *5*	(6082.40)	1/2+	4364.57	1/2−	Additional information 36.
1726.24 *7*	0.28 *5*	(6082.40)	1/2+	4356.13	1/2−	
x1731.9 *3*	0.27 *5*					
1745.7 *3*	0.24 *5*	2379.557	3/2−	633.741	5/2+	
1752.6 *4*	0.17 *5*	1752.28	(5/2)−	0.0	3/2+	
x1770.41 *20*	0.25 *2*					
1784.58 *23*	0.22 *4*	(6082.40)	1/2+	4297.80	1/2−	
1805.35 *11*	0.40 *2*	(6082.40)	1/2+	4277.02	3/2−	
1815.6 *5*	0.08 *2*	2360.473	3/2−	544.606	5/2+	
1830.22 *4*	2.12 *2*	2705.119	1/2−	874.880	3/2+	Additional information 31.
1834.9 *3*	0.26 *2*	2379.557	3/2−	544.606	5/2+	
1842.1 *3*	0.49 *2*	(6082.40)	1/2+	4240.5	3/2−	
x1848.3 *5*	0.14 *2*					
1851.28 *18*	0.37 *3*	1851.53	5/2−,7/2−	0.0	3/2+	
1859.64 *8*	1.51 *5*	2040.19	3/2−	180.363	1/2+	Additional information 18.
1861.80 *18*	0.58 *5*	(6082.40)	1/2+	4220.61	3/2−	
1878.1 *3*	0.28 *5*	(6082.40)	1/2+	4204.3	1/2−	
1901.77 *18*	0.34 *4*	(6082.40)	1/2+	4180.67	(3/2)−	
1906.9 *3*	0.20 *4*	(6082.40)	1/2+	4175.3	(1/2)−	
x1920.7 *3*	0.21 *4*					
1931.91 *23*	0.31 *5*	2705.119	1/2−	773.215	1/2+	
1948.81[‡] *10*	0.61[‡] *13*	(6082.40)	1/2+	4133.50	3/2−	
1961.16[‡] *8*	0.63[‡] *20*	(6082.40)	1/2+	4121.19	1/2−	
1987.6[‡] *6*	0.050[‡] *12*	3546.91	(3/2−)	1559.84	(3/2)−	
1994.92 *12*	0.68 *5*	(6082.40)	1/2+	4087.54	3/2−	
1999.5 *3*	0.24 *5*	4220.61	3/2−	2221.66	(3/2,5/2+)	
x2022.67 *20*	0.34 *3*					
2040.38 *7*	0.71 *4*	2040.19	3/2−	0.0	3/2+	Additional information 19.
2041.6[‡] *7*	0.340[‡] *14*	2221.66	(3/2,5/2+)	180.363	1/2+	
2049.87 *16*	0.51 *3*	(6082.40)	1/2+	4032.59	3/2−	Additional information 37.
x2059.6 *4*	0.17 *3*					
x2066.7 *3*	0.30 *3*					
2071.03 *23*	0.43 *3*	2705.119	1/2−	633.741	5/2+	
x2079.5 *3*	0.24 *3*					
2086.84 *6*	1.32 *3*	2267.23	3/2−	180.363	1/2+	Additional information 22.
x2107.30 *15*	0.44 *4*					
x2134.5 *3*	0.18 *3*					
x2164.9 *4*	0.14 *3*					
2180.12 *3*	17.2 *5*	2360.473	3/2−	180.363	1/2+	Additional information 23.
x2194.03 *14*	0.46 *3*					
2199.21 *3*	5.70 *6*	2379.557	3/2−	180.363	1/2+	Additional information 26.
2216.96 *7*	0.85 *3*	(6082.40)	1/2+	3865.37	3/2−	
2221.5[‡] *4*	0.98[‡] *14*	2221.66	(3/2,5/2+)	0.0	3/2+	
2229.63 *13*	0.53 *2*	(6082.40)	1/2+	3852.71	3/2−	Additional information 38.
2267.1 *9*	0.12 *3*	2267.23	3/2−	0.0	3/2+	
2289.99 *4*	3.83 *4*	(6082.40)	1/2+	3792.41	3/2−	
2312.7 *8*	0.12 *3*	2493.05	3/2−	180.363	1/2+	
x2336.4 *3*	0.25 *2*					Additional information 3.
2343.7 *3*	0.19 *2*	2524.76	1/2−	180.363	1/2+	
2360.42 *3*	3.22 *3*	2360.473	3/2−	0.0	3/2+	Additional information 24.
2371.1 *7*	0.11 *2*	3792.41	3/2−	1421.34	5/2+	
x2374.71 *20*	0.46 *2*					
2379.51 *4*	2.06 *4*	2379.557	3/2−	0.0	3/2+	Additional information 27.
2401.74 *22*	0.27 *2*	2581.67	3/2−	180.363	1/2+	
x2410.0 *5*	0.12 *2*					

