^{113}Cd(n,n′γ) 1987BaYW,1991NeZX

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

Enriched≈96% target.
Measured: γ, γγ, γ(θ), linear polarization.
Also measurement ^{112}Cd(n,γ) E=res.
1991NeZX has reanalyzed the data of 1987BaYW and placed many new gammas.

^{113}Cd Levels

E(level)	Jπ†	E(level)	Jπ†	E(level)	Jπ†
0.0	1/2+	1051.2 *5*	7/2−	1542.28 *9*	(1/2)+
263.68 *6*	11/2−	1109.5 *6*		1561.5 *5*	
298.567 *17*	3/2+	1124.5 *6*		1575.8 *5*	7/2−
316.207 *16*	5/2+	1126.22 *6*	3/2+	1605.7 *3*	
458.578 *24*	7/2+	1177.26 *8*	3/2+	1607.17 *9*	5/2+
522.1 *6*	7/2−	1195.0 *3*	3/2−	1658.5 *5*	
583.89 *4*	5/2+	1209.56 *13*	13/2−	1675.11 *9*	3/2+
638.35 *6*	9/2−	1214.31 *13*	11/2+	1732.5 *5*	
680.550 *21*	3/2+	1268.13 *6*	3/2+	1746.09 *14*	3/2−
708.556 *22*	5/2+	1279.55 *7*	3/2+	1779.02 *18*	9/2−
816.62 *4*	7/2+	1301.03 *7*	3/2+,5/2+	1798.9 *5*	(1/2,3/2,5/2)+
855.4 *3*	5/2−	1313.74 *12*	5/2+	1823.5 *5*	
870.20 *14*	15/2−	1322.17 *13*	7/2−	1842.94 *14*	(3/2−)
878.5 *5*	3/2+	1351.6 *5*	5/2,7/2	1867.99 *9*	7/2−,9/2−
883.62 *5*	1/2+	1364.71 *7*		1892.44 *12*	7/2−
897.3 *5*	3/2+	1387.44 *8*	5/2+,3/2+	1902.5 *5*	
939.72 *5*	9/2+	1390.56 *9*	1/2+,3/2+	1904.28 *11*	5/2+,7/2+
988.40 *6*	1/2+	1395.5 *5*		2037.69 *19*	5/2,7/2,9/2
1002.89 *4*	3/2+	1405.81 *10*	1/2+,3/2+	2094.3 *4*	7/2−
1007.16 *5*	7/2+	1407.44 *25*	(9/2)+	2113.18 *22*	7/2−
1034.1 *5*	3/2+	1423.85 *12*	‡	2173.71 *12*	1/2−,3/2−
1037.4 *2*	7/2+	1450.3 *5*		2219.5 *5*	
1047.49 *10*	7/2+	1479.1 *5*	1/2,3/2	2319.70 *18*	3/2−
1049.68 *10*	3/2+	1492.99 *9*	1/2+,3/2+	2759.32 *12*	3/2+,5/2+

† As given by 1991NeZX, see Adopted Levels for comments.
‡ 1991NeZX suggested a 11/2− from syst, not adopted in (α,2nγ) 1997Wa20.

^{113}Cd(n,n′γ) 1987BaYW,1991NeZX (continued)

γ(^{113}Cd)

E_γ	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Mult.[†]	δ	Comments
96.9 *2*	1.6 *3*	680.550	3/2$^+$	583.89	5/2$^+$			
142.35 *2*	34 *3*	458.578	7/2$^+$	316.207	5/2$^+$	M1+E2	−0.04 *3*	
[x]162.32 *5*	0.23 *5*							
171.07 *12*	0.27 *8*	1450.3		1279.55	3/2$^+$			
174.79 *9*	0.25 *8*	1301.03	3/2$^+$,5/2$^+$	1126.22	3/2$^+$			
184.62[‡] *25*	0.24 *8*	1124.5		939.72	9/2$^+$			
[x]186.17 *12*	0.09 *2*							
[x]196.90 *26*	0.28 *8*							
[x]198.27 *13*	0.47 *14*							
205.86 *8*	0.42 *4*	522.1	7/2$^-$	316.207	5/2$^+$	E1		
217.00 *3*	0.56 *6*	855.4	5/2$^-$	638.35	9/2$^-$	E2		
224.69 *25*	0.03 *1*	1492.99	1/2$^+$,3/2$^+$	1268.13	3/2$^+$			
[x]228.7 *3*	0.05 *2*							
[x]230.34 *25*	0.16 *5*							
[x]232.6 *3*	0.05 *3*							
242.6 *3*	0.04 *1*	1126.22	3/2$^+$	883.62	1/2$^+$	M1		
[x]244.73 *11*	0.26 *5*							
249.93 *6*	1.2 *1*	708.556	5/2$^+$	458.578	7/2$^+$	M1+E2	+0.24 *8*	
258.72 *2*	34 *2*	522.1	7/2$^-$	263.68	11/2$^-$	E2		
264.2 *4*	0.14 *4*	1390.56	1/2$^+$,3/2$^+$	1126.22	3/2$^+$			
267.68 *6*	0.82 *16*	583.89	5/2$^+$	316.207	5/2$^+$	M1		
[x]271.04 *19*	0.06 *2*							
[x]273.05 *19*	0.09 *3*							
274.67 *18*	0.14 *4*	1214.31	11/2$^+$	939.72	9/2$^+$	M1		
279.80[#] *15*	0.12[#] *2*	988.40	1/2$^+$	708.556	5/2$^+$			
279.80[#] *15*	0.12[#] *2*	1405.81	1/2$^+$,3/2$^+$	1126.22	3/2$^+$			
285.19 *8*	0.46 *4*	583.89	5/2$^+$	298.567	3/2$^+$	M1		
[x]288.53 *30*	0.05 *3*							
291.54 *25*	0.10 *3*	1279.55	3/2$^+$	988.40	1/2$^+$	M1		
294.52[#] *21*	0.62[#] *18*	878.5	3/2$^+$	583.89	5/2$^+$			
294.52[#] *21*	0.62[#] *18*	1002.89	3/2$^+$	708.556	5/2$^+$			
298.58 *2*	100	298.567	3/2$^+$	0.0	1/2$^+$	M1+E2	+0.30 *+3−1*	
307.9 *20*	0.05 *2*	988.40	1/2$^+$	680.550	3/2$^+$			
313.66 *30*	0.71 *5*	897.3	3/2$^+$	583.89	5/2$^+$			
316.21 *2*	73 *4*	316.207	5/2$^+$	0.0	1/2$^+$	E2		
322.35 *3*	1.4 *1*	1002.89	3/2$^+$	680.550	3/2$^+$	M1+E2	−0.8 *2*	Mult.: δ=−0.8 *2* or −2.2 *10*.
332.97 *3*	12.2 *11*	855.4	5/2$^-$	522.1	7/2$^-$	M1+E2	−0.27 *2*	
339.30[@] *10*	1.6[@] *3*	1195.0	3/2$^-$	855.4	5/2$^-$	M1+E2	−0.20 *15*	
339.30[@] *10*	0.1[@]	1209.56	13/2$^-$	870.20	15/2$^-$			
[x]341.89 *8*								
344.31 *12*	0.08 *2*	1351.6	5/2,7/2	1007.16	7/2$^+$			

$^{113}_{48}Cd_{65}$-2

^{113}Cd(n,n′γ) 1987BaYW,1991NeZX (continued)

γ(^{113}Cd) (continued)

