Energy levels and branching ratios [05De52, 93De15].

$^{105}_{48}$Cd

E^* [keV]	$2J^\pi$	σ (d,t) μb/sr	L	S_N (d,t)	L	S_N (τ,α)	$T_{1/2}$ or Γ_{cm}	Ref.	Branching ratios in percentage				
									E_f^*: 0.0	131.1	196	260	604
									$2J_f^\pi$: 5^+	7^+	$\langle 3,5\rangle^+$	$\langle 7\rangle^+$	$\langle 7\rangle^+$
0.0	5^+	870	2	1.54*	2	2.2(1)	55.5(4) m	75Ch21					
131.11(7)	7^+	176	4	4.69	4	3.8(1)	1.8(1) ns	73De16	100				
196.05(7)	$\langle 3,5\rangle^+$	36							100				
260.27(6)	$\langle 7\rangle^+$	215	$\langle 2\rangle$	0.50	$\langle 2\rangle$			73De16	91(5)	6.1(5)	2.5(6)		
604.37(7)	$\langle 7\rangle^+$								92(5)	8.4(8)			
679(10)	$5^+,3^+$				2	0.2,0.2		75Ch21					
766.44(9)									34(10)	14(3)	50(5)		1.5(5)
770.83(8)	$\langle 9\rangle^+$								15.7(8)	47(4)		32(16)	5.7(5)
776(10)	$5^+,3^+$				2	0.4,0.5		75Ch21					
799.62(11)	11^+									100			
832.37(8)	$\langle 9\rangle^+$					0.27(12)		75Ch21	78(3)	12.2(12)	2.2(18)		7.6(9)
1114.8(1)									24(2)	10(2)		44(3)	
1139.7(1)									54(11)		29(3)	6(2)	11(3)
1163.1(1)	$\langle 11\rangle^-$				$\langle 5\rangle$	0.87(2)		75Ch21		29(5)			
1182.36(14)									60(8)	40(4)			
1327.92(16)													55(31)
1386.65(9)	$\langle 7^+,9^+\rangle$								36(4)	18(4)	15(2)	14(1)	8(1)
1439.65(10)	$\langle 7,9,11^+\rangle$									19(1)		5.2(12)	7(2)
1495.06(11)	$\langle 7,9^+\rangle$										9(2)		58(5)
1578.39(20)	$\langle 13\rangle^+$												
1579.17(12)													
1608.72(11)	$\langle 7,9^+\rangle$								9(1)	10(1)		29(4)	10(1)
1625.41(17)	$\langle 7,9,11^+\rangle$									37(10)			
1635.26(14)													
1686.15(25)	15^+												
1702.4(2)	$\langle 15\rangle^-$												
1728.72(17)													5(5)
1822.80(14)	$\langle 7,9,11^+\rangle$												28(4)
2059.80(22)										12(5)		25(10)	
2123(10)					$\langle 4\rangle$	0.29(1)		75Ch21					
2142.76(13)	$\langle 7^+–11^+\rangle$									15(4)		34(9)	30(5)
2193.7(2)	$\langle 7^+,9^+\rangle$								23(6)	65(12)			12(6)
2277.70(14)	$\langle 7^+–11^+\rangle$											14(5)	15(4)
2307.89(23)	$\langle 7^+–11^+\rangle$											74(19)	
2365.27(14)	$\langle 7^+,9^+\rangle$								9(3)			16(5)	20(2)
2371.83(14)	$\langle 7^+,9^+\rangle$								15(1)	10(4)	15(1)		
2391.0(2)	$\langle 17\rangle^+$												
2420.08(19)	$\langle 7^+,9^+\rangle$								20(8)		49(6)		
2488.6(3)	$\langle 19\rangle^-$												
2517.5(3)	$\langle 21^+\rangle$												
2552.3(2)	$\langle 7^+–11^+\rangle$												56(8)
2587.4(5)													
2643.7(5)													
2677.21(11)	$\langle 7^+–11^+\rangle$												6(2)
2730(10)						0.24(10)		75Ch21					

(continued) **$^{105}_{48}$Cd**

E^*	$2J^\pi$	σ (d,t)	L	S_N	L	S_N	$T_{1/2}$ or	Ref.	Branching ratios in percentage				
									E_f^*: 0.0	131.1	196	260	604
[keV]		μb/sr		(d,t)		(τ,α)	Γ_{cm}		$2J_f^\pi$: 5^+	7^+	$\langle 3,5\rangle^+$	$\langle 7\rangle^+$	$\langle 7\rangle^+$
2818(10)					$\langle 4\rangle$	0.82(2)		75Ch21					
2853.2(2)	$\langle 7^+,9^+\rangle$								24(7)	62(11)			
2874(10)					$\langle 4\rangle$	1.04(3)		75Ch21					
3165.01(16)	$\langle 7^+–11^+\rangle$												
3202.97(18)	$\langle 7^+–11^+\rangle$									21(7)		3(2)	8(4)
3337.6(4)	$\langle 7^+–11^+\rangle$											28(11)	
3343.3(4)	$\langle 23\rangle^-$							93Re13					
3622.2(7)	$\langle 23^+\rangle$												
4248.3(11)	27^-												
4914.0(8)	$\langle 27^+\rangle$							93Re13					
5225.8(12)	29^-												
5291.9(12)	31^-												
5758.7(12)	31^-							93Re13					
6304.0(13)	33^-												
6471.3(13)	35^-							93Re13					
6646.0(13)													
7236.9(14)	37^-							93Re13					
7801.3(14)	39^-							93Re13					
8980.2(15)	$\langle 41^-\rangle$												
9267.2(15)	$\langle 43^-\rangle$							93Re13					
10851.2(16)	$\langle 47^-\rangle$							93Re13					
		73De16		73De16		75Ch21		Ref.					

Additional data on this isotope can be found in [95Je04, 93Re13].

* Calculated from relation $d\sigma/d\Omega_{exp}$=3.33$S_N\sigma_{DWBA}$ [73De16].

Parameters of (τ,α) reaction are normalized such that sum of S-values for levels with E^*<2000 keV is 8.0 [75Ch21, 86De02].

