^{111}Cd(α,2nγ) 1997Ka40,1991Vi09

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 111, 1471 (2010)	1-May-2009

1997Ka40: E=27 MeV. Measured: γ, excit, $\gamma\gamma$ coin, $\gamma(\theta)$, γ(t) Doppler shift, linear polarization, γ-rf distribution. Preliminary report was given in 1995KaZV.
1991Vi09: E=27 MeV. Measured: γ, excit, $\gamma\gamma$ coin, $\gamma(\theta)$, γ(t) Doppler shift.
Others: 1972Br38, 1973IsZQ, 1974Br29. Measured: $T_{1/2}$ of 739 level.

^{113}Sn Levels

E(level)	J$^{\pi}$[†]	$T_{1/2}$[‡]	Comments
0.0[#]	1/2$^+$		
77.38[#]	7/2$^+$		
410.36[#] *14*	5/2$^+$		
498.11[#] *9*	3/2$^+$	>0.35 ps	
739.17[@] *18*	11/2$^-$	86 ns *2*	$T_{1/2}$: from Adopted Levels.
1014.39[#] *22*	3/2$^+$	0.2 ps *1*	
1018.31[#] *18*	5/2$^+$	1.0 ps *5*	
1249.3 *5*			
1284.27[#] *12*	5/2$^+$	0.5 ps *2*	
1314.01[#] *20*	3/2$^+$		
1356.00[#] *16*	3/2$^+$	0.7 ps *3*	
1472.78[#] *9*	5/2$^+$	0.8 ps *5*	
1539.36[#] *24*	5/2$^+$	0.6 ps *1*	
1540.7[@] *4*	(11/2$^-$)	0.2 ps *1*	
1557.0[#] *3*	3/2$^+$		
1645.3 *5*			
1647.4 *3*			
1652.0[#] *3*	5/2$^+$		
1732.5[#] *5*	(3/2$^+$,5/2$^+$)		
1745.22[#] *18*	5/2$^+$	0.31 ps *8*	
1781.52[@] *24*	9/2$^-$	0.19 ps *7*	
1867.55[#] *16*	5/2$^+$	0.33 ps *10*	
1907.45[@] *20*	15/2$^-$	0.8 ps *2*	
1909.83[#] *19*	(5/2$^+$,7/2$^+$)		
1936.18[@] *20*	11/2$^-$	1.9 ps *8*	
1946.08[@] *25*	(9/2$^-$)	0.4 ps *2*	
1952.78[@] *20*	13/2$^-$	1.0 ps *4*	
2031.7 *6*			
2039.99[#] *16*	7/2$^+$	0.2 ps *1*	
2045.81[#] *24*	(3/2$^+$,5/2$^+$)		
2135.5 *6*			
2176.83[#] *16*	7/2$^+$	0.3 ps *2*	
2200.72 *22*	(5/2)	>0.24 ps	
2258.8[#] *3*	(5/2$^+$)	0.3 ps *1*	
2275.2 *6*			
2337.47[@] *24*	11/2$^-$	0.35 ps *8*	
2386.01[#] *24*	7/2$^+$	0.7 ps *4*	
2411.0 *5*			E(level): from coin between 1284-583-543 gammas.

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^{111}Cd(α,2nγ) 1997Ka40,1991Vi09 (continued)

^{113}Sn Levels (continued)

E(level)	J^{π}[†]	$T_{1/2}$[‡]	Comments
2448.59 *18*	(7/2)		
2506.2 *3*			
2512.0[#] *5*	(3/2$^+$,5/2$^+$)		
2540.78[@] *25*	(15/2$^-$)	0.07 ps *3*	
2552.6 *4*			
2583.10[@] *24*	(15/2$^-$)	0.22 ps *9*	
2620.1 *3*			
2624.6 *3*			
2649.8[@] *6*	(9/2$^-$)		
2662.8[#] *4*	(3/2$^+$,5/2$^+$)		
2671.9 *6*			
2675.6 *3*			E(level): from coin between 1284-583-808 gammas.
2701.15 *25*		0.4 ps *1*	
2718.6[@] *3*	(11/2$^-$)		
2750.61[@] *25*	17/2$^-$	0.21 ps *7*	
2778.7 *4*			
2807.50[@] *22*	19/2$^-$	0.31 ps *10*	
2852.5[@] *3*	(17/2$^-$)	1.2 ps *6*	
2889.9 *6*			
2916.6 *3*			
2956.7 *4*			
2975.92[@] *24*	(19/2$^-$)	0.28 ps *14*	
3092.55[@] *22*	19/2$^-$	0.45 ps *18*	
3129.9[@] *3*	21/2$^-$	>0.35 ps	
3131.0 *4*			
3139.2 *6*			
3224.0[@] *4*	(19/2$^-$)	>1.4 ps	
3410.3 *4*			
3421.4[@] *3*	21/2$^-$		
3454.3 *5*			
3459.5[@] *3*	23/2$^-$		
3838.7[@] *4*	(23/2$^-$)		
3902.7[@] *4*	(23/2$^-$)	0.6 ps *2*	
3914.7[@] *4*	(21/2$^-$)		
3973.4[@] *3*	(23/2$^-$)	0.5 ps *2*	
4059.2[#] *4*	25/2$^+$	0.69 ns *28*	$T_{1/2}$: from γ-rf(t) (1997Ka40).
4476.6[#] *4*	(27/2$^+$)	>1.1 ps	
4714.7[@] *6*	(27/2$^-$)	0.31 ps *10*	

[†] From decay properties, as given by 1997Ka40.
[‡] From Doppler shift.
[#] Band(A): positive-parity levels.
[@] Band(B): negative-parity levels.