Continued on next page (footnotes at end of table)

^{128}Te(n,γ) E=thermal 2003Wi02 (continued)

γ(^{129}Te) (continued)

E_γ	I_γ [†e]	E_i(level)	J^π_i	E_f	J^π_f	Comments
2433.65 *11*	0.56 *3*	(6082.40)	1/2+	3648.77	1/2−	
2443.99 *7*	0.97 *3*	(6082.40)	1/2+	3638.38	1/2−	Additional information 39.
[x]2480.44 *24*	0.25 *2*					
2493.1 *6*	0.14 *3*	2493.05	3/2−	0.0	3/2+	
2518.02 *11*	1.14 *2*	(6082.40)	1/2+	3564.51	1/2−	
2524.78[g] *3*	1.1[g] *3*	2524.76	1/2−	0.0	3/2+	Additional information 29.
2524.78[g] *3*	4.8[g] *3*	2705.119	1/2−	180.363	1/2+	Additional information 32.
2535.47 *9*	0.79 *3*	(6082.40)	1/2+	3546.91	(3/2−)	
[x]2542.7 *4*	0.16 *2*					
2554.0[‡] *5*	0.26[‡] *8*	3429.8	(3/2)−	874.880	3/2+	
2554.06 *10*	0.43 *8*	(6082.40)	1/2+	3528.28	(1/2−)	
2579.78 *7*	1.06 *3*	(6082.40)	1/2+	3502.58	(3/2−)	
2581.5[‡] *9*	0.09[‡] *2*	2581.67	3/2−	0.0	3/2+	
[x]2606.89 *20*	0.33 *2*					
2627.7 *5*	0.12 *2*	3502.58	(3/2−)	874.880	3/2+	
2630.0 *11*	0.08 *3*	3852.71	3/2−	1221.25	(5/2−,7/2+)	
2652.3[g] *4*	0.19[g] *6*	3528.28	(1/2−)	874.880	3/2+	
2652.3[g] *4*	0.65[g] *6*	(6082.40)	1/2+	3429.8	(3/2)−	
2670.4 *6*	0.11 *2*	3429.8	(3/2)−	759.81	7/2−	
2705.07 *4*	3.23 *3*	2705.119	1/2−	0.0	3/2+	Additional information 33.
[x]2721.6 *5*	0.16 *2*					
2726.70 *12*	0.68 *3*	(6082.40)	1/2+	3355.46	3/2−	Additional information 40.
2741.4 *11*	0.07 *2*	3502.58	(3/2−)	759.81	7/2−	
2754.8 *7*	0.14 *3*	3528.28	(1/2−)	773.215	1/2+	
[x]2837.35 *20*	0.53 *3*					
[x]2878.8 *6*	0.21 *3*					
[x]2898.9 *4*	0.22 *3*					
[x]2989.3 *5*	0.31 *3*					
[x]2994.0 *6*	0.23 *3*					
3018.7[‡] *10*	0.11[‡] *3*	3792.41	3/2−	773.215	1/2+	
[x]3046.5 *3*	0.29 *3*					
[x]3053.7 *3*	0.31 *3*					
[x]3127.1 *3*	0.34 *3*					
[x]3237.3 *9*	0.11 *2*					
3250.0 *10*	0.10 *2*	3429.8	(3/2)−	180.363	1/2+	
3322.0 *4*	0.28 *3*	3502.58	(3/2−)	180.363	1/2+	
3348.6 *5*	0.64 *3*	3528.28	(1/2−)	180.363	1/2+	
3355.14 *14*	0.73 *4*	3355.46	3/2−	0.0	3/2+	
3366.3 *6*	0.22 *3*	3546.91	(3/2−)	180.363	1/2+	
3377.26 *4*	10.44 *10*	(6082.40)	1/2+	2705.119	1/2−	Additional information 41.
[x]3391.2 *3*	0.27 *3*					
[x]3412.2 *4*	0.27 *3*					
3457.6 *3*	0.33 *3*	3638.38	1/2−	180.363	1/2+	
3468.7 *3*	0.39 *5*	3648.77	1/2−	180.363	1/2+	
3500.59 *12*	0.86 *4*	(6082.40)	1/2+	2581.67	3/2−	
3528.4 *4*	0.54 *8*	3528.28	(1/2−)	0.0	3/2+	
[x]3545.1 *5*	0.17 *3*					
3546.6[‡] *11*	0.050[‡] *12*	3546.91	(3/2−)	0.0	3/2+	
3557.60 *9*	1.16 *3*	(6082.40)	1/2+	2524.76	1/2−	Additional information 42.
3564.71 *14*	1.04 *4*	3564.51	1/2−	0.0	3/2+	
3589.41 *17*	0.52 *3*	(6082.40)	1/2+	2493.05	3/2−	
[x]3601.1 *10*	0.08 *3*					
3612.02 *6*	2.14 *4*	3792.41	3/2−	180.363	1/2+	
3638.36 *13*	0.69 *3*	3638.38	1/2−	0.0	3/2+	Additional information 34.
3672.2 *3*	0.26 *3*	3852.71	3/2−	180.363	1/2+	

