

¹¹⁰Cd(n,γ):E=th,reactor,res **1987BaYW,1991NeZX**

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 110, 1239 (2009)	1-Feb-2008

E(n) neutron reactor and resonance neutron filtered with B₄C.

Enriched target 96%.

Measured: γ, γγ, γ(θ).

1991NeZX have performed a new analysis of data of **1987BaYW** and propose many new levels using the Ritz combination principle.

1990Ve10 has reported a serious lack of intensity balances for the 245-keV level (84%) and for the 342-keV level (30%) and suggest a new experiment with a pure ¹¹⁰Cd target, the high ¹¹³Cd (n,γ) σ being a large contaminant in the experiment.

¹¹¹Cd Levels

E(level)	J ^π †	E(level)	J ^π †	E(level)	J ^π †	E(level)	J ^π †
0	1/2 ⁺	1274.5 5	(5/2 ⁺)	1801.8 6	(7/2 ⁻)	2325.9 8	1/2,3/2
245.45 14	5/2 ⁺	1289.2 7	(7/2 ⁻)	1828.5 4	3/2 ⁺	2381.1 4	(5/2,7/2)
342.34 14	3/2 ⁺	1298.5 5		1842.57 24	1/2 ⁺ ,3/2	2445.9 6	(3/2,5/2)
396.5 5	11/2 ⁻	1326.5 4	3/2 ⁺	1849.0 4	(3/2 ⁺ ,5/2 ⁺)	2495.2 5	(1/2,3/2)
416.69 19	7/2 ⁺	1340.1 3	1/2 ⁺ ,3/2 ⁺	1906.1 5	(7/2,11/2) ⁺	2556.9 4	(1/2,3/2)
620.41 15	5/2 ⁺	1341.2 4	(1/2 ⁺ ,3/2 ⁺)	1972.2 10	(7/2 ⁻)	2566.2 5	(1/2,3/2)
680.7 5	(9/2 ⁻)	1346.1 3	(7/2 ⁺)	1974.8 3	(3/2 ⁺)	2588.1 5	(3/2 ⁺)
752.99 18	5/2 ⁺	1391.7 3	3/2 ⁺	1992.8 8	(5/2 ⁻)	2653.4 7	(3/2,5/2)
831.6 5	(7/2 ⁻)	1472.7 3	3/2 ⁺	2005.8 4	(3/2 ⁻)	2692.3 5	
853.7 3	(7/2 ⁺)	1505.5 10	(9/2 ⁻)	2016.0 5	(3/2 ⁺)	2710.4 6	
866.82 17	3/2 ⁺	1511.8 6	(9/2 ⁺)	2038.7 4	(3/2 ⁺)	2714.5 5	
985.9 4	9/2 ⁺	1546.62 22	3/2 ⁺	2044.9 3	3/2 ⁺	2733.1 3	
1016.82 25	3/2 ⁺	1551.9 3	(9/2 ⁺)	2096.7 4	(5/2 ⁺ ,7/2 ⁺)	2768.5 5	(3/2 ⁺ ,5/2 ⁺)
1046.9 5	(7/2 ⁺)	1552.1 3	(3/2 ⁺)	2134.8 8	(1/2,3/2)	2950.5 5	
1078.03 23	3/2 ⁺	1666.4 6	7/2 ⁺	2154.0 9	(5/2 ⁺ ,7/2 ⁺)	2977.7 5	(5/2 ⁺ ,7/2 ⁺)
1115.35 25	3/2 ⁺ ,5/2 ⁺	1692.1 3	3/2 ⁺	2165.8 5	(1/2 ⁺ ,3/2 ⁺)	3076.2 3	
1118.2 4	(7/2 ⁺)	1717.2 4	(3/2 ⁺)	2236.1 4		3126.4 6	(1/2 ⁺ ,3/2 ⁺)
1190.2 3	1/2 ⁺	1739.8 3	3/2 ⁺	2242.6 5			
1255.7 10	11/2 ⁺	1789.4 4	3/2 ⁺	2280.9 4	1/2 ⁺ ,3/2		

† From derived multipolarity as given by authors.

γ(¹¹¹Cd)

E _γ	I _γ	E _i (level)	J _i ^π	E _f	J _f ^π
97.0		342.34	3/2 ⁺	245.45	5/2 ⁺
150.9 3		396.5	11/2 ⁻	245.45	5/2 ⁺
171.3 3	57 6	416.69	7/2 ⁺	245.45	5/2 ⁺
203.8 6	0.30 6	620.41	5/2 ⁺	416.69	7/2 ⁺
211.8 7	0.40 8	1078.03	3/2 ⁺	866.82	3/2 ⁺
^x 229.4 5	2.1 4				
^x 235.5 7	0.20 6				
245.3 3	274 25	245.45	5/2 ⁺	0	1/2 ⁺
278.2 5	3.0 4	620.41	5/2 ⁺	342.34	3/2 ⁺
284.3 3	29 3	680.7	(9/2 ⁻)	396.5	11/2 ⁻
335.8 4	3.2 6	752.99	5/2 ⁺	416.69	7/2 ⁺
342.2 3	100	342.34	3/2 ⁺	0	1/2 ⁺
353.4 5	1.8 3	2044.9	3/2 ⁺	1692.1	3/2 ⁺
374.8 3	12.5 9	620.41	5/2 ⁺	245.45	5/2 ⁺

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$^{110}\text{Cd}(n,\gamma):E=\text{th,reactor,res}$ 1987BaYW,1991NeZX (continued) $\gamma(^{111}\text{Cd})$ (continued)

