^{130}Te(n,γ) E=th 2003To08,1980Ho29

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Yu. Khazov, I. Mitropolsky, A. Rodionov	NDS 107, 2715 (2006)	17-Jul-2006

2003To08: ^{130}Te(n,γ) E=th; measured Eγ, Iγ, $\gamma\gamma$, ^{131}Te deduced levels, J^π, σ, S_n. Comparison with IBF and QP models. Neutron guide, HPGe detector, coincidence facility.

1980Ho29: ^{130}Te(n,γ) E=th; measured Eγ, Iγ deduced levels, S_n, σ. Ge(Li) detector, filtered by Bi-crystal, neutron beam, enriched target.

Others: 1977RuZR, 1984Ho18.

Evaluators used XUNDL file for 2003To08.

The placement of the transitions in the level scheme was based on coincidence relations. The depopulation of the capture state is equal to 97.1 γ/100n *11*; the populations of the 11/2-isomer and g.s. are equal to 5.15 γ/100n *12* and 96.8 γ/100n *12*, correspondingly, (all Iγ values have a systematic error of 5 γ/100n); calculation was made by evaluators with GTOL code. From this it follows that nearly 100% depopulating transitions of the capture state and nearly 100% of g.s and isomeric state population were observed.

^{131}Te Levels

E(level)†	J$^\pi$‡	$T_{1/2}$	E(level)†	J$^\pi$‡
0.0	3/2$^+$	25.0# min *1*	2671.30 *20*	1/2,3/2
182.29 *4*	11/2$^-$	33.25# h *25*	2706.30 *7*	3/2$^-$
296.014 *10*	1/2$^+$		2754.22 *6*	3/2$^-$
642.338 *15*	5/2$^+$		2932.30 *8*	1/2$^-$
802.24 *5*	(9/2$^-$)		3001.95 *3*	1/2$^-$
854.397 *20*	3/2$^+$		3146.23 *18*	1/2,3/2
880.34 *4*	7/2$^-$		3170.8 *3*	(3/2)
943.45 *4*	7/2$^+$		3186.87 *14*	(3/2)
1041.68 *8*	1/2$^+$		3507.45 *9*	(3/2)
1050.842 *16*	3/2$^+$		3546.84 *8*	3/2$^-$
1207.11 *4*	5/2$^+$		3568.26 *5*	3/2$^-$
1267.45 *14*	7/2$^+$		3601.76 *8*	3/2$^-$
1398.90 *7*	5/2$^+$		3623.73 *6*	3/2$^-$
1469.66 *8*	5/2$^+$		3668.25 *10*	3/2$^-$
1659.44 *5*	7/2$^-$		3689.81 *6*	1/2$^-$
1670.26 *16*	(5/2)		3698.26 *7*	3/2$^-$
1678.27 *8*	(1/2,3/2)		3737.83 *11*	(3/2)
1683.02 *6*	(1/2,3/2)		3763.42 *14*	3/2$^-$
1721.64 *6*	(5/2$^+$)		3938.59 *7*	3/2$^-$
1755.96 *5*	5/2$^-$		3986.98 *23*	3/2$^-$
1781.17 *5*	3/2$^-$		4028.36 *13*	(3/2)
1787.92 *6*	7/2$^-$		4036.63 *5*	3/2$^-$
1852.4 *6*	(7/2,9/2)		4061.18 *14*	1/2$^-$
1855.78 *7*	(3/2)		4070.40 *5*	3/2$^-$
1867.02 *14*	7/2$^-$		4109.00 *8*	3/2$^-$
1951.60 *8*	1/2$^+$,3/2		4124.33 *13*	3/2$^-$
2015.43 *4*	5/2$^+$		4238.97 *9*	1/2$^-$
2092.01 *5*	3/2$^-$		4253.58 *6*	1/2$^-$
2231.08 *6*	(1/2$^+$,3/2)		4278.57 *15*	3/2$^-$
2330.49 *11*	7/2$^-$		4285.80 *5*	3/2$^-$
2373.8 *4*	7/2$^-$		4300.28 *7*	3/2$^-$
2457.02 *10*	3/2$^+$		4324.59 *7*	3/2$^-$
2496.56 *8*	5/2$^+$		4364.65 *9*	3/2$^-$
2511.99 *4*	3/2$^-$		4425.07 *11*	(3/2)
2544.24 *9*	(7/2$^+$)		4437.0 *3*	3/2$^-$
2547.65 *8*	3/2$^-$		4445.77 *25*	3/2$^-$
2582.536 *25*	3/2$^-$		4453.9 *4*	1/2$^-$

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^{130}Te(n,γ) E=th 2003To08,1980Ho29 (continued)

^{131}Te Levels (continued)

E(level)†	Jπ‡	E(level)†	Jπ‡	E(level)†	Jπ‡	E(level)†	Jπ‡
4472.57 *10*	3/2⁻	4558.45 *5*	1/2⁻	4732.73 *12*	3/2⁻	4964.21 *14*	3/2⁻
4485.19 *13*	3/2⁻	4563.18 *7*	3/2⁻	4801.23 *12*	(3/2)	4970.36 *10*	3/2⁻
4489.48 *17*	(1/2,3/2)	4583.14 *12*	3/2⁻	4856.2 *3*	(3/2⁺)	5048.56 *16*	(3/2)
4519.97 *9*	(3/2)	4645.36 *5*	3/2⁻	4869.67 *8*	(3/2⁻)	5172.21 *25*	(3/2)
4531.31 *8*	1/2⁻	4649.93 *9*	3/2⁻	4894.05 *11*	(3/2)	(5929.380 *24*)	1/2⁺ @
4545.18 *5*	1/2⁻	4707.52 *10*	(3/2,5/2)⁺	4944.92 *11*	3/2⁻		

† From least-squares fit to Eγ's (by evaluators). A systematic uncertainty of 50 eV should be added to all level energies (confirmed with the first author (I. Tomandl) in e-mail reply, July 3, 03).
‡ As suggested in the Table 4 (2003To08), assuming mult=E2 for three primary transitions (ΔJ=2), and all other primary transitions as M1 or E1, and the secondary transitions as M1, E1 or E2. See 2003To08 for details.
# From Adopted Levels.
@ s-wave neutron capture in 0⁺.

γ(^{131}Te)

1980Ho29 only observed and unplaced in the level scheme (Eγ, Iγ): 364.5 *2*, 3.6 *5*; 1069.7 *3*, 1.3 *2*; 1677.7 *3*, 0.5; 1724.9 *3*, 1.7 *2*; 1969.7 *3*, 1.3 *2*; 1471.6 *2*, 1.0; 2047.7 *5*, 1.8 *2*; 3480.7 *6*, 1.5 *2*; 3538.1 *6*, 1.6 *2*.
1977RuZR only observed (Eγ, Iγ): 257, 2.2; 362, 3.8; 1043, 3.3; 1677, 2.0.

E_γ†#	I_γ†‡*b*	E_i(level)	J_i^π	E_f	J_f^π	Comments
211.7 *5*	0.23 *12*	854.397	3/2⁺	642.338	5/2⁺	
227.1 *3*	0.02 *1*	2015.43	5/2⁺	1787.92	7/2⁻	
229.9 *3*	0.07 *4*	1951.60	1/2⁺,3/2	1721.64	(5/2⁺)	
296.01@& *1*	47.7 *5*	296.014	1/2⁺	0.0	3/2⁺	
310.9 *3*	0.06 *3*	2092.01	3/2⁻	1781.17	3/2⁻	
324.3 *3*	0.06 *2*	1267.45	7/2⁺	943.45	7/2⁺	
332.2 *7*	0.06 *3*	2015.43	5/2⁺	1683.02	(1/2,3/2)	
335.9 *3*	0.05 *3*	2092.01	3/2⁻	1755.96	5/2⁻	
352.5 *8*	0.03 *2*	1207.11	5/2⁺	854.397	3/2⁺	
355.89 *5*	0.29 *5*	2015.43	5/2⁺	1659.44	7/2⁻	
408.49@ *1*	1.490 *15*	1050.842	3/2⁺	642.338	5/2⁺	E_γ,I_γ: 408.6 *2*, 2.5 *5*; unplaced in the level scheme of 1980Ho29.
419.44 *5*	0.46 *2*	3001.95	1/2⁻	2582.536	3/2⁻	
419.9 *3*	0.04 *2*	2511.99	3/2⁻	2092.01	3/2⁻	
455.59 *20*	0.09 *5*	1398.90	5/2⁺	943.45	7/2⁺	
457.2 *4*	0.05 *2*	1855.78	(3/2)	1398.90	5/2⁺	
475.33 *9*	0.14 *2*	2932.30	1/2⁻	2457.02	3/2⁺	
490.03 *20*	0.15 *4*	3001.95	1/2⁻	2511.99	3/2⁻	
490.74 *24*	0.17 *6*	2582.536	3/2⁻	2092.01	3/2⁻	
496.5 *3*	0.04 *2*	2511.99	3/2⁻	2015.43	5/2⁺	
515.0 *5*	0.18 *5*	1721.64	(5/2⁺)	1207.11	5/2⁺	
525.87 *17*	0.10 *2*	1469.66	5/2⁺	943.45	7/2⁺	
544.3 *5*	0.03 *2*	1398.90	5/2⁺	854.397	3/2⁺	
545.8 *5*	0.04 *2*	2015.43	5/2⁺	1469.66	5/2⁺	
x547.31 *18*	0.08 *2*					
558.2 *4*	0.37 *7*	854.397	3/2⁺	296.014	1/2⁺	
567.07 *5*	0.33 *6*	2582.536	3/2⁻	2015.43	5/2⁺	
x586.05 *19*	0.07 *2*					

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^{130}Te(n,γ) E=th 2003To08,1980Ho29 (continued)

γ(^{131}Te) (continued)

E_γ †#	I_γ ††‡ b	E_i(level)	J_i^π	E_f	J_f^π	Comments
616.4 5	0.04 2	2015.43	5/2+	1398.90	5/2+	
619.8 3	0.10 5	1670.26	(5/2)	1050.842	3/2+	
619.93 2	1.11 3	802.24	(9/2−)	182.29	11/2−	
625.23 22	0.19 5	1267.45	7/2+	642.338	5/2+	
632.03 19	0.17 5	1683.02	(1/2,3/2)	1050.842	3/2+	
636.80 17	0.11 6	1678.27	(1/2,3/2)	1041.68	1/2+	
642.28@& 2	6.36 6	642.338	5/2+	0.0	3/2+	
661.9 3	0.13 3	2754.22	3/2−	2092.01	3/2−	
670.29e 12	0.12 3	2330.49	7/2−	1659.44	7/2−	E_γ: poor fit; level-energy difference=671.03 11.
698.07 2	3.82 8	880.34	7/2−	182.29	11/2−	
708.60 15	0.08 4	2496.56	5/2+	1787.92	7/2−	
726.84 20	0.25 5	1670.26	(5/2)	943.45	7/2+	
738.87 15	0.31 4	2754.22	3/2−	2015.43	5/2+	
739.4 3	0.05 3	1781.17	3/2−	1041.68	1/2+	
744.49 11	0.21 4	1951.60	1/2+,3/2	1207.11	5/2+	
754.89& 4	1.36 12	1050.842	3/2+	296.014	1/2+	
755.4 4	0.05 2	2511.99	3/2−	1755.96	5/2−	
756.7 3	0.72 18	1398.90	5/2+	642.338	5/2+	
757.3 3	0.14 9	(5929.380)	1/2+	5172.21	(3/2)	
779.28 12	0.13 7	1659.44	7/2−	880.34	7/2−	
789.0 5	0.04 2	1670.26	(5/2)	880.34	7/2−	
791.62 14	0.19 4	2547.65	3/2−	1755.96	5/2−	
x799.6 8	0.040 10					
804.96 9	0.22 3	1855.78	(3/2)	1050.842	3/2+	
807.8 3	0.12 2	2015.43	5/2+	1207.11	5/2+	
813.3 4	0.04 3	1855.78	(3/2)	1041.68	1/2+	
815.0 8	0.03 2	1670.26	(5/2)	854.397	3/2+	
823.85 18	0.11 3	1678.27	(1/2,3/2)	854.397	3/2+	
828.59 8	0.52 4	1683.02	(1/2,3/2)	854.397	3/2+	
829.2 6	0.09 4	2511.99	3/2−	1683.02	(1/2,3/2)	
837.06c&e 21	0.09c 4	1781.17	3/2−	943.45	7/2+	E_γ: poor fit; level-energy difference=837.71 6. This γ is listed in Table 4 of 2003To08 as depopulating 2497 level.
837.06c 21	0.09c 4	2496.56	5/2+	1659.44	7/2−	E_γ,I_γ: from the Table 4, Iγ=0.16; this γ listed in the Table 3 as depopulating the 1781 level. In 1980Ho29 Iγ=3.3 28, unplaced transition in the level scheme.
853.2 5	0.05 3	2511.99	3/2−	1659.44	7/2−	
854.39@& 2	3.54 4	854.397	3/2+	0.0	3/2+	E_γ: unplaced transition in 1980Ho29.
857.15 3	0.56 4	1659.44	7/2−	802.24	(9/2−)	
860.7 3	0.08 3	2582.536	3/2−	1721.64	(5/2+)	
861.61 19	0.09 3	3568.26	3/2−	2706.30	3/2−	
868.0 6	0.14 6	3623.73	3/2−	2754.22	3/2−	
875.61 3	0.46 6	1755.96	5/2−	880.34	7/2−	
880.78 16	0.14 2	(5929.380)	1/2+	5048.56	(3/2)	E_γ: placement from Table 4, unplaced in Table 3 of 2003To08.
900.85 3	0.36 3	1781.17	3/2−	880.34	7/2−	
900.9 3	0.13 5	1951.60	1/2+,3/2	1050.842	3/2+	
907.57 5	0.26 2	1787.92	7/2−	880.34	7/2−	
909.97 20	0.06 3	1951.60	1/2+,3/2	1041.68	1/2+	
910.59 20	0.32 2	1207.11	5/2+	296.014	1/2+	
917.52 13	0.19 9	3623.73	3/2−	2706.30	3/2−	
926.2 5	0.05 2	1781.17	3/2−	854.397	3/2+	
929.35 11	0.20 5	4531.31	1/2−	3601.76	3/2−	
943.44 4	0.55 4	943.45	7/2+	0.0	3/2+	
950.5 3	0.06 2	2706.30	3/2−	1755.96	5/2−	