Continued on next page (footnotes at end of table)

^{128}Te(n,γ) E=thermal 2003Wi02 (continued)

γ(^{129}Te) (continued)

E_γ	I_γ[†e]	E_i(level)	J^π_i	E_f	J^π_f	Comments
3684.74 *14*	0.55 *3*	3865.37	3/2$^-$	180.363	1/2$^+$	
3702.82 *6*	10.33 *10*	(6082.40)	1/2$^+$	2379.557	3/2$^-$	Additional information 43.
3721.87 *5*	19.54 *20*	(6082.40)	1/2$^+$	2360.473	3/2$^-$	Additional information 44.
^{x}3787.7 *7*	0.14 *2*					
3792.4 *3*	0.39 *2*	3792.41	3/2$^-$	0.0	3/2$^+$	
3815.14 *6*	2.39 *5*	(6082.40)	1/2$^+$	2267.23	3/2$^-$	
^{x}3824.1 *7*	0.12 *2*					
^{x}3849.8 *6*	0.24 *3*					
3853.6 *7*	0.50 *3*	4032.59	3/2$^-$	180.363	1/2$^+$	
3860.59 *10*	1.00 *3*	(6082.40)	1/2$^+$	2221.66	(3/2,5/2$^+$)	
^{x}3876.7 *7*	0.13 *2*					
^{x}3882.2 *4*	0.30 *2*					
^{x}3888.7 *6*	0.14 *2*					
^{x}3902.14 *12*	0.85 *3*					
3907.2 *5*	0.25 *2*	4087.54	3/2$^-$	180.363	1/2$^+$	
3940.4 *4*	0.24 *2*	4121.19	1/2$^-$	180.363	1/2$^+$	
3952.8 *4*	0.26 *2*	4133.50	3/2$^-$	180.363	1/2$^+$	
4001.5 *8*	0.22 *2*	4180.67	(3/2)$^-$	180.363	1/2$^+$	
4042.11 *7*	2.09 *4*	(6082.40)	1/2$^+$	2040.19	3/2$^-$	Additional information 45.
4060.5 *5*	0.21 *2*	4240.5	3/2$^-$	180.363	1/2$^+$	
^{x}4076.7 *6*	0.15 *2*					
4096.5[‡] *3*	0.10[‡] *3*	4277.02	3/2$^-$	180.363	1/2$^+$	
4120.5[‡] *4*	0.060[‡] *13*	4121.19	1/2$^-$	0.0	3/2$^+$	
4133.23 *19*	0.46 *2*	4133.50	3/2$^-$	0.0	3/2$^+$	
4174.6[f] *6*	0.32[f] *3*	4175.3	(1/2)$^-$	0.0	3/2$^+$	
4174.6[f] *6*	0.32[f] *3*	4356.13	1/2$^-$	180.363	1/2$^+$	
4184.0 *3*	0.44 *3*	4364.57	1/2$^-$	180.363	1/2$^+$	
4204.0 *9*	0.21 *4*	4204.3	1/2$^-$	0.0	3/2$^+$	
4208.4 *4*	0.44 *4*	4388.93	1/2$^-$	180.363	1/2$^+$	
^{x}4246.0 *8*	0.24 *3*					
4252.0 *6*	0.23 *2*	4432.93	3/2$^-$	180.363	1/2$^+$	
4297.7 *6*	0.17 *2*	4297.80	1/2$^-$	0.0	3/2$^+$	
4364.38 *15*	0.83 *2*	4364.57	1/2$^-$	0.0	3/2$^+$	Additional information 35.