E_γ	I_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
^x 385.3 6	0.88 11				
^x 391.8 5	1.9 4				
410.7 3	5.4 9	752.99	5/2 ⁺	342.34	3/2 ⁺
420.8 6	1.4 5	1274.5	(5/2 ⁺)	853.7	(7/2 ⁺)
426.7 10	0.46 14	1046.9	(7/2 ⁺)	620.41	5/2 ⁺
^x 430.8 10	0.10 4				
435.1 4	5.5 9	831.6	(7/2 ⁻)	396.5	11/2 ⁻
437.4 10	2.0 6	853.7	(7/2 ⁺)	416.69	7/2 ⁺
^x 446.0 3	11.6 9				
449.3 8	0.47 14	866.82	3/2 ⁺	416.69	7/2 ⁺
457.8 6	1.8 4	1078.03	3/2 ⁺	620.41	5/2 ⁺
^x 463.7 6	0.40 15				
493.1 5	4.4 7	2044.9	3/2 ⁺	1551.9	(9/2 ⁺)
494.8 8	1.5 3	1115.35	3/2 ⁺ ,5/2 ⁺	620.41	5/2 ⁺
524.8 4	1.8 2	866.82	3/2 ⁺	342.34	3/2 ⁺
^x 564.3 4	6.4 8				
569.0 ^c 5	2.1 ^{c@} 4	985.9	9/2 ⁺	416.69	7/2 ⁺
569.0 ^c 5	5.2 ^{c&} 10	1190.2	1/2 ⁺	620.41	5/2 ⁺
587.4 ^b	0.60 ^b 15	1340.1	1/2 ⁺ ,3/2 ⁺	752.99	5/2 ⁺
587.4 ^b	0.60 ^b 15	1341.2	(1/2 ⁺ ,3/2 ⁺)	752.99	5/2 ⁺
601.9 5	0.60 18	1717.2	(3/2 ⁺)	1115.35	3/2 ⁺ ,5/2 ⁺
608.4 3	12.3 25	853.7	(7/2 ⁺)	245.45	5/2 ⁺
620.3 3	38 4	620.41	5/2 ⁺	0	1/2 ⁺
^x 632.3 6	1.6 3				
638.7 8	0.38 13	1391.7	3/2 ⁺	752.99	5/2 ⁺
646.0 5	9.6 14	1326.5	3/2 ⁺	680.7	(9/2 ⁻)
^x 662.7 6	0.8 3				
666.1 10	0.50 18	1992.8	(5/2 ⁻)	1326.5	3/2 ⁺
680.0 5	1.9 5	1666.4	7/2 ⁺	985.9	9/2 ⁺
687.1 10	0.60 21	2733.1		2044.9	3/2 ⁺
701.3 7	6.8 15	1118.2	(7/2 ⁺)	416.69	7/2 ⁺
704.7 8	6.0 15	1046.9	(7/2 ⁺)	342.34	3/2 ⁺
^x 715.6 4	3.7 6				
719.7 ^b 4	4.8 ^b 7	1340.1	1/2 ⁺ ,3/2 ⁺	620.41	5/2 ⁺
719.7 ^b 4	4.8 ^b 7	1472.7	3/2 ⁺	752.99	5/2 ⁺
725.4 4	1.7 6	1346.1	(7/2 ⁺)	620.41	5/2 ⁺
^x 733.5 9	0.35 5				
740.8 6	0.80 12	985.9	9/2 ⁺	245.45	5/2 ⁺
752.6 6	7.9 8	752.99	5/2 ⁺	0	1/2 ⁺
758.8 8	0.29 11	2733.1		1974.8	(3/2 ⁺)
^x 762.9 10	0.21 7				
770.3 8	1.0 4	1016.82	3/2 ⁺	245.45	5/2 ⁺
773.0 6	3.4 9	1115.35	3/2 ⁺ ,5/2 ⁺	342.34	3/2 ⁺
776.0 5	2.8 9	1118.2	(7/2 ⁺)	342.34	3/2 ⁺
^x 781.2 6	0.30 7				
793.3 3	1.2 2	1546.62	3/2 ⁺	752.99	5/2 ⁺
808.9 10	1.1 4	2134.8	(1/2,3/2)	1326.5	3/2 ⁺
811.9 7	2.0 7	1828.5	3/2 ⁺	1016.82	3/2 ⁺
825.9 4	1.2 2	1505.5	(9/2 ⁻)	680.7	(9/2 ⁻)
832.3 3	9.4 8	1078.03	3/2 ⁺	245.45	5/2 ⁺
839.0 9	0.8 3	1255.7	11/2 ⁺	416.69	7/2 ⁺
857.8 5	0.30 8	1274.5	(5/2 ⁺)	416.69	7/2 ⁺
867.6 3	16 5	866.82	3/2 ⁺	0	1/2 ⁺
872.7 5	3.0 6	1739.8	3/2 ⁺	866.82	3/2 ⁺

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$^{110}\text{Cd}(n,\gamma):E=\text{th,reactor,res}$ **1987BaYW,1991NeZX** (continued) $\gamma(^{111}\text{Cd})$ (continued)

E_γ	I_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
^x 876.1 10	0.20 6				
882.6 10	0.9 4	1298.5		416.69	7/2 ⁺
892.2 10	0.21 8	1289.2	(7/2 ⁻)	396.5	11/2 ⁻
^x 894.2 10	0.08 3				
900.2 10	0.20 8	2016.0	(3/2 ⁺)	1115.35	3/2 ⁺ ,5/2 ⁺
907.0 8	0.40 16	2096.7	(5/2 ⁺ ,7/2 ⁺)	1190.2	1/2 ⁺
^x 920.6 5	0.54 11				
925.4 [†]	1.5 4	1341.2	(1/2 ⁺ ,3/2 ⁺)	416.69	7/2 ⁺
929.5 6	0.63 19	1346.1	(7/2 ⁺)	416.69	7/2 ⁺
932.2 4	2.4 6	1551.9	(9/2 ⁺)	620.41	5/2 ⁺
939.3 6	0.52 15	1692.1	3/2 ⁺	752.99	5/2 ⁺
942.3 ^b 10	0.12 ^b 4	1340.1	1/2 ⁺ ,3/2 ⁺	396.5	11/2 ⁻
^x 953.9 10	0.20 5				
^x 956.6 10	0.20 11				
958.0 10	0.40 18	1974.8	(3/2 ⁺)	1016.82	3/2 ⁺
^x 968.8 6	0.54 11				
975.6 4	1.4 2	1842.57	1/2 ⁺ ,3/2	866.82	3/2 ⁺
984.4 9	0.11 8	1326.5	3/2 ⁺	342.34	3/2 ⁺
^x 987.5 9	0.80 24				
993.6 8	0.7 3	2733.1		1739.8	3/2 ⁺
998.7 4	4.7 9	1341.2	(1/2 ⁺ ,3/2 ⁺)	342.34	3/2 ⁺
^x 1005.8 [†]	0.40 12				
1016.7 4	14.2 14	1016.82	3/2 ⁺	0	1/2 ⁺
1022.5 10	0.51 13	2495.2	(1/2,3/2)	1472.7	3/2 ⁺
1028.9 4	1.8 4	1274.5	(5/2 ⁺)	245.45	5/2 ⁺
1036.1 5	0.62 12	1789.4	3/2 ⁺	752.99	5/2 ⁺
1042.5 [†] 20	1.1 3	2381.1	(5/2,7/2)	1340.1	1/2 ⁺ ,3/2 ⁺
1049.3 4	2.1 5	1391.7	3/2 ⁺	342.34	3/2 ⁺
1054.1 ^c 20	1.7 ^{c‡} 5	1298.5		245.45	5/2 ⁺
1054.1 ^c	1.7 ^{c#} 5	1906.1	(7/2,11/2) ⁺	853.7	(7/2 ⁺)
^x 1064.9 5	0.63 16				
1078.2 4	7.1 9	1078.03	3/2 ⁺	0	1/2 ⁺
1090.4 9	0.41 14	2280.9	1/2 ⁺ ,3/2	1190.2	1/2 ⁺
1101.0 4	4.8 ^a 12	1346.1	(7/2 ⁺)	245.45	5/2 ⁺
1105.7 6	1.6 4	2445.9	(3/2,5/2)	1340.1	1/2 ⁺ ,3/2 ⁺
1109.0 8	0.66 23	1505.5	(9/2 ⁻)	396.5	11/2 ⁻
1115.5 4	6.8 9	1115.35	3/2 ⁺ ,5/2 ⁺	0	1/2 ⁺
1130.5 4	3.6 7	1472.7	3/2 ⁺	342.34	3/2 ⁺
1135.9 10	0.10 5	1551.9	(9/2 ⁺)	416.69	7/2 ⁺
1146.1 4	4.2 6	1391.7	3/2 ⁺	245.45	5/2 ⁺
^x 1150.2 6	1.3 2				
1155.3 8	0.41 15	2495.2	(1/2,3/2)	1340.1	1/2 ⁺ ,3/2 ⁺
1157.7 10	0.10 5	2236.1		1078.03	3/2 ⁺
1161.4 10	0.22 7	1992.8	(5/2 ⁻)	831.6	(7/2 ⁻)
^x 1171.8 10	0.41 14				
1174.0 8	0.60 24	2005.8	(3/2 ⁻)	831.6	(7/2 ⁻)
^x 1185.7 4	9.7 9				
1190.4 7	0.75 19	1190.2	1/2 ⁺	0	1/2 ⁺
^x 1197.1 2	0.52 15				
1209.3 5	4.0 11	1552.1	(3/2 ⁺)	342.34	3/2 ⁺
1219.2 8	0.9 3	2236.1		1016.82	3/2 ⁺
1221.9 6	1.0 4	1842.57	1/2 ⁺ ,3/2	620.41	5/2 ⁺
1225.6 5	1.7 6	2242.6		1016.82	3/2 ⁺
^x 1235.1 4	0.83 17				