^{111}Cd(α,2nγ) 1997Ka40,1991Vi09 (continued)

$\gamma(^{113}Sn)$

E_γ †	I_γ †	E_i(level)	J_i^π	E_f	J_f^π	Mult. ‡	δ	Comments
77.38		77.38	$7/2^+$	0.0	$1/2^+$			E_γ: from Adopted Levels, gammas.
86.1 *3*		4059.2	$25/2^+$	3973.4	$(23/2^-)$			
87.8		498.11	$3/2^+$	410.36	$5/2^+$			
153.5 *3*	0.4 *2*	3129.9	$21/2^-$	2975.92	$(19/2^-)$			
172.4 *2*	1.2 *1*	2039.99	$7/2^+$	1867.55	$5/2^+$	M1+E2	0.4 *2*	B(M1)(W.u.)=5 *3*; B(E2)(W.u.)=2.1×10^4 *21*
225.3 *2*	1.6 *1*	2975.92	$(19/2^-)$	2750.61	$17/2^-$	M1+E2	0.25 *5*	B(M1)(W.u.)=1.3 *7*; B(E2)(W.u.)=1.2×10^3 *8*
282.7 *3*	0.5 *2*	2620.1		2337.47	$11/2^-$			
291.7 *2*	1.8 *2*	3421.4	$21/2^-$	3129.9	$21/2^-$	M1+E2	0.35 *15*	
322.5 *1*	15.9 *8*	3129.9	$21/2^-$	2807.50	$19/2^-$	M1+E2	0.15 *5*	B(M1)(W.u.)<1.8; B(E2)(W.u.)<5.1×10^2
329.5# *2*	5.8# *5*	3459.5	$23/2^-$	3129.9	$21/2^-$	M1+E2	0.16 *5*	
332.6 *2*	11.2 *6*	410.36	$5/2^+$	77.38	$7/2^+$	M1+E2	−0.08 *2*	
363.7 *4*	0.5 *2*	2701.15		2337.47	$11/2^-$			
379.2 *4*	0.4 *2*	3838.7	$(23/2^-)$	3459.5	$23/2^-$			
381.1 *5*	0.4 *2*	2718.6	$(11/2^-)$	2337.47	$11/2^-$			
392.7 *2*	2.5 *2*	2975.92	$(19/2^-)$	2583.10	$(15/2^-)$			
394.8 *3*	0.9 *2*	1867.55	$5/2^+$	1472.78	$5/2^+$			
410.3 *3*	0.6 *2*	410.36	$5/2^+$	0.0	$1/2^+$			
417.4 *2*	1.3 *1*	4476.6	$(27/2^+)$	4059.2	$25/2^+$	M1+E2	0.4 *2*	B(M1)(W.u.)<0.27; B(E2)(W.u.)<3.2×10^2
498.1 *1*	6.6 *4*	498.11	$3/2^+$	0.0	$1/2^+$	M1+E2	0.12 *6*	B(M1)(W.u.)<0.51; B(E2)(W.u.)<46
510.9 *5*	1.4 *8*	3131.0		2620.1				
518.4 *5*	0.5 *2*	2386.01	$7/2^+$	1867.55	$5/2^+$			
543.5 *4*	0.4 *2*	2411.0		1867.55	$5/2^+$			
551.9 *3*	0.9 *1*	3973.4	$(23/2^-)$	3421.4	$21/2^-$	M1+E2	>10	B(M1)(W.u.)<0.00044; B(E2)(W.u.)>47
567.2 *3*	1.2 *1*	2039.99	$7/2^+$	1472.78	$5/2^+$	M1+E2	6 *3*	B(M1)(W.u.)=0.004 *4*; B(E2)(W.u.)=3.8×10^2 *20*
573.0 *3*	1.0 *1*	2045.81	$(3/2^+,5/2^+)$	1472.78	$5/2^+$	(M1)		
583.2 *2*	8.0 *4*	1867.55	$5/2^+$	1284.27	$5/2^+$	M1+E2	0.15 *10*	B(M1)(W.u.)=0.30 *10*; B(E2)(W.u.)=15 *+21−15*
599.5 *2*	3.0 *2*	4059.2	$25/2^+$	3459.5	$23/2^-$	E1		B(E1)(W.u.)=1.9×10^{-6} *9*
608.0 *2*	4.2 *3*	1018.31	$5/2^+$	410.36	$5/2^+$	M1+E2	3 *1*	B(M1)(W.u.)=0.006 *5*; B(E2)(W.u.)=1.1×10^2 *6*
613.3 *3*	0.7 *2*	3421.4	$21/2^-$	2807.50	$19/2^-$	M1+E2	0.4 *1*	
633.3 *3*	1.0 *1*	2540.78	$(15/2^-)$	1907.45	$15/2^-$	M1+E2	−1.2 *8*	B(M1)(W.u.)=0.24 *22*; B(E2)(W.u.)=7.E+2 *5*
652.1 *5*	0.2 *1*	3459.5	$23/2^-$	2807.50	$19/2^-$			
661.5 *1*	100 *4*	739.17	$11/2^-$	77.38	$7/2^+$	M2		B(M2)(W.u.)=0.122 *3*
678.7 *4*	0.8 *2*	3902.7	$(23/2^-)$	3224.0	$(19/2^-)$	(E2)		B(E2)(W.u.)=6.E+1 *3*
684.0 *2*	1.5 *1*	2039.99	$7/2^+$	1356.00	$3/2^+$	E2		B(E2)(W.u.)=1.9×10^2 *10*
708.7 *4*	1.2 *1*	3838.7	$(23/2^-)$	3129.9	$21/2^-$	M1		
748.3 *3*	0.9 *2*	2701.15		1952.78	$13/2^-$			
755.8 *3*	0.7 *2*	2039.99	$7/2^+$	1284.27	$5/2^+$			
765.0 *4*	0.4 *2*	2701.15		1936.18	$11/2^-$			
772.5 *3*	0.6 *2*	2718.6	$(11/2^-)$	1946.08	$(9/2^-)$	M1		
786.0 *4*	0.8 *3*	2258.8	$(5/2^+)$	1472.78	$5/2^+$			
786.1 *3*	2.0 *2*	1284.27	$5/2^+$	498.11	$3/2^+$			
797.8 *2*	4.9 *3*	2750.61	$17/2^-$	1952.78	$13/2^-$	(E2)		B(E2)(W.u.)=2.6×10^2 *9*
801.5 *3*	2.0 *2*	1540.7	$(11/2^-)$	739.17	$11/2^-$	M1+E2	−0.3 *1*	B(M1)(W.u.)=0.20 *10*; B(E2)(W.u.)=22 *18*
808.0 *4*	0.5 *2*	2675.6		1867.55	$5/2^+$			