4374.6 *12*	0.07 *2*	4374.0	(1/2,3/2,5/2$^+$)	0.0	3/2$^+$	
^{x}4390.1 *4*	0.24 *2*					
^{x}4407.0 *5*	0.22 *2*					
4426.8 *7*	0.23 *3*	(6082.40)	1/2$^+$	1656.25	5/2$^+$	
4433.6 *5*	0.65 *3*	4432.93	3/2$^-$	0.0	3/2$^+$	
4523.0 *5*	0.23 *2*	(6082.40)	1/2$^+$	1559.84	(3/2)$^-$	
4588.5 *5*	0.21 *3*	4588.48	(1/2,3/2,5/2$^+$)	0.0	3/2$^+$	
^{x}4859.8 *11*	0.08 *2*					
^{x}4903.4 *8*	0.21 *3*					
^{x}4919.6 *10*	0.11 *2*					
^{x}5049.7 *9*	0.12 *2*					
^{x}5133.8 *8*	0.17 *2*					
5449.4 *6*	0.22 *2*	(6082.40)	1/2$^+$	633.741	5/2$^+$	
5901.55 *24*	0.59 *3*	(6082.40)	1/2$^+$	180.363	1/2$^+$	
6082.0 *3*	0.39 *2*	(6082.40)	1/2$^+$	0.0	3/2$^+$	

[†] Intensities are per 100 neutron captures; a systematic uncertainty of 10% should be added in quadrature for absolute intensities, probably due to unplaced or missing γ rays. Intensities for 10 primary γ rays and 31 secondary γ rays are listed in 1991StZX, but several of these γ rays have not been reported in 2003Wi02. Relative intensities are listed in 1991StZX. To match these to

Continued on next page (footnotes at end of table)

^{128}Te(n,γ) E=thermal 2003Wi02 (continued)

γ(^{129}Te) (continued)

absolute scale as in 2003Wi02, multiply by a factor of 30.5.

‡ From $\gamma\gamma$ coin spectra.

Placement not confirmed in (n,γ) coincidence data, but confirmed in ^{129}Sb β^- decay.

@ Total intensity for doublet=0.42 *3*; split based on branching ratios in ^{129}Sb decay (same in Adopted dataset).

& Poor fit; level-energy difference=1317.84.

[a] 1.41 in Table 5 of 2003Wi02 is a misprint.

[b] Poor fit; level-energy difference=1105.03.

[c] Poor fit; level-energy difference 1649.86.

[d] Placement is not unique; also in $\gamma\gamma$ coin with 359γ.

[e] Intensity per 100 neutron captures.

[f] Multiply placed with undivided intensity.