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$^{110}\text{Cd}(n,\gamma):E=\text{th,reactor,res}$ 1987BaYW,1991NeZX (continued) $\gamma(^{111}\text{Cd})$ (continued)

E_γ	I_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
1243.0 4	1.5 3	2096.7	(5/2 ⁺ ,7/2 ⁺)	853.7	(7/2 ⁺)
1248.4 8	0.26 3	2588.1	(3/2 ⁺)	1340.1	1/2 ⁺ ,3/2 ⁺
1250.0 6	0.50 12	1666.4	7/2 ⁺	416.69	7/2 ⁺
1263.0 8	1.0 3	2016.0	(3/2 ⁺)	752.99	5/2 ⁺
1266.1 10	0.16 5	1511.8	(9/2 ⁺)	245.45	5/2 ⁺
^x 1271.2 7	0.92 22				
^x 1279.7 9	0.42 16				
^x 1282.7 7	1.4 5				
1299.0 5	3.0 9	2165.8	(1/2 ⁺ ,3/2 ⁺)	866.82	3/2 ⁺
1301.4 7	0.80 28	1546.62	3/2 ⁺	245.45	5/2 ⁺
1305.8 7	1.6 4	1552.1	(3/2 ⁺)	245.45	5/2 ⁺
^x 1316.4 7	0.40 14				
^x 1321.4 5	6.2 9				
1326.2 6	3.0 4	1326.5	3/2 ⁺	0	1/2 ⁺
^x 1332.3 8	0.60 12				
1340.2 4	4.4 6	1340.1	1/2 ⁺ ,3/2 ⁺	0	1/2 ⁺
1343.2 8	0.48 19	2096.7	(5/2 ⁺ ,7/2 ⁺)	752.99	5/2 ⁺
1349.3 9	0.35 13	1692.1	3/2 ⁺	342.34	3/2 ⁺
^x 1356.3 8	0.40 15				
^x 1364.3 6	1.7 3				
^x 1367.6 7	0.7 3				
^x 1370.3 7	0.8 3				
1374.6 8	0.30 9	2714.5		1340.1	1/2 ⁺ ,3/2 ⁺
^x 1378.2 6	1.6 4				
1384.0 5	0.35 9	2710.4		1326.5	3/2 ⁺
1387.2 5	0.77 15	2733.1		1346.1	(7/2 ⁺)
1392.2 7	0.43 9	1391.7	3/2 ⁺	0	1/2 ⁺
^x 1395.6 10	0.10 4				
1410.5 9	0.21 7	3076.2		1666.4	7/2 ⁺
1415.3 8	1.0 4	2280.9	1/2 ⁺ ,3/2	866.82	3/2 ⁺
1421.0 5	2.2 3	2710.4		1289.2	(7/2 ⁻)
1423.2 8	0.20 8	2044.9	3/2 ⁺	620.41	5/2 ⁺
1432.3 6	0.54 11	1849.0	(3/2 ⁺ ,5/2 ⁺)	416.69	7/2 ⁺
^x 1437.6 8	0.25 8				
1447.2 5	0.80 25	1789.4	3/2 ⁺	342.34	3/2 ⁺
1452.2 8	0.17 5	2566.2	(1/2,3/2)	1115.35	3/2 ⁺ ,5/2 ⁺
1471.8 8	3.1 8	1472.7	3/2 ⁺	0	1/2 ⁺
1483.6 10	0.36 15	2236.1		752.99	5/2 ⁺
1486.0 5	1.5 4	1828.5	3/2 ⁺	342.34	3/2 ⁺
1489.4 5	2.2 4	1906.1	(7/2,11/2) ⁺	416.69	7/2 ⁺
1494.5 4	2.7 4	1739.8	3/2 ⁺	245.45	5/2 ⁺
1500.6 8	0.67 20	1842.57	1/2 ⁺ ,3/2	342.34	3/2 ⁺
1506.0 [†]	1.7 6	1849.0	(3/2 ⁺ ,5/2 ⁺)	342.34	3/2 ⁺
^x 1516.6 9	0.56 14				
1528.1 6	1.2 3	2381.1	(5/2,7/2)	853.7	(7/2 ⁺)
^x 1535.6 9	0.31 11				
^x 1545 [†]	1.7 5				
1551.9 5	0.96 19	1552.1	(3/2 ⁺)	0	1/2 ⁺
^x 1556.7 8	0.52 18				
^x 1566.9 10	0.20 7				
^x 1569.6 8	0.76 22				
1573.7 8	0.35 12	2692.3		1118.2	(7/2 ⁺)
1575.7 8	0.35 12	1972.2	(7/2 ⁻)	396.5	11/2 ⁻
1597.8 6	2.0 5	1842.57	1/2 ⁺ ,3/2	245.45	5/2 ⁺
^x 1604.0 5	2.2 6				
1617.5 5	0.68 22	2733.1		1115.35	3/2 ⁺ ,5/2 ⁺

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$^{110}\text{Cd}(n,\gamma):E=\text{th,reactor,res}$ **1987BaYW,1991NeZX** (continued) $\gamma(^{111}\text{Cd})$ (continued)