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^{130}Te(n,γ) E=th 2003To08,1980Ho29 (continued)

γ(^{131}Te) (continued)

E_γ †#	I_γ †‡b	E_i(level)	J_i^π	E_f	J_f^π	Comments
953.71 *15*	0.16 *5*	1755.96	5/2⁻	802.24	(9/2⁻)	
959.02 *10*	0.35 *4*	(5929.380)	1/2⁺	4970.36	3/2⁻	
965.17 *14*	0.17 *3*	(5929.380)	1/2⁺	4964.21	3/2⁻	E_γ: placement from Table 4, in Table 3 this γ among unplaced.
984.46 *10*	0.33 *4*	(5929.380)	1/2⁺	4944.92	3/2⁻	
985.65 *11*	0.08 *3*	1787.92	7/2⁻	802.24	(9/2⁻)	
986.73 *17*	0.13 *4*	1867.02	7/2⁻	880.34	7/2⁻	
998.2 *4*	0.05 *2*	2754.22	3/2⁻	1755.96	5/2⁻	
1000.9 *4*	0.06 *2*	1855.78	(3/2)	854.397	3/2⁺	
1019.4 *6*	0.14 *7*	3601.76	3/2⁻	2582.536	3/2⁻	
1024.1 *3*	0.06 *3*	2231.08	(1/2⁺,3/2)	1207.11	5/2⁺	
1035.29 *11*	0.20 *3*	(5929.380)	1/2⁺	4894.05	(3/2)	
1040.84 *10*	0.9 *5*	1683.02	(1/2,3/2)	642.338	5/2⁺	
1041.5 *7*	0.06 *3*	2092.01	3/2⁻	1050.842	3/2⁺	
1041.68@& *20*	2.8 *5*	1041.68	1/2⁺	0.0	3/2⁺	Eγ=1041.4, Iγ=5.9, unplaced in 1980Ho29; Eγ=1043, Iγ=3.3 in 1977RuZR.
1050.2 *6*	0.020 *10*	1852.4	(7/2,9/2)	802.24	(9/2⁻)	
1050.91@& *3*	1.97 *2*	1050.842	3/2⁺	0.0	3/2⁺	I_γ: Iγ=3.1, unplaced in 1980Ho29.
1059.73 *7*	0.21 *4*	(5929.380)	1/2⁺	4869.67	(3/2⁻)	
1064.69 *22*	0.06 *2*	1867.02	7/2⁻	802.24	(9/2⁻)	
1071.7 *3*	0.12 *4*	2754.22	3/2⁻	1683.02	(1/2,3/2)	
1071.80 *17*	0.09 *4*	3568.26	3/2⁻	2496.56	5/2⁺	
1073.1 *3*	0.18 *10*	(5929.380)	1/2⁺	4856.2	(3/2⁺)	E_γ: placement from Table 4, unplaced in Table 3 of 2003To08.
1075.99@ *7*	0.28 *3*	2754.22	3/2⁻	1678.27	(1/2,3/2)	E_γ: unplaced in 1980Ho29, Iγ=1.7 *2*.
1079.58 *16*	0.11 *2*	1721.64	(5/2⁺)	642.338	5/2⁺	
1097.4 *3*	0.23 *9*	1951.60	1/2⁺,3/2	854.397	3/2⁺	
1112.84 *9*	0.23 *4*	2582.536	3/2⁻	1469.66	5/2⁺	
1128.14 *12*	0.18 *4*	(5929.380)	1/2⁺	4801.23	(3/2)	
1135.13 *5*	0.28 *3*	2015.43	5/2⁺	880.34	7/2⁻	
1151.07 *8*	0.30 *3*	2932.30	1/2⁻	1781.17	3/2⁻	
1159.2e *5*	0.14 *3*	4707.52	(3/2,5/2)⁺	3546.84	3/2⁻	E_γ: poor fit: level-energy difference=1160.60 *12*.
1161.8 *5*	0.13 *4*	2015.43	5/2⁺	854.397	3/2⁺	
1170.9 *4*	0.07 *4*	3186.87	(3/2)	2015.43	5/2⁺	
1180.6 *4*	0.10 *2*	2231.08	(1/2⁺,3/2)	1050.842	3/2⁺	
1183.65 *8*	0.30 *2*	2582.536	3/2⁻	1398.90	5/2⁺	
1187.3 *14*	0.07 *3*	2231.08	(1/2⁺,3/2)	1041.68	1/2⁺	
1196.71 *12*	0.42 *5*	(5929.380)	1/2⁺	4732.73	3/2⁻	
1207.11 *4*	1.76 *5*	1207.11	5/2⁺	0.0	3/2⁺	
1211.85 *16*	0.23 *4*	2092.01	3/2⁻	880.34	7/2⁻	
1213.2 *4*	0.06 *2*	1855.78	(3/2)	642.338	5/2⁺	
1221.93 *10*	0.19 *3*	(5929.380)	1/2⁺	4707.52	(3/2,5/2)⁺	
1226.18 *23*	0.11 *3*	3737.83	(3/2)	2511.99	3/2⁻	
1230.1 *4*	0.09 *4*	2496.56	5/2⁺	1267.45	7/2⁺	
1241.0 *3*	0.08 *2*	3698.26	3/2⁻	2457.02	3/2⁺	
1250.8 *8*	0.05 *2*	2457.02	3/2⁺	1207.11	5/2⁺	
1267.6 *3*	0.13 *2*	1267.45	7/2⁺	0.0	3/2⁺	
1277.3 *6*	0.12 *6*	2544.24	(7/2⁺)	1267.45	7/2⁺	
1279.46 *9*	0.30 *5*	(5929.380)	1/2⁺	4649.93	3/2⁻	
1284.03 *4*	0.73 *7*	(5929.380)	1/2⁺	4645.36	3/2⁻	
1292.7 *3*	0.18 *10*	3623.73	3/2⁻	2330.49	7/2⁻	
x1302.13 *18*	0.05 *5*					
1303.9 *6*	0.06 *3*	2511.99	3/2⁻	1207.11	5/2⁺	
1309.20 *24*	0.10 *3*	1951.60	1/2⁺,3/2	642.338	5/2⁺	
x1315.29 *10*	0.19 *3*					

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^{130}Te(n,γ) E=th 2003To08,1980Ho29 (continued)

γ(^{131}Te) (continued)

E_γ †#	I_γ †‡b	E_i(level)	J_i^π	E_f	J_f^π	Comments
1346.22 *12*	0.22 *3*	(5929.380)	1/2$^+$	4583.14	3/2$^-$	
1359.34 *16*	0.25 *5*	3689.81	1/2$^-$	2330.49	7/2$^-$	
1366.20 *6*	0.91 *5*	(5929.380)	1/2$^+$	4563.18	3/2$^-$	
1370.95 *5*	1.34 *4*	(5929.380)	1/2$^+$	4558.45	1/2$^-$	
1375.1 *10*	0.04 *2*	2582.536	3/2$^-$	1207.11	5/2$^+$	
1382.1 *5*	0.38 *5*	1678.27	(1/2,3/2)	296.014	1/2$^+$	
1384.22@& *5*	2.80 *8*	(5929.380)	1/2$^+$	4545.18	1/2$^-$	tentatively placement in 1980Ho29, Eγ=1383.8 *3*, Iγ=2.6 *2*.
1397.95 *10*	0.32 *18*	(5929.380)	1/2$^+$	4531.31	1/2$^-$	
1399.0@ *3*	0.74 *19*	1398.90	5/2$^+$	0.0	3/2$^+$	
1405.4 *10*	0.18 *9*	2457.02	3/2$^+$	1050.842	3/2$^+$	
1405.7 *4*	0.07 *4*	3186.87	(3/2)	1781.17	3/2$^-$	
1409.42 *8*	0.43 *4*	(5929.380)	1/2$^+$	4519.97	(3/2)	
1414.3 *15*	0.10 *10*	2457.02	3/2$^+$	1041.68	1/2$^+$	
1440.3 *3*	0.55 *28*	(5929.380)	1/2$^+$	4489.48	(1/2,3/2)	
1444.12ce *14*	0.24c *3*	4445.77	3/2$^-$	3001.95	1/2$^-$	
1444.12c *14*	0.24c *3*	(5929.380)	1/2$^+$	4485.19	3/2$^-$	Eγ: placement from Table 4, placed from the 4446 level in Table 3 of 2003To08.
1450.8 *5*	0.23 *4*	2330.49	7/2$^-$	880.34	7/2$^-$	
1456.80 *10*	0.42 *5*	(5929.380)	1/2$^+$	4472.57	3/2$^-$	
1459.7 *9*	0.03 *2*	2511.99	3/2$^-$	1050.842	3/2$^+$	
1469.77 *23*	0.78 *22*	1469.66	5/2$^+$	0.0	3/2$^+$	
1470.2 *3*	0.11 *3*	2511.99	3/2$^-$	1041.68	1/2$^+$	
1475.7 *5*	0.11 *6*	(5929.380)	1/2$^+$	4453.9	1/2$^-$	
1476.33 *13*	0.09 *3*	3568.26	3/2$^-$	2092.01	3/2$^-$	
1477.0 *7*	0.22 *8*	1659.44	7/2$^-$	182.29	11/2$^-$	
1483.0 *5*	0.09 *5*	4485.19	3/2$^-$	3001.95	1/2$^-$	
1483.4 *4*	0.46 *25*	(5929.380)	1/2$^+$	4445.77	3/2$^-$	
1484.0 *6*	0.09 *5*	4238.97	1/2$^-$	2754.22	3/2$^-$	
1485.0 *3*	0.51 *23*	1781.17	3/2$^-$	296.014	1/2$^+$	
1488.3 *4*	0.06 *2*	4489.48	(1/2,3/2)	3001.95	1/2$^-$	
1492.6 *3*	0.09 *2*	(5929.380)	1/2$^+$	4437.0	3/2$^-$	Eγ: placement from Table 4, unplaced in Table 3 of 2003To08.
1492.9 *10*	0.03 *2*	2373.8	7/2$^-$	880.34	7/2$^-$	
1496.78 *16*	0.14 *3*	2547.65	3/2$^-$	1050.842	3/2$^+$	
1504.32 *10*	0.27 *3*	(5929.380)	1/2$^+$	4425.07	(3/2)	
1505.3 *6*	0.06 *3*	2547.65	3/2$^-$	1041.68	1/2$^+$	
1515.6 *10*	0.12 *3*	4028.36	(3/2)	2511.99	3/2$^-$	
1524.5 *3*	0.11 *3*	4278.57	3/2$^-$	2754.22	3/2$^-$	
1528.04 *16*	0.23 *3*	2330.49	7/2$^-$	802.24	(9/2$^-$)	
1531.66 *6*	0.60 *3*	2582.536	3/2$^-$	1050.842	3/2$^+$	
1532.3 *5*	0.06 *3*	3623.73	3/2$^-$	2092.01	3/2$^-$	
1540.5 *7*	0.14 *5*	2582.536	3/2$^-$	1041.68	1/2$^+$	
1542.84 *17*	0.20 *3*	4545.18	1/2$^-$	3001.95	1/2$^-$	
1556.52 *18*	0.18 *3*	4558.45	1/2$^-$	3001.95	1/2$^-$	
1564.73 *8*	0.40 *4*	(5929.380)	1/2$^+$	4364.65	3/2$^-$	
1571.6 *4*	0.09 *5*	2373.8	7/2$^-$	802.24	(9/2$^-$)	
x1582.9 *3*	0.08 *2*					
1588.48 *14*	0.21 *3*	2231.08	(1/2$^+$,3/2)	642.338	5/2$^+$	
1602.9 *3*	0.29 *5*	2457.02	3/2$^+$	854.397	3/2$^+$	
1604.81 *7*	0.55 *3*	(5929.380)	1/2$^+$	4324.59	3/2$^-$	
1608.27 *22*	0.20 *9*	3623.73	3/2$^-$	2015.43	5/2$^+$	
1615.9 *3*	0.07 *3*	2496.56	5/2$^+$	880.34	7/2$^-$	
1629.10 *6*	0.58 *3*	(5929.380)	1/2$^+$	4300.28	3/2$^-$	
1629.6 *4*	0.06 *4*	2671.30	1/2,3/2	1041.68	1/2$^+$	