Energy levels and branching ratios [05De52, 93De15]. Part 2 **$^{105}_{48}$Cd**

E^*	$2J^\pi$	Branching ratios in percentage										
	E_f^*:	766.5	770.9	799.6	832.4	1114.8	1162.6	1182.4	1327.9	1386.6	1439.6	
[keV]	$2J_f^\pi$:		$\langle 9\rangle^+$	11^+	$\langle 9\rangle^+$		$\langle 11\rangle^-$			$\langle 7^+,9^+\rangle$		
1114.8(1)			21(10)									
1163.1(1)	$\langle 11\rangle^-$		35(1)		36(1)							
1327.92(16)					29(18)	16(4)						
1386.65(9)	$\langle 7^+,9^+\rangle$	2.2(4)			4(2)			2.3(11)				
1439.65(10)	$\langle 7,9,11^+\rangle$	43(9)			16(16)	10(2)						
1495.06(11)	$\langle 7,9^+\rangle$				34(2)							
1578.39(20)	$\langle 13\rangle^+$		88(4)	12(4)								
1579.17(12)			59(4)				16(2)			25(11)		
1608.72(11)	$\langle 7,9^+\rangle$	6(2)	18(8)						17(5)			
1625.41(17)	$\langle 7,9,11^+\rangle$				22(7)					41(7)		

(continued) **$^{105}_{48}$Cd**

E^*	$2J^\pi$		Branching ratios in percentage									
		E_f^*:	766.5	770.9	799.6	832.4	1114.8	1162.6	1182.4	1327.9	1386.6	1439.6
[keV]		$2J_f^\pi$:		$\langle 9\rangle^+$	11^+	$\langle 9\rangle^+$		$\langle 11\rangle^-$			$\langle 7^+,9^+\rangle$	
1635.26(14)											68(53)	
1686.15(25)	15^+				100							
1702.4(2)	$\langle 15\rangle^-$							100				
1728.72(17)			8(7)			35(4)						26(20)
1822.80(14)	$\langle 7,9,11^+\rangle$		48(5)				24(12)					
2142.76(13)	$\langle 7^+–11^+\rangle$										21(9)	
2277.70(14)	$\langle 7^+–11^+\rangle$						35(13)		35(11)			
2307.89(23)	$\langle 7^+–11^+\rangle$				26(11)							
2677.21(11)	$\langle 7^+–11^+\rangle$		10(2)	9(2)	22(4)							22(3)
3165.01(16)	$\langle 7^+–11^+\rangle$										43(6)	
3202.97(18)	$\langle 7^+–11^+\rangle$					34(4)		12(4)				

Energy levels and branching ratios [05De52, 93De15]. Part 3 **$^{105}_{48}$Cd**

E^*	$2J^\pi$		Branching ratios in percentage									
		E_f^*:	1495.1	1578.4	1579.2	1608.7	1635.3	1686.4	1701.9	1728.7	1822.8	2142.8
[keV]		$2J_f^\pi$:	$\langle 7,9^+\rangle$	$\langle 13\rangle^+$		$\langle 7,9^+\rangle$		15^+	$\langle 15\rangle^-$			
1635.26(14)			32(13)									
1728.72(17)						26(11)						
2059.80(22)						11(3)				53(11)		
2365.27(14)	$\langle 7^+,9^+\rangle$						17(3)			20(17)		
2371.83(14)	$\langle 7^+,9^+\rangle$				11(4)					49(11)		
2391.0(2)	$\langle 17\rangle^+$			63(3)				37(3)				
2420.08(19)	$\langle 7^+,9^+\rangle$											31(14)
2488.6(3)	$\langle 19\rangle^-$								100			
2552.3(2)	$\langle 7^+–11^+\rangle$									44(8)		
2587.4(5)								100				
2643.7(5)										100		
2677.21(11)	$\langle 7^+–11^+\rangle$				9(1)	10(2)	11(2)					
2853.2(2)	$\langle 7^+,9^+\rangle$					14(7)						
3202.97(18)	$\langle 7^+–11^+\rangle$										22(5)	

Energy levels and branching ratios [05De52, 93De15]. Part 4 **$^{105}_{48}$Cd**

E^*	$2J^\pi$		Branching ratios in percentage					
		E_f^*:	2277.7	2365.2	2371.8	2390.9	2488.1	3342.9	4247.9
[keV]		$2J_f^\pi$:		$\langle 7^+,9^+\rangle$	$\langle 7^+,9^+\rangle$	$\langle 17\rangle^+$	$\langle 19\rangle^-$	$\langle 23\rangle^-$	$\langle 27\rangle^-$
2365.27(14)	$\langle 7^+,9^+\rangle$		18(3)						
2517.5(3)	$\langle 21^+\rangle$					100			

(continued) **$^{105}_{48}$Cd**

E^*	$2J^\pi$	Branching ratios in percentage						
	E_f^*: 2277.7	2365.2	2371.8	2390.9	2488.1	3342.9	4247.9	
[keV]	$2J_f^\pi$:	$\langle 7^+,9^+\rangle$	$\langle 7^+,9^+\rangle$	$\langle 17\rangle^+$	$\langle 19\rangle^-$	$\langle 23\rangle^-$	$\langle 27\rangle^-$	
3165.01(16)	$\langle 7^+–11^+\rangle$	36(3)	22(7)					
3337.6(4)	$\langle 7^+–11^+\rangle$		72(14)					
3343.3(4)	$\langle 23\rangle^-$				100			
4248.3(11)	27^-					100		
5291.9(12)	31^-						100	

Energy levels and branching ratios [94De15]. **$^{106}_{48}$Cd**

E^*	J^π	σ (τ,n)	σ (p,p′)	$T_{1/2}$ or	Ref.	Branching ratios in percentage					
						E_f^*:	0.0	633	1494	1716	1795
[keV]		μb/sr	*rel.*	Γ_{cm}		J_f^π:	0^+	2^+	4^+	2^+	0^+
0.0	0^+	502	1000*	Stable	77Fi04						
632.64(4)	2^+			7.3(1) ps			100				
1493.78(5)	4^+		128	0.9(1) ps	92Ku01			100			
1716.53(8)	2^+		168	0.3(1) ps	92Ku01		59(9)	41(5)			
1795.25(11)	0^+		164		92Ku01			100			
2104.53(6)	4^+		20	≤2 ps	92Ku01			36(1)	60(1)	4(1)	
2144.06(4)	0^+		101		92Ku01		x	70(10)		30(4)	
2252.2(6)	$\langle 4^+\rangle$		190		92Ku01			95(50)	4.8(8)		
2254.0(5)	$\langle 2^+,3^+\rangle$		100		92Ku01			94(47)		6.1(9)	
2304.92(12)	4^+		38		92Ku01			12(2)	88(16)		
2330.56(6)	5^+			0.6(2) ns					31(2)		
2338.55(21)	$\langle 4^+\rangle$							43(10)	57(9)		
2347.55(11)	$\langle 2\rangle^+$		185		92Ku01			100			
2370.62(4)	2^+		6.3		92Ku01		5.3(8)	59(9)		19(3)	16(2)
2378.50(4)	3^-		121		92Ku01			100			
2468.42(4)	$\langle 4\rangle^+$								100		
2485.72(14)	$2^+–4^+$							49(5)	51(15)		
2491.66(6)	6^+								99(5)		
2503.08(7)	6^+								100		
2521.9(3)	$\langle 4,5^+\rangle$								100		
2561.37(6)	0^+							100			
2566.26(11)	2^+							100			
2629.20(7)	5^-			5(2) ps					18(1)		
2630.08(5)	2^+						12(2)	88(12)			
2717.86(4)	$2^+,3$							100			
2720.56(4)	$1,2^+,3$							100			
2824.58(5)	1						100				
2889.57(21)	$2,3^+$							100			
2918.2(3)	1						82(4)	18(2)			
2920.14(8)	5								100		
2924.80(9)	6^+								34(6)		