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^{111}Cd(α,2nγ) 1997Ka40,1991Vi09 (continued)

$\gamma(^{113}Sn)$ (continued)

E_γ[†]	I_γ[†]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[‡]	δ	Comments
810.1 *3*	1.8 *2*	3902.7	(23/2$^-$)	3092.55	19/2$^-$	(E2)		B(E2)(W.u.)=58 *22*
812.0 *4*	0.7 *1*	4714.7	(27/2$^-$)	3902.7	(23/2$^-$)	(E2)		B(E2)(W.u.)=1.6×10^2 *6*
838.4[#] *4*	<1.5[#]	2620.1		1781.52	9/2$^-$			
838.9[#] *4*	<1.5[#]	1249.3		410.36	5/2$^+$			
843.7 *2*	6.6 *3*	3973.4	(23/2$^-$)	3129.9	21/2$^-$	M1+E2	0.25 *5*	B(M1)(W.u.)=0.061 *25*; B(E2)(W.u.)=4.2 *24*
873.9 *4*	0.6 *2*	1284.27	5/2$^+$	410.36	5/2$^+$	M1+E2	2.7 *8*	B(M1)(W.u.)=0.00032 *24*; B(E2)(W.u.)=2.4 *13*
879.4 *3*	0.4 *2*	2624.6		1745.22	5/2$^+$			
892.6 *2*	1.6 *1*	2176.83	7/2$^+$	1284.27	5/2$^+$	M1+E2	−0.2 *1*	B(M1)(W.u.)=0.029 *20*; B(E2)(W.u.)=1.1 *+14−1* Mult.: δ=−0.2 *1* or −2.1 *6*.
899.7[#] *4*	20.5[#] *9*	2852.5	(17/2$^-$)	1952.78	13/2$^-$			
900.1[#] *1*	20.5[#] *9*	2807.50	19/2$^-$	1907.45	15/2$^-$	E2		B(E2)(W.u.)=1.0×10^2 *3*
913.2 *3*	2.9 *2*	2386.01	7/2$^+$	1472.78	5/2$^+$	M1+E2	0.4 *2*	B(M1)(W.u.)=0.027 *17*; B(E2)(W.u.)=4 *+5−4*
936.7 *2*	1.6 *1*	1014.39	3/2$^+$	77.38	7/2$^+$	E2		B(E2)(W.u.)=6.E+1 *4*
940.6 *2*	2.5 *2*	1018.31	5/2$^+$	77.38	7/2$^+$	M1+E2	0.5 *2*	B(M1)(W.u.)=0.008 *4*; B(E2)(W.u.)=1.7 *14*
945.0 *2*	1.6 *2*	2852.5	(17/2$^-$)	1907.45	15/2$^-$			
963.8 *2*	1.2 *2*	2916.6		1952.78	13/2$^-$			
974.6 *4*	1.2 *1*	2258.8	(5/2$^+$)	1284.27	5/2$^+$			
975.8 *3*	1.9 *1*	2448.59	(7/2)	1472.78	5/2$^+$			
1009.1 *5*	0.2 *1*	2916.6		1907.45	15/2$^-$			
1014.4 *4*	1.5 *1*	1014.39	3/2$^+$	0.0	1/2$^+$	M1+E2	0.5 *1*	B(M1)(W.u.)=0.041 *21*; B(E2)(W.u.)=8 *5*
1018.3 *5*	0.3 *2*	1018.31	5/2$^+$	0.0	1/2$^+$	E2		B(E2)(W.u.)=0.7 *6*
1034.0 *4*	0.6 *2*	2506.2		1472.78	5/2$^+$			
1042.3 *2*	4.1 *2*	1781.52	9/2$^-$	739.17	11/2$^-$	M1+E2	−0.5 *3*	B(M1)(W.u.)=0.08 *4*; B(E2)(W.u.)=14 *+15−14* Mult.: δ=−0.5 *3* or −1.6 *3*.
1068.3 *3*	4.1 *2*	2975.92	(19/2$^-$)	1907.45	15/2$^-$	E2		B(E2)(W.u.)=22 *12*
1079.8 *4*	0.3 *2*	2552.6		1472.78	5/2$^+$			
1092.6 *5*	0.2 *1*	2448.59	(7/2)	1356.00	3/2$^+$			
1101.8 *4*	0.4 *2*	2386.01	7/2$^+$	1284.27	5/2$^+$			
1107.2 *3*	1.1 *1*	3914.7	(21/2$^-$)	2807.50	19/2$^-$	M1		
1129.0 *2*	1.2 *2*	1539.36	5/2$^+$	410.36	5/2$^+$	M1+E2	−2.5 *10*	B(M1)(W.u.)=0.0035 *25*; B(E2)(W.u.)=14 *3*
1147.2 *5*	0.3 *2*	1645.3		498.11	3/2$^+$			
1149.3 *4*	0.6 *2*	1647.4		498.11	3/2$^+$			
1151.8 *5*	0.1 *1*	2624.6		1472.78	5/2$^+$			
1164.3 *2*	2.9 *2*	2448.59	(7/2)	1284.27	5/2$^+$	M1+E2	1.4 *6*	
1168.3 *1*	57 *3*	1907.45	15/2$^-$	739.17	11/2$^-$	E2		B(E2)(W.u.)=10 *3*
1185.1 *1*	5.3 *3*	3092.55	19/2$^-$	1907.45	15/2$^-$	E2		B(E2)(W.u.)=17 *7*
1197.0 *1*	3.3 *2*	1936.18	11/2$^-$	739.17	11/2$^-$	M1+E2	−5 *3*	B(M1)(W.u.)=0.0003 *+4−3*; B(E2)(W.u.)=3.6 *16*
1202.8 *4*	0.6 *2*	2675.6		1472.78	5/2$^+$			
1206.9 *2*	2.5 *2*	1946.08	(9/2$^-$)	739.17	11/2$^-$	M1+E2	0.15 *5*	B(M1)(W.u.)=0.031 *16*; B(E2)(W.u.)=0.4 *3*
1213.6 *1*	12.1 *6*	1952.78	13/2$^-$	739.17	11/2$^-$	M1+E2	3.4 *2*	B(M1)(W.u.)=0.0010 *4*; B(E2)(W.u.)=6.1 *25*
1221.6 *3*	0.9 *1*	2506.2		1284.27	5/2$^+$			
1223.6 *4*	0.4 *2*	3131.0		1907.45	15/2$^-$			
1234.4 *4*	0.2 *1*	1732.5	(3/2$^+$,5/2$^+$)	498.11	3/2$^+$	M1		
1237.1 *4*	0.2 *1*	1647.4		410.36	5/2$^+$			