E_γ	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Mult.[†]	δ	Comments
356.7[#] *4*	0.23[#] *7*	1037.4	7/2$^+$	680.550	3/2$^+$	E2		
356.7[#] *4*	0.23[#] *7*	1390.56	1/2$^+$,3/2$^+$	1034.1	3/2$^+$			
358.03 *21*	2.2 *6*	816.62	7/2$^+$	458.578	7/2$^+$			
364.37 *3*	3.2 *3*	680.550	3/2$^+$	316.207	5/2$^+$	M1+E2	−0.02 *7*	
369.10 *11*	0.55 *11*	1049.68	3/2$^+$	680.550	3/2$^+$	M1		
374.64 *3*	13.6 *14*	638.35	9/2$^-$	263.68	11/2$^-$	M1+E2	−0.25 *2*	
[x]378.21 *23*	0.14 *4*							
381.96 *3*	3.0 *3*	680.550	3/2$^+$	298.567	3/2$^+$	M1+E2	+0.16 *15*	Mult.: δ=+ 0.16 *15* or 2.3 *7*.
[x]389.3 *3*	0.43 *8*							
392.36 *2*	10 *1*	708.556	5/2$^+$	316.207	5/2$^+$	M1+E2	−0.24 *4*	
[x]398.08 *15*	0.19 *3*							
402.19 *13*	0.25 *7*	1390.56	1/2$^+$,3/2$^+$	988.40	1/2$^+$			
409.97 *9*	1.0 *2*	708.556	5/2$^+$	298.567	3/2$^+$	M1+E2	−0.10 *4*	
412.85 *6*	3.3 *6*	1051.2	7/2$^-$	638.35	9/2$^-$	M1+E2	−0.41 *1*	
416.11 *4*	0.31 *4*	1450.3		1034.1	3/2$^+$			
416.11 *4*	0.31 *4*	1542.28	(1/2)$^+$	1126.22	3/2$^+$			
417.4[#] *3*	0.44[#] *8*	1126.22	3/2$^+$	708.556	5/2$^+$	M1		
417.4[#] *3*	0.44[#] *8*	1301.03	3/2$^+$,5/2$^+$	883.62	1/2$^+$			
417.4[#] *3*	0.44[#] *8*	1405.81	1/2$^+$,3/2$^+$	988.40	1/2$^+$			
419.8 *3*	0.12 *3*	878.5	3/2$^+$	458.578	7/2$^+$			
423.34 *18*	0.22 *6*	1007.16	7/2$^+$	583.89	5/2$^+$	M1		
427.68 *16*	0.26 *5*	2173.71	1/2$^-$,3/2$^-$	1746.09	3/2$^-$	M1		
438.95 *25*	0.16 *3*	897.3	3/2$^+$	458.578	7/2$^+$			
445.2 *3*	0.18 *4*	1479.1	1/2,3/2	1034.1	3/2$^+$			
449.9 *3*	0.19 *4*	1034.1	3/2$^+$	583.89	5/2$^+$	M1		
453.44 *11*	0.36 *7*	1037.4	7/2$^+$	583.89	5/2$^+$	M1		
463.69 *13*	0.23 *4*	1047.49	7/2$^+$	583.89	5/2$^+$	M1		
481.10 *5*	3.3 *3*	939.72	9/2$^+$	458.578	7/2$^+$	M1		
496.8 *3*	0.26 *8*	1351.6	5/2,7/2	855.4	5/2$^-$			
496.8 *3*	0.26 *8*	1904.28	5/2$^+$,7/2$^+$	1407.44	(9/2)$^+$			
500.43 *3*	6.2 *7*	816.62	7/2$^+$	316.207	5/2$^+$			E_γ: from private communication to 1991NeZX.
[x]500.47 *3*	6.2 *7*					M1+E2	+0.47	δ: +0.47<δ<3.0.
517.67 *15*	0.20 *4*	816.62	7/2$^+$	298.567	3/2$^+$			
528.78 *5*	1.6 *3*	1051.2	7/2$^-$	522.1	7/2$^-$	M1+E2	−2.25 *115*	
539.39 *22*	0.53 *10*	1542.28	(1/2)$^+$	1002.89	3/2$^+$			
542.4 *3*	0.32 *6*	1126.22	3/2$^+$	583.89	5/2$^+$	M1		
548.54 *5*	1.2 *2*	1007.16	7/2$^+$	458.578	7/2$^+$	M1		
551.50 *21*	1.3 *3*	1746.09	3/2$^-$	1195.0	3/2$^-$			
553.9 *3*	0.38 *11*	1423.85		870.20	15/2$^-$	E2		E_γ: placed from a 1192 level in (α,2nγ).
562.26 *9*	1.3 *2*	878.5	3/2$^+$	316.207	5/2$^+$			
[x]565.7 *3*	0.16 *3*							
[x]567.2 *3*	0.16 *3*							

$^{113}_{48}Cd_{65}$-3

^{113}Cd(n,n′γ) 1987BaYW,1991NeZX (continued)

γ(^{113}Cd) (continued)

E_γ	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Mult.[†]	δ	Comments
569.3 *3*	0.17 *4*	1779.02	9/2$^-$	1209.56	13/2$^-$	E2		
580.0[#] *5*	2.5[#] *7*	878.5	3/2$^+$	298.567	3/2$^+$			
580.0[#] *5*	2.5[#] *7*	897.3	3/2$^+$	316.207	5/2$^+$			
583.93 *7*	33 *3*	583.89	5/2$^+$	0.0	1/2$^+$	E2		
588.92 *16*	1.1 *2*	1047.49	7/2$^+$	458.578	7/2$^+$	M1		
x593.45 *25*	0.31 *9*							
598.88[@] *15*	6.0[@] *8*	897.3	3/2$^+$	298.567	3/2$^+$			
598.88[@] *15*	6.0[@] *8*	1279.55	3/2$^+$	680.550	3/2$^+$	M1		
606.33 *25*	1.04 *13*	870.20	15/2$^-$	263.68	11/2$^-$	E2		
x608.8 *4*	0.19 *6*							
611.0 *3*	0.34 *4*	1195.0	3/2$^-$	583.89	5/2$^+$	E1		
620.76[‡] *8*	1.1 *3*	1561.5		939.72	9/2$^+$			
623.59 *7*	1.8 *4*	939.72	9/2$^+$	316.207	5/2$^+$	E2		
624.2 *3*		1479.1	1/2,3/2	855.4	5/2$^-$			
643.1 *3*	0.14 *3*	1351.6	5/2,7/2	708.556	5/2$^+$			
648.26 *25*	0.41 *16*	1842.94	(3/2$^-$)	1195.0	3/2$^-$			
658.66 *8*	0.68 *25*	1542.28	(1/2)$^+$	883.62	1/2$^+$			
x661.57 *25*	0.10 *3*							
663.96 *12*	0.13 *6*	1561.5		897.3	3/2$^+$			
x665.98 *25*	0.79 *15*							
665.98 *25*	0.79 *15*	1605.7		939.72	9/2$^+$			
670.4 *4*	0.37 *15*	2094.3	7/2$^-$	1423.85		E2		
672.25[#] *15*	0.1[#]	988.40	1/2$^+$	316.207	5/2$^+$			
672.25[#] *15*	2.5[#] *6*	1195.0	3/2$^-$	522.1	7/2$^-$	E2		
678.9		1387.44	5/2$^+$,3/2$^+$	708.556	5/2$^+$			
680.59 *5*	14.1 *9*	680.550	3/2$^+$	0.0	1/2$^+$	M1+E2	−1.8 *1*	
684.10[#] *11*	0.72[#] *15*	1268.13	3/2$^+$	583.89	5/2$^+$	M1		
684.10[#] *11*	0.72[#] *15*	1322.17	7/2$^-$	638.35	9/2$^-$			
687.4[‡] *3*	0.12 *4*	1902.5		1214.31	11/2$^+$			
691.00 *8*	3.4 *6*	1007.16	7/2$^+$	316.207	5/2$^+$	M1+E2	0.35 *5*	
x703.82 *25*	0.08 *3*							
708.52[@] *5*	4.9[@] *5*	708.556	5/2$^+$	0.0	1/2$^+$	E2		
708.52[@] *5*	≈1.6[@]	1007.16	7/2$^+$	298.567	3/2$^+$	E2		
717.13 *11*	1.6 *3*	1301.03	3/2$^+$,5/2$^+$	583.89	5/2$^+$			
721.22 *8*	2.5 *7*	1037.4	7/2$^+$	316.207	5/2$^+$	M1+E2	0.29 *1*	
731.37	2.8 *7*	1047.49	7/2$^+$	316.207	5/2$^+$	M1		
733.3	0.6	1049.68	3/2$^+$	316.207	5/2$^+$			E_γ: from 1978Ma17.
735.10 *10*	2.7 *7*	1034.1	3/2$^+$	298.567	3/2$^+$	M1		
738.76 *9*	2.2 *6*	1037.4	7/2$^+$	298.567	3/2$^+$	E2		
745.00 *17*	0.53 *16*	1561.5		816.62	7/2$^+$			

^{113}Cd(n,n′γ) 1987BaYW,1991NeZX (continued)

γ(^{113}Cd) (continued)