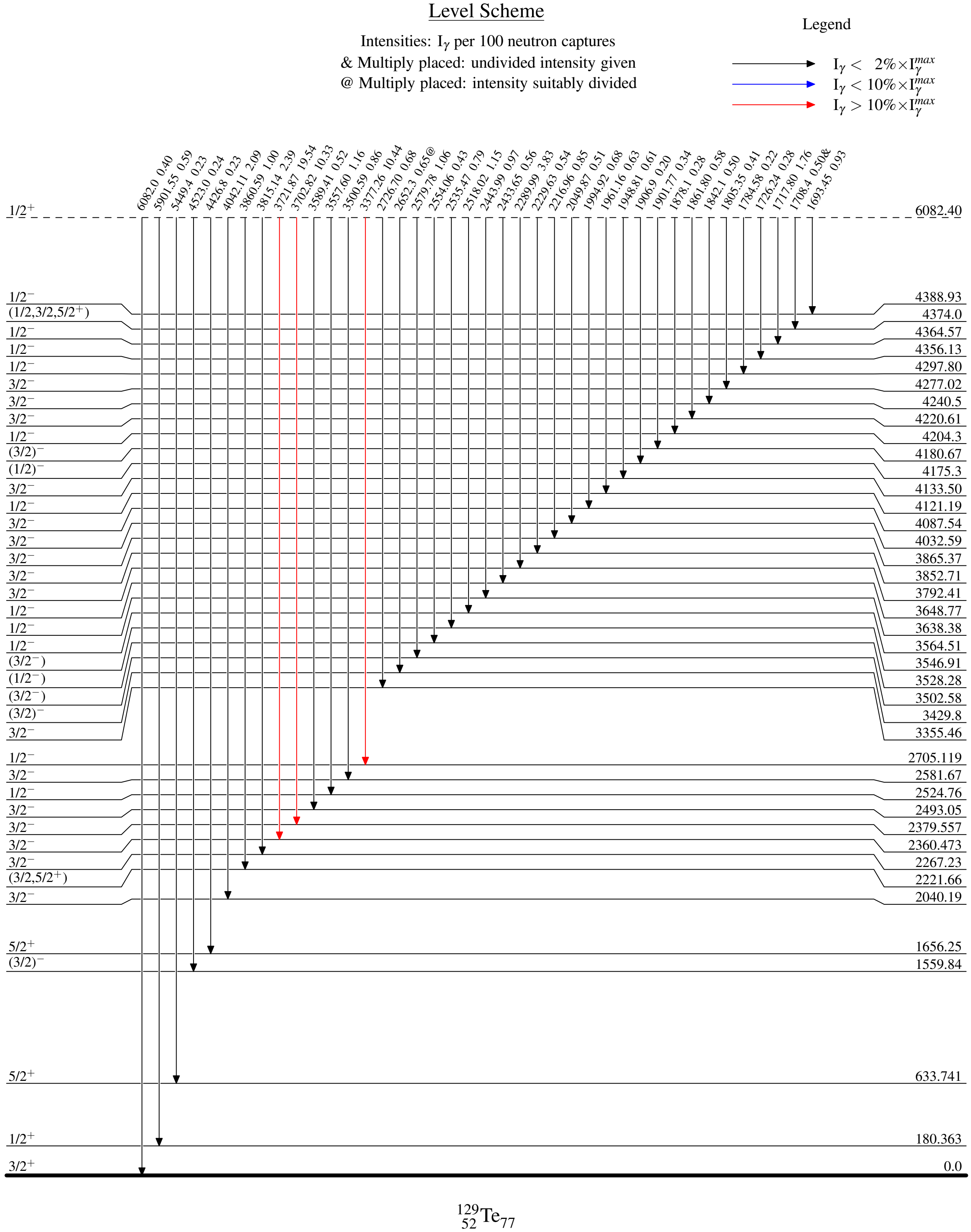
[g] Multiply placed with intensity suitably divided.

[x] γ ray not placed in level scheme.