Continued on next page (footnotes at end of table)

^{130}Te(n,γ) E=th 2003To08,1980Ho29 (continued)

γ(^{131}Te) (continued)

E_γ †#	I_γ †‡b	E_i(level)	J_i^π	E_f	J_f^π	Comments
1642.3 *3*	0.20 *5*	2496.56	5/2$^+$	854.397	3/2$^+$	
1643.55@ *5*	1.37 *4*	(5929.380)	1/2$^+$	4285.80	3/2$^-$	I_γ: Iγ=2.1 *2* in 1980Ho29.
1650.70 *19*	0.36 *5*	(5929.380)	1/2$^+$	4278.57	3/2$^-$	
1663.9 *3*	0.19 *9*	2544.24	(7/2$^+$)	880.34	7/2$^-$	
1665.0 *5*	0.09 *5*	2706.30	3/2$^-$	1041.68	1/2$^+$	
1675.83 *6*	0.90 *6*	(5929.380)	1/2$^+$	4253.58	1/2$^-$	
1678.5@& *3*	0.13 *7*	1678.27	(1/2,3/2)	0.0	3/2$^+$	
1683.50e *12*	1.23 *10*	1683.02	(1/2,3/2)	0.0	3/2$^+$	E_γ: poor fit, level-energy difference= 1683.11 *6*.
1689.4 *3*	0.25 *5*	2544.24	(7/2$^+$)	854.397	3/2$^+$	
1690.46 *9*	1.10 *6*	(5929.380)	1/2$^+$	4238.97	1/2$^-$	
1702.45 *17*	0.40 *2*	2582.536	3/2$^-$	880.34	7/2$^-$	
1703.3 *7*	0.09 *4*	2754.22	3/2$^-$	1050.842	3/2$^+$	
1721.54 *7*	0.76 *4*	1721.64	(5/2$^+$)	0.0	3/2$^+$	
1737.8c *5*	0.08c *4*	3689.81	1/2$^-$	1951.60	1/2$^+$,3/2	
1737.8c *5*	0.08c *4*	4285.80	3/2$^-$	2547.65	3/2$^-$	
1742.05 *9*	0.15 *6*	2544.24	(7/2$^+$)	802.24	(9/2$^-$)	
1751.51 *9*	0.28 *3*	3507.45	(3/2)	1755.96	5/2$^-$	
1756.08 *17*	0.12 *3*	1755.96	5/2$^-$	0.0	3/2$^+$	
x1770.25 *22*	0.14 *6*					
1780.89 *12*	0.43 *15*	1781.17	3/2$^-$	0.0	3/2$^+$	
1795.94 *6*	0.69 *3*	2092.01	3/2$^-$	296.014	1/2$^+$	
x1800.9 *4*	0.13 *3*					
1805.10ce *13*	0.29c *3*	4036.63	3/2$^-$	2231.08	(1/2$^+$,3/2)	
1805.10c *13*	0.29c *3*	(5929.380)	1/2$^+$	4124.33	3/2$^-$	E_γ: placement from Table 4, placed from the 4037 level in Table 3 of 2003To08.
1817.3 *7*	0.12 *4*	2671.30	1/2,3/2	854.397	3/2$^+$	
1820.36 *8*	0.57 *3*	(5929.380)	1/2$^+$	4109.00	3/2$^-$	
1855.82 *12*	0.42 *4*	1855.78	(3/2)	0.0	3/2$^+$	
1859.00@& *5*	1.73 *3*	(5929.380)	1/2$^+$	4070.40	3/2$^-$	I_γ: Iγ=2.5 *2* in 1980Ho29.
1868.08 *15*	0.26 *5*	(5929.380)	1/2$^+$	4061.18	1/2$^-$	
1873.80 *10*	0.34 *4*	2754.22	3/2$^-$	880.34	7/2$^-$	
1890.5 *9*	0.15 *8*	2932.30	1/2$^-$	1041.68	1/2$^+$	
1892.70& *4*	1.50 *3*	(5929.380)	1/2$^+$	4036.63	3/2$^-$	
1901.02 *13*	0.39 *4*	(5929.380)	1/2$^+$	4028.36	(3/2)	
1901.1 *4*	0.08 *3*	2544.24	(7/2$^+$)	642.338	5/2$^+$	
1905.02 *21*	0.18 *5*	2547.65	3/2$^-$	642.338	5/2$^+$	
1935.7 *6*	0.03 *2*	2231.08	(1/2$^+$,3/2)	296.014	1/2$^+$	
1940.4 *3*	0.37 *14*	2582.536	3/2$^-$	642.338	5/2$^+$	
1942.4 *4*	0.46 *9*	(5929.380)	1/2$^+$	3986.98	3/2$^-$	
1951.05 *9*	1.49 *18*	3001.95	1/2$^-$	1050.842	3/2$^+$	
1951.3 *4*	0.46 *23*	1951.60	1/2$^+$,3/2	0.0	3/2$^+$	
1960.1 *4*	0.14 *5*	3001.95	1/2$^-$	1041.68	1/2$^+$	
1990.78 *7*	0.80 *4*	(5929.380)	1/2$^+$	3938.59	3/2$^-$	
2015.9 *3*	0.51 *5*	2015.43	5/2$^+$	0.0	3/2$^+$	
2092.10 *10*	0.63 *12*	2092.01	3/2$^-$	0.0	3/2$^+$	
2097.1 *7*	0.10 *3*	3568.26	3/2$^-$	1469.66	5/2$^+$	
2144.1e *3*	0.20 *5*	3186.87	(3/2)	1041.68	1/2$^+$	E_γ: poor fit: level-energy difference=2144.97 *14*.
2147.50 *20*	0.26 *5*	3001.95	1/2$^-$	854.397	3/2$^+$	
2161.2 *7*	0.19 *8*	2457.02	3/2$^+$	296.014	1/2$^+$	
2162.2 *9*	0.11 *5*	4253.58	1/2$^-$	2092.01	3/2$^-$	
2165.96 *14*	0.38 *4*	(5929.380)	1/2$^+$	3763.42	3/2$^-$	
2191.63 *13*	0.35 *4*	(5929.380)	1/2$^+$	3737.83	(3/2)	
2200.56 *15*	0.23 *4*	2496.56	5/2$^+$	296.014	1/2$^+$	
x2209.3 *5*	0.08 *11*					

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^{130}Te(n,γ) E=th 2003To08,1980Ho29 (continued)

γ(^{131}Te) (continued)

E_γ †#	I_γ ††‡ b	E_i(level)	J_i^π	E_f	J_f^π	Comments
2215.93@ 5	4.51 14	2511.99	3/2−	296.014	1/2+	
2231.07c 7	0.5c 5	2231.08	(1/2+,3/2)	0.0	3/2+	
2231.07c 7	0.5c 5	(5929.380)	1/2+	3698.26	3/2−	
2239.64@ 6	1.98 10	(5929.380)	1/2+	3689.81	1/2−	
2251.5 8	0.14 7	2547.65	3/2−	296.014	1/2+	
2261.06 11	0.55 7	(5929.380)	1/2+	3668.25	3/2−	
2269.7 7	0.05 2	3668.25	3/2−	1398.90	5/2+	
2286.48@&a 5	26.8 3	2582.536	3/2−	296.014	1/2+	Iγ=29.2 3 in 1980Ho29; Iγ=17.1 in 1977RuZR.
2291.9 9	0.06 3	3146.23	1/2,3/2	854.397	3/2+	
2305.60 6	1.14 2	(5929.380)	1/2+	3623.73	3/2−	
2327.62 11	1.41 6	(5929.380)	1/2+	3601.76	3/2−	
2332.1 5	0.07 4	3186.87	(3/2)	854.397	3/2+	
2349.2 4	0.15 6	4070.40	3/2−	1721.64	(5/2+)	
2361.05@& 6	1.77 4	(5929.380)	1/2+	3568.26	3/2−	This transition depopulates the 3002 level in 1980Ho29, Iγ=1.7 2; Iγ=1.3 in 1977RuZR.
2361.1 3	0.25 5	3568.26	3/2−	1207.11	5/2+	
2382.47 8	1.04 3	(5929.380)	1/2+	3546.84	3/2−	
2410.10 12	0.45 4	2706.30	3/2−	296.014	1/2+	
2422.01 18	0.34 3	(5929.380)	1/2+	3507.45	(3/2)	
2456.7 4	0.59 3	2457.02	3/2+	0.0	3/2+	
2472.5 4	0.08 4	4253.58	1/2−	1781.17	3/2−	
2495.4 3	0.22 3	3546.84	3/2−	1050.842	3/2+	
2504.7 3	0.14 6	3546.84	3/2−	1041.68	1/2+	
2512.05@& 6	3.25 3	2511.99	3/2−	0.0	3/2+	Eγ=2511.0 4, Iγ=2.6 in 1980Ho29, E=2512, Iγ=2.3 in 1977RuZR.
2530.6 8	0.06 3	3737.83	(3/2)	1207.11	5/2+	
2544.3 6	0.07 4	3186.87	(3/2)	642.338	5/2+	
x2546.6 5	0.33 14					
2548.26e 21	0.48 9	2547.65	3/2−	0.0	3/2+	E_γ: poor fit: level-energy difference= 2547.69 7. E_γ: from a coincidence measurement. One more γ of 2546.6 5 Iγ=0.33 14 from a single-detector measurement entered in the Table 3 (2003To08) is less confident (explained by the first author (I. Tomandl) in e-mail reply, December 20, 04).
2549.7 5	0.18 9	3601.76	3/2−	1050.842	3/2+	
2556.3 6	0.09 5	4238.97	1/2−	1683.02	(1/2,3/2)	
2581.8 4	0.13 4	3623.73	3/2−	1041.68	1/2+	
2582.58@& 6	4.87 5	2582.536	3/2−	0.0	3/2+	
2599.7 7	0.06 3	4070.40	3/2−	1469.66	5/2+	
2617.6 6	0.09 3	3668.25	3/2−	1050.842	3/2+	
x2623.0 3	0.24 5					
2636.21 23	0.12 3	2932.30	1/2−	296.014	1/2+	
2647.1 7	0.10 5	3698.26	3/2−	1050.842	3/2+	
2648.4 9	0.07 4	3689.81	1/2−	1041.68	1/2+	
2652.8 5	0.09 5	3507.45	(3/2)	854.397	3/2+	
2665.0 9	0.18 6	3546.84	3/2−	880.34	7/2−	
2671.3 3	0.18 9	2671.30	1/2,3/2	0.0	3/2+	
2685.9 9	0.01 1	3737.83	(3/2)	1050.842	3/2+	
2689.3 10	0.07 4	3568.26	3/2−	880.34	7/2−	
2691.2 9	0.04 3	3546.84	3/2−	854.397	3/2+	
2705.0 8	0.09 5	4485.19	3/2−	1781.17	3/2−	
2705.86@& 6	7.18 7	3001.95	1/2−	296.014	1/2+	Eγ=2706.1 4, Iγ=8.7 3 in 1980Ho29, E=2707, Iγ=4.7 in 1977RuZR.
2706.40 20	0.10 4	2706.30	3/2−	0.0	3/2+	

Continued on next page (footnotes at end of table)

^{130}Te(n,γ) E=th 2003To08,1980Ho29 (continued)

γ(^{131}Te) (continued)