(continued) **$^{106}_{48}$Cd**

E^*	J^π	σ (τ,n)	σ (p,p′)	$T_{1/2}$ or	Ref.	Branching ratios in percentage					
						E_f^*:	0.0	633	1494	1716	1795
[keV]		μb/sr	*rel.*	Γ_{cm}		J_f^π:	0^+	2^+	4^+	2^+	0^+
2933.65(6)	$2^+,3^+$									100	
2936.15(6)	$2^+,3^+$							100			
2973.33(9)	$2,3^+,4^+$							100			
3000	$[0^+]$	79			77Fi04						
3015.35(6)	$2^+,3^+$									100	
3018.80(5)	$3^+,\langle 5\rangle^+$								100		
3020.74(7)	$2,3^+$							100			
3044.13(7)	8^+			0.4(2) ps							
3059.84(6)	3							67(9)	33(5)		
3072.82(11)	$2,3^+,4$							100			
3084.38(7)	7^+										
3092.88(11)	$\langle 2^+\rangle$						17(3)	30(2)	14(2)	39(5)	
3094	$\langle 8\rangle$										
3118.80(6)	2^+–4^+								10(2)	90(12)	
3119.72(15)	1						61(5)	39(5)			
3126.18(15)	7^+										
3222.65(20)	1						100				
3235.24(15)	$2,3^+$							16(3)		84(11)	
3245.43(13)	$\langle 2^+\rangle$						43(7)			30(6)	
3283.97(16)	X^+										
3320.15(7)	6^-										
3322.69(10)	$1^+,2^+,3$							100			
3328.15(11)	$1,2^+$						23(4)	47(7)			
3329.28(8)	3^+								100		
3367.16(7)	8^+										
3394.2(3)	2^+						100				
3409.65(7)	$7^{\langle -\rangle}$										
3426.90(20)	$2,3^+,4^+$							100			
3462.0(6)	$\langle 6^-\rangle$										
3472.81(13)									16(2)		
3485.92(25)	$1,2^+$						2(1)	86(18)			12(3)
3494.7(4)	$1,2^+$						59(2)	41(2)			
3507.79(4)	8^-			1.5(5) ns							
3543.6(2)	7										
3547.60(14)	X^+										
3590	$[0^+]$	92			77Fi04						
3641.82(12)	$\langle 8^+\rangle$										
3678.88(7)	9^-			0.7(3) ns							
3679.29(17)	$2^+,3$							70(9)	30(6)		
3698.3(5)	$\langle 7^-\rangle$										
3710.9(10)											
3787.39(15)											
3902	$\langle 10\rangle$										
4106.33(9)	10^-			≤4 ps							
4113.86(18)											

(continued) **$^{106}_{48}$Cd**

E^*	J^π	σ (τ,n)	σ (p,p′)	$T_{1/2}$ or	Ref.	Branching ratios in percentage					
						E_f^*:	0.0	633	1494	1716	1795
[keV]		μb/sr	*rel.*	Γ_{cm}		J_f^π:	0^+	2^+	4^+	2^+	0^+
4120.95(15)	$9^{\langle+\rangle}$										
4175.1(6)											
4179.5(4)											
4183.04(19)											
4220	$[0^+]$	45			77Fi04						
4243.57(15)											
4324.42(8)	$11^{\langle-\rangle}$										
4420.7(7)											
4436.02(9)	$10^{\langle+\rangle}$										
4574.3(4)	$10^{\langle+\rangle}$										
4659.71(9)	$12^{\langle+\rangle}$			62(6) ns							
4720	$[0^+]$	58			77Fi04						
4794	$\langle 12\rangle$										
4902.8(4)											
4967.55(18)	$\langle 12^-\rangle$										
5130.76(13)											
5214.06(11)	$13^{\langle-\rangle}$			≤9 ps							
5241.0(3)	12^+										
5252.43(18)	$\langle 13^+\rangle$										
5822	$\langle 14\rangle$										
5912.0(6)											
5976.4(5)	$\langle 14^-\rangle$										
6265.0(3)	$\langle 15^-\rangle$										
		77Fi04			Ref.						

Additional data on this isotope can be found in [94Je05, 92Ku01, 90Ku01, 90Ar20, 86Ba39].
Abundance: 1.25(6) %.
* Gamma-ray intensities from the (p,p′) reaction correspond to the direct level population [92Ku01].
Intensity of the 2_1^++-0_1^+ transitions normalized to 1000. Only part of data for ^{106}Cd, ^{108}Cd, ^{110}Cd and ^{112}Cd is presented.
Data for this isotope are considered in vol. LB I/18B.

Energy levels and branching ratios [94De15]. Part 2 **$^{106}_{48}$Cd**

E^*	J^π	Branching ratios in percentage									
	E_f^*:	2104	2331	2347	2491.66	2503.1	2629.2	2920.1	3044.1	3084.4	3094
[keV]	J_f^π:	4^+	5^+	$\langle 2\rangle^+$	6^+	6^+	5^-	5	8^+	7^+	$\langle 8\rangle$
2330.56(6)	5^+	69(2)									
2491.66(6)	6^+		1.0(2)								
2629.20(7)	5^-	80(1)	2(1)								
2924.80(9)	6^+				66(9)						
3044.13(7)	8^+				61(2)	39(3)					

(continued) **$^{106}_{48}$Cd**

E^*	J^π	Branching ratios in percentage									
	E_f^*:	2104	2331	2347	2491.66	2503.1	2629.2	2920.1	3044.1	3084.4	3094
[keV]	J_f^π:	4^+	5^+	$\langle 2\rangle^+$	6^+	6^+	5^-	5	8^+	7^+	$\langle 8\rangle$
3084.38(7)	7^+		34(2)		48(2)	18(2)					
3094	$\langle 8\rangle$				100						
3126.18(15)	7^+				35(4)	65(6)					
3245.43(13)	$\langle 2^+\rangle$	27(5)									
3283.97(16)	X^+				28(3)	72(7)					
3320.15(7)	6^-				27.4(14)		68.4(16)	4.2(9)			
3328.15(11)	$1,2^+$			30(5)							
3367.16(7)	8^+				66(3)	15(6)			10.2(5)	8.4(6)	
3409.65(7)	$7^{\langle -\rangle}$				38.6(10)	35(2)	15(2)	11(2)			
3462.0(6)	$\langle 6^-\rangle$						100				
3472.81(13)			69(7)		15(2)						
3507.79(4)	8^-								5.8(6)	28.8(18)	
3543.6(2)	7				38(5)	62(4)					
3547.60(14)	X^+	32(3)	54(5)								
3641.82(12)	$\langle 8^+\rangle$				31(5)	69(3)					
3678.88(7)	9^-								27(3)		
3698.3(5)	$\langle 7^-\rangle$						100				
3710.9(10)					100						
3787.39(15)					47(9)	53(7)					
3902	$\langle 10\rangle$										100
4120.95(15)	$9^{\langle +\rangle}$								100		
4179.5(4)									100		
4183.04(19)									40(10)		
4243.57(15)									35(4)		
4436.02(9)	$10^{\langle +\rangle}$								8(3)		
4574.3(4)	$10^{\langle +\rangle}$								100		
5130.76(13)									20(2)		