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^{111}Cd(α,2nγ) 1997Ka40,1991Vi09 (continued)

$\gamma(^{113}Sn)$ (continued)

E_γ †	I_γ †	E_i(level)	J_i^π	E_f	J_f^π	Mult.‡	δ	Comments
1241.6 *3*	1.0 *2*	1652.0	$5/2^+$	410.36	$5/2^+$	M1		
1247.1 *5*	0.1 *1*	1745.22	$5/2^+$	498.11	$3/2^+$	M1+E2	2.1 *15*	B(M1)(W.u.)=0.00013 *+21−13*; B(E2)(W.u.)=0.3 *+4−3*
1268.4 *5*	0.2 *2*	2552.6		1284.27	$5/2^+$			
1271.6 *5*	0.4 *2*	3139.2		1867.55	$5/2^+$			
1284.2 *2*	12.5 *6*	1284.27	$5/2^+$	0.0	$1/2^+$	E2		B(E2)(W.u.)=8 *4*
1314.0 *2*	2.6 *2*	1314.01	$3/2^+$	0.0	$1/2^+$	M1		
1316.5 *3*	2.4 *2*	3224.0	$(19/2^-)$	1907.45	$15/2^-$			
1334.9 *2*	3.9 *2*	1745.22	$5/2^+$	410.36	$5/2^+$	M1+E2	0.6 *4*	B(M1)(W.u.)=0.016 *8*; B(E2)(W.u.)=3 *3*
1356.0 *2*	2.2 *2*	1356.00	$3/2^+$	0.0	$1/2^+$	M1+E2	0.14 *6*	B(M1)(W.u.)=0.012 *6*; B(E2)(W.u.)=0.10 *10*
1411.7 *2*	1.2 *2*	1909.83	$(5/2^+,7/2^+)$	498.11	$3/2^+$			
1472.8 *1*	13.3 *7*	1472.78	$5/2^+$	0.0	$1/2^+$	E2		B(E2)(W.u.)=3.1 *20*
1499.5 *3*	0.5 *2*	1909.83	$(5/2^+,7/2^+)$	410.36	$5/2^+$			
1502.8 *3*	0.6 *2*	3410.3		1907.45	$15/2^-$			
1546.8 *4*	<1.9	3454.3		1907.45	$15/2^-$			
1547.7 *5*	<1.9	2045.81	$(3/2^+,5/2^+)$	498.11	$3/2^+$			
1557.0 *3*	0.7 *2*	1557.0	$3/2^+$	0.0	$1/2^+$	M1+E2	0.2 *1*	
1574.5 *4*	0.5 *2*	1652.0	$5/2^+$	77.38	$7/2^+$	M1+E2	−1.0 *5*	
1598.3 *2*	2.2 *2*	2337.47	$11/2^-$	739.17	$11/2^-$	M1+E2	1.9 *2*	B(M1)(W.u.)=0.0033 *10*; B(E2)(W.u.)=3.7 *9*
1621.3 *5*	0.1 *1*	2031.7		410.36	$5/2^+$			
1635.5 *5*	0.1 *1*	2045.81	$(3/2^+,5/2^+)$	410.36	$5/2^+$			
1667.5 *2*	1.2 *1*	1745.22	$5/2^+$	77.38	$7/2^+$			
1672.4 *3*	0.3 *1*	2956.7		1284.27	$5/2^+$			
1702.6 *2*	1.3 *1*	2200.72	(5/2)	498.11	$3/2^+$	M1+E2	−0.5 *3*	B(M1)(W.u.)<0.018; B(E2)(W.u.)<2.0
1703.8 *4*	0.2 *1*	1781.52	$9/2^-$	77.38	$7/2^+$	[E1]		B(E1)(W.u.)=1.4×10^{-5} *9*
1725.1 *5*	0.2 *1*	2135.5		410.36	$5/2^+$			
1766.5 *2*	2.5 *2*	2176.83	$7/2^+$	410.36	$5/2^+$	M1		B(M1)(W.u.)=0.006 *4*
1801.6 *2*	1.1 *1*	2540.78	$(15/2^-)$	739.17	$11/2^-$			
1843.8 *2*	3.7 *2*	2583.10	$(15/2^-)$	739.17	$11/2^-$	E2		B(E2)(W.u.)=3.7 *16*
1864.8 *5*	0.1 *1*	2275.2		410.36	$5/2^+$			
1881.0 *3*	0.9 *1*	2620.1		739.17	$11/2^-$			
1910.6 *5*	0.2 *1*	2649.8	$(9/2^-)$	739.17	$11/2^-$	(M1)		
1932.7 *5*	0.1 *1*	2671.9		739.17	$11/2^-$			
1962.0 *3*	0.7 *2*	2701.15		739.17	$11/2^-$			
1979.4 *3*	0.6 *2*	2718.6	$(11/2^-)$	739.17	$11/2^-$			
2013.9 *4*	0.5 *2*	2512.0	$(3/2^+,5/2^+)$	498.11	$3/2^+$			
2039.5 *3*	1.6	2778.7		739.17	$11/2^-$			
2099.3 *3*	1.4 *1*	2176.83	$7/2^+$	77.38	$7/2^+$	M1		B(M1)(W.u.)=0.0020 *14*
2150.5 *5*	0.2 *1*	2889.9		739.17	$11/2^-$			
2164.7 *3*	0.9 *3*	2662.8	$(3/2^+,5/2^+)$	498.11	$3/2^+$			