E_γ †#	I_γ ††‡ b	E_i(level)	J_i^π	E_f	J_f^π	Comments
2713.6 *9*	0.09 *5*	3568.26	3/2$^-$	854.397	3/2$^+$	
2742.34 *16*	0.32 *4*	(5929.380)	1/2$^+$	3186.87	(3/2)	
2743.4 *6*	0.11 *4*	3623.73	3/2$^-$	880.34	7/2$^-$	
2746.1 *7*	0.09 *5*	3601.76	3/2$^-$	854.397	3/2$^+$	
2754.0 *4*	0.09 *5*	2754.22	3/2$^-$	0.0	3/2$^+$	
2758.5 *3*	0.21 *3*	(5929.380)	1/2$^+$	3170.8	(3/2)	E_γ: placement from Table 4, unplaced in Table 3 of 2003To08.
2768.2 *10*	0.04 *2*	3623.73	3/2$^-$	854.397	3/2$^+$	
2783.10 *19*	0.23 *3*	(5929.380)	1/2$^+$	3146.23	1/2,3/2	
x2797.8 *3*	0.21 *5*					
2828.7 *12*	0.06 *3*	4036.63	3/2$^-$	1207.11	5/2$^+$	
2830.6 *8*	0.06 *3*	4300.28	3/2$^-$	1469.66	5/2$^+$	
2863.13 *20*	0.13 *3*	4070.40	3/2$^-$	1207.11	5/2$^+$	
2903.0 *13*	0.03 *3*	3546.84	3/2$^-$	642.338	5/2$^+$	
2925.64 *18*	0.66 *7*	3568.26	3/2$^-$	642.338	5/2$^+$	
2927.0 *3*	0.05 *4*	4707.52	(3/2,5/2)$^+$	1781.17	3/2$^-$	
2927.33@&a *6*	14.71 *15*	(5929.380)	1/2$^+$	3001.95	1/2$^-$	I_γ: 12.9 *3* (1984Ho18).
2932.8 *4*	0.17 *3*	2932.30	1/2$^-$	0.0	3/2$^+$	
2959.28 *22*	0.24 *9*	3601.76	3/2$^-$	642.338	5/2$^+$	
2996.59e *10*	0.90 *5*	(5929.380)	1/2$^+$	2932.30	1/2$^-$	E_γ: poor fit: level-energy difference=2996.91 *7*.
3001.87@& *6*	4.84 *5*	3001.95	1/2$^-$	0.0	3/2$^+$	
3019.9 *5*	0.04 *2*	4070.40	3/2$^-$	1050.842	3/2$^+$	
3025.9 *6*	0.09 *3*	3668.25	3/2$^-$	642.338	5/2$^+$	
3030.1 *6*	0.02 *2*	4070.40	3/2$^-$	1041.68	1/2$^+$	
3055.1 *13*	0.05 *3*	3698.26	3/2$^-$	642.338	5/2$^+$	
3058.8 *13*	0.06 *4*	3938.59	3/2$^-$	880.34	7/2$^-$	
x3093.9 *5*	0.05 *2*					
3095.7 *5*	0.05 *2*	3737.83	(3/2)	642.338	5/2$^+$	
3131.9 *8*	0.09 *4*	3986.98	3/2$^-$	854.397	3/2$^+$	
3146.0 *6*	0.05 *4*	3146.23	1/2,3/2	0.0	3/2$^+$	
3155.3 *7*	0.23 *4*	4036.63	3/2$^-$	880.34	7/2$^-$	
3170.6 *5*	0.11 *7*	3170.8	(3/2)	0.0	3/2$^+$	
3175.0 *10*	0.08 *4*	4028.36	(3/2)	854.397	3/2$^+$	
3175.24 *10*	1.17 *6*	(5929.380)	1/2$^+$	2754.22	3/2$^-$	
3175.4 *6*	0.05 *2*	4645.36	3/2$^-$	1469.66	5/2$^+$	
3181.0 *7*	0.10 *4*	4036.63	3/2$^-$	854.397	3/2$^+$	
3189.8 *10*	0.12 *4*	4070.40	3/2$^-$	880.34	7/2$^-$	
3203.5 *7*	0.06 *3*	4253.58	1/2$^-$	1050.842	3/2$^+$	
3212.5 *4*	0.09 *3*	4253.58	1/2$^-$	1041.68	1/2$^+$	
3223.00 *21*	1.01 *18*	(5929.380)	1/2$^+$	2706.30	3/2$^-$	
3234.1 *11*	0.06 *3*	4285.80	3/2$^-$	1050.842	3/2$^+$	
3250.0 *9*	0.04 *3*	4300.28	3/2$^-$	1050.842	3/2$^+$	
3250.9 *3*	0.06 *2*	3546.84	3/2$^-$	296.014	1/2$^+$	
3257.9 *7*	0.06 *3*	4300.28	3/2$^-$	1041.68	1/2$^+$	
3258.2 *4*	0.15 *5*	(5929.380)	1/2$^+$	2671.30	1/2,3/2	
3271.6 *8*	0.06 *3*	3568.26	3/2$^-$	296.014	1/2$^+$	
3273.4 *13*	0.05 *3*	4324.59	3/2$^-$	1050.842	3/2$^+$	
3283.0 *8*	0.11 *5*	4324.59	3/2$^-$	1041.68	1/2$^+$	
3305.41 *19*	0.33 *3*	3601.76	3/2$^-$	296.014	1/2$^+$	
3312.7 *8*	0.04 *2*	4519.97	(3/2)	1207.11	5/2$^+$	
3327.4 *3*	0.67 *8*	3623.73	3/2$^-$	296.014	1/2$^+$	
3346.76@&a *7*	32.0 *3*	(5929.380)	1/2$^+$	2582.536	3/2$^-$	I_γ: 28.2 *7* (1984Ho18).
3372.4 *5*	0.09 *3*	3668.25	3/2$^-$	296.014	1/2$^+$	
3381.55 *11*	0.75 *5*	(5929.380)	1/2$^+$	2547.65	3/2$^-$	
3393.93d *23*	0.17d *4*	3689.81	1/2$^-$	296.014	1/2$^+$	

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^{130}Te(n,γ) E=th 2003To08,1980Ho29 (continued)

γ(^{131}Te) (continued)

E_γ †#	I_γ †‡b	E_i(level)	J_i^π	E_f	J_f^π	Mult.	Comments
3393.93d 23	0.07d 4	4036.63	3/2−	642.338	5/2+		
3402.4 4	0.17 5	3698.26	3/2−	296.014	1/2+		
3405.6 8	0.06 4	4285.80	3/2−	880.34	7/2−		
3417.32@& 7	7.82 8	(5929.380)	1/2+	2511.99	3/2−		
3437.6 9	0.06 2	4489.48	(1/2,3/2)	1050.842	3/2+		
3442.0 12	0.01 1	3737.83	(3/2)	296.014	1/2+		
3447.8 5	0.10 2	4489.48	(1/2,3/2)	1041.68	1/2+		
3468.6 10	0.09 7	3763.42	3/2−	296.014	1/2+		
3471.0 8	0.37 9	(5929.380)	1/2+	2457.02	3/2+		
3471.3 11	0.11 7	4519.97	(3/2)	1050.842	3/2+		
3471.7 11	0.06 3	4324.59	3/2−	854.397	3/2+		
3478.6 10	0.15 9	4519.97	(3/2)	1041.68	1/2+		
3482.5 4	0.06 3	4124.33	3/2−	642.338	5/2+		
3483.5 13	0.02 1	4364.65	3/2−	880.34	7/2−		
3499.8 11	0.03 2	4707.52	(3/2,5/2)+	1207.11	5/2+		
3507.6 7	0.14 9	3507.45	(3/2)	0.0	3/2+		
3511.9 16	0.04 2	4563.18	3/2−	1050.842	3/2+		
3526.9 8	0.14 9	4732.73	3/2−	1207.11	5/2+		
3533.3 14	0.04 2	4583.14	3/2−	1050.842	3/2+		
3547.10 23	0.41 5	3546.84	3/2−	0.0	3/2+		
3568.1 3	0.25 4	3568.26	3/2−	0.0	3/2+		
3571.4 7	0.07 5	4425.07	(3/2)	854.397	3/2+		
x3590.2 10	0.03 2						
3592.3 9	0.06 4	4472.57	3/2−	880.34	7/2−		E_γ: level-energy difference=3592.19 11; one more γ of 3590.2 10, Iγ=0.03 2, entered in the Table 3, is not placed in the level scheme.
3602.0 3	0.28 9	3601.76	3/2−	0.0	3/2+		
3623.3 5	0.08 2	3623.73	3/2−	0.0	3/2+		
3635.6 5	0.18 9	4278.57	3/2−	642.338	5/2+		
3642.43 17	0.88 5	3938.59	3/2−	296.014	1/2+		
3643.6 8	0.06 3	4285.80	3/2−	642.338	5/2+		
3658.5 5	0.05 3	4300.28	3/2−	642.338	5/2+		
3667.80 24	0.47 5	3668.25	3/2−	0.0	3/2+		
3682.4 4	0.11 5	4324.59	3/2−	642.338	5/2+		
3683.5 7	0.07 4	4563.18	3/2−	880.34	7/2−		
3689.99@& 10	1.38 18	3689.81	1/2−	0.0	3/2+		
3690.9 4	0.18 9	4545.18	1/2−	854.397	3/2+		
3691.1 4	0.18 9	3986.98	3/2−	296.014	1/2+		
3698.15c@ 13	0.5c 5	3698.26	3/2−	0.0	3/2+		
3698.15c@ 13	0.5c 5	(5929.380)	1/2+	2231.08	(1/2+,3/2)		
3732.4 8	0.09 5	4028.36	(3/2)	296.014	1/2+		
3737.7 13	0.05 3	4944.92	3/2−	1207.11	5/2+		
3740.40 14	0.72 6	4036.63	3/2−	296.014	1/2+		
3759.4 5	0.06 3	4801.23	(3/2)	1041.68	1/2+		
3762.8 11	0.09 7	3763.42	3/2−	0.0	3/2+		
3774.47@ 11	0.79 18	4070.40	3/2−	296.014	1/2+		
3791.5 12	0.02 1	4645.36	3/2−	854.397	3/2+		
3812.2 5	0.09 7	4109.00	3/2−	296.014	1/2+		
3831.0 20	0.02 2	4472.57	3/2−	642.338	5/2+		
3837.27 19	0.37 4	(5929.380)	1/2+	2092.01	3/2−		
3912.6 5	0.54 14	(5929.380)	1/2+	2015.43	5/2+	[E2]	
3921.5 6	0.06 3	4563.18	3/2−	642.338	5/2+		
3938.81 24	0.37 4	3938.59	3/2−	0.0	3/2+		

Continued on next page (footnotes at end of table)

^{130}Te(n,γ) E=th 2003To08,1980Ho29 (continued)

γ(^{131}Te) (continued)

E_γ[†#]	I_γ[†‡b]	E_i(level)	J_i^π	E_f	J_f^π	Mult.	Comments
3944.0 *5*	0.28 *6*	4238.97	$1/2^-$	296.014	$1/2^+$		
3957.65 *23*	0.42 *5*	4253.58	$1/2^-$	296.014	$1/2^+$		
3978.2 *4*	0.36 *8*	(5929.380)	$1/2^+$	1951.60	$1/2^+$,3/2		
3981.7 *6*	0.12 *7*	4278.57	$3/2^-$	296.014	$1/2^+$		
3986.9 *4*	0.15 *4*	3986.98	$3/2^-$	0.0	$3/2^+$		
3989.60 *11*	0.84 *3*	4285.80	$3/2^-$	296.014	$1/2^+$		
4004.3 *4*	0.18 *6*	4300.28	$3/2^-$	296.014	$1/2^+$		
4028.6 *8*	0.09 *5*	4028.36	(3/2)	0.0	$3/2^+$		
4028.8 *3*	0.23 *9*	4324.59	$3/2^-$	296.014	$1/2^+$		
4036.2 *3*	0.11 *2*	4036.63	$3/2^-$	0.0	$3/2^+$		
4060.7 *3*	0.13 *9*	4061.18	$1/2^-$	0.0	$3/2^+$		
4065.0 *10*	0.05 *4*	4707.52	$(3/2,5/2)^+$	642.338	$5/2^+$		
4069.0 *5*	0.05 *3*	4364.65	$3/2^-$	296.014	$1/2^+$		
4070.4 *4*	0.11 *2*	4070.40	$3/2^-$	0.0	$3/2^+$		
4073.4 *3*	0.38 *4*	(5929.380)	$1/2^+$	1855.78	(3/2)		
4092.2 *10*	0.07 *4*	4732.73	$3/2^-$	642.338	$5/2^+$		
4109.1 *3*	0.44 *4*	4109.00	$3/2^-$	0.0	$3/2^+$		
4148.0 *10*	0.04 *3*	(5929.380)	$1/2^+$	1781.17	$3/2^-$		
4149.4 *4*	0.25 *6*	4445.77	$3/2^-$	296.014	$1/2^+$		
4157.7 *7*	0.08 *4*	4453.9	$1/2^-$	296.014	$1/2^+$		
4176.3 *5*	0.16 *4*	4472.57	$3/2^-$	296.014	$1/2^+$		
4188.2 *5*	0.09 *5*	4485.19	$3/2^-$	296.014	$1/2^+$		E_γ: not listed in Table 3 of 2003To08. Eγ from recoil-corrected value of 4188.3 in Table 4; ΔE is assigned by evaluators on the analogy of γ-rays in this energy range.
4193.5 *3*	0.26 *4*	4489.48	(1/2,3/2)	296.014	$1/2^+$		
4207.3 *3*	0.39 *4*	(5929.380)	$1/2^+$	1721.64	$(5/2^+)$	[E2]	
4214.3 *8*	0.05 *3*	4856.2	$(3/2^+)$	642.338	$5/2^+$		E_γ: not listed in Table 3 of 2003To08. Eγ from recoil-corrected value of 4214.4 in Table 4; ΔE is assigned by evaluators on the analogy of γ-rays in this energy range.
4224.5 *8*	0.18 *11*	4519.97	(3/2)	296.014	$1/2^+$		
4239.9 *5*	0.33 *5*	4238.97	$1/2^-$	0.0	$3/2^+$		
4246.5[&] *4*	1.26 *24*	(5929.380)	$1/2^+$	1683.02	(1/2,3/2)		
4249.5 *7*	0.69 *24*	4545.18	$1/2^-$	296.014	$1/2^+$		
4253.5 *3*	0.34 *5*	4253.58	$1/2^-$	0.0	$3/2^+$		
4267.0 *3*	0.41 *8*	4563.18	$3/2^-$	296.014	$1/2^+$		
4278.9 *14*	0.19 *9*	4278.57	$3/2^-$	0.0	$3/2^+$		
4286.9 *4*	0.09 *5*	4583.14	$3/2^-$	296.014	$1/2^+$		
4287.1[@] *6*	0.04 *2*	4285.80	$3/2^-$	0.0	$3/2^+$		Eγ=4287.2 *9*, Iγ=0.5 *1* in 1980Ho29.
4324.9 *20*	0.05 *5*	4970.36	$3/2^-$	642.338	$5/2^+$		
4349.4 *3*	0.21 *5*	4645.36	$3/2^-$	296.014	$1/2^+$		
4354.0 *4*	0.03 *3*	4649.93	$3/2^-$	296.014	$1/2^+$		
4364.2 *14*	0.02 *1*	4364.65	$3/2^-$	0.0	$3/2^+$		
4438.0 *6*	0.09	4437.0	$3/2^-$	0.0	$3/2^+$		E_γ: not listed in Table 3 of 2003To08. Eγ from recoil-corrected value of 4438.1 in Table 4; ΔE is assigned by evaluators on the analogy of γ-rays in this energy range.
4445.8 *5*	0.15 *8*	4445.77	$3/2^-$	0.0	$3/2^+$		
4454.1 *5*	0.11 *5*	4453.9	$1/2^-$	0.0	$3/2^+$		E_γ: not listed in Table 3 of 2003To08. Eγ from recoil-corrected value of 4454.2 in Table 4; ΔE is assigned by evaluators on the analogy of γ-rays in this energy range.
4489.2 *6*	0.06 *2*	4489.48	(1/2,3/2)	0.0	$3/2^+$		
4519.9 *7*	0.13 *9*	4519.97	(3/2)	0.0	$3/2^+$		