Energy levels and branching ratios [94De15]. Part 3 **$^{106}_{48}$Cd**

E^*	J^π	Branching ratios in percentage									
	E_f^*:	3126.2	3320.1	3367.2	3409.6	3462.0	3507.8	3543.6	3547.6	3641.8	3678.9
[keV]	J_f^π:	7^+	6^-	8^+	$7^{\langle -\rangle}$	$\langle 6^-\rangle$	8^-	7	X^+	$\langle 8^+\rangle$	9^-
3507.79(4)	8^-		63.9(19)	1.5(5)							
3547.60(14)	X^+	14(2)									
3678.88(7)	9^-			4.4(5)	38(6)		31(2)				
4106.33(9)	10^-						87.3(18)				12.7(11)
4113.86(18)					61(4)			39(5)			
4175.1(6)						55(26)					
4183.04(19)							60(8)				
4243.57(15)										65(6)	
4324.42(8)	$11^{\langle -\rangle}$										96.4(16)

(continued) **$^{106}_{48}$Cd**

E^*	J^π	Branching ratios in percentage									
	E_f^*:	3126.2	3320.1	3367.2	3409.6	3462.0	3507.8	3543.6	3547.6	3641.8	3678.9
[keV]	J_f^π:	7^+	6^-	8^+	$7^{\langle-\rangle}$	$\langle 6^-\rangle$	8^-	7	X^+	$\langle 8^+\rangle$	9^-
4436.02(9)	$10^{\langle+\rangle}$			70.3(8)							4.8(15)
4659.71(9)	$12^{\langle+\rangle}$								14(6)		
5130.76(13)				22(2)						39(4)	

Energy levels and branching ratios [94De15]. Part 4 **$^{106}_{48}$Cd**

E^*	J^π	Branching ratios in percentage									
	E_f^*:	3698.3	3902	4106.3	4113.9	4120.9	4183.0	4243.6	4324.4	4436.0	4659.7
[keV]	J_f^π:	$\langle 7^-\rangle$	$\langle 10\rangle$	10^-		$9^{\langle+\rangle}$			$11^{\langle-\rangle}$	$10^{\langle+\rangle}$	$12^{\langle+\rangle}$
4175.1(6)		45(14)									
4324.42(8)	$11^{\langle-\rangle}$			3.6(12)							
4420.7(7)		100									
4436.02(9)	$10^{\langle+\rangle}$					3.8(6)			13(3)		
4659.71(9)	$12^{\langle+\rangle}$						18(4)		33.0(8)	34.7(8)	
4794	$\langle 12\rangle$		x								
4902.8(4)				30(8)	70.4(7)						
4967.55(18)	$\langle 12^-\rangle$			100							
5130.76(13)								19(2)			
5214.06(11)	$13^{\langle-\rangle}$								100		
5241.0(3)	12^+									100	
5252.43(18)	$\langle 13^+\rangle$										100

Energy levels and branching ratios [94De15]. Part 5 **$^{106}_{48}$Cd**

E^*	J^π	Branching ratios in percentage			
	E_f^*:	4794	4967.5	5214.1	5252.4
[keV]	J_f^π:	$\langle 12\rangle$	$\langle 12^-\rangle$	$13^{\langle-\rangle}$	$\langle 13^+\rangle$
5822	$\langle 14\rangle$	100			
5912.0(6)					100
5976.4(5)	$\langle 14^-\rangle$		100		
6265.0(3)	$\langle 15^-\rangle$			100	

Energy levels and branching ratios [00Bl05].

$^{107}_{48}$Cd

E^* [keV]	$2J^\pi$	L	S_N (d,p)	σ (d,p) μb/sr	$T_{1/2}$ or Γ_{cm}	Ref.	E_f^*: $2J_f^\pi$:	Branching ratios in percentage 0.0 5^+	205 7^+	321 5^+	365 3^+	458 1^+
0.0	5^+	2	0.25	1440	6.50(2) h	73De16						
204.98(3)	7^+	4	0.40	240	0.71(4) ns	73De16		100				
320.92(3)	5^+	2	0.14	450	≤42 ps	73De16		100				
365.31(4)	3^+			≈100				100				
457.8(5)	1^+	0	0.46	3180		73De16		33(2)			67(3)	
505.49(4)	7^+							99(3)	1.3(2)			
702.34(11)	$\langle 3\rangle^+$	2	0.35	1180		73De16		87(6)		13(3)		
809.01(4)	9^+				3.0(15) ps			61(3)	25(1)	1.5(4)		
840.20(10)	$\langle 3\rangle^+$							34(5)		49(5)	17(4)	
845.54(6)	11^-	5	0.086	530	71(5) ns	73De16		2.0(6)	88(4)			
905.6(7)	1^+	0	0.046	330		73De16		43			57	
919.43(12)	$\langle 5\rangle^+$							15(5)		11(2)	35(7)	
921.69(7)	$\langle 9\rangle^+$				0.4(1) ps			34(4)	9(4)	8(1)		
933.04(6)	11^+				4.8(14) ps				100			
998.61(9)	$\langle 5\rangle^+$	2	0.054	190		73De16		75(4)	13(2)	13(2)		
1059(10)	7^+,9^+	4	0.47	340		73De16						
1059.5(7)	$\langle 5\rangle^-$							86		14		
1158.6(3)	$\langle 5\rangle$		0.016	100		73De16		22(3)	64(6)	14(1)		
1213.52(6)	$\langle 3^+,5^+\rangle$							37(3)	11(1)	14(1)	30(3)	8(1)
1236.08(6)	$\langle 3^+–7^+\rangle$							49(4)	2.8(7)	27(2)	21(2)	
1244.59(6)	$\langle 3^+,5^+\rangle$							38(3)	16(2)		28(2)	18(2)
1268.32(6)	7^+							60(2)	14(1)	9.4(7)	5.2(7)	
1278.95(7)	1^+	0	0.083	600		73De16		9(4)				63(5)
1319.65(19)												
1360.31(10)	15^-				16(1) ps							
1377.37(6)	7^+							42(2)	4.4(8)	21(1)	2.0(7)	
1420.53(8)	$\langle 11^+\rangle$				0.8(2) ps							
1525.55(10)	$\langle 3–7\rangle$									27(5)	53(5)	
1527(10)	1^+	0	0.009	640		73De16						
1530.49(21)					0.16(4) ps				100			
1573.14(8)	$\langle 3,5\rangle$									14(1)	29(2)	
1590.72(8)	3^+,5^+	2	0.15	570		73De16		31(3)			25(2)	8(3)
1645.81(10)								32(9)				
1653.5(4)								100				
1675.3(4)								25(4)			27(4)	
1692.3(9)												
1712.8(5)								40(11)	46(23)			
1719.43(8)								68(3)			12(2)	
1731.1(3)	$\langle 13^+\rangle$											
1749(10)	1^+	0	0.063	480		73De16						
1763.93(10)								29(6)				
1776.38(9)	7^+								40(3)	21(2)	33(2)	
1781.41(15)										90(4)	10(1)	
1869.87(9)								74(6)		26(4)		
1876.75(22)										46(5)		