E_γ	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Mult.[†]
[x]751.95 *21*	0.62 *18*					
755.67 *16*	1.4 *3*	1214.31	$11/2^+$	458.578	$7/2^+$	E2
[x]760.39 *25*	0.10 *2*					
[x]763.6 *3*	0.25 *7*					
765.1 *3*	0.20 *8*	1798.9	$(1/2,3/2,5/2)^+$	1034.1	$3/2^+$	
767.65 *13*	1.2 *2*	1351.6	5/2,7/2	583.89	$5/2^+$	
770.4 *3*	0.59 *18*	1450.3		680.550	$3/2^+$	
[x]777.43 *25*	0.18 *5*					
780.81 *11*	0.51 *16*	1364.71		583.89	$5/2^+$	
784.6 *3*	0.11 *4*	1492.99	$1/2^+,3/2^+$	708.556	$5/2^+$	
788.0 *3*	0.08 *2*	1051.2	$7/2^-$	263.68	$11/2^-$	
791.49 *15*	0.42 *12*	1675.11	$3/2^+$	883.62	$1/2^+$	M1
794.75[‡] *18*	0.56 *16*	1732.5		939.72	$9/2^+$	
799.9 *6*	0.68 *3*	1322.17	$7/2^-$	522.1	$7/2^-$	
808.3 *5*	0.45 *20*	1124.5		316.207	$5/2^+$	
809.96 *25*	1.2 *5*	1126.22	$3/2^+$	316.207	$5/2^+$	M1
812.7 *4*	0.13 *6*	1492.99	$1/2^+,3/2^+$	680.550	$3/2^+$	
823.64	1.5 *3*	1407.44	$(9/2)^+$	583.89	$5/2^+$	
827.65 *25*	0.40 *12*	1126.22	$3/2^+$	298.567	$3/2^+$	M1
829.4 *3*	0.73 *25*	1351.6	5/2,7/2	522.1	$7/2^-$	
[x]838.64 *22*	0.20 *10*					
845.80[‡] *9*	0.88 *17*	1109.5		263.68	$11/2^-$	
855.05 *19*	0.08 *3*	1313.74	$5/2^+$	458.578	$7/2^+$	
856.73 *25*	0.08 *3*	1904.28	$5/2^+,7/2^+$	1047.49	$7/2^+$	
861.24 *15*	1.5 *2*	1177.26	$3/2^+$	316.207	$5/2^+$	
[x]870.10 *25*	0.09 *4*					
878.62[#] *9*	8.4[#] *8*	878.5	$3/2^+$	0.0	$1/2^+$	
878.62[#] *9*	8.4[#] *8*	1177.26	$3/2^+$	298.567	$3/2^+$	
878.62[#] *9*	8.4[#] *8*	1195.0	$3/2^-$	316.207	$5/2^+$	
883.60 *5*	6.5 *6*	883.62	$1/2^+$	0.0	$1/2^+$	
[x]888.02 *11*	0.28 *8*					
890.84 *22*	0.16 *5*	1746.09	$3/2^-$	855.4	$5/2^-$	
892.9 *3*	0.09 *3*	1351.6	5/2,7/2	458.578	$7/2^+$	
896.7 *2*	2.7 *3*	1195.0	$3/2^-$	298.567	$3/2^+$	E1
[x]903.2 *4*	0.20 *8*					
906.08 *25*	0.24 *2*	1364.71		458.578	$7/2^+$	
909.12 *13*	0.36 *12*	1492.99	$1/2^+,3/2^+$	583.89	$5/2^+$	
[x]917.81 *5*	1.2 *2*					
926.6 *4*	0.29 *12*	1607.17	$5/2^+$	680.550	$3/2^+$	M1
928.77 *18*	1.0 *3*	1387.44	$5/2^+,3/2^+$	458.578	$7/2^+$	
[x]933.6 *3*	0.06 *2*					
937.2 *3*	0.24 *7*	1575.8	$7/2^-$	638.35	$9/2^-$	

$^{113}_{48}Cd_{65}$-5

^{113}Cd(n,n′γ) 1987BaYW,1991NeZX (continued)

γ(^{113}Cd) (continued)

E_γ	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Mult.[†]	δ	Comments
[x]938.98 *25*	0.22 *6*							
[x]942.52 *25*	0.10 *3*							
945.96 *15*	1.1 *2*	1209.56	13/2$^-$	263.68	11/2$^-$			
948.85 *25*	0.11 *5*	1407.44	(9/2)$^+$	458.578	7/2$^+$			
951.95 *13*	1.5 *3*	1268.13	3/2$^+$	316.207	5/2$^+$	M1+E2	−0.8 *3*	
[x]957.70 *22*	0.13 *4*							
960.46 *15*	0.07 *2*	2759.32	3/2$^+$,5/2$^+$	1798.9	(1/2,3/2,5/2)$^+$			
963.25 *15*	0.16 *5*	1279.55	3/2$^+$	316.207	5/2$^+$	M1		
969.55 *10*	1.1 *2*	1268.13	3/2$^+$	298.567	3/2$^+$	M1		
[x]974.06 *11*	0.16 *2*							
979.08 *23*	0.13 *5*	2173.71	1/2$^-$,3/2$^-$	1195.0	3/2$^-$	M1		
980.94 *25*	0.14 *5*	1279.55	3/2$^+$	298.567	3/2$^+$	M1		
987.5		1842.94	(3/2$^-$)	855.4	5/2$^-$			
988.43 *7*	4.8 *3*	988.40	1/2$^+$	0.0	1/2$^+$			
994.53 *11*	0.40 *8*	1675.11	3/2$^+$	680.550	3/2$^+$	M1		
997.58 *14*	0.25 *5*	1313.74	5/2$^+$	316.207	5/2$^+$			
1002.76 *9*	0.82 *16*	1002.89	3/2$^+$	0.0	1/2$^+$	M1		
[x]1007.50 *25*	0.12 *4*							
1007.50[‡] *25*	0.12 *4*	1823.5		816.62	7/2$^+$			
1012.91 *21*	0.52 *16*	1867.99	7/2$^-$,9/2$^-$	855.4	5/2$^-$			
1023.00 *25*	0.60 *24*	1607.17	5/2$^+$	583.89	5/2$^+$	M1		
[x]1027.0 *3*	0.06 *2*							
1033.80 *12*	4.0 *8*	1034.1	3/2$^+$	0.0	1/2$^+$	M1+E2	0.52 *22*	
1036.87 *15*	0.90 *27*	1892.44	7/2$^-$	855.4	5/2$^-$	M1		
1049.75 *16*	3.1 *3*	1049.68	3/2$^+$	0.0	1/2$^+$	M1+E2	−0.49 *8*	Mult.: δ=− 0.49 *8* or - 30 *+60−20*.
1052.95 *12*	0.47 *14*	1351.6	5/2,7/2	298.567	3/2$^+$			
1053.0 *3*	0.47 *14*	1575.8	7/2$^-$	522.1	7/2$^-$			
1058.48 *11*	0.70 *19*	1322.17	7/2$^-$	263.68	11/2$^-$			
1066.16 *8*	1.4 *1*	1364.71		298.567	3/2$^+$			
[x]1076.08 *10*	0.18 *5*							
1079.46[‡] *11*	0.53 *10*	1395.5		316.207	5/2$^+$			
1088.89 *9*	1.3 *3*	1387.44	5/2$^+$,3/2$^+$	298.567	3/2$^+$			
1092.18 *21*	0.16 *8*	1390.56	1/2$^+$,3/2$^+$	298.567	3/2$^+$			
1097.89 *22*	0.52 *19*	2037.69	5/2,7/2,9/2	939.72	9/2$^+$			
1107.11 *18*	1.1 *3*	1405.81	1/2$^+$,3/2$^+$	298.567	3/2$^+$			
[x]1116.51 *17*	0.16 *3*							
1126.20 *8*	3.4 *3*	1126.22	3/2$^+$	0.0	1/2$^+$	M1+E2	−0.02 *3*	
1135.45[‡]	0.45 *9*	1658.5		522.1	7/2$^-$			
[x]1144.0 *4*	0.35 *11*							
[x]1147.2 *4*	0.35 *14*							
1147.2 *4*	0.35 *14*	1605.7		458.578	7/2$^+$			
1160.12 *11*	0.64 *19*	1423.85		263.68	11/2$^-$	M1		
[x]1165.49 *11*	0.55 *11*							