Continued on next page (footnotes at end of table)

^{130}Te(n,γ) E=th 2003To08,1980Ho29 (continued)

$\gamma(^{131}Te)$ (continued)

E_γ †#	I_γ †‡b	E_i(level)	J_i^π	E_f	J_f^π	Mult.	Comments
4531.48 *24*	0.42 *4*	4531.31	$1/2^-$	0.0	$3/2^+$		
4545.37@ *11*	1.54 *5*	4545.18	$1/2^-$	0.0	$3/2^+$		
4558.65 *18*	0.82 *5*	4558.45	$1/2^-$	0.0	$3/2^+$		
4558.9 *9*	0.06 *4*	4856.2	$(3/2^+)$	296.014	$1/2^+$		
4563.1 *5*	0.17 *4*	4563.18	$3/2^-$	0.0	$3/2^+$		
4574.6 *8*	0.07 *4*	4869.67	$(3/2^-)$	296.014	$1/2^+$		
4582.1 *12*	0.02 *2*	4583.14	$3/2^-$	0.0	$3/2^+$		
4597.2 *5*	0.20 *4*	4894.05	(3/2)	296.014	$1/2^+$		
4646.0 *3*	0.35 *5*	4645.36	$3/2^-$	0.0	$3/2^+$		
4648.9 *8*	0.08 *4*	4944.92	$3/2^-$	296.014	$1/2^+$		
4649.9 *4*	0.04 *3*	4649.93	$3/2^-$	0.0	$3/2^+$		
4668.1 *5*	0.09 *5*	4964.21	$3/2^-$	296.014	$1/2^+$		
4674.4 *4*	0.12 *5*	4970.36	$3/2^-$	296.014	$1/2^+$		
4721.7 *6*	0.12 *5*	(5929.380)	$1/2^+$	1207.11	$5/2^+$	[E2]	
4733.1 *8*	0.14 *9*	4732.73	$3/2^-$	0.0	$3/2^+$		
4870.1 *4*	0.35 *5*	4869.67	$(3/2^-)$	0.0	$3/2^+$		
4876.5 *8*	0.10 *4*	5172.21	(3/2)	296.014	$1/2^+$		
4877.2 *8*	0.14 *6*	(5929.380)	$1/2^+$	1050.842	$3/2^+$		
4887.7 *5*	0.30 *9*	(5929.380)	$1/2^+$	1041.68	$1/2^+$		
5048.0 *6*	0.14	5048.56	(3/2)	0.0	$3/2^+$		E_γ: from recoil-corrected value of 5048.1 in Table 4; uncertainty assigned based on those for similar intensity γ-rays. This γ not listed in Table 3 of 2003To08.
5074.92 *24*	0.66 *5*	(5929.380)	$1/2^+$	854.397	$3/2^+$		
5172.3 *5*	0.14 *9*	5172.21	(3/2)	0.0	$3/2^+$		

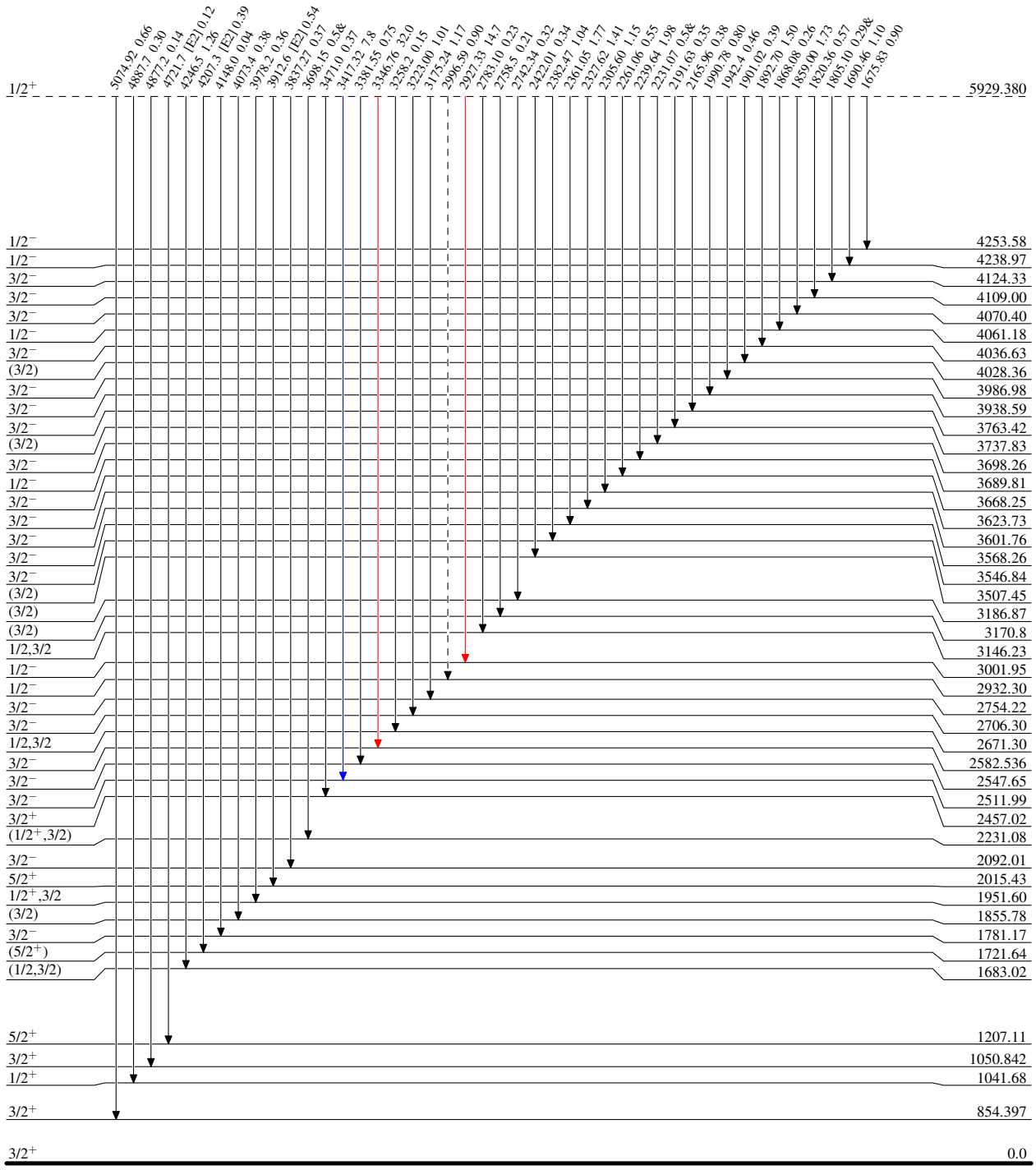
† From the Table 3 of 2003To08, except as noted.
‡ For doublets, the evaluators assume that intensities are undivided when exactly the same values are given for the two components.
# If Iγ<0.07 or Δ(Iγ) >50%, γ lines have a probability about 5-10% of to be non-existent (2003To08).
@ Also observed by 1980Ho29.
& Also observed by 1977RuZR.
a Also observed by 1984Ho18.
b For intensity per 100 neutron captures, multiply by 1.00 *5*.
c Multiply placed with undivided intensity.
d Multiply placed with intensity suitably divided.
e Placement of transition in the level scheme is uncertain.
x γ ray not placed in level scheme.

^{130}Te(n,γ) E=th 2003To08,1980Ho29

Level Scheme

Intensities: Per 100 neutron captures
& Multiply placed: undivided intensity given

Legend
- $I_\gamma < 2\% \times I_\gamma^{max}$
- $I_\gamma < 10\% \times I_\gamma^{max}$
- $I_\gamma > 10\% \times I_\gamma^{max}$
- γ Decay (Uncertain)



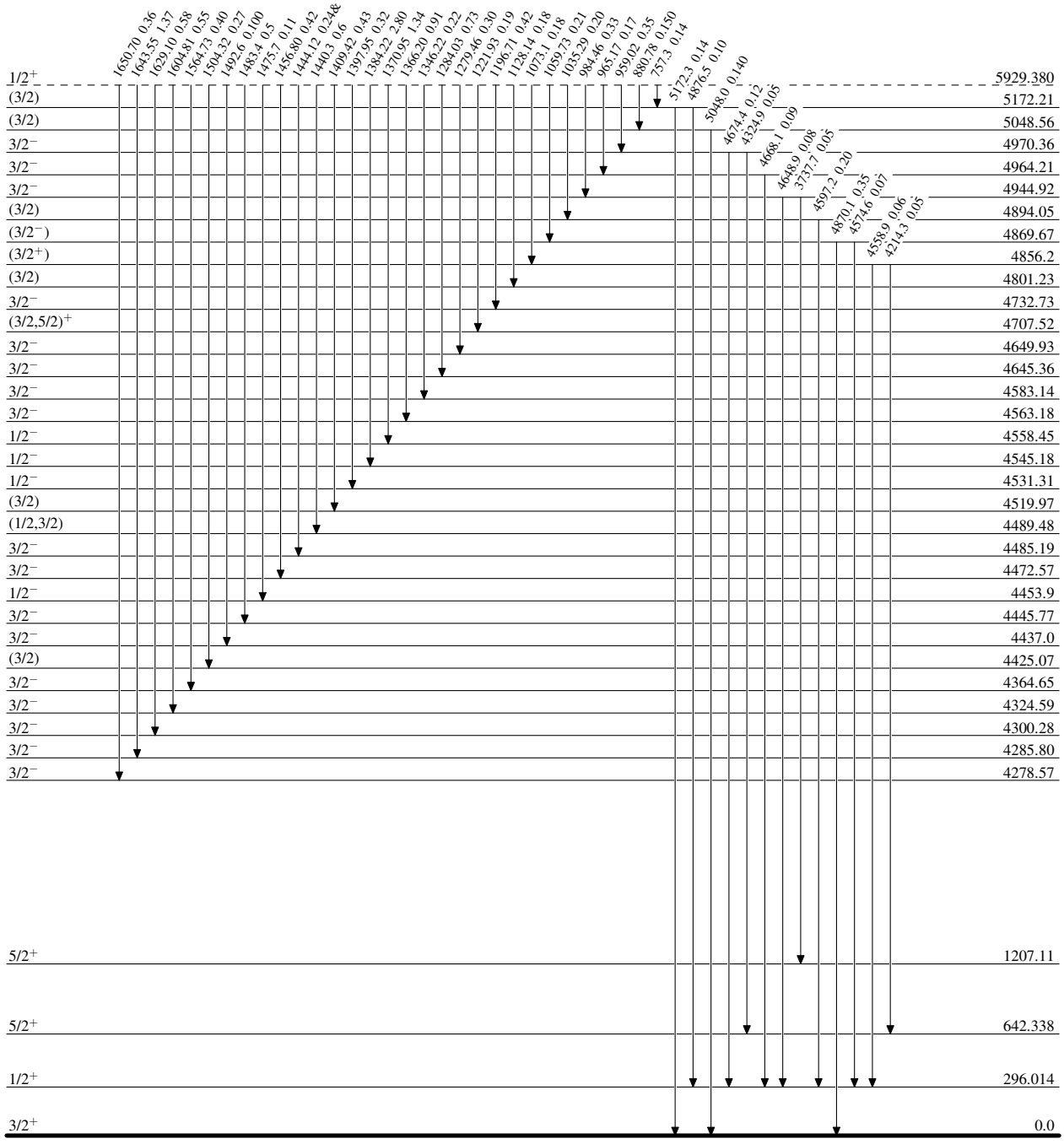
$^{131}_{52}Te_{79}$

^{130}Te(n,γ) E=th 2003To08,1980Ho29

Level Scheme (continued)