E_γ	I_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
1621.9 8	0.61 21	2242.6		620.41	5/2 ⁺
1632.5 3	5.5 9	1974.8	(3/2 ⁺)	342.34	3/2 ⁺
^x 1641.7 4	1.5 4				
^x 1650.6 5	0.78 24				
^x 1652.9 8	0.21 8				
1660.4 4	1.5 5	2280.9	1/2 ⁺ ,3/2	620.41	5/2 ⁺
1664.4 8	0.23 11	2005.8	(3/2 ⁻)	342.34	3/2 ⁺
1667.9 7	0.66 16	2714.5		1046.9	(7/2 ⁺)
^x 1683.9 7	0.68 21				
1691.7 5	3.5 5	1692.1	3/2 ⁺	0	1/2 ⁺
1697.2 5	1.9 8	2038.7	(3/2 ⁺)	342.34	3/2 ⁺
1701.6 8	1.2 4	2566.2	(1/2,3/2)	866.82	3/2 ⁺
^x 1712.1 8	1.3 3				
1717.2 5	1.6 3	1717.2	(3/2 ⁺)	0	1/2 ⁺
^x 1725.7 8	0.32 11				
1737.3 8	0.46 16	2154.0	(5/2 ⁺ ,7/2 ⁺)	416.69	7/2 ⁺
1740.0 8	0.36 14	1739.8	3/2 ⁺	0	1/2 ⁺
^x 1743.7 8	0.44 17				
^x 1758.7 7	0.23 11				
1786.5 10	0.10 4	3126.4	(1/2 ⁺ ,3/2 ⁺)	1340.1	1/2 ⁺ ,3/2 ⁺
1790.0 8	0.83 25	1789.4	3/2 ⁺	0	1/2 ⁺
1792.7 7	1.4 5	2038.7	(3/2 ⁺)	245.45	5/2 ⁺
1801.8 6	0.80 22	1801.8	(7/2 ⁻)	0	1/2 ⁺
^x 1806.1 7	0.20 8				
1826.4 [†]	1.6 7	2445.9	(3/2,5/2)	620.41	5/2 ⁺
1828.4 8	0.75 22	1828.5	3/2 ⁺	0	1/2 ⁺
^x 1834.2 6	0.44 13				
1842.4 4	3.3 5	1842.57	1/2 ⁺ ,3/2	0	1/2 ⁺
1849.2 5	1.5 3	1849.0	(3/2 ⁺ ,5/2 ⁺)	0	1/2 ⁺
1860.5 10	0.56 22	2714.5		853.7	(7/2 ⁺)
1878.8 8	0.60 21	2710.4		831.6	(7/2 ⁻)
1888.8 10	0.70 25	2134.8	(1/2,3/2)	245.45	5/2 ⁺
1901.2 9	0.7 3	2242.6		342.34	3/2 ⁺
^x 1921.6 7	0.27 9				
1930.7 10	0.42 16	2977.7	(5/2 ⁺ ,7/2 ⁺)	1046.9	(7/2 ⁺)
1937.9 10	0.50 18	2280.9	1/2 ⁺ ,3/2	342.34	3/2 ⁺
1940.0 10	1.3 5	2692.3		752.99	5/2 ⁺
^x 1945.1 10	0.46 17				
1958.0 5	0.26 8	3076.2		1118.2	(7/2 ⁺)
1965.8 6	1.12 23	2381.1	(5/2,7/2)	416.69	7/2 ⁺
^x 1970.9 5	0.33 11				
1983.5 7	0.30 11	2325.9	1/2,3/2	342.34	3/2 ⁺
1990.6 6	0.37 13	2236.1		245.45	5/2 ⁺
^x 1995.4 4	0.64 17				
2005.6 4	1.3 3	2005.8	(3/2 ⁻)	0	1/2 ⁺
2016.2 8	1.0 3	2016.0	(3/2 ⁺)	0	1/2 ⁺
^x 2022.6 10	0.21 8				
2032.8 8	0.48 14	2653.4	(3/2,5/2)	620.41	5/2 ⁺
2037.9 6	0.43 12	2038.7	(3/2 ⁺)	0	1/2 ⁺
2045.1 4	2.2 3	2044.9	3/2 ⁺	0	1/2 ⁺
^x 2050.2 8	0.45 17				
2059.0 4	1.2 2	3076.2		1016.82	3/2 ⁺
^x 2067.8 9	0.51 18				
^x 2074.0 8	0.75 22				
2083.1 [†]	0.93 25	2950.5		866.82	3/2 ⁺

Continued on next page (footnotes at end of table)

$^{110}\text{Cd}(n,\gamma):E=\text{th,reactor,res}$ 1987BaYW,1991NeZX (continued) $\gamma(^{111}\text{Cd})$ (continued)

E_γ	I_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
2103.6	2.8 6	2445.9	(3/2,5/2)	342.34	3/2 ⁺
2124.0 5	0.84 16	2977.7	(5/2 ⁺ ,7/2 ⁺)	853.7	(7/2 ⁺)
^x 2137.2 7	0.43 11				
^x 2145.2 10	0.33 10				
2152.9 5	1.11 16	2495.2	(1/2,3/2)	342.34	3/2 ⁺
2165.6 8	1.0 3	2165.8	(1/2 ⁺ ,3/2 ⁺)	0	1/2 ⁺
2171.2 [†]	1.4 3	2588.1	(3/2 ⁺)	416.69	7/2 ⁺
^x 2191.0 10	0.45 17				
^x 2196.7 6	2.2 4				
^x 2204.2 6	0.90 14				
^x 2230.1 6	0.24 7				
2236.1 5	0.85 21	2236.1		0	1/2 ⁺
^x 2240.2 10	0.20 8				
2245.7 6	1.2 3	2588.1	(3/2 ⁺)	342.34	3/2 ⁺
^x 2253.5 8	0.58 15				
^x 2256.6 8	0.37 13				
2275.6 10	0.8 3	2692.3		416.69	7/2 ⁺
^x 2280.0 6	1.2 3				
^x 2285.1 10	0.21 8				
2297.7 7	1.2 2	2714.5		416.69	7/2 ⁺
2311.7 5	1.9 4	2556.9	(1/2,3/2)	245.45	5/2 ⁺
^x 2325.9 10	0.21 8				
2330.7 10	0.14 5	2950.5		620.41	5/2 ⁺
^x 2339.9 10	0.15 6				
2351.4 7	0.83 23	2768.5	(3/2 ⁺ ,5/2 ⁺)	416.69	7/2 ⁺
^x 2358.2 6	0.43 13				
^x 2368.8 8	0.43 15				
2373.2 8	0.39 12	3126.4	(1/2 ⁺ ,3/2 ⁺)	752.99	5/2 ⁺
^x 2384.4 9	0.56 14				
2390.9 6	1.5 3	2733.1		342.34	3/2 ⁺
^x 2396.3 8	0.90 22				
2408.2 10	0.34 11	2653.4	(3/2,5/2)	245.45	5/2 ⁺
^x 2414.6 10	0.66 17				
^x 2419.8 6	1.5 4				
2426.9 9	0.31 8	2768.5	(3/2 ⁺ ,5/2 ⁺)	342.34	3/2 ⁺
2455.8 5	1.5 5	3076.2		620.41	5/2 ⁺
^x 2489.4 8	0.65 19				
^x 2495.2 8	0.88 18				
2506.1 10	1.5 4	3126.4	(1/2 ⁺ ,3/2 ⁺)	620.41	5/2 ⁺
^x 2549.9 10	1.2 3				
^x 2560.4 10	1.2 3				
^x 2568.2 10	0.46 17				
^x 2589.6 10	0.42 16				
^x 2597.8 10	0.34 18				
2608.0 10	0.8 3	2950.5		342.34	3/2 ⁺
^x 2618.8 10	0.9 3				
^x 2622.2 10	1.3 5				
^x 2629.0 8	1.0 3				
^x 2643.3 10	1.0 3				
^x 2649.4 10	0.62 22				
2659.6 6	2.1 4	3076.2		416.69	7/2 ⁺
^x 2669.4 8	0.76 23				
^x 2681.3 10	0.70 24				
2692.2 10	1.1 48	2692.3		0	1/2 ⁺
2705.1 [†]	2.4 9	2950.5		245.45	5/2 ⁺
^x 2720.7 10	0.36 11				

Continued on next page (footnotes at end of table)