(continued) **$^{107}_{48}$Cd**

E^*	$2J^\pi$	L	S_N	σ (d,p)	$T_{1/2}$ or	Ref.	Branching ratios in percentage				
							E_f^*:	0.0	205	321	365	458
[keV]			(d,p)	μb/sr	Γ_{cm}		$2J_f^\pi$:	5^+	7^+	5^+	3^+	1^+
1885.32(15)											68(3)	32(3)
1904(10)	1^+	0	0.044	340		73De16						
1908.84(20)								27(3)	13(3)	18(5)		
1920.18(21)										100		
1922.18(12)	7^+							56(3)	9.7(9)	18(2)		
1923.27(24)	15^+				0.90(25) ps							
1962.94(21)									100			
2006.31(12)	7^+							47(2)	4(1)	5.6(7)	3.5(8)	
2064.40(14)	7^+,9^+							47(2)	9.9(7)	13(1)		
2082.20(12)												100
2146.11(9)								33(3)			67(7)	
2158.47(12)	19^-				2.3(7) ps							
2183.4(3)								47(5)	53(3)			
2204.06(11)											100	
2209.97(8)										67(8)	33(5)	
2256.86(11)											100	
2276(10)	$\langle 3^+,5^+\rangle$	$\langle 2\rangle$	0.096	420		73De16						
2279.0(3)					0.55(+25-15) ps							
2284.78(13)	7^+,9^+							38(3)		15(1)		
2304.36(13)	7^+,9^+							34(4)	24(2)	33(2)		
2309.59(11)										100		
2342.86(11)											100	
2360(10)	1^+	0	0.078	600		73De16						
2366.10(22)										60(4)		
2405.7(4)								65(6)	35(11)			
2421.6(4)												
2425(10)	3^+,5^+	2	0.108	490		73De16						
2447.62(12)												
2462.54(11)												
2481(10)	$[7^-]$		0.027	190		73De16						
2504.45(25)										48(14)		
2545.9(5)	$\langle 17^-\rangle$				0.45(15) ps							
2547.9(3)								28(4)	37(6)	35(7)		
2559(10)	1^-,3^-	1	0.012	210		73De16						
2584.1(3)								45(3)		23(5)		
2629(10)	$[7^-]$		0.019	140		73De16						
2637.9(3)								26(6)	42(4)			
2645.8(3)												
2652.6(3)	7^+,9^+							28(2)		53(4)		
2678.88(15)	21^+				55(4) ns							
2700.9(3)								24(3)				
2719(10)	$\langle 1^+\rangle$	$\langle 1\rangle$	0.016	130		73De16						
2764.23(13)	7^+–11^+											
2806.79(18)	$\langle 19^+\rangle$				1.0(4) ps							
2811(10)	$\langle 1^+\rangle$	$\langle 1\rangle$	0.065	530		73De16						

(continued) **$^{107}_{48}$Cd**

E^*	$2J^\pi$	L	S_N	σ (d,p)	$T_{1/2}$ or	Ref.	Branching ratios in percentage				
							E_f^*: 0.0	205	321	365	458
[keV]			(d,p)	μb/sr	Γ_{cm}		$2J_f^\pi$: 5^+	7^+	5^+	3^+	1^+
2811.9(15)	7^+–11^+										
2818.7(5)							32(5)				
2875.49(20)	7^+,9^+						54(3)	19(3)	7(1)		
2922.2(4)	7^+–11^+							100			
2986.1(5)	7^+,9^+						19(3)		81(9)		
3001.8(3)	7^+–11^+							6(2)	61(5)		
3049.0(5)	21^-				0.6(2) ps						
3063.2(5)											
3114.48(24)	23^-				0.8(3) ps						
3115+X											
3117.9	19^+										
3217.1	$\langle 17 \rangle$										
3321(10)	$[7^+]$	4	0.175	170		73De16					
3383(10)				330		73De16					
3450(10)	$[7^-]$	$\langle 3 \rangle$	0.032	250		73De16					
3516(10)				≈300		73De16					
3579.9	$\langle 21 \rangle$										
3803+X											
4009.3	23^+										
4164.6(5)	27^-				0.40(15) ps						
4182.2	27^-										
4190.5(5)	25^+										
4364	27^-										
4440+X											
4502.5	27^+										
4527+X											
4608+X											
4876.6(11)	29^+										
5018.6	29^+										
5229+X											
5231.2	31^+										
5315	31^-										
5334	$\langle 31^- \rangle$										
5565	$\langle 29 \rangle$										
5614+X											
5815.6	33^+										
5900+X											
6035	33^+										
6183.3(9)	35^+										
6390+X											
6546+X											
6616	$\langle 35^- \rangle$										
6680+X											
6852+X											
6922.2	37^+										

(continued) **$^{107}_{48}$Cd**

E^*	$2J^\pi$	L	S_N	σ (d,p)	$T_{1/2}$ or	Ref.	Branching ratios in percentage				
							E_f^*:	0.0	205	321	365	458
[keV]			(d,p)	μb/sr	Γ_{cm}		$2J_f^\pi$:	5^+	7^+	5^+	3^+	1^+
7221	37^+											
7316.8	39^+											
7832	$\langle 39^- \rangle$											
8048	$\langle 37 \rangle$											
8187	41^+											
8670.8	43^+											
9622	45^+											
9856	$\langle 45 \rangle$											
10221	47^+											
11117	$\langle 47 \rangle$											
11228	$\langle 49^+ \rangle$											
11852	$\langle 51^+ \rangle$											
			73De16	73De16		Ref.						

Additional data on this isotope can be found in [92Je02, 90Vi07, 90Ar20].
S_N values are calculated from the relation $d\sigma/d\Omega_{exp}$=1.5(2J+1)$S_N\sigma_{DWBA}$ [73De16].
Rotational bands in ^{107}Cd are discussed in [92Je02].