$^{113}_{48}Cd_{65}$-6

^{113}Cd(n,n′γ) 1987BaYW,1991NeZX (continued)

γ(^{113}Cd) (continued)

E_γ	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Mult.[†]	δ
1176.76[#] *24*	<1.1[#]	1177.26	3/2$^+$	0.0	1/2$^+$		
1176.76[#] *15*	1.1[#] *3*	1492.99	1/2$^+$,3/2$^+$	316.207	5/2$^+$	M1+E2	+0.23 *17*
1180.70 *18*	0.56 *11*	1479.1	1/2,3/2	298.567	3/2$^+$		
1194.43 *10*	1.08 *11*	1195.0	3/2$^-$	0.0	1/2$^+$	E1	
1214.8 *5*	1.4 *2*	1798.9	(1/2,3/2,5/2)$^+$	583.89	5/2$^+$		
x1218.4 *4*	0.09 *4*						
1221.3 *4*	0.75 *6*	2037.69	5/2,7/2,9/2	816.62	7/2$^+$		
x1230.74 *21*	0.20 *8*						
x1240.8 *5*	0.29 *12*						
x1248.3 *5*	0.21 *6*						
x1253.2 *3*	0.31 *6*						
x1261.93 *10*	0.40 *11*						
1268.32 *15*	0.44 *6*	1268.13	3/2$^+$	0.0	1/2$^+$	M1	
x1273.23 *17*	0.12 *4*						
1279.81 *11*	0.09 *2*	1279.55	3/2$^+$	0.0	1/2$^+$	M1	
1289.4 *3*	0.20 *5*	2173.71	1/2$^-$,3/2$^-$	883.62	1/2$^+$	E1	
x1293.46 *12*	0.45 *8*						
1301.07 *10*	0.41 *8*	1301.03	3/2$^+$,5/2$^+$	0.0	1/2$^+$		
1308.70 *11*	0.34 *8*	1607.17	5/2$^+$	298.567	3/2$^+$	M1	
1312.18 *15*	0.13 *3*	1575.8	7/2$^-$	263.68	11/2$^-$		
x1315.84 *16*	0.08 *3*						
1320.43 *15*	0.47 *8*	1842.94	(3/2$^-$)	522.1	7/2$^-$		
1320.43 *15*	0.47 *8*	1904.28	5/2$^+$,7/2$^+$	583.89	5/2$^+$		
x1325.46 *22*	0.17 *5*						
x1326.95 *15*	0.21 *6*						
x1332.94 *21*	0.06 *2*						
1345.56 *8*	0.71 *5*	1867.99	7/2$^-$,9/2$^-$	522.1	7/2$^-$		
x1354.34 *25*	0.04 *1*						
1370.22 *15*	0.610 *6*	1892.44	7/2$^-$	522.1	7/2$^-$		
1376.64 *25*	0.28 *11*	1675.11	3/2$^+$	298.567	3/2$^+$	M1	
1387.3 *5*	0.17 *8*	1387.44	5/2$^+$,3/2$^+$	0.0	1/2$^+$		
1390.42 *15*	1.4 *4*	1390.56	1/2$^+$,3/2$^+$	0.0	1/2$^+$		
1394.7 *4*	0.37 *14*	2759.32	3/2$^+$,5/2$^+$	1364.71			
1405.85 *11*	0.95 *19*	1405.81	1/2$^+$,3/2$^+$	0.0	1/2$^+$		
x1413.11 *25*	0.34 *14*						
x1417.21 *25*	0.09 *2*						
x1423.7 *4*	0.9 *2*						
1429.9 *4*	0.13 *4*	1746.09	3/2$^-$	316.207	5/2$^+$		
x1433.6	0.2 *1*						
1445.70 *11*	1.2 *2*	1904.28	5/2$^+$,7/2$^+$	458.578	7/2$^+$		
x1452.96 *14*	0.04 *1*						
x1460.41 *25*	0.04 *1*						
1464.32 *18*	0.12 *3*	2319.70	3/2$^-$	855.4	5/2$^-$	M1	

^{113}Cd(n,n′γ) 1987BaYW,1991NeZX (continued)

γ(^{113}Cd) (continued)

E_γ	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Mult.[†]
[x]1468.79 *25*	0.20 *8*					
[x]1472.0 *3*	0.64 *9*					
1474.8 *3*	0.2 *1*	2113.18	7/2$^-$	638.35	9/2$^-$	M1
1479.19 *15*	1.2 *2*	1479.1	1/2,3/2	0.0	1/2$^+$	
1482.85 *25*	0.16 *5*	1798.9	(1/2,3/2,5/2)$^+$	316.207	5/2$^+$	
[x]1484.80 *25*	0.05 *2*					
1492.88[#] *25*	0.06[#] *2*	1492.99	1/2$^+$,3/2$^+$	0.0	1/2$^+$	
1492.88[#] *25*	0.06[#] *2*	2173.71	1/2$^-$,3/2$^-$	680.550	3/2$^+$	E1
[x]1496.66 *15*	0.29 *5*					
[x]1504.05 *21*	0.07 *2*					
[x]1507.83 *21*	0.06 *2*					
1515.4 *2*	0.82 *16*	1779.02	9/2$^-$	263.68	11/2$^-$	M1
[x]1525.71 *17*	0.37 *7*					
[x]1534.46 *25*	0.05 *2*					
[x]1538.06 *25*	0.06 *2*					
[x]1541.23 *25*	0.05 *2*					
[x]1545.17 *25*	0.08 *3*					
[x]1549.05 *25*	0.05 *2*					
[x]1552.68 *14*	0.19 *6*					
[x]1571.3 *5*	0.15 *5*					
[x]1574.16 *25*	0.41 *12*					
1579.1 *5*	0.12 *4*	2037.69	5/2,7/2,9/2	458.578	7/2$^+$	
[x]1585.74 *25*	0.11 *3*					
1590.8 *3*	0.35 *9*	2113.18	7/2$^-$	522.1	7/2$^-$	M1
1604.23 *23*	0.12 *3*	1867.99	7/2$^-$,9/2$^-$	263.68	11/2$^-$	
1606.96 *22*	0.08 *2*	1607.17	5/2$^+$	0.0	1/2$^+$	E2
[x]1609.91 *25*	0.08 *2*					
[x]1612.30 *25*	0.10 *2*					
[x]1622.30 *25*	0.10 *2*					
[x]1626.7 *4*	0.13 *3*					
1628.8 *4*	0.23 *6*	1892.44	7/2$^-$	263.68	11/2$^-$	E2
[x]1645.33 *20*	0.24 *4*					
[x]1656.6 *5*	0.10 *4*					
[x]1666.37 *22*	0.04 *1*					
[x]1670.3 *3*	0.04 *1*					
[x]1675.7 *4*	0.03 *1*					
[x]1678.97 *22*	0.15 *6*					
[x]1682.79 *25*	0.022 *4*					
[x]1689.34 *15*	0.20 *4*					
[x]1694.06 *18*	0.06 *1*					
[x]1698.18 *16*	0.19 *3*					
[x]1705.48	0.37 *7*					
[x]1717.40 *15*	0.16 *3*					

$^{113}_{48}Cd_{65}$-8

^{113}Cd(n,n′γ) 1987BaYW,1991NeZX (continued)

γ(^{113}Cd) (continued)