$^{110}\text{Cd}(n,\gamma):E=\text{th,reactor,res}$ 1987BaYW,1991NeZX (continued) $\gamma(^{111}\text{Cd})$ (continued)

E_γ	I_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π	E_γ	I_γ	$E_i(\text{level})$
^x 2728.2 10	0.57 22					^x 3705.7 4	1.11 12	
^x 2755.0 8	0.70 21					^x 3714.8 6	0.77 12	
2768.2	1.0 3	2768.5	(3/2 ⁺ ,5/2 ⁺)	0	1/2 ⁺	^x 3734.1 5	0.53 11	
^x 2775.5 7	0.72 15					^x 3755.0 5	0.67 11	
^x 2784.8 6	0.80 16					^x 3780.7 5	0.43 9	
^x 2800.5 5	0.59 11					^x 3801.0 5	0.64 11	
^x 2811.0 5	0.63 10					^x 3817.1 7	0.17 6	
^x 2822.7 6	0.36 9					^x 3848.5 8	1.7 3	
^x 2829.9 5	0.72 10					^x 3893.3 5	0.78 18	
^x 2837.4 6	0.40 10					^x 3907.8 5	1.6 2	
^x 2872.9 7	0.21 10					^x 3920.8 7	0.21 7	
^x 2928.6 5	0.56 10					^x 3951.2 12	0.41 18	
^x 2986.4 5	0.25 6					^x 3969.7 4	1.8 2	
^x 2999.4 5	0.57 9					^x 3995.4 7	0.64 13	
^x 3015.1 5	0.58 8					^x 4014.2 8	0.22 10	
^x 3078.6 16	1.6 6					^x 4035.1 7	0.39 13	
^x 3099.4 7	0.47 12					^x 4078.4 7	0.19 9	
^x 3109.1 4	1.12 15					^x 4109.4 3	3.3 2	
^x 3129.0 12	0.86 20					^x 4124.1 7	1.22 14	
^x 3137.5 8	0.75 23					^x 4131.6 8	0.36 12	
^x 3157.7 8	0.76 23					^x 4136.0 8	0.37 13	
^x 3194.7 5	0.70 12					^x 4152.7 7	0.22 8	
^x 3219.2 8	0.29 11					^x 4162.7 5	0.78 13	
^x 3236.9 7	0.28 11					^x 4183.8 4	0.49 10	
^x 3321.9 7	0.44 16					^x 4201.5 6	0.35 10	
^x 3332.6 6	0.53 15					^x 4212.3 9	0.49 11	
^x 3341.8 12	0.39 19					^x 4217.5 5	1.4 3	
^x 3383.0 6	0.52 12					^x 4244.8 9	0.38 17	
^x 3393.4 6	0.51 11					^x 4265.0 8	2.4 5	
^x 3412.5 13	1.2 5					^x 4292.1 9	0.11 5	
^x 3508.5 5	0.6 3					^x 4319.1 6	0.45 17	
^x 3523.3 5	1.7 8					^x 4352.4 7	0.44 17	
^x 3552.2 5	0.7 3					^x 4362.8 5	0.90 16	
^x 3591.8 4	0.59 8					^x 4371.6 8	0.37 12	
^x 3605.1 5	0.30 7					^x 4387.6 8	0.61 17	
^x 3640.3 8	0.63 17					^x 4406.1 5	1.37 16	
^x 3648.7 6	0.92 18					^x 4417.4 4	2.2 2	
^x 3672.7 5	0.79 15							

† Complex peak.

‡ From $I_\gamma/I_\gamma(881.9\gamma)=0.8$ in ($^3\text{He,pn}\gamma$).

From $I_\gamma=2.4$ 7 for doubly placed 1054γ and value deduced for placement from 1298 level.

@ From $I_\gamma/I_\gamma(741\gamma)=2.7$ 3 from 986 level in ($^3\text{He,2n}\gamma$).

& From $I_\gamma=7.3$ 9 for doubly-placed γ , and 2.7 3 deduced for placement from the 986 level.

^a From $I_\gamma/I_\gamma(929\gamma)=1.0$ 4 in ($n,n'\gamma$), one expects $I_\gamma=0.6$ 3.

^b Multiply placed with undivided intensity.

^c Multiply placed with intensity suitably divided.

^x γ ray not placed in level scheme.

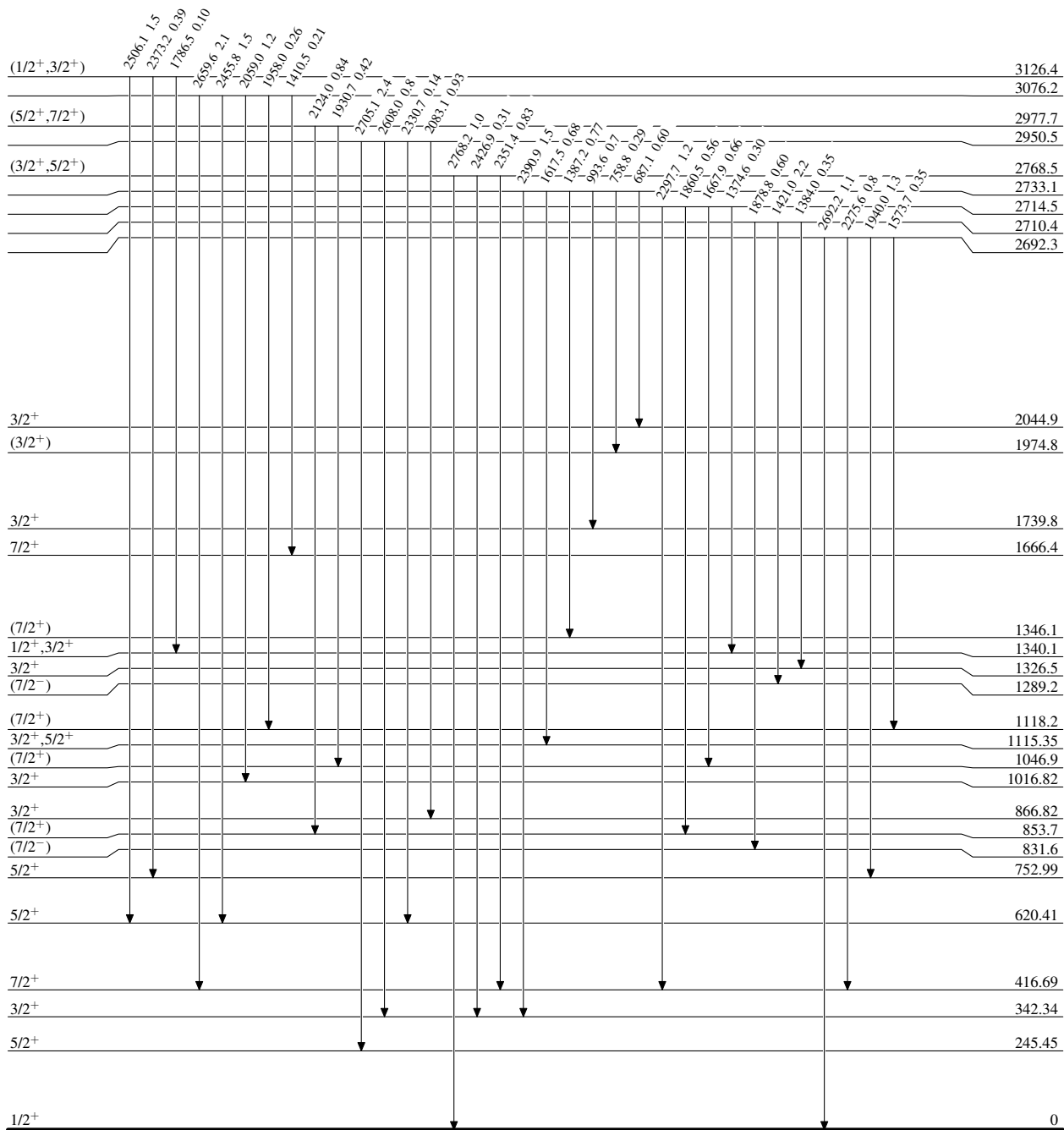
¹¹⁰Cd(n,γ):E=th,reactor,res 1987BaYW,1991NeZX