Intensities: Per 100 neutron captures
& Multiply placed: undivided intensity given

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



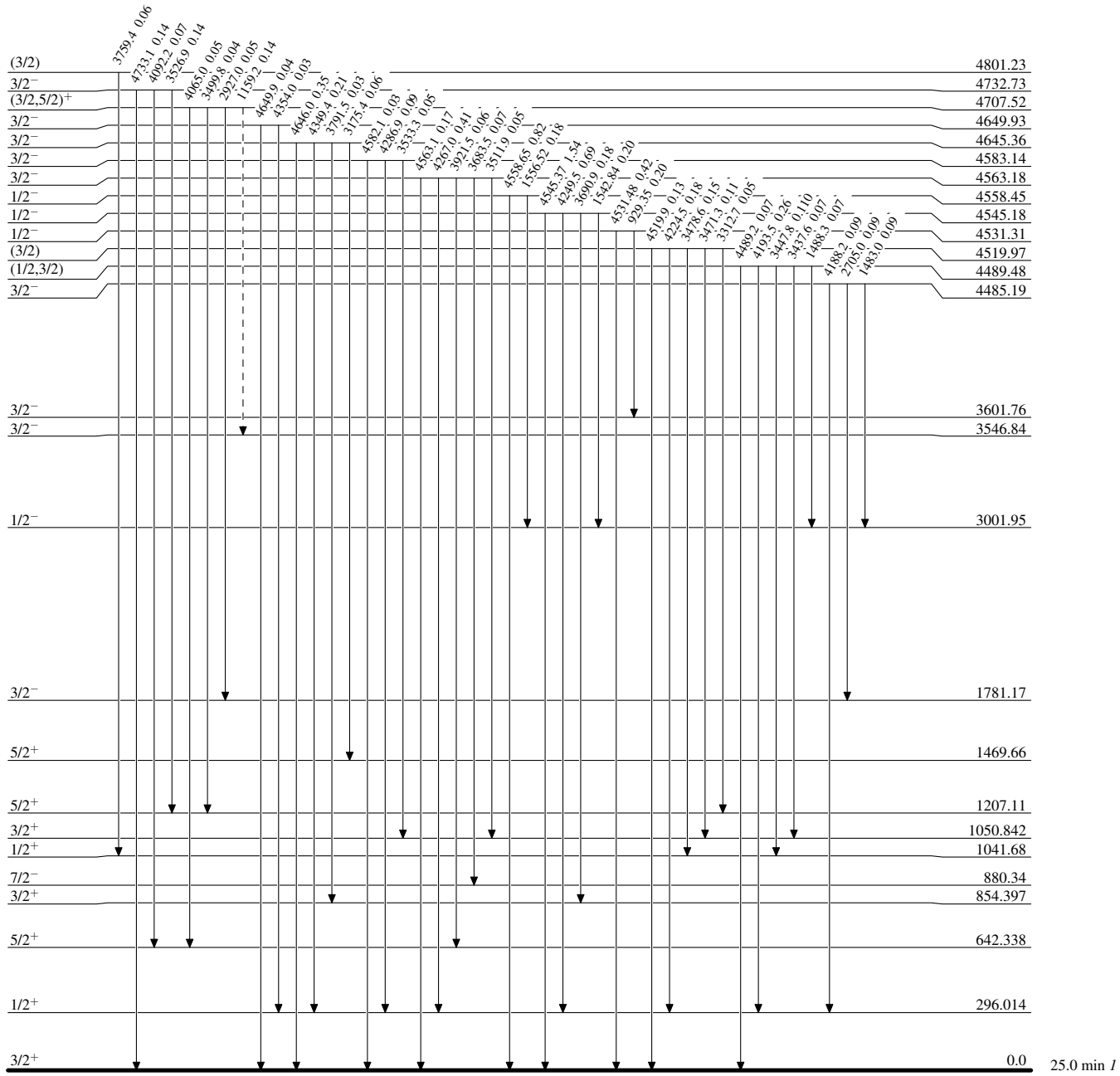
$^{131}_{52}Te_{79}$

^{130}Te(n,γ) E=th 2003To08,1980Ho29

Level Scheme (continued)

Intensities: Per 100 neutron captures
& Multiply placed: undivided intensity given

Legend
- $I_\gamma < 2\% \times I_\gamma^{max}$
- $I_\gamma < 10\% \times I_\gamma^{max}$
- $I_\gamma > 10\% \times I_\gamma^{max}$
- γ Decay (Uncertain)

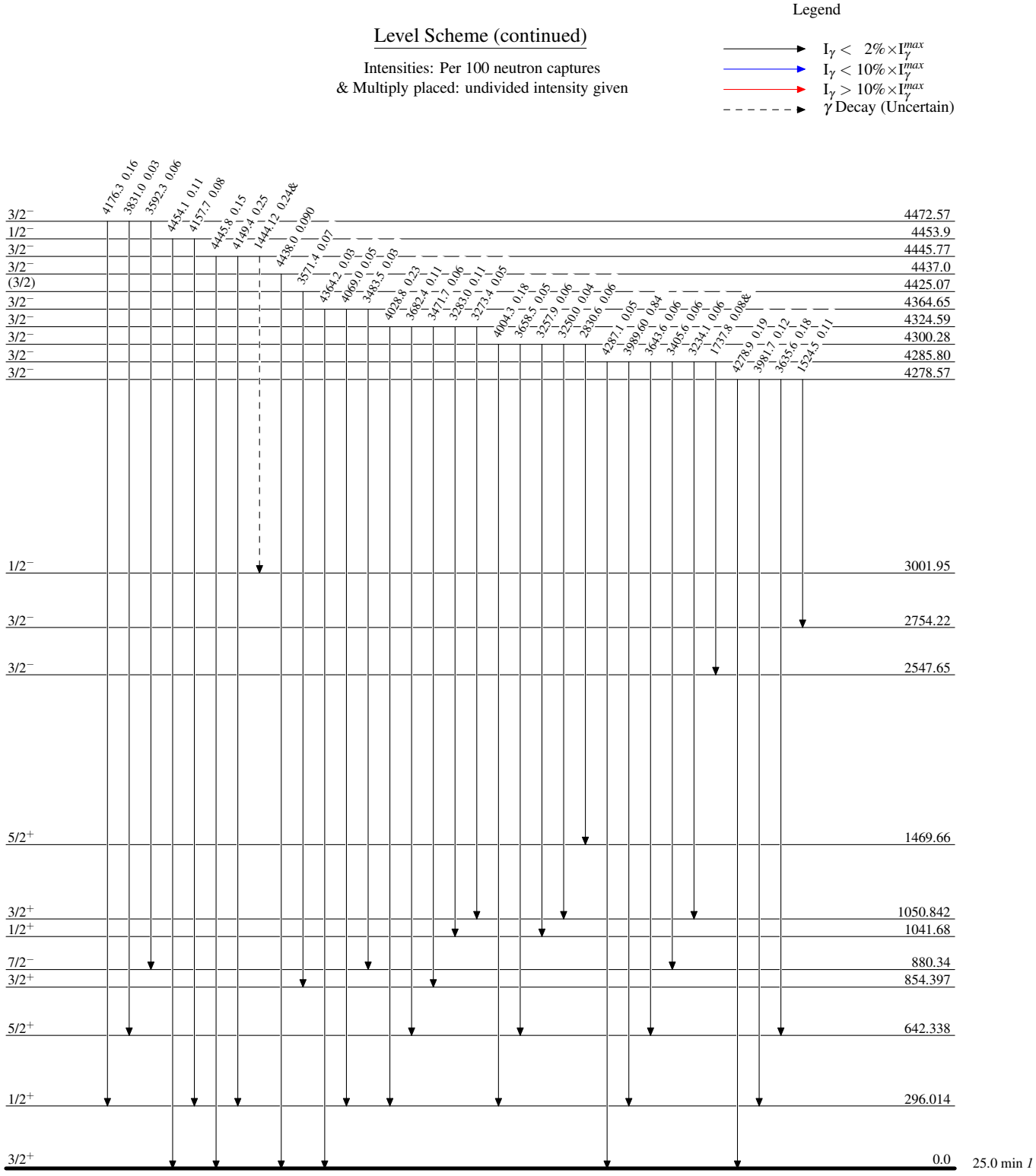


$^{131}_{52}Te_{79}$

^{130}Te(n,γ) E=th 2003To08,1980Ho29

Level Scheme (continued)

Intensities: Per 100 neutron captures
& Multiply placed: undivided intensity given



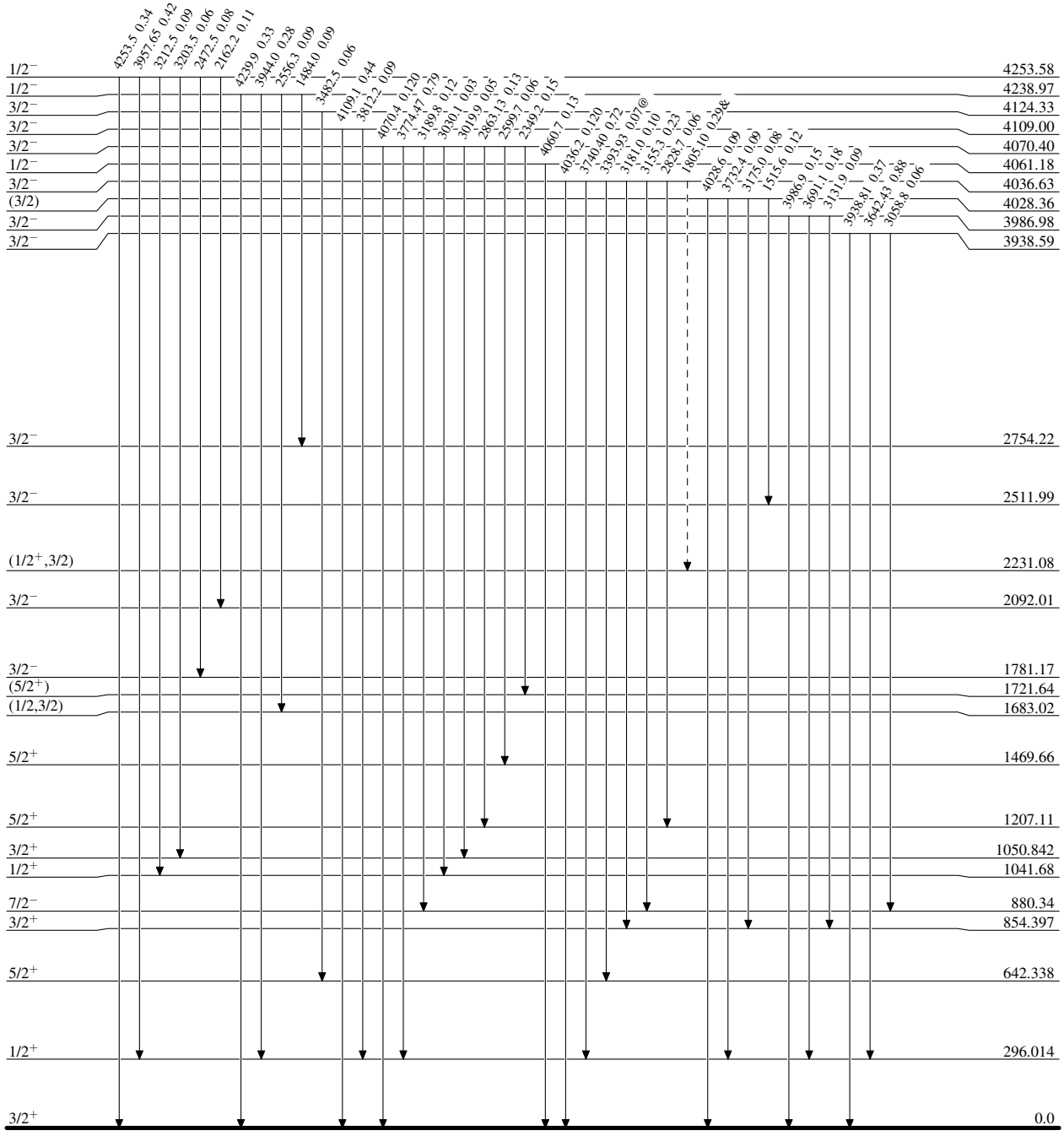
$^{131}_{52}Te_{79}$

^{130}Te(n,γ) E=th 2003To08,1980Ho29

Level Scheme (continued)