^{128}Te(n,γ) E=thermal 2003Wi02

Level Scheme

Intensities: I_γ per 100 neutron captures
& Multiply placed: undivided intensity given
@ Multiply placed: intensity suitably divided

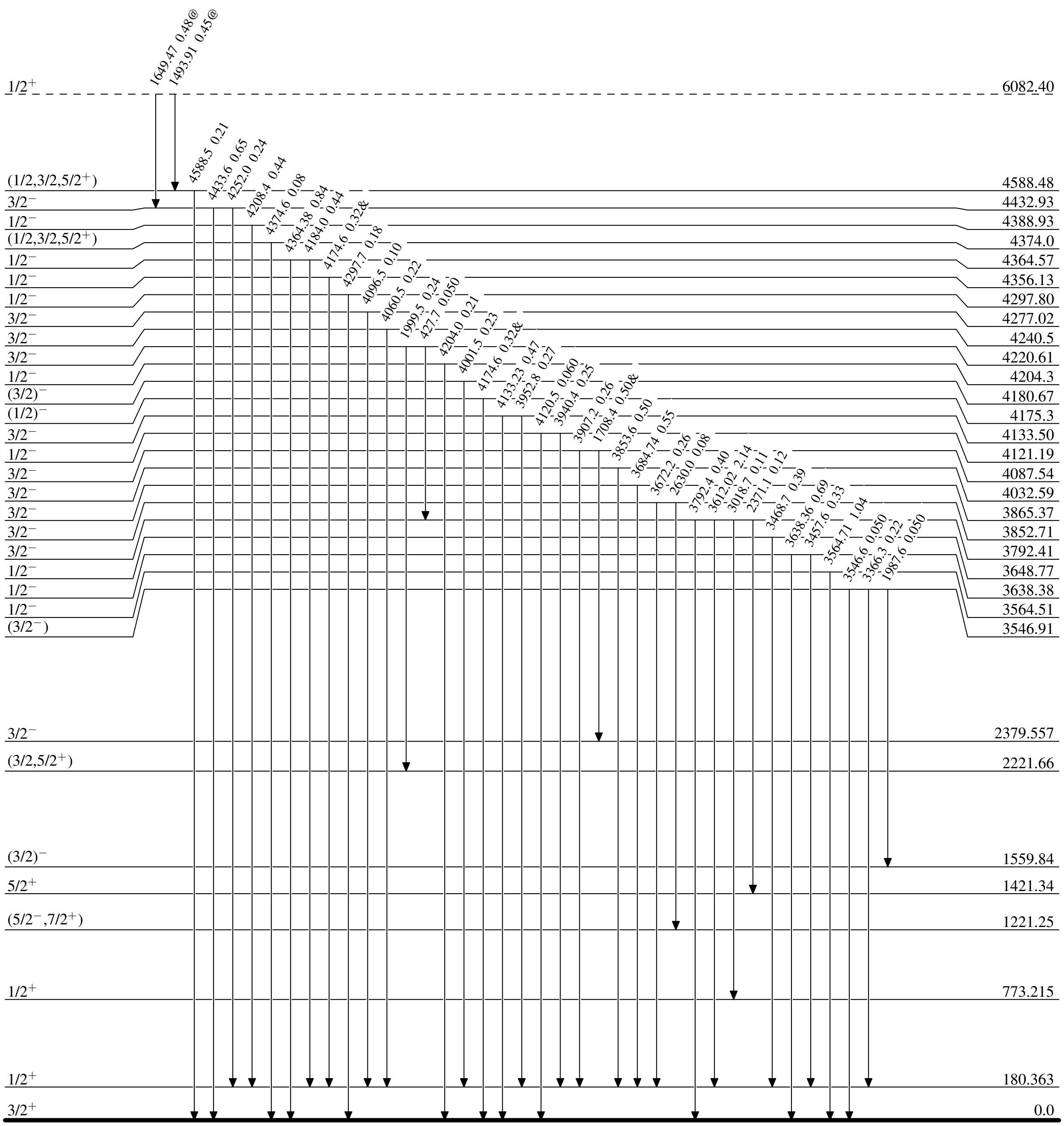


^{128}Te(n,γ) E=thermal 2003Wi02

Level Scheme (continued)

Intensities: I_γ per 100 neutron captures
& Multiply placed: undivided intensity given
@ Multiply placed: intensity suitably divided