† From 1997Ka40, $\Delta E\gamma$=0.3 keV estimated by evaluator, average of $\Delta E\gamma$=0.1-0.4 keV (1997Ka40). The data of 1991Vi09 are in agreement with 1997Ka40.

‡ From $\gamma(\theta)$ at seven angles, linear polarization.

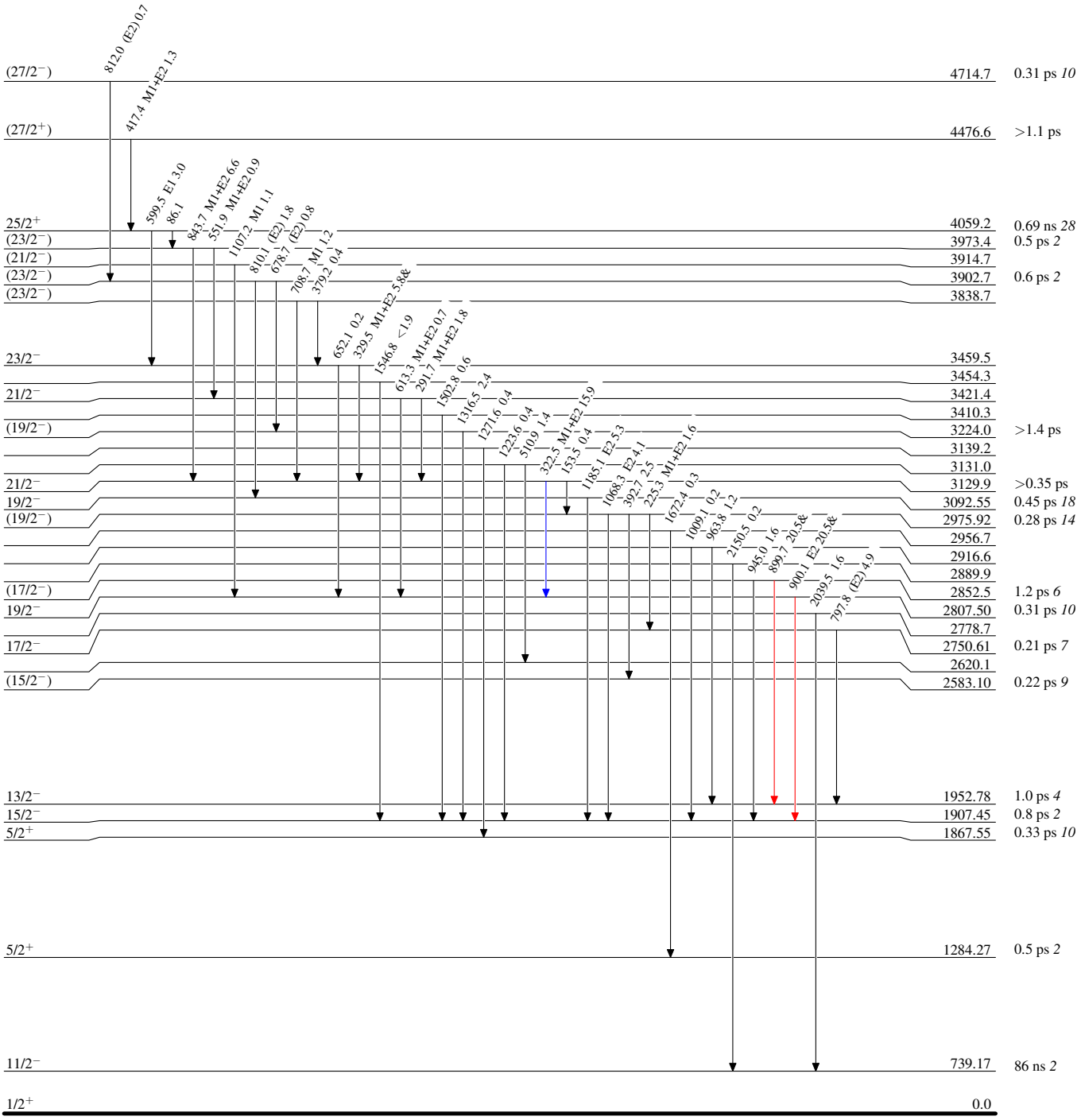
Multiply placed with undivided intensity.