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

Legend
$I_\gamma < 2\% \times I_\gamma^{max}$
$I_\gamma < 10\% \times I_\gamma^{max}$
$I_\gamma > 10\% \times I_\gamma^{max}$
γ Decay (Uncertain)



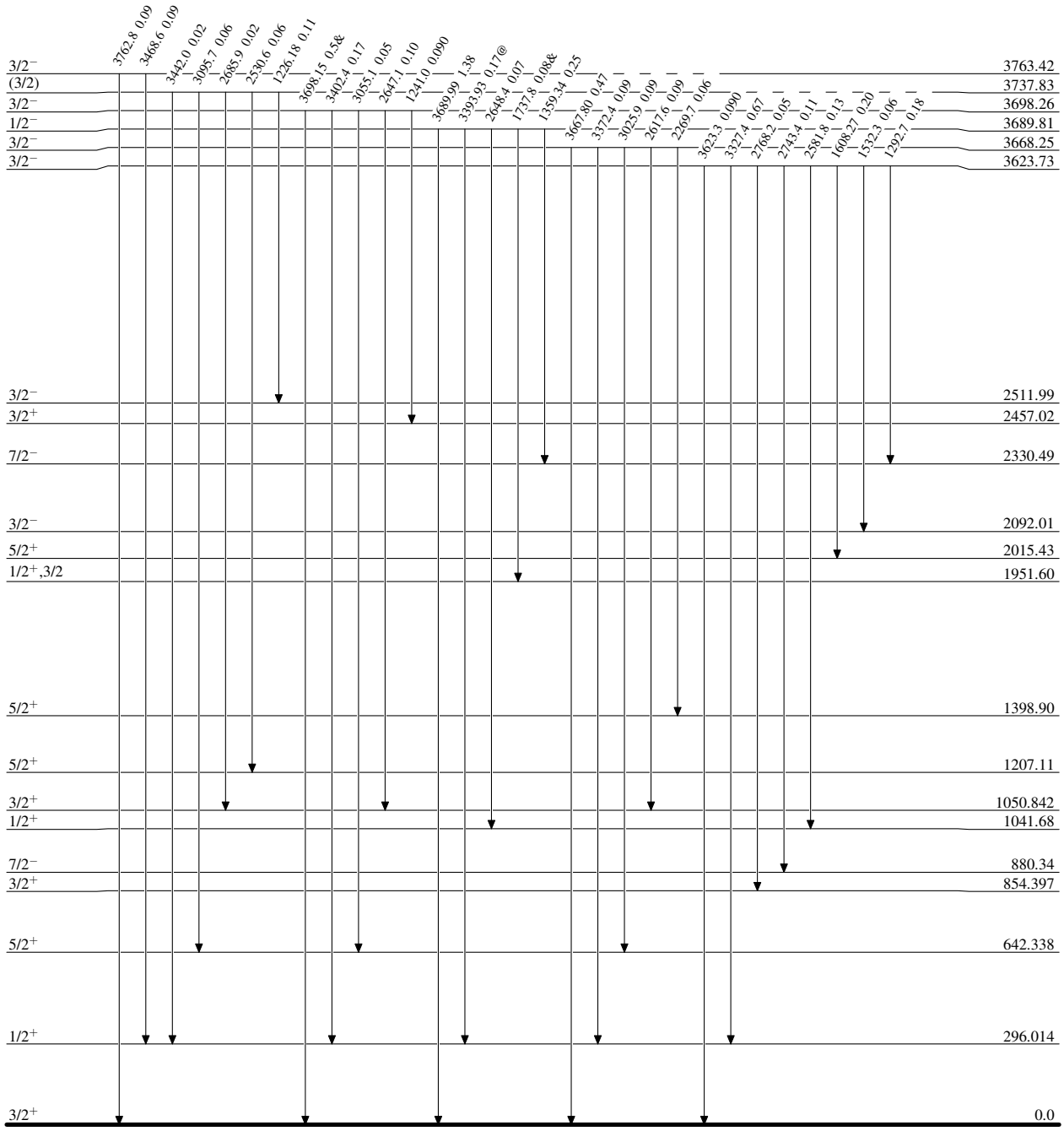
$^{131}_{52}Te_{79}$

^{130}Te(n,γ) E=th 2003To08,1980Ho29

Level Scheme (continued)

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

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



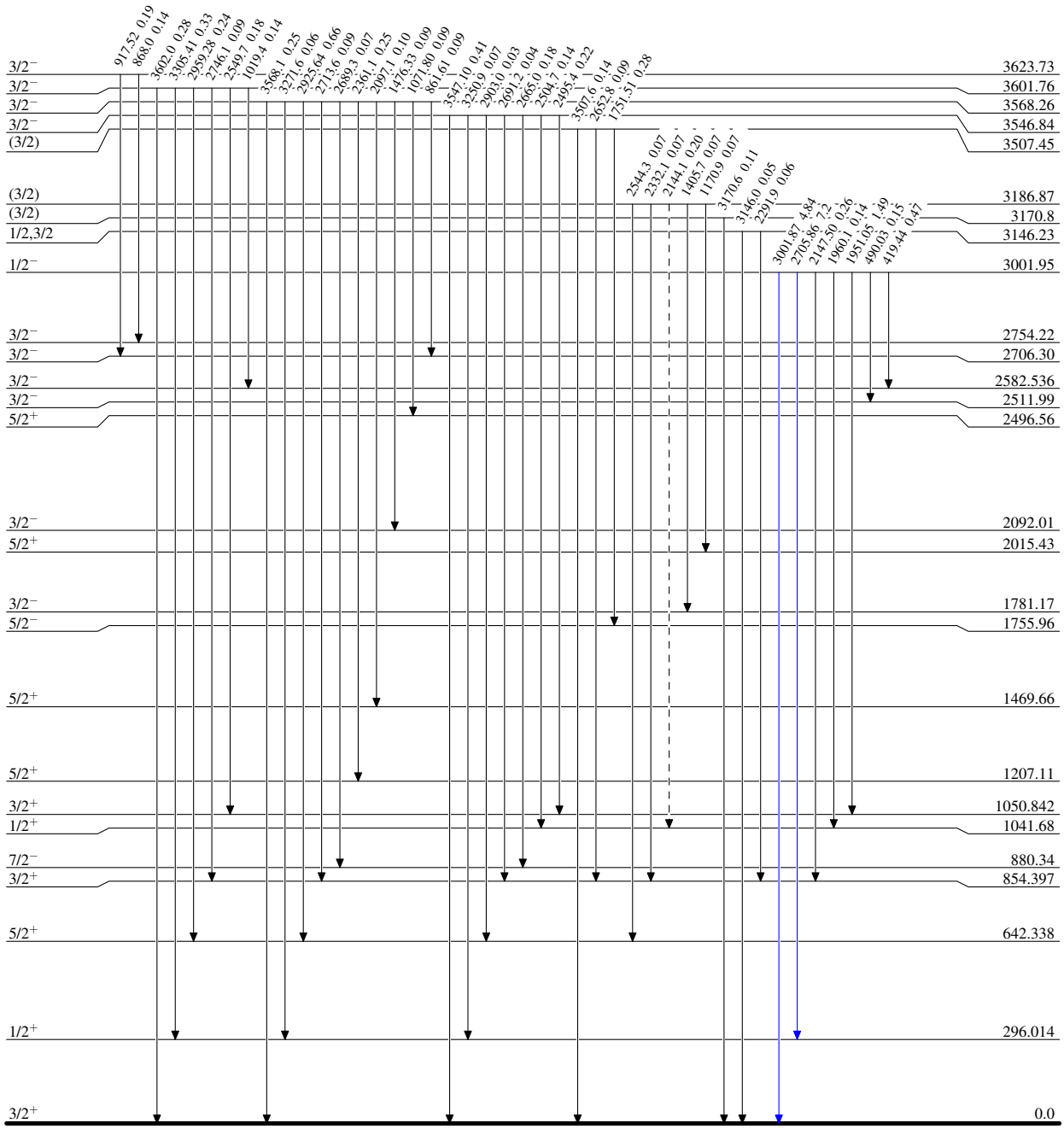
$^{131}_{52}Te_{79}$

^{130}Te(n,γ) E=th 2003To08,1980Ho29

Level Scheme (continued)

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

Legend
$I_\gamma < 2\% \times I_\gamma^{max}$
$I_\gamma < 10\% \times I_\gamma^{max}$
$I_\gamma > 10\% \times I_\gamma^{max}$
γ Decay (Uncertain)



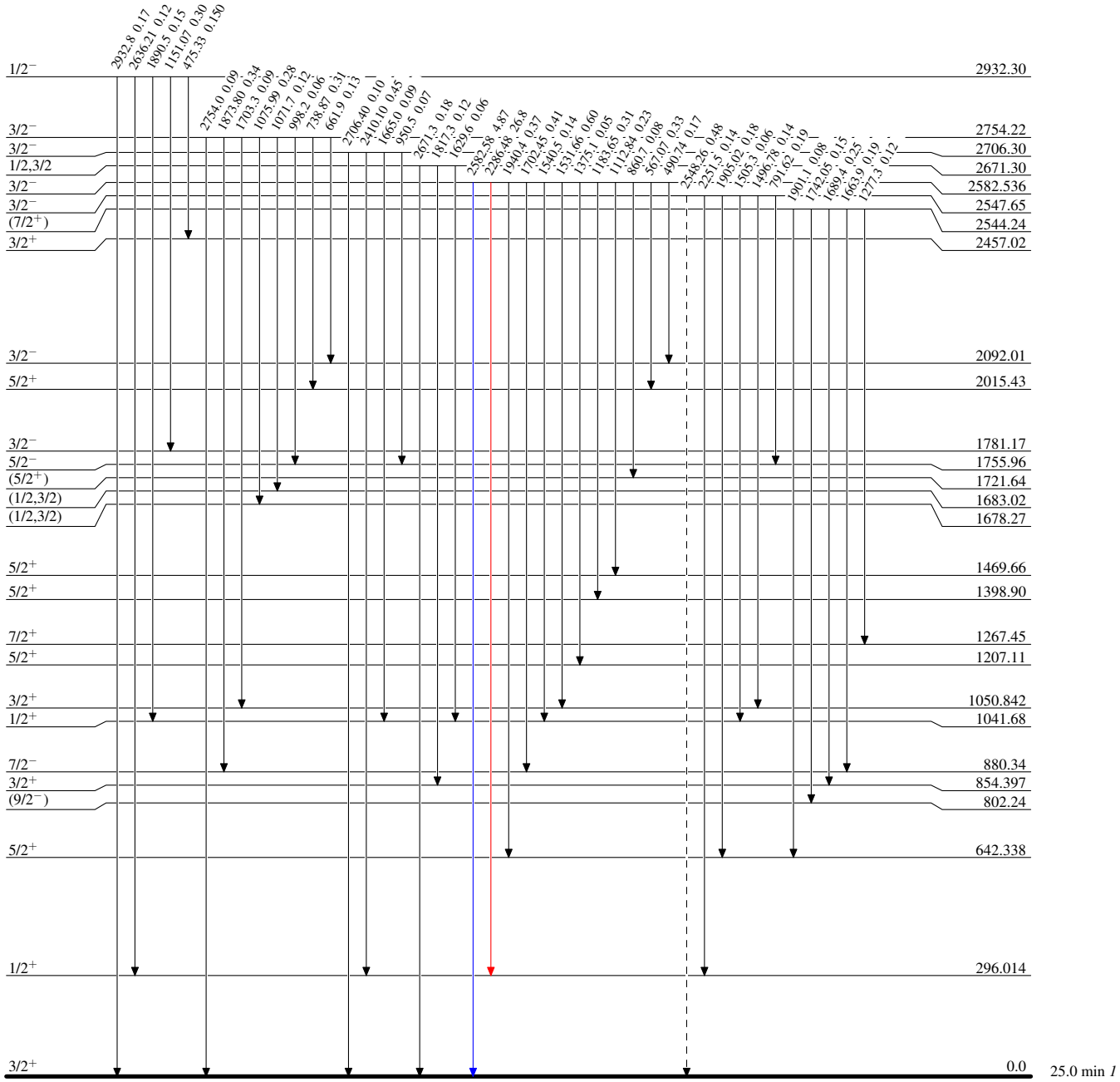
$^{131}_{52}Te_{79}$

^{130}Te(n,γ) E=th 2003To08,1980Ho29

Level Scheme (continued)