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



$^{129}_{52}Te_{77}$

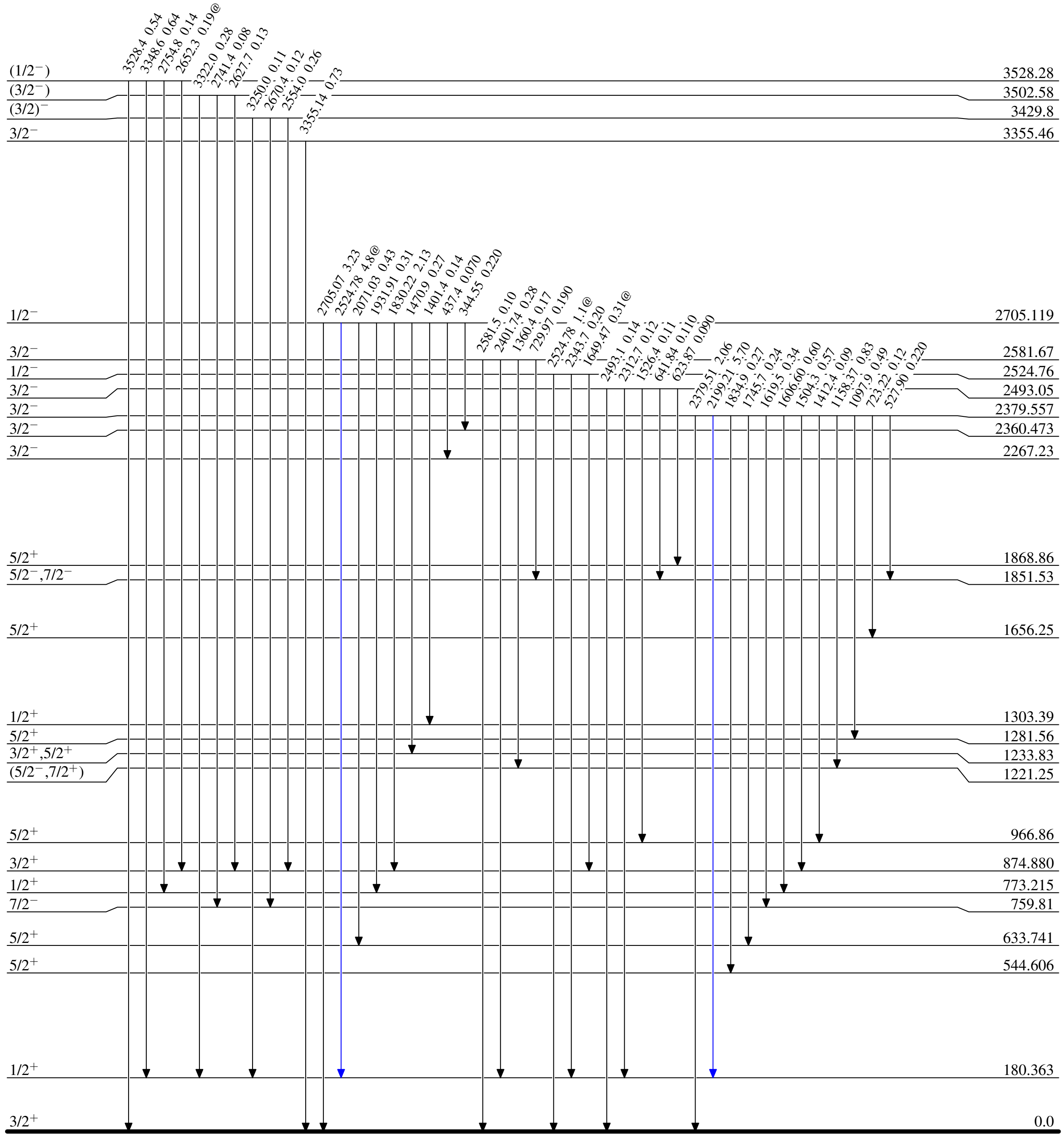
^{128}Te(n,γ) E=thermal 2003Wi02

Level Scheme (continued)

Intensities: I_γ per 100 neutron captures
& Multiply placed: undivided intensity given
@ Multiply placed: intensity suitably divided