Level Scheme

Intensities: Type not specified

Legend

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}



¹¹¹Cd₆₃

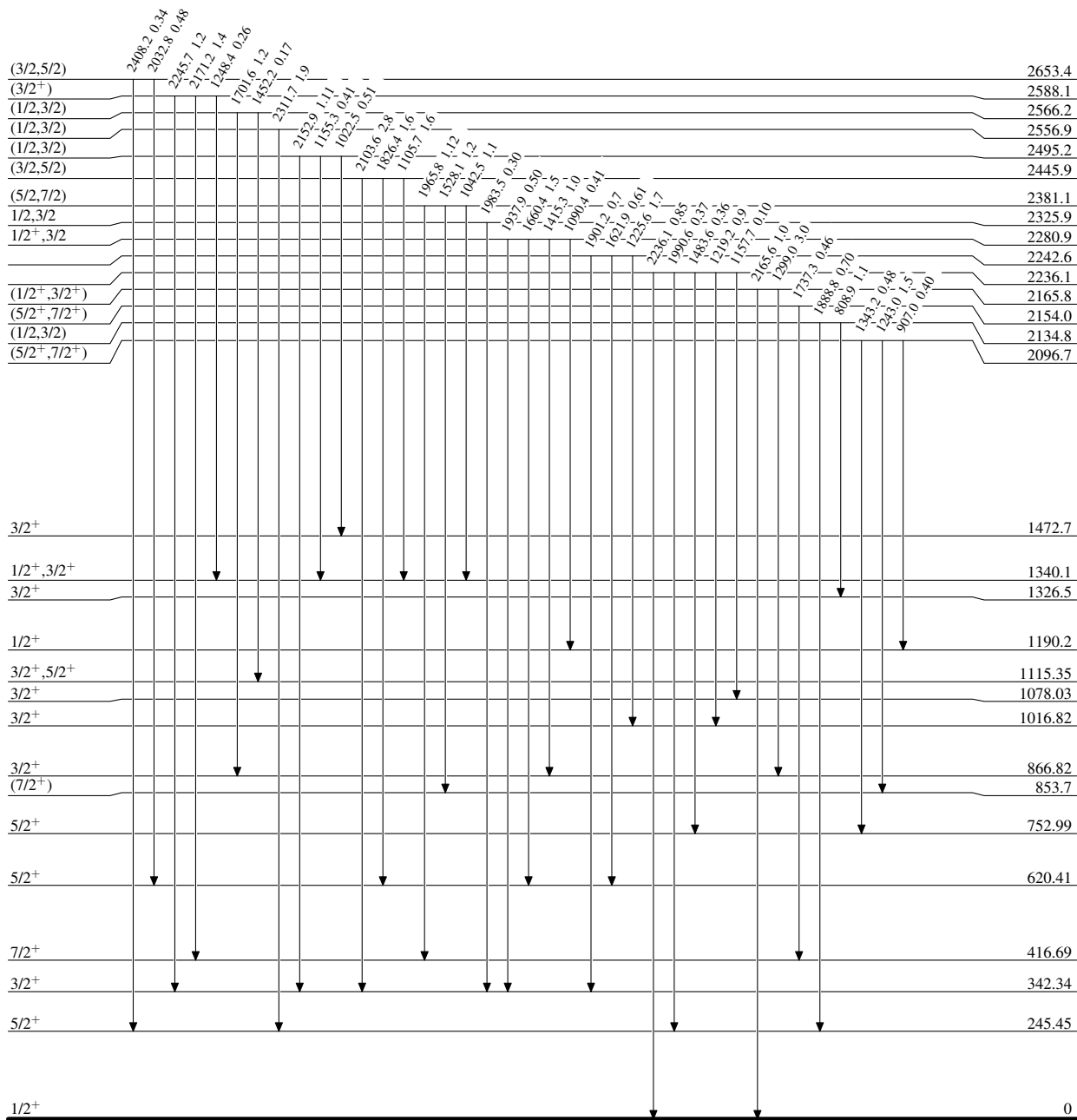
$^{110}\text{Cd}(n,\gamma):E=\text{th,reactor,res}$ 1987BaYW,1991NeZX

Level Scheme (continued)

Intensities: Type not specified

Legend

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






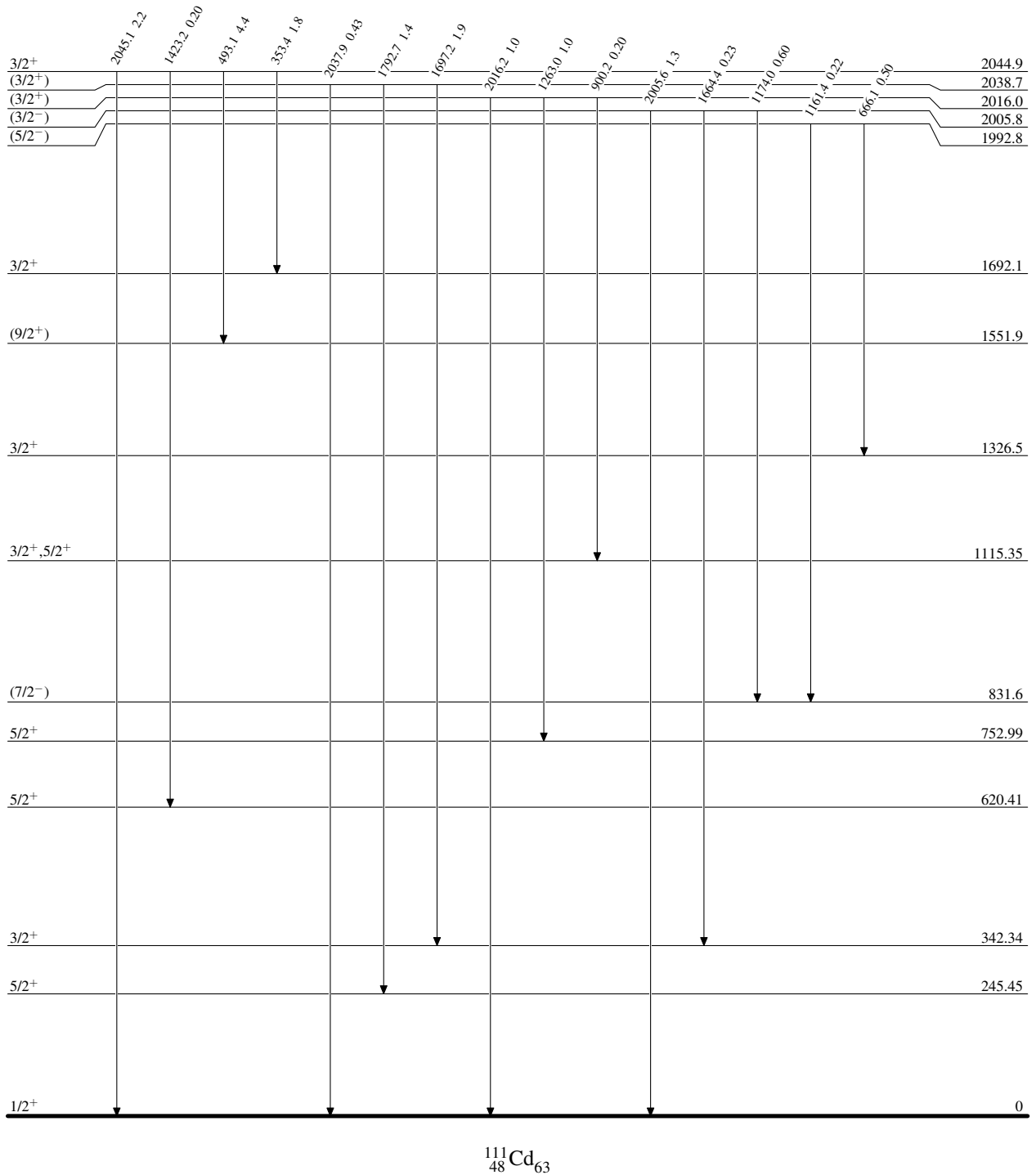
$^{110}\text{Cd}(n,\gamma):E=\text{th,reactor,res}$ 1987BaYW,1991NeZX