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

Legend
$I_\gamma < 2\% \times I_\gamma^{max}$
$I_\gamma < 10\% \times I_\gamma^{max}$
$I_\gamma > 10\% \times I_\gamma^{max}$
γ Decay (Uncertain)



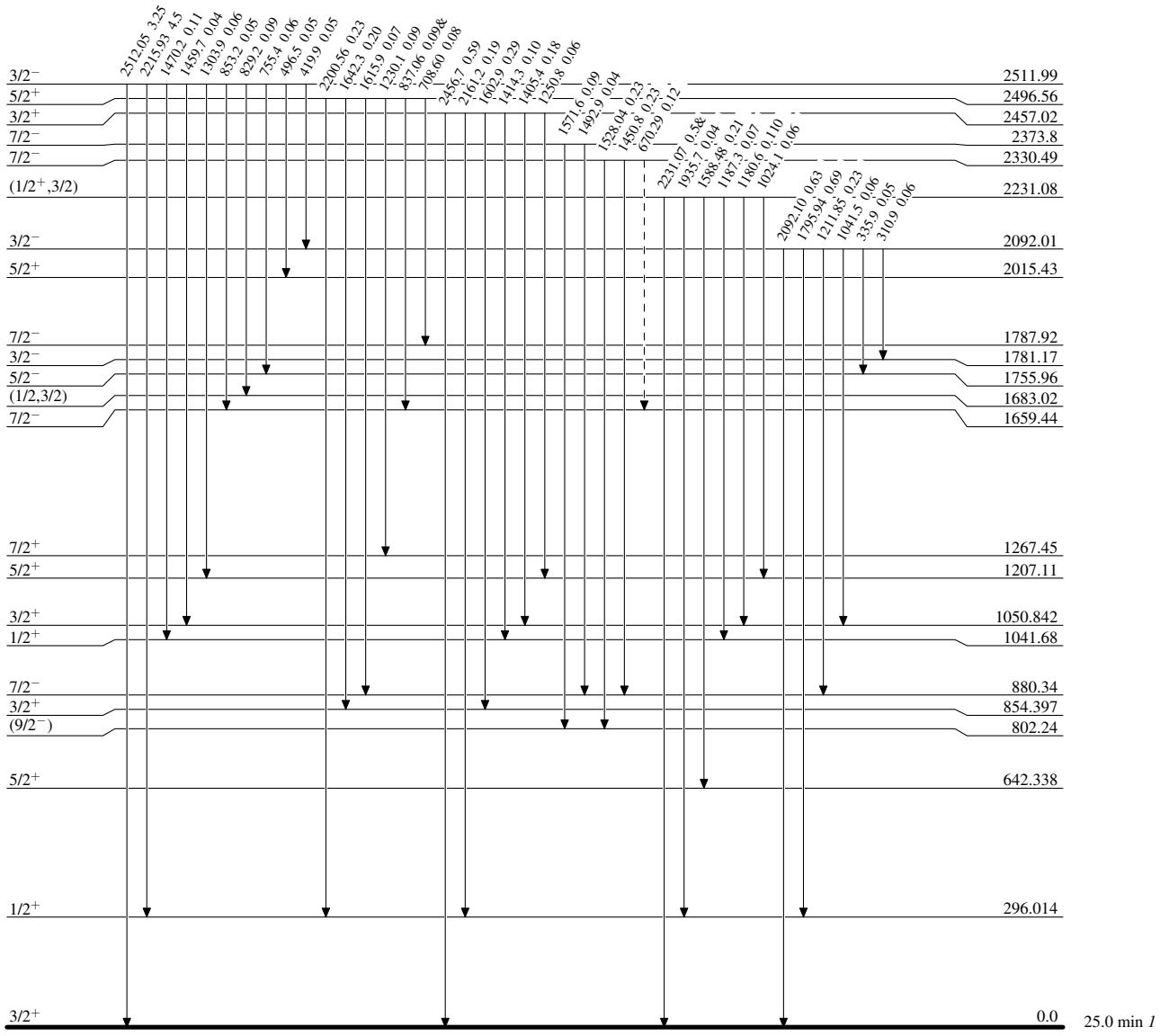
$^{131}_{52}Te_{79}$

^{130}Te(n,γ) E=th 2003To08,1980Ho29

Level Scheme (continued)

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

Legend
$I_\gamma < 2\% \times I_\gamma^{max}$
$I_\gamma < 10\% \times I_\gamma^{max}$
$I_\gamma > 10\% \times I_\gamma^{max}$
γ Decay (Uncertain)



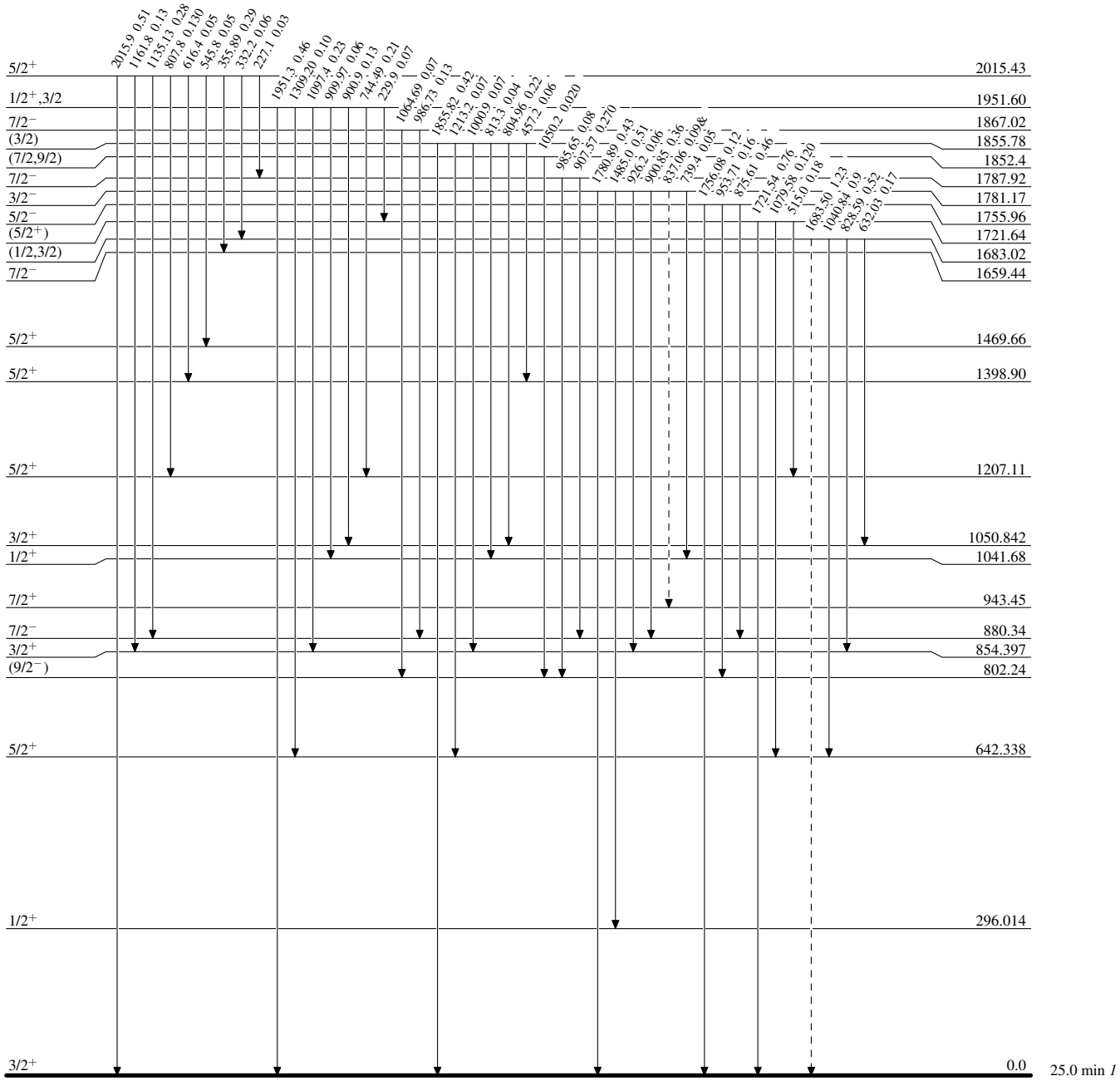
$^{131}_{52}Te_{79}$

^{130}Te(n,γ) E=th 2003To08,1980Ho29

Level Scheme (continued)

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

Legend
$I_\gamma < 2\% \times I_\gamma^{max}$
$I_\gamma < 10\% \times I_\gamma^{max}$
$I_\gamma > 10\% \times I_\gamma^{max}$
γ Decay (Uncertain)



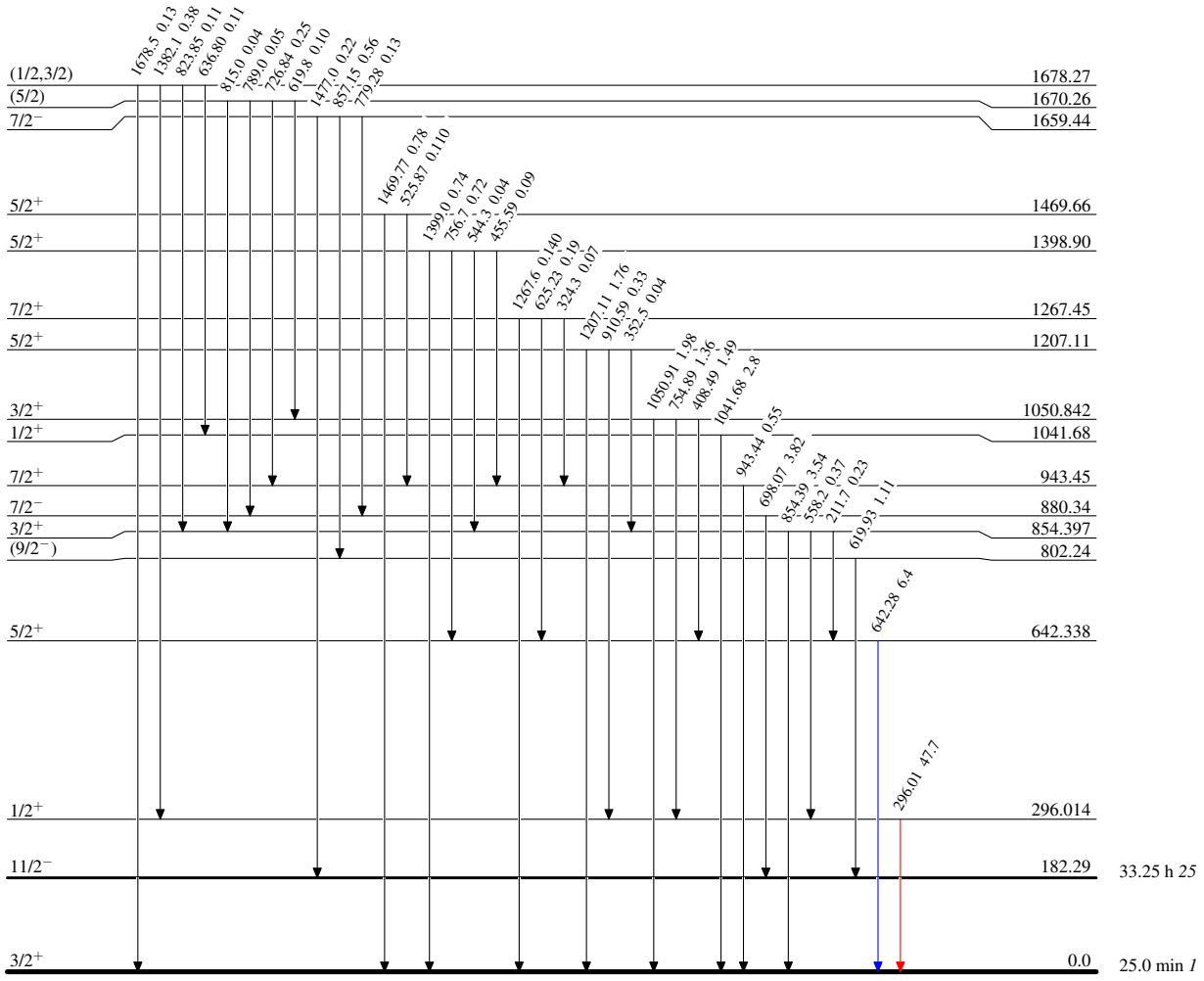
$^{131}_{52}Te_{79}$

^{130}Te(n,γ) E=th 2003To08,1980Ho29

Level Scheme (continued)

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

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



$^{131}_{52}Te_{79}$