Legend

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



$^{129}_{52}Te_{77}$

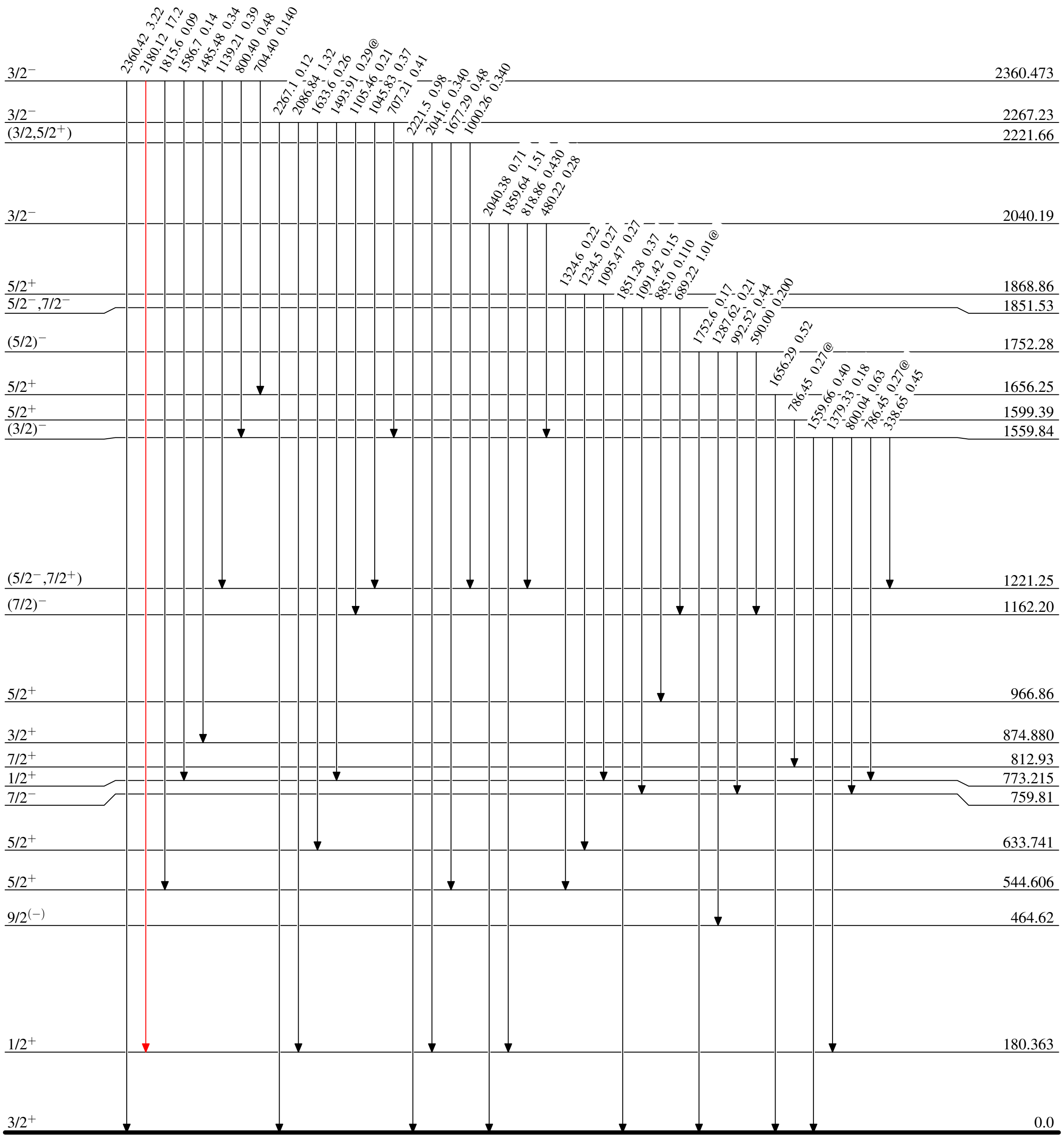
^{128}Te(n,γ) E=thermal 2003Wi02

Level Scheme (continued)

Intensities: I_γ per 100 neutron captures
& Multiply placed: undivided intensity given
@ Multiply placed: intensity suitably divided

Legend

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



$^{129}_{52}Te_{77}$

^{128}Te(n,γ) E=thermal 2003Wi02

Level Scheme (continued)

Intensities: I_γ per 100 neutron captures
& Multiply placed: undivided intensity given
@ Multiply placed: intensity suitably divided