^{111}Cd(α,2nγ) **1997Ka40,1991Vi09**

Level Scheme

Intensities: Relative I_γ
& Multiply placed: undivided intensity given

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



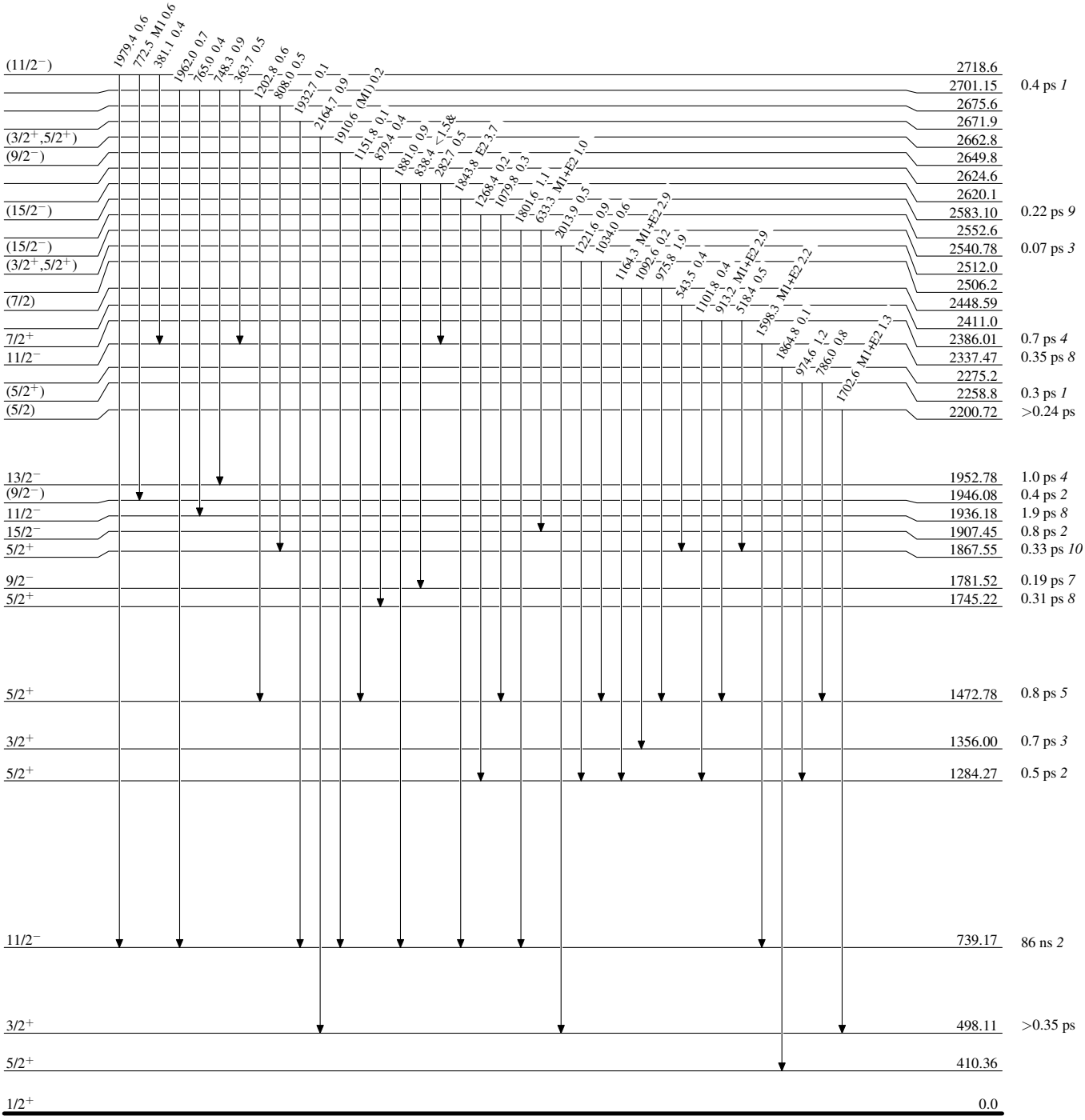
$^{113}_{50}Sn_{63}$

^{111}Cd(α,2nγ) 1997Ka40,1991Vi09

Level Scheme (continued)