Energy levels and branching ratios [00Bl05]. Part 2 **$^{107}_{48}$Cd**

E^*	$2J^\pi$					Branching ratios in percentage						
		E_f^*:	505	702	809	840.2	845.5	905.6	919.4	921.7	933.0	998.6
[keV]		$2J_f^\pi$:	7^+	$\langle 3 \rangle^+$	9^+	$\langle 3 \rangle^+$	11^-	1^+	$\langle 5 \rangle^+$	$\langle 9 \rangle^+$	11^+	$\langle 5 \rangle^+$
809.01(4)	9^+		12(1)									
845.54(6)	11^-				10(1)							
919.43(12)	$\langle 5 \rangle^+$		38(5)									
921.69(7)	$\langle 9 \rangle^+$		49(2)									
1268.32(6)	7^+		8.1(7)		2.0(2)				1.8(5)			
1278.95(7)	1^+					21.2(10)		8(2)				
1319.65(19)				100								
1360.31(10)	15^-						100					
1377.37(6)	7^+		16(1)							15(1)		
1420.53(8)	$\langle 11^+ \rangle$		59(4)		29(2)					12(2)		
1525.55(10)	$\langle 3–7 \rangle$		20(3)									
1573.14(8)	$\langle 3,5 \rangle$							3.8(6)				
1590.72(8)	$3^+,5^+$			22(2)								6(2)
1645.81(10)			50(9)							18(4)		
1675.3(4)						48(4)						
1712.8(5)			14(6)									
1731.1(3)	$\langle 13^+ \rangle$				100							
1763.93(10)			71(6)									
1776.38(9)	7^+				4.5(6)							2.1(4)
1876.75(22)					46(9)				7(1)			

(continued) **$^{107}_{48}$Cd**

E^*	$2J^\pi$	Branching ratios in percentage									
	E_f^*:	505	702	809	840.2	845.5	905.6	919.4	921.7	933.0	998.6
[keV]	$2J_f^\pi$:	7^+	$\langle 3\rangle^+$	9^+	$\langle 3\rangle^+$	11^-	1^+	$\langle 5\rangle^+$	$\langle 9\rangle^+$	11^+	$\langle 5\rangle^+$
1908.84(20)		42(7)									
1922.18(12)	7^+			3.2(7)	5.1(7)			8.2(9)			
1923.27(24)	15^+									100	
2006.31(12)	7^+	30(2)		7(1)				2.5(6)			
2064.40(14)	7^+,9^+							22(3)			
2279.0(3)						100					
2284.78(13)	7^+,9^+	47(2)									
2304.36(13)	7^+,9^+	2.6(1)									
2366.10(22)			40(4)								
2421.6(4)		100									
2447.62(12)			100								
2462.54(11)		100									
2584.1(3)		32(6)									
2637.9(3)			32(5)								
2652.6(3)	7^+,9^+							18(5)			
2700.9(3)										76(11)	
2764.23(13)	7^+–11^+	3.9(7)		21(2)					4.1(7)	24(1)	
2811.9(15)	7^+–11^+									100	
2818.7(5)								68(11)			
3001.8(3)	7^+–11^+	33(4)									

Energy levels and branching ratios [00Bl05]. Part 3 **$^{107}_{48}$Cd**

E^*	$2J^\pi$	Branching ratios in percentage									
	E_f^*:	1059.5	1158.6	1268.3	1360.3	1377.4	1420.5	1876.7	1908.8	1923.3	2158.5
[keV]	$2J_f^\pi$:	$\langle 5\rangle^-$	$\langle 5\rangle$	7^+	15^-	7^+	$\langle 11^+\rangle$			15^+	19^-
1573.14(8)	$\langle 3,5\rangle$	53(2)									
1590.72(8)	3^+,5^+		9(2)								
1719.43(8)		20(2)									
2064.40(14)	7^+,9^+		5(1)			2.6(4)					
2158.47(12)	19^-				100						
2304.36(13)	7^+,9^+			5(1)					1.4(5)		
2504.45(25)				52(14)							
2545.9(5)	$\langle 17^-\rangle$				100						
2678.88(15)	21^+										100
2764.23(13)	7^+–11^+						46(3)				
2806.79(18)	$\langle 19^+\rangle$									71(8)	
2875.49(20)	7^+,9^+			8(2)				12(4)			
3049.0(5)	21^-										100
3114.48(24)	23^-										100
3117.9	19^+									27(11)	73(12)

Energy levels and branching ratios [00Bl05]. Part 4 **$^{107}_{48}$Cd**

E^*	$2J^\pi$					Branching ratios in percentage						
		E_f^*:	2645.8	2678.9	3114.5	3115+X	3117.9	3217.1	3579.9	3803+X	4009.3	4164.6
[keV]		$2J_f^\pi$:		21^+	23^-		19^+	$\langle 17\rangle$	$\langle 21\rangle$		23^+	27^-
2806.79(18)	$\langle 19^+\rangle$			29(4)								
3063.2(5)				100								
3217.1	$\langle 17\rangle$		100									
3579.9	$\langle 21\rangle$						35(3)	65(3)				
3803+X						100						
4009.3	23^+						57(3)		43(2)			
4164.6(5)	27^-				100							
4182.2	27^-				100							
4190.5(5)	25^+				100							
4364	27^-				100							
4502.5	27^+										82(4)	
4527+X										100		
5315	31^-											100

Energy levels and branching ratios [00Bl05]. Part 5 **$^{107}_{48}$Cd**

E^*	$2J^\pi$					Branching ratios in percentage						
		E_f^*:	4182.2	4190.5	4364	4440+X	4502.5	4527+X	4608+X	4876.6	5018.6	5229+X
[keV]		$2J_f^\pi$:	27^-	25^+	27^-		27^+			29^+	29^+	
4502.5	27^+			18.0(16)								
4876.6(11)	29^+			100								
5018.6	29^+			100								
5229+X						44(4)		20(1)	35(3)			
5231.2	31^+						100					
5334	$\langle 31^-\rangle$		100									
5565	$\langle 29\rangle$				100							
5614+X												100
5815.6	33^+									100		
6035	33^+										100	

Energy levels and branching ratios [00Bl05]. Part 6 **$^{107}_{48}$Cd**

E^*	$2J^\pi$					Branching ratios in percentage						
		E_f^*:	5231.2	5334	5614+X	5815.6	5900+X	6035	6183.3	6390+X	6616	6680+X
[keV]		$2J_f^\pi$:	31^+	$\langle 31^-\rangle$		33^+		33^+	35^+		$\langle 35^-\rangle$	
5900+X					100							
6183.3(9)	35^+		100									
6390+X					10(5)		90(7)					
6546+X										100		

(continued) **$^{107}_{48}$Cd**

E^*	$2J^\pi$	Branching ratios in percentage										
		E_f^*:	5231.2	5334	5614+X	5815.6	5900+X	6035	6183.3	6390+X	6616	6680+X
[keV]		$2J_f^\pi$:	31^+	$\langle 31^- \rangle$		33^+		33^+	35^+		$\langle 35^- \rangle$	
6616	$\langle 35^- \rangle$			100								
6680+X										100		
6852+X												100
6922.2	37^+					100						
7221	37^+							100				
7316.8	39^+								100			
7832	$\langle 39^- \rangle$										100	
8048	$\langle 37 \rangle$										100	