Level Scheme (continued)

Intensities: Type not specified

Legend

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

 $^{111}_{48}\text{Cd}_{63}$

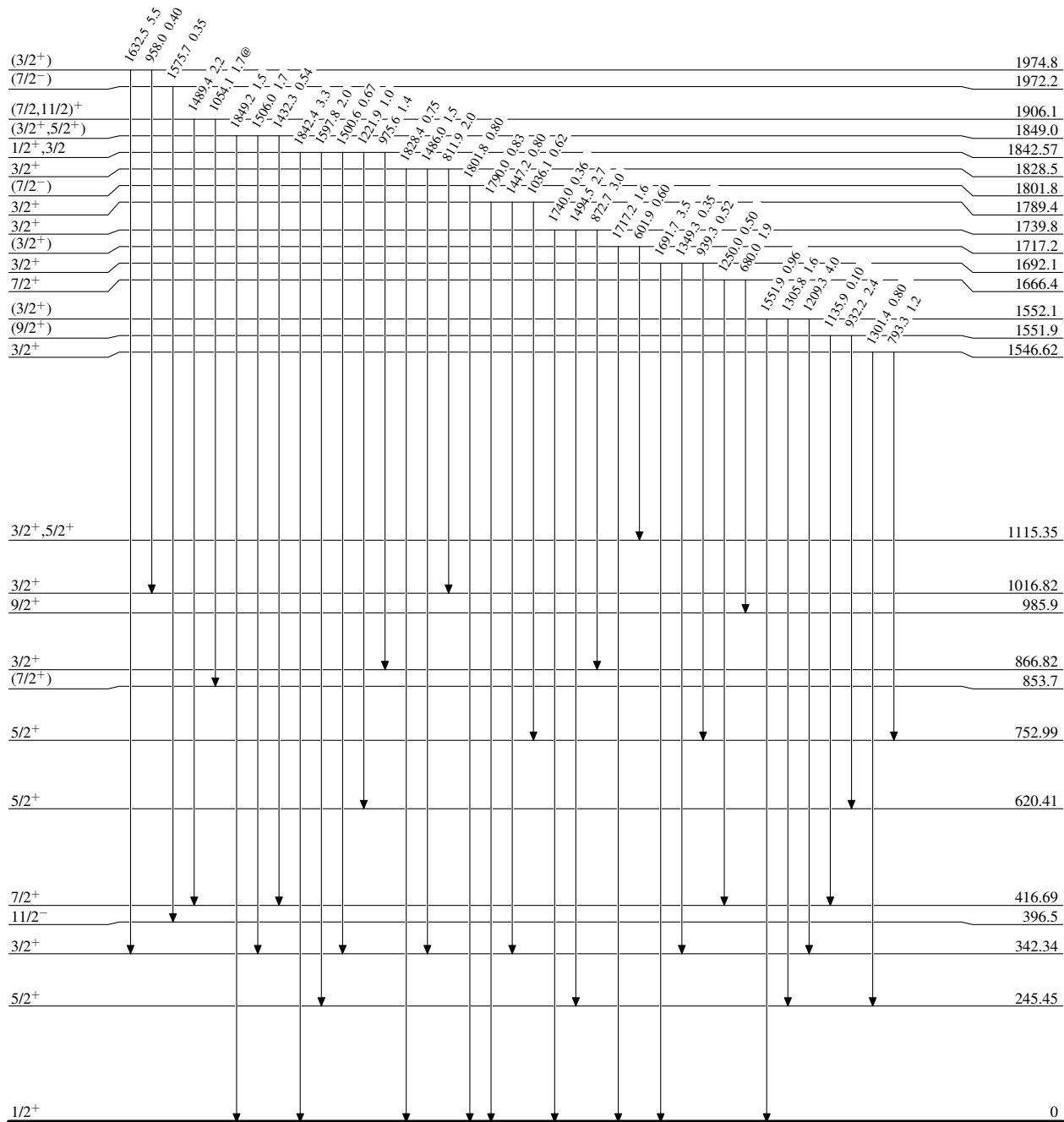
¹¹⁰Cd(n,γ):E=th,reactor,res 1987BaYW,1991NeZX

Level Scheme (continued)