E_γ	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Mult.[†]
[x]1721.06 *16*	0.049 *15*					
[x]1743.2 *5*	0.064 *22*					
1746.0 *5*	0.26 *9*	1746.09	3/2$^-$	0.0	1/2$^+$	
[x]1758.8 *4*	0.092 *23*					
[x]1764.4 *4*	0.036 *6*					
[x]1767.7 *4*	0.15 *4*					
[x]1781.8 *5*	0.26 *7*					
[x]1785.83 *25*	0.46 *11*					
[x]1791.2 *3*	0.051 *13*					
[x]1792.7 *4*	0.015 *4*					
[x]1794.7 *3*	0.015 *4*					
1798.65 *25*	0.051 *10*	1798.9	(1/2,3/2,5/2)$^+$	0.0	1/2$^+$	
[x]1803.7 *4*	0.14 *4*					
[x]1806.1 *4*	0.17 *5*					
[x]1812.96	0.72 *14*					
[x]1820.8 *4*	0.09 *2*					
[x]1826.12 *20*	0.34 *8*					
1830.7 *5*	0.17 *5*	2094.3	7/2$^-$	263.68	11/2$^-$	E2
[x]1837.45 *23*	0.032 *8*					
[x]1855.18	0.13 *3*					
[x]1867.6 *4*	0.15 *4*					
[x]1873.02 *25*	0.030 *7*					
[x]1881.5 *4*	0.040 *10*					
[x]1888.7 *4*	0.032 *8*					
[x]1895.4 *4*	0.032 *8*					
[x]1923.8 *4*	0.031 *9*					
[x]1926.7 *5*	0.029 *9*					
[x]1930.29 *25*	0.05 *2*					
[x]1937.8 *4*	0.08 *2*					
1942.71 *25*	0.27 *8*	2759.32	3/2$^+$,5/2$^+$	816.62	7/2$^+$	
[x]1952.9 *3*	0.11 *4*					
[x]1969.0 *3*	0.028 *8*					
[x]1970.9 *3*	0.048 *14*					
[x]1974.2 *3*	0.036 *11*					
[x]1976.1 *4*	0.015 *6*					
[x]1995.7 *4*	0.06 *2*					
[x]2044.43 *22*	0.16 *3*					
[x]2053.9 *4*	0.18 *4*					
[x]2091.2 *4*	0.14 *4*					
[x]2112.2 *3*	0.041 *10*					
[x]2135.6 *3*	0.14 *3*					
2173.64 *21*	0.34 *6*	2173.71	1/2$^-$,3/2$^-$	0.0	1/2$^+$	E1
[x]2182.5 *4*	0.14 *2*					
[x]2209.0 *4*	0.032 *8*					

$^{113}_{48}Cd_{65}$-9

^{113}Cd(n,n′γ) 1987BaYW,1991NeZX (continued)

γ(^{113}Cd) (continued)

E_γ	I_γ	E_i(level)	J_i^π	E_f	J_f^π	Mult.[†]
[x]2230.5 *3*	0.17 *4*					
[x]2278.8 *4*	0.07 *2*					
[x]2313.7 *6*	0.14 *4*					
2319.7 *6*	0.54 *22*	2319.70	3/2$^-$	0.0	1/2$^+$	E1
[x]2336.0 *4*	0.12 *2*					
[x]2353.0	0.13 *3*					
[x]2383.7 *4*	0.10 *3*					
[x]2394.9 *6*	0.16 *7*					
[x]2409.0 *4*	0.13 *5*					
[x]2413.0 *4*	0.13 *5*					
[x]2428.9 *5*	0.11 *4*					
[x]2450.4 *4*	0.04 *1*					
2460.6 *2*	0.55 *11*	2759.32	3/2$^+$,5/2$^+$	298.567	3/2$^+$	
[x]2506.5 *7*	0.08 *2*					
[x]2525.6 *4*	0.11 *3*					
[x]2535.4 *4*	0.12 *3*					
[x]2545.6 *5*	0.10 *4*					
[x]2557.5 *5*	0.08 *2*					
[x]2588.6 *5*	0.216					
[x]2598.8 *6*	0.16 *4*					
[x]2674.6 *8*	0.6 *3*					
[x]2767.8 *6*	0.14 *5*					
[x]2800.3 *4*	0.14 *4*					
[x]3213.6 *8*	0.04 *2*					

[†] From 1987BaYW, with new results from 1991NeZX.
[‡] γ placed by evaluator using the (α,nγ) of 1997Wa20.
[#] Multiply placed with undivided intensity.
[@] Multiply placed with intensity suitably divided.
[x] γ ray not placed in level scheme.