Energy levels and branching ratios [00Bl05]. Part 7 **$^{107}_{48}$Cd**

E^*	$2J^\pi$	Branching ratios in percentage							
		E_f^*:	6922.2	7316.8	8187	8670.8	9622	9856	10221
[keV]		$2J_f^\pi$:	37^+	39^+	41^+	43^+	45^+	$\langle 45 \rangle$	47^+
8187	41^+		100						
8670.8	43^+			100					
9622	45^+				100				
9856	$\langle 45 \rangle$					100			
10221	47^+					100			
11117	$\langle 47 \rangle$							100	
11228	$\langle 49^+ \rangle$						100		
11852	$\langle 51^+ \rangle$								100

Energy levels and branching ratios [00Bl21]. **$^{108}_{48}$Cd**

E^*	J^π	L	C^2S'	$d\sigma/d\Omega$	S_α	$I_{s,0}$	$B(M1)$	Ref.	Branching ratios in percentage				
									E_f^*:	0.0	633	1508	1602	1721
[keV]			(τ,d)	μb/sr		[eVb]	[μ_N^2]		J_f^π:	0^+	2^+	4^+	2^+	0^+
0.0	0^+	1	0.83	1.629(151)	0.02			77Fl04						
632.986(16)	2^+	1	0.20	0.334(68)	0.01			72Au05		100				
1508.46(2)	4^+			0.181(50)	0.01			79Ja21			100			
1601.84(2)	2^+	$\langle 1 \rangle$	0.02	0.111(39)	0.01			72Au05		48(2)	52			
1720.65(3)	0^+	1	0.07	0.042(24)				72Au05			100			
1830(30)				0.014(14)				79Ja21						
1913.43(3)	0^+	$\langle 1 \rangle$	0.02	0.056(18)	0.001			77Fl04		x	51		49(4)	
2145.85(2)	3^+										82(2)	7(2)	11(1)	
2162.72(3)	2^+	$\langle 1 \rangle$	0.01					72Au05		6.3(6)	94			
2202.22(3)	3^-	2	0.09	0.334(68)	0.01			72Au05			96		3.7(6)	
2239.35(2)	4^+			incl							45(1)	49(1)	5(2)	

(continued)

$^{108}_{48}$Cd

E^*	J^π	L	C^2S'	$d\sigma/d\Omega$	S_α	$I_{s,0}$	$B(M1)$	Ref.	Branching ratios in percentage				
								E_f^*:	0.0	633	1508	1602	1721
[keV]			(τ,d)	μb/sr		[eVb]	[μ_N^2]	J_f^π:	0^+	2^+	4^+	2^+	0^+
0+Y	J_1												
2365.77(2)	2^+	1	0.03					72Au05	15(1)	85			
2374.56(5)	$\langle 0^+\rangle$			0.056(28)						100		<18	
2486.30(4)	2^+	$\langle 1\rangle$	0.02					72Au05	1.4(4)	90(3)		9(1)	
2541.38(4)	6^+			0.153(46)	0.04			79Ja21			100		
2555.23(4)	$3^{\langle -\rangle}$	[2]	0.05	incl				02Ga35		100			
2565.22(4)	5^+										68(2)		
2601.65(5)	5^-	4	0.74	0.362(71)	0.03			72Au05			100		
2619.97(4)	2^+							02Ga35		99		1.2(4)	
2645.62(4)	4^+									10(1)	87(3)	3(1)	
2678.0(1)*	1^-	0	0.02			26.9(9)	0.83(3)	72Au05	100				
2682.61(5)	1							02Ga35		100			
2707.06(4)	5^-	[4]	0.3					72Au05			100		
2738.89(6)	4^+	$\langle 1\rangle$	0.01	0.251(59)				72Au05			100		
2740(14)	0^+–2^+												
2755.0	4^+,5^+							02Ga35					
2762.76(6)	3^+									26(2)		74(4)	
2790.8								02Ga35					
2805.04(5)	3			0.125(42)						13(1)	87(3)		
2807.91(5)	6^+			incl							26(3)		
2810.10(4)	4^-	[2]	0.03	incl				72Au05			100		
2816.61(10)	2^+								33(2)	67			
2819.97(7)	$2^{\langle -\rangle}$							02Ga35		100			
2876.02(6)	4^+							02Ga35		56	44(3)		
2905.8	5^+							02Ga35					
2912.32(6)	$2,3^+$			0.139(44)						100			
2936.11(3)	0^+–2^+	1	0.02	incl				72Au05		45(5)			
2975.39(7)	6^-												
2976.5	4^+												
2993.10(7)	2^+							02Ga35	15(2)	85(3)			
2994.1(2)	6^+										62		
2998.1													
3005.6(1)*	1					31.1(12)	0.077(8)		100				
3028.3													
3031.43(8)	2^+							02Ga35		80(3)	20(2)		
3046.7(2)*	1^+					8.4(5)	0.037(4)		59(5)	35(2)		6(2)	
3057.57(5)	7^-												
3059.4													
3059.8	$\langle 4,5\rangle^+$												
3077.5	$\langle 4^+\rangle$	1	0.01					02Ga35					
3081.78(9)	3^+									100			
3092.2	$\langle 3\rangle$							02Ga35					
3110.49(10)	$\langle 8^+\rangle$												
3138.9	0^-,1^-	$\langle 0\rangle$	0.01					72Au05					
3171.04(12)	$2,3^+$									100			

(continued) **$^{108}_{48}$Cd**

E^*	J^π	L	C^2S'	$d\sigma/d\Omega$	S_α	$I_{s,0}$	$B(M1)$	Ref.	Branching ratios in percentage				
									E_f^*:	0.0	633	1508	1602	1721
[keV]			(τ,d)	μb/sr		[eVb]	[μ_N^2]		J_f^π:	0^+	2^+	4^+	2^+	0^+
3174.1								02Ga35						
3181.69(10)											100			
3189.68(11)	5–7							02Ga35						
3194.81(12)	2^+									31(4)	69(5)			
3221.8	$\langle 3,4\rangle^+$							02Ga35						
3221.9								02Ga35						
3223.83(6)	8^-													
3228.0	$\langle 2^+\rangle$							02Ga35						
3248.2								02Ga35						
3248.83(18)	7^-													
3259.6								02Ga35						
3264.92(12)	$1,2^+,3$										100			
3267.68(11)													71(4)	29(4)
3284(16)	3^-–5^-	4	0.52					72Au05						
3292.5(2)*	1		0.04			13.8(6)	0.046(2)	72Au05		100				
3294.32(17)	3^+		0.19					72Au05			100			
3298.6								02Ga35						
3316.34(23)	$\langle 3^+\rangle$										100			
3321.9								02Ga35						
3326.02(20)	3										100			
3343.9	1							02Ga35						
3353.3								02Ga35						
3367.54(13)	$\langle 5,6^+\rangle$											35(4)		
3385.0	$2^+,3$							02Ga35						
3389.0	$5^{\langle+\rangle}$							02Ga35						
3389.4	$\langle 3\rangle$							02Ga35						
3400.4								02Ga35						
3407.2								02Ga35						
3407.8								02Ga35						
3413.1	$\langle 6^+\rangle$							02Ga35						
3428.0								02Ga35						
3433.0								02Ga35						
3435.0								02Ga35						
3436.9								02Ga35						
3450.0	$2^+,3^+$							02Ga35						
3454.1(2)*	1^+					6.5(5)	0.024(4)	02Ga35		97(6)				
3459.8	5,6							02Ga35						
3460.5								02Ga35						
3470.1	$2^{\langle-\rangle}$							02Ga35						
3474.69(18)	8^-													
3482.21(11)	2										61(4)		39(2)	
3485.21(6)	9^-													
3489.4								02Ga35						
3512.2								02Ga35						
3525.3								02Ga35						