Legend

Intensities: Type not specified
@ Multiply placed: intensity suitably divided

→ I_γ < 2% × I_γ^{max}
→ I_γ < 10% × I_γ^{max}
→ I_γ > 10% × I_γ^{max}



¹¹¹Cd₆₃

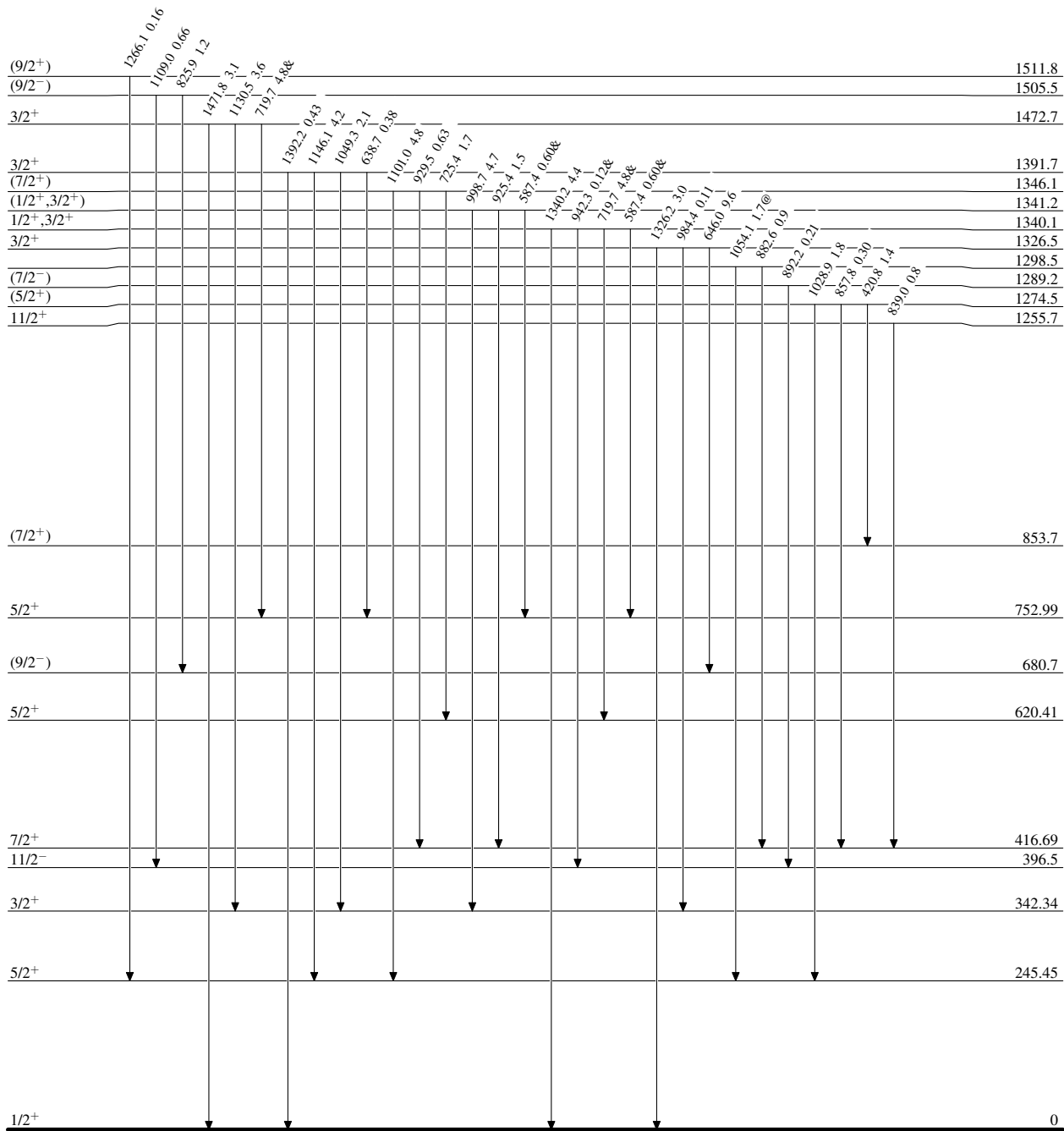
$^{110}\text{Cd}(n,\gamma):E=\text{th,reactor,res}$ 1987BaYW,1991NeZX

Level Scheme (continued)

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

Legend

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



$^{111}_{48}\text{Cd}_{63}$

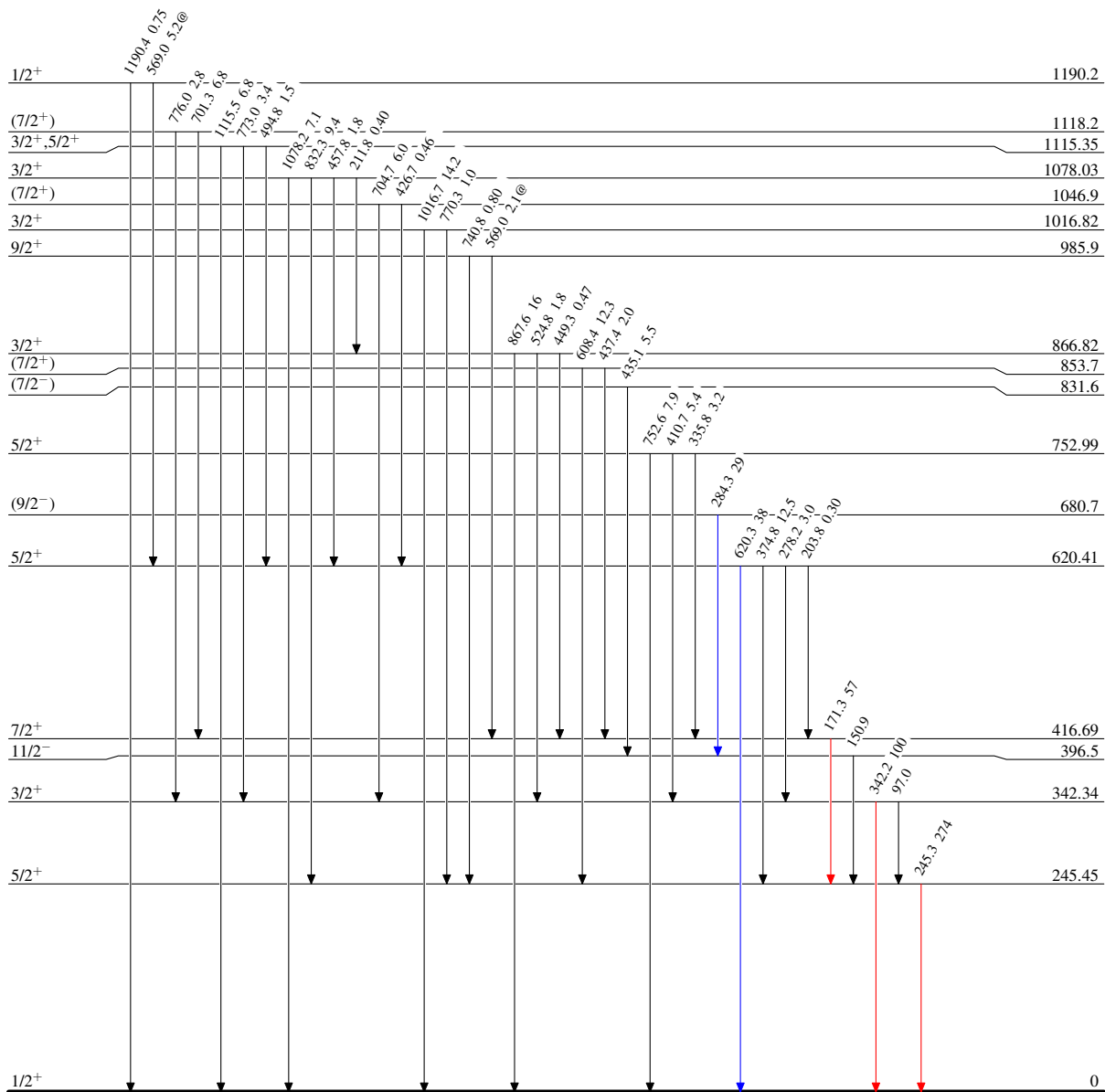
$^{110}\text{Cd}(n,\gamma):E=\text{th,reactor,res}$ 1987BaYW,1991NeZX

Level Scheme (continued)

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

Legend

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

 $^{111}_{48}\text{Cd}_{63}$