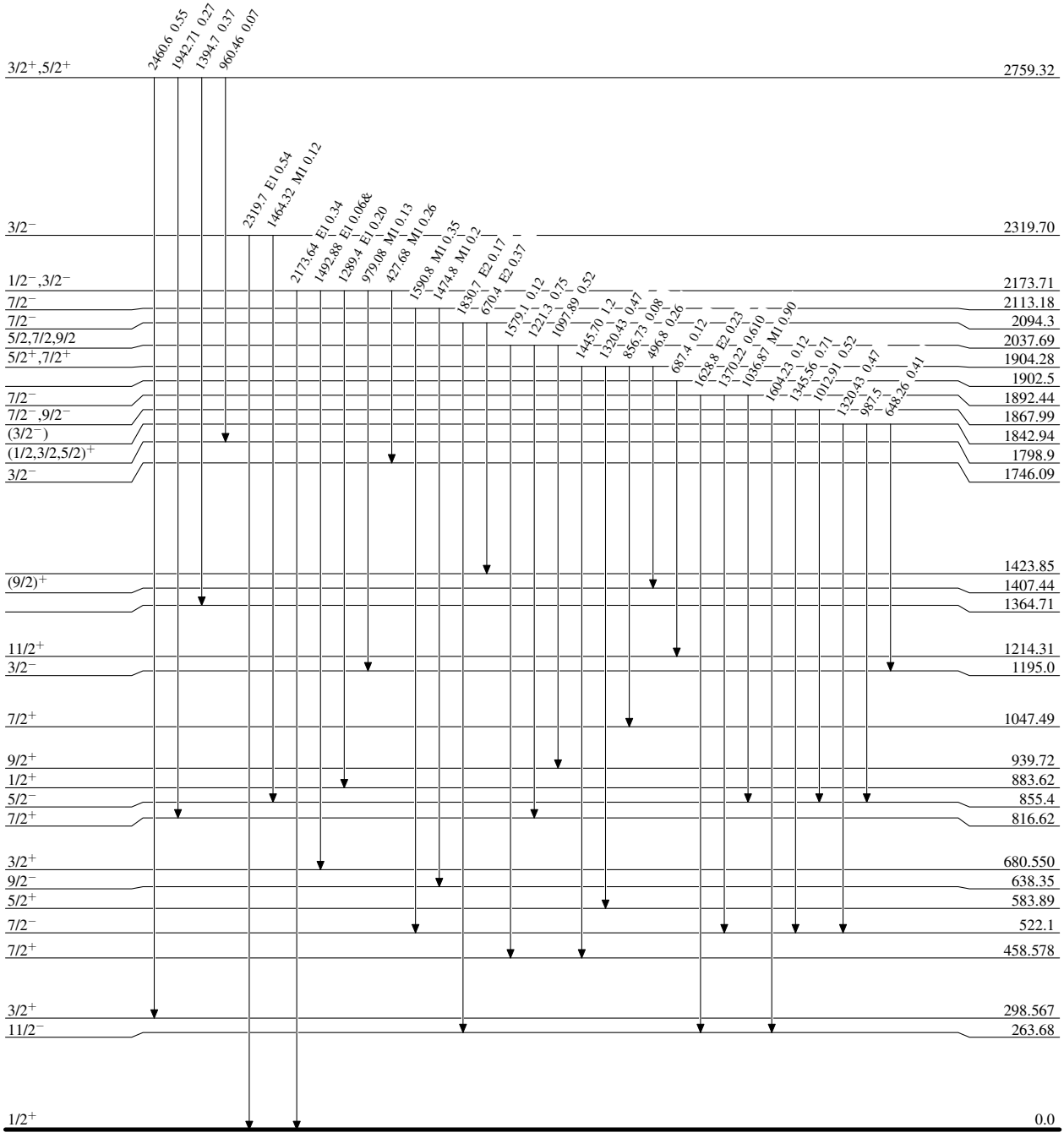
$^{113}_{48}Cd_{65}$-10

^{113}Cd(n,n′γ) 1987BaYW,1991NeZX

Level Scheme

Intensities: Type not specified
& Multiply placed: undivided intensity given

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



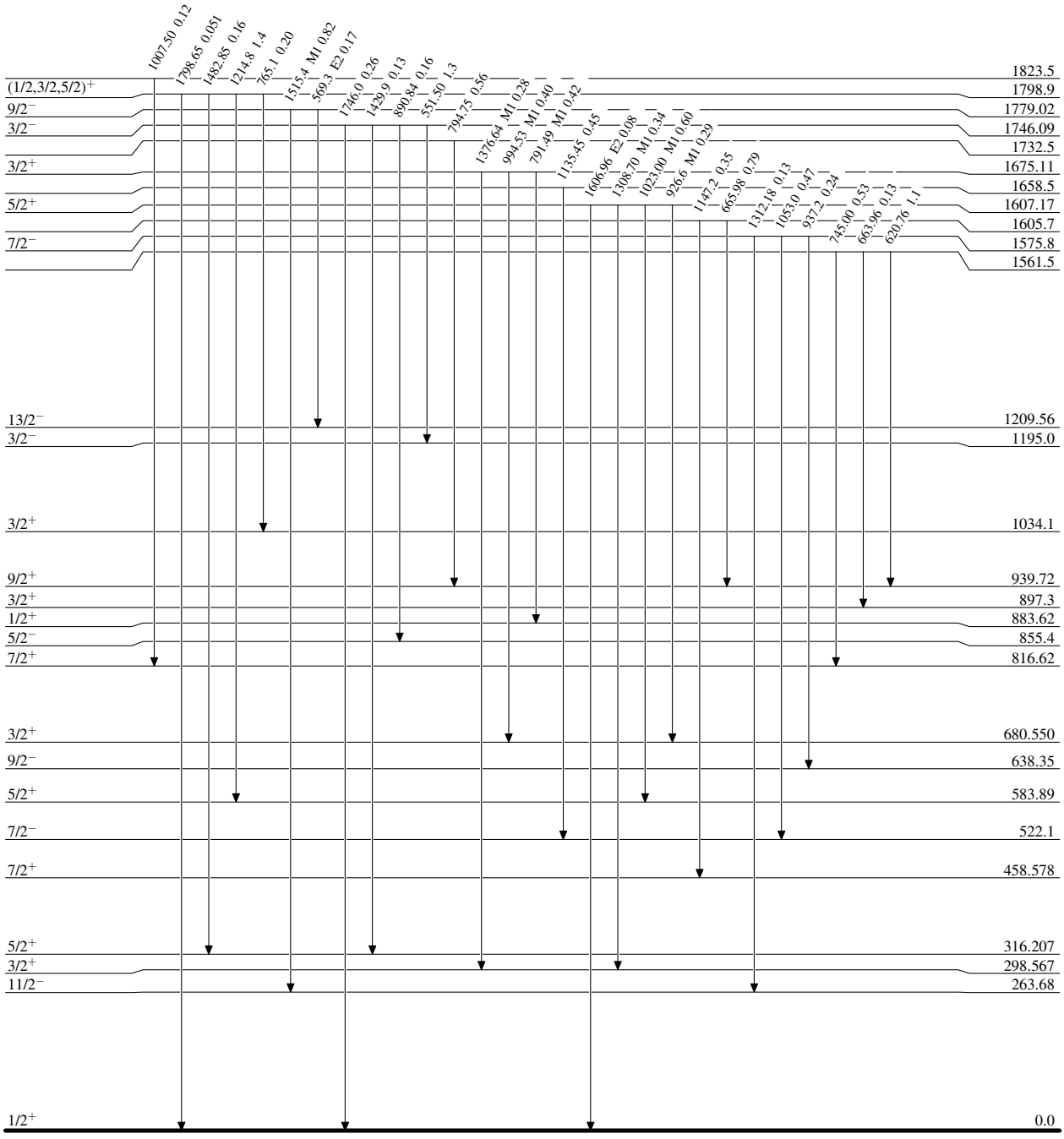
$^{113}_{48}Cd_{65}$

^{113}Cd(n,n′γ) 1987BaYW,1991NeZX

Level Scheme (continued)

Intensities: Type not specified
& Multiply placed: undivided intensity given

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



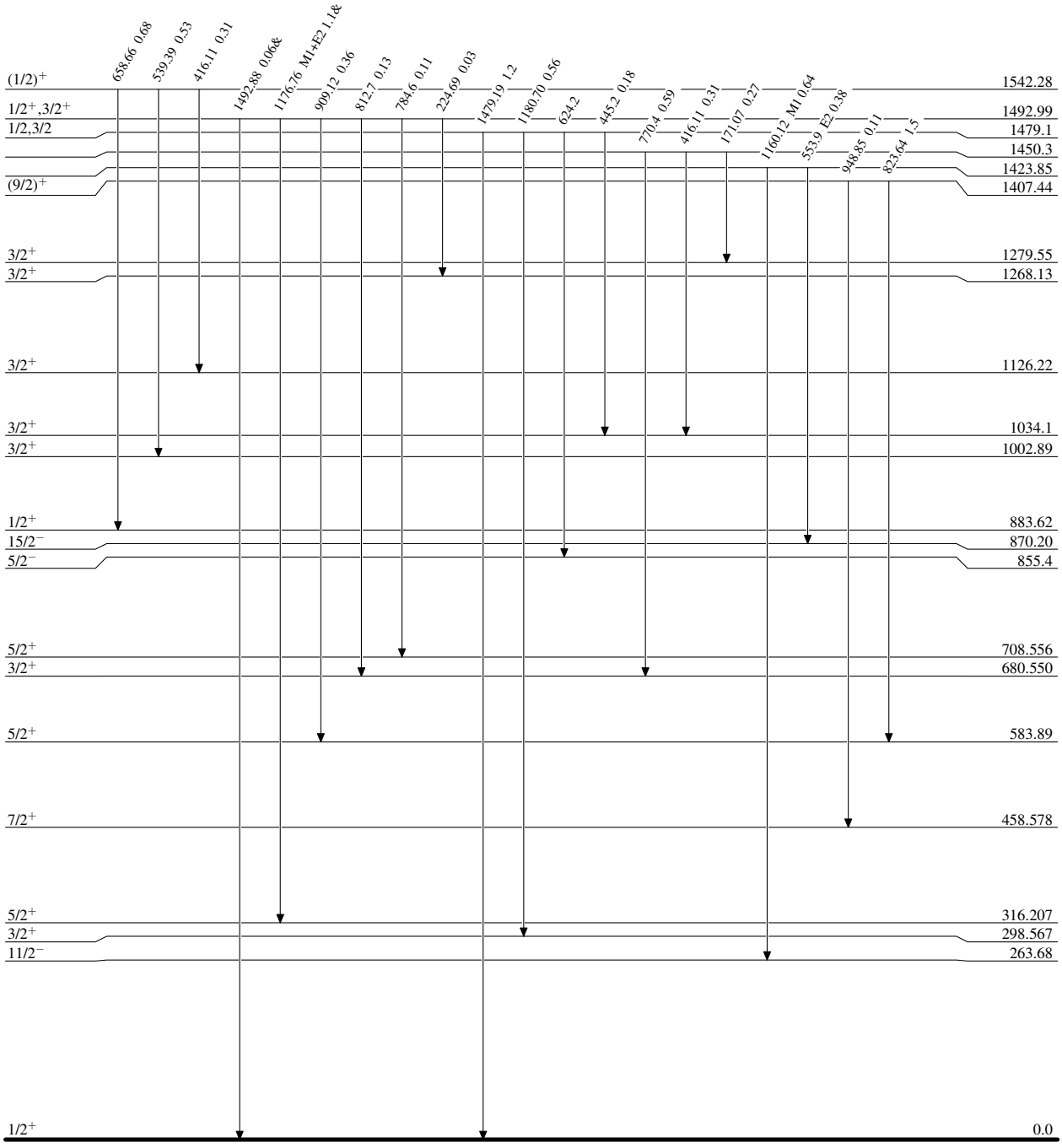
$^{113}_{48}Cd_{65}$

^{113}Cd(n,n′γ) 1987BaYW,1991NeZX

Level Scheme (continued)