Intensities: Relative I_γ
& Multiply placed: undivided intensity given

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



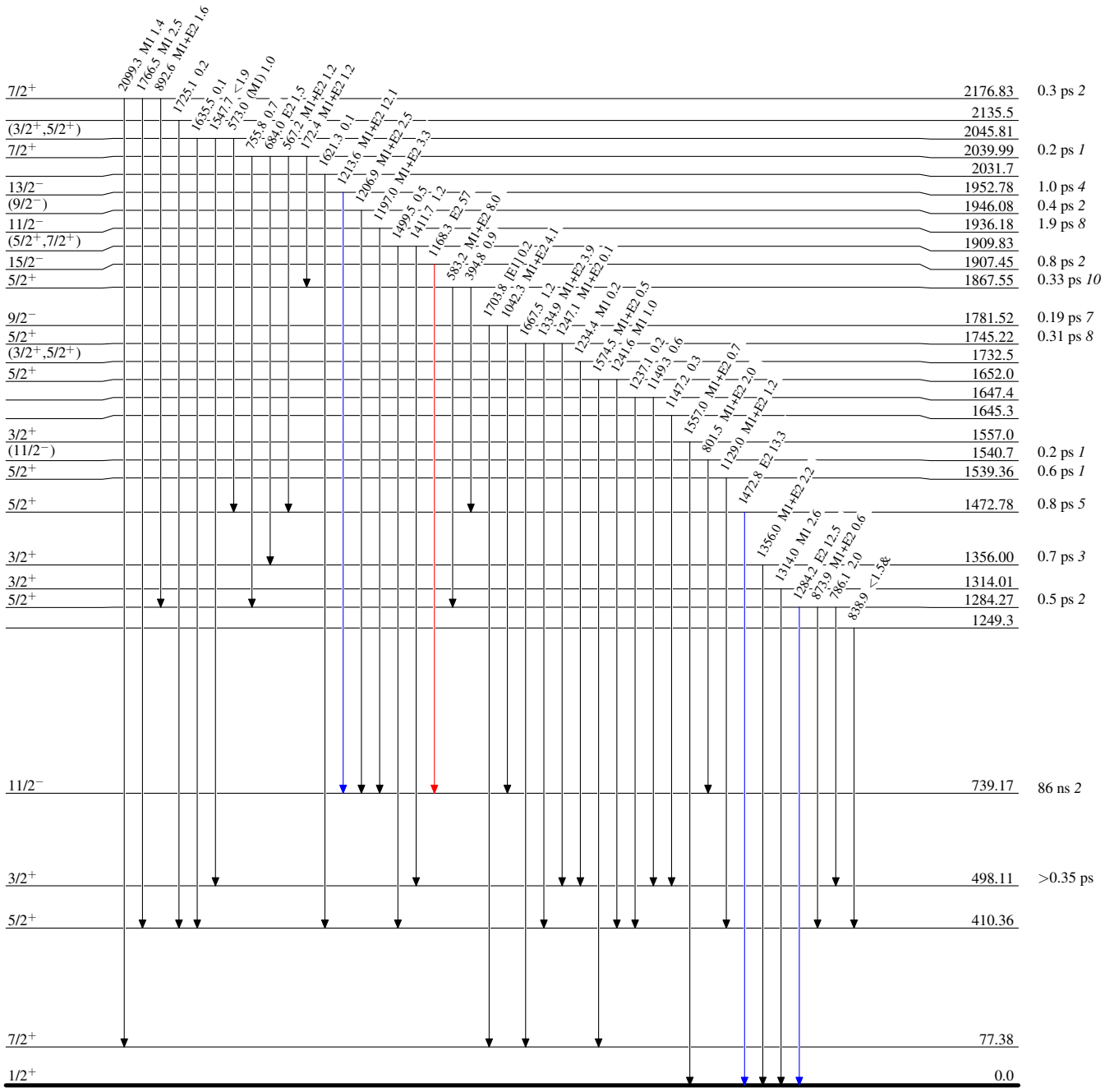
$^{113}_{50}Sn_{63}$

^{111}Cd(α,2nγ) 1997Ka40,1991Vi09

Level Scheme (continued)

Intensities: Relative I_γ
& Multiply placed: undivided intensity given

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



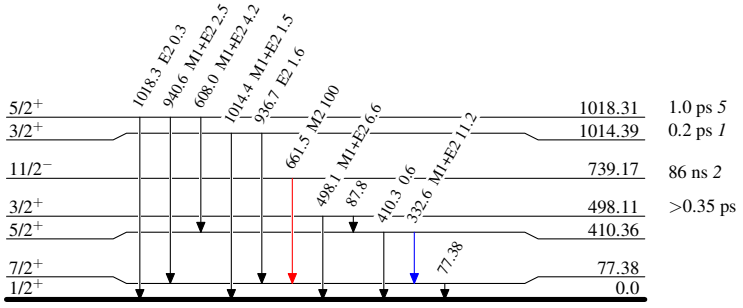
$^{113}_{50}Sn_{63}$

^{111}Cd(α,2nγ) 1997Ka40,1991Vi09

Level Scheme (continued)

Intensities: Relative I_γ
& Multiply placed: undivided intensity given

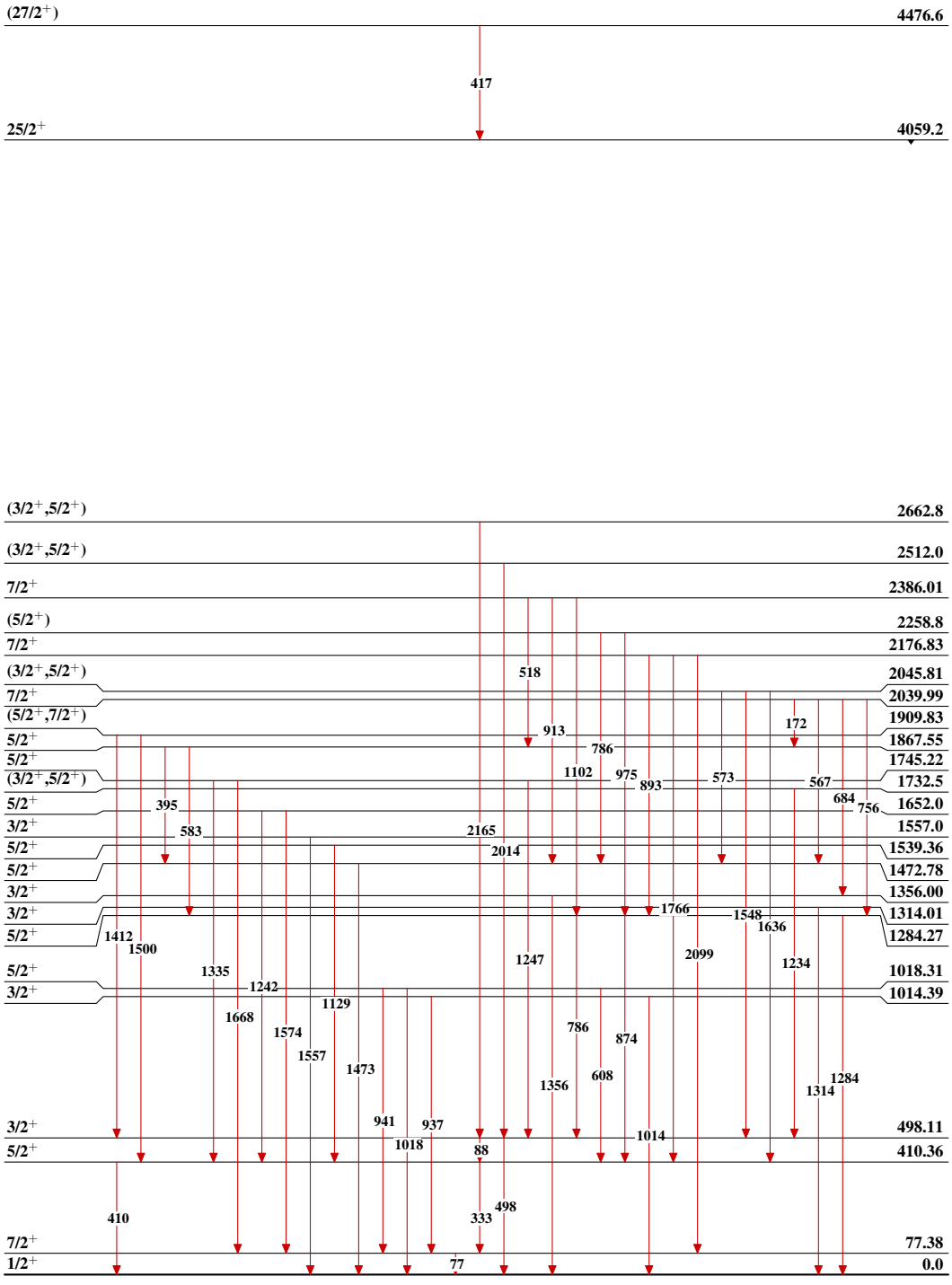
Legend
$I_\gamma < 2\% \times I_\gamma^{max}$
$I_\gamma < 10\% \times I_\gamma^{max}$
$I_\gamma > 10\% \times I_\gamma^{max}$



$^{113}_{50}Sn_{63}$

^{111}Cd(α,2nγ) 1997Ka40,1991Vi09

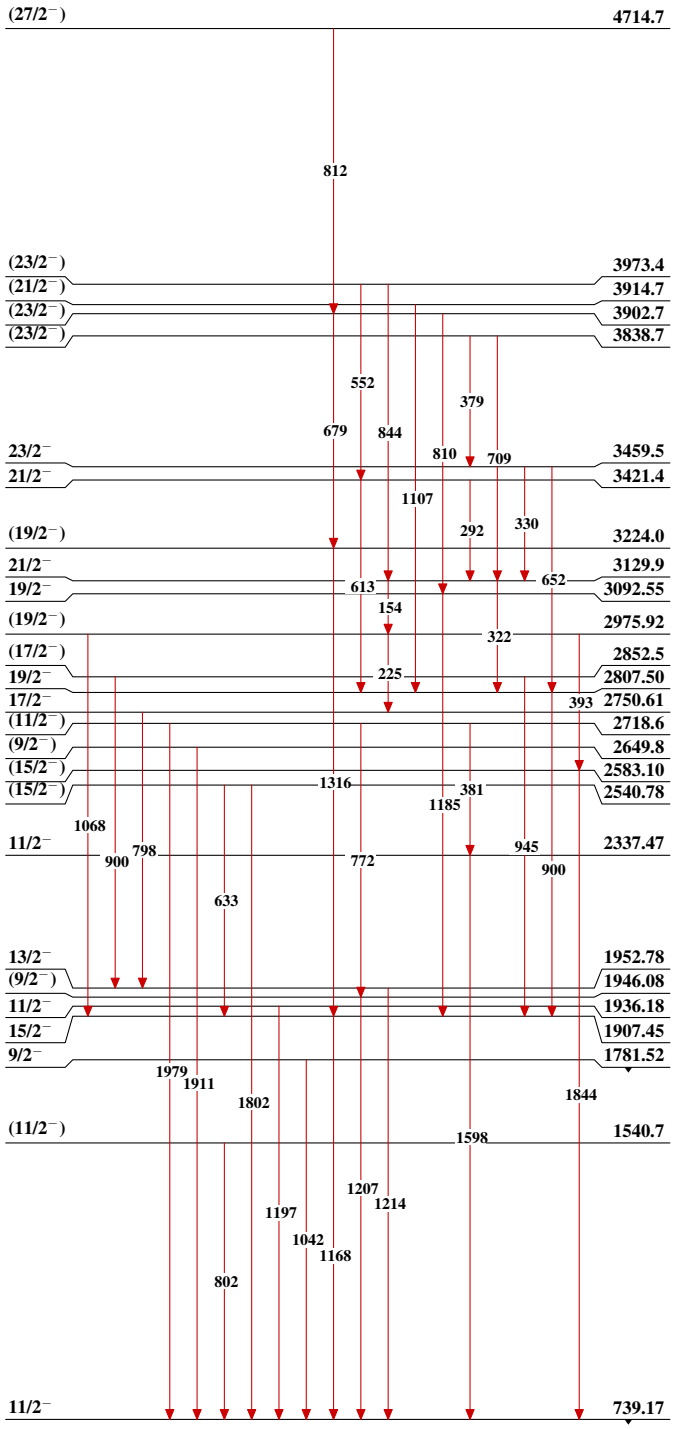
Band(A): Positive-parity levels



$^{113}_{50}Sn_{63}$

^{111}Cd(α,2nγ) 1997Ka40,1991Vi09 (continued)

Band(B): Negative-parity levels



$^{113}_{50}Sn_{63}$