Intensities: Type not specified
& Multiply placed: undivided intensity given

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

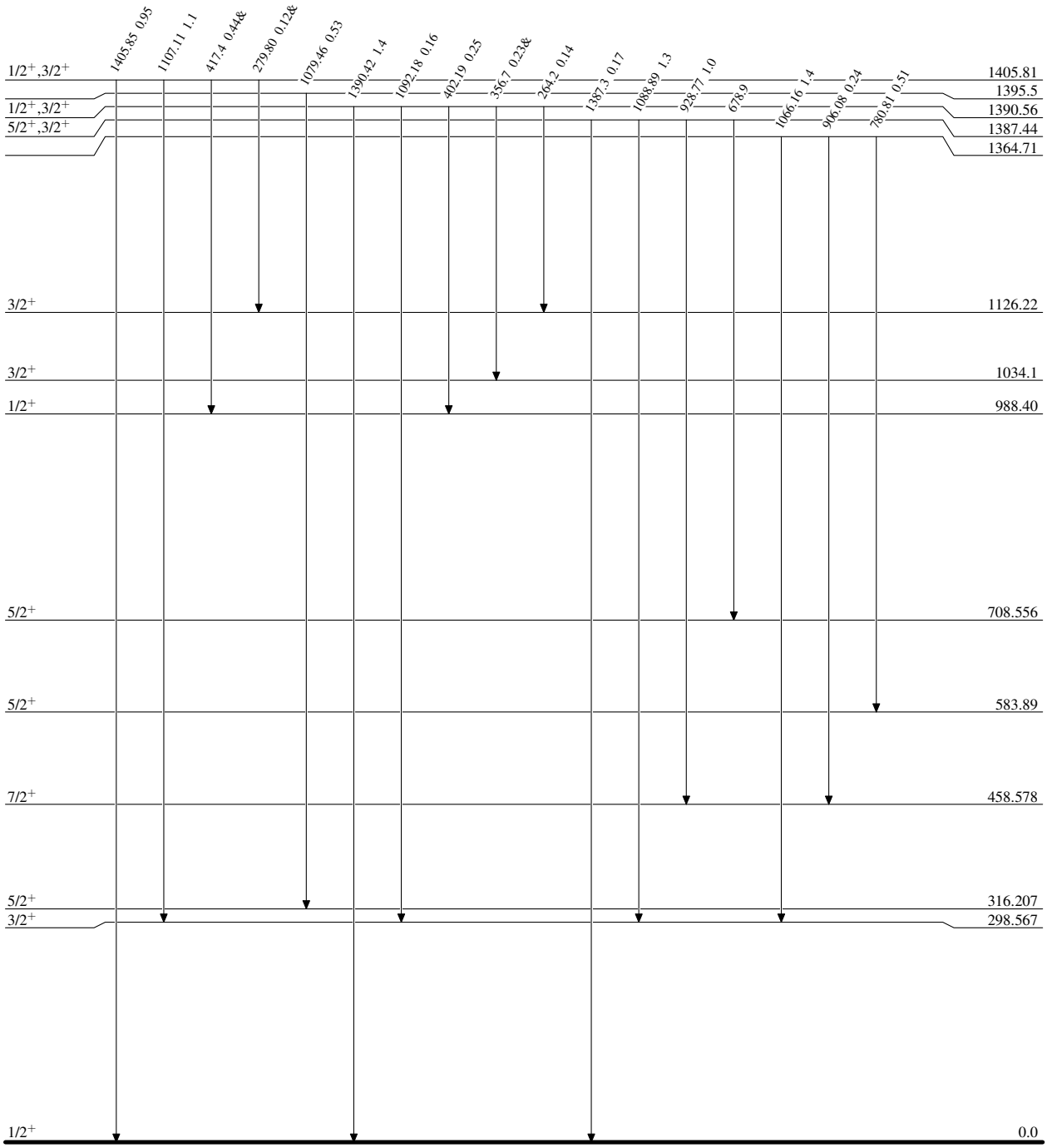


$^{113}_{48}Cd_{65}$

^{113}Cd(n,n′γ) 1987BaYW,1991NeZX

Level Scheme (continued)

Intensities: Type not specified
& Multiply placed: undivided intensity given



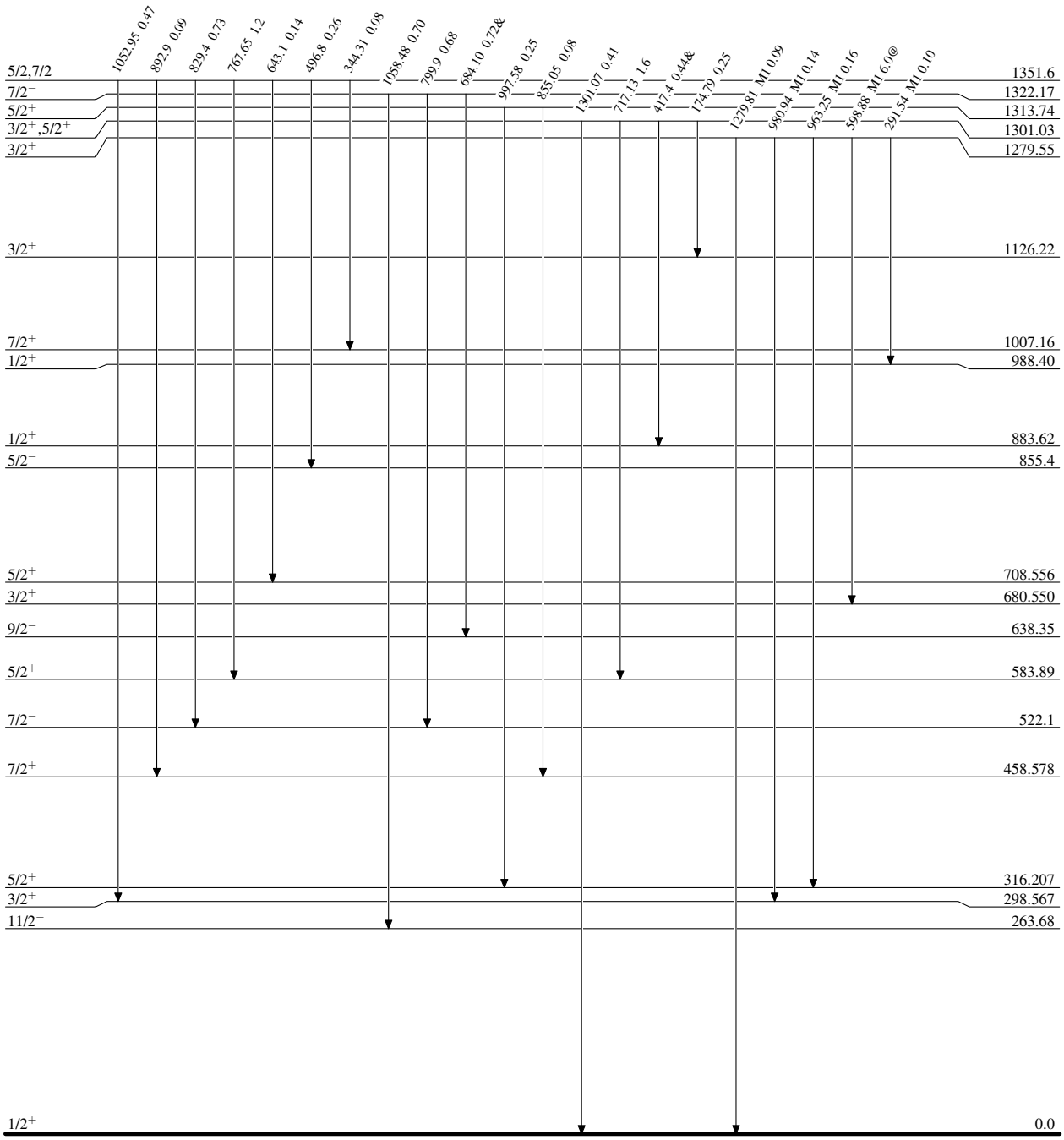
$^{113}_{48}Cd_{65}$

^{113}Cd(n,n′γ) 1987BaYW,1991NeZX

Level Scheme (continued)

Intensities: Type not specified
& Multiply placed: undivided intensity given
@ Multiply placed: intensity suitably divided

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



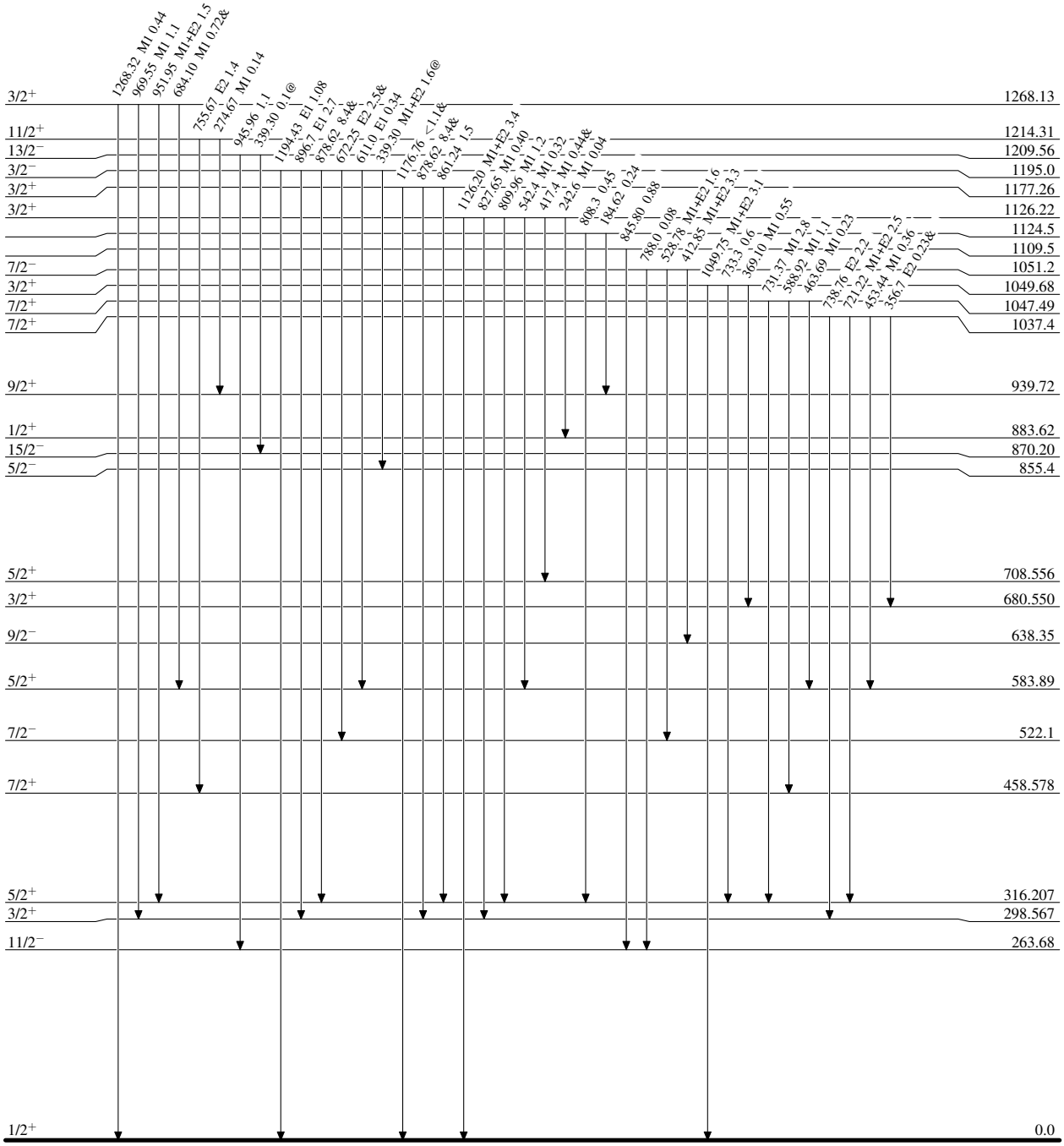
$^{113}_{48}Cd_{65}$

^{113}Cd(n,n′γ) 1987BaYW,1991NeZX

Level Scheme (continued)

Intensities: Type not specified
& Multiply placed: undivided intensity given
@ Multiply placed: intensity suitably divided

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



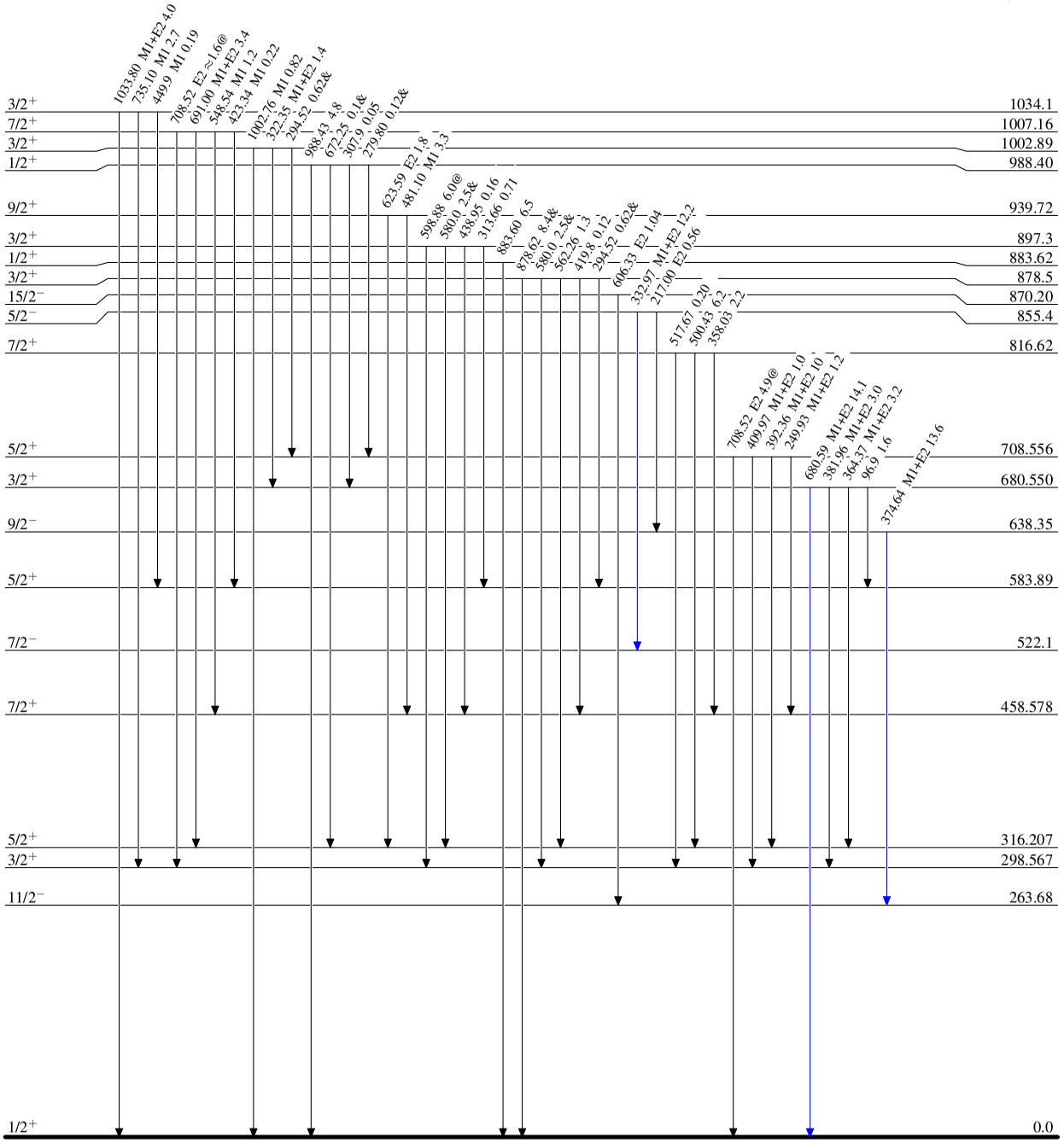
$^{113}_{48}Cd_{65}$

^{113}Cd(n,n′γ) 1987BaYW,1991NeZX

Level Scheme (continued)

Intensities: Type not specified
& Multiply placed: undivided intensity given
@ Multiply placed: intensity suitably divided

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



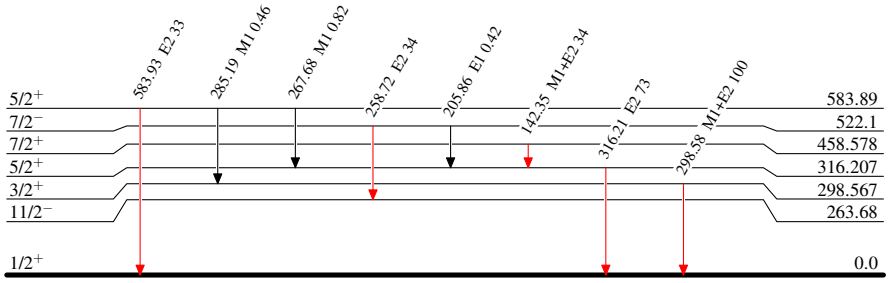
$^{113}_{48}Cd_{65}$

^{113}Cd(n,n′γ) 1987BaYW,1991NeZX

Level Scheme (continued)

Intensities: Type not specified
& Multiply placed: undivided intensity given
@ Multiply placed: intensity suitably divided

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



$^{113}_{48}Cd_{65}$