(continued) **$^{108}_{48}$Cd**

E^* [keV]	J^π	L	C^2S' (τ,d)	$d\sigma/d\Omega$ μb/sr	S_α	$I_{s,0}$ [eVb]	$B(M1)$ [μ_N^2]	Ref.	E_f^*: J_f^π:	Branching ratios in percentage 0.0 0^+	633 2^+	1508 4^+	1602 2^+	1721 0^+
3527.1								02Ga35						
3535.83(20)	$\langle 3,4\rangle^+$										100			
3540.26(13)												85(5)	15(3)	
3554.87(15)	$\langle 3^+\rangle$										100			
3559.61(18)	$0^+,1^+$										100			
3561.2	$\langle 4\text{–}6\rangle^+$							02Ga35						
3566.4								02Ga35						
3571.8	2^+							02Ga35						
3576.2								02Ga35						
3605.3								02Ga35						
3611.5								02Ga35						
3629.1								02Ga35						
3642.2								02Ga35						
3643.2								02Ga35						
3656.3								02Ga35						
3656.5	$\langle 8^+\rangle$							02Ga35						
3667.0*	1					30.3(13)	0.060(20)	02Ga35						
3674.6								02Ga35						
3683.27(8)	8^+													
3683.3								02Ga35						
3718.4								02Ga35						
3724.5	2^+							02Ga35						
3726.6								02Ga35						
3731.9								02Ga35						
3737.51(7)	9^-													
3740.4														
3770.3	$\langle 7^+\rangle$							02Ga35						
3779.7								02Ga35						
3787.0								02Ga35						
3788.0	2^+							02Ga35						
≈3800	$\langle 0^+\rangle$							77Fl04						
3814.6(3)*	1^+					10.7(9)	0.033(3)	02Ga35		66(5)	26(4)		8(1)	
3816.36(10)	$5^+,6^+$							02Ga35				26(3)		
3826.0(5)*	1^+					2.8(5)	0.012(3)	02Ga35		63(6)			37(4)	
3860.97(11)	8^+													
3875.7								02Ga35						
3881.6								02Ga35						
3872.26(10)	10^-													
3890.7								02Ga35						
3904.0								02Ga35						
3946.0	2^+							02Ga35						
3968.2								02Ga35						
3968.6								02Ga35						
3969.0								02Ga35						
3984.6								02Ga35						

(continued) **$^{108}_{48}$Cd**

E^* [keV]	J^π	L	C^2S' (τ,d)	$d\sigma/d\Omega$ μb/sr	S_α	$I_{s,0}$ [eVb]	$B(M1)$ [μ_N^2]	Ref.	Branching ratios in percentage E_f^*: 0.0 633 1508 1602 1721 J_f^π: 0^+ 2^+ 4^+ 2^+ 0^+
4008.8								02Ga35	
4011.4								02Ga35	
4011.9	2^+							02Ga35	
4017.0								02Ga35	
4028.7	2^+							02Ga35	
4030.9								02Ga35	
4043.20(9)	$4,5^+$							02Ga35	
4082.8								02Ga35	
4083.6								02Ga35	
4096.1								02Ga35	
4109.5								02Ga35	
4152.68(8)	10^+								
4160.7								02Ga35	
4179.36(18)									
4188.21(8)	11^-								
4196.5(7)	10^-								
4203.5	$\langle 1^+ \rangle$							02Ga35	
4209.8	2^+							02Ga35	
4224.1								02Ga35	
4238.8	1^+							02Ga35	
4240.03(22)									
4251.45(22)									
4278.6								02Ga35	
4282.3								02Ga35	
4293.9								02Ga35	
4315.7								02Ga35	
4323.4	$\langle 1^+,3^+ \rangle$							02Ga35	
4334.3								02Ga35	
4345.4								02Ga35	
4351.9								02Ga35	
4394.7								02Ga35	
4400.6								02Ga35	
4414.0								02Ga35	
4468.4								02Ga35	
4471.0								02Ga35	
4481.3								02Ga35	
4512.5(2)	6^+								
4525.44(22)									
4529.1								02Ga35	
4568.66(14)	11^-								
4584.5	1^+							02Ga35	
4617.0								02Ga35	
4618.3(10)	$\langle 10 \rangle$								
4640.2								02Ga35	
4640.4								02Ga35	

(continued)

$^{108}_{48}$Cd

E^*	J^π	L	C^2S'	$d\sigma/d\Omega$	S_α	$I_{s,0}$	$B(M1)$	Ref.	Branching ratios in percentage					
									E_f^*:	0.0	633	1508	1602	1721
[keV]			(τ,d)	μb/sr		[eVb]	[μ_N^2]		J_f^π:	0^+	2^+	4^+	2^+	0^+
4649.4								02Ga35						
4656.4								02Ga35						
4663.3								02Ga35						
4663.9								02Ga35						
4698.3								02Ga35						
4708.79(10)	12^+													
4755.5								02Ga35						
4755.74(21)	10^+													
4774.8								02Ga35						
4811.5	1^+–3^+													
4811.7								02Ga35						
4826.15(18)	12^-													
4849.1								02Ga35						
4858.7								02Ga35						
4864.6								02Ga35						
4870.3								02Ga35						
4914.4								02Ga35						
5125.12(23)	12^-													
5179.98(15)	13^-													
3130+Y	J_1+4													
5502.62(12)	14^+													
5574.29(20)	13^-													
5589.0(11)	11^-													
5591.82(16)	12^+													
5639.56(15)	12^-													
5760.67(18)	13^-													
5837.54(24)	$\langle 12\rangle$													
5982.5(3)	14^-													
6076.71(23)	14^-													
6124.36(17)	14^+													
6251.65(25)	14^-													
6404.2(4)	15^-													
6458.92(24)	16^+													
6488.03(21)	$\langle 14\rangle$													
6598.6(3)	15^-													
6891.08(22)	16^+													
4796+Y	J_1+6													
7212.8(5)	$\langle 16^-\rangle$													
7214.0(4)	$\langle 15^-\rangle$													
7275.4(4)	16^-													
7383.4(3)	$\langle 16\rangle$													
7386.1(3)	16^-													
7529.0(4)	16^-													
7564.2(10)	18^+													
7725.4(5)	17^-													

(continued) **$^{108}_{48}$Cd**

E^*	J^π	L	C^2S'	$d\sigma/d\Omega$	S_α	$I_{s,0}$	$B(M1)$Ref.	Branching ratios in percentage				
								E_f^*: 0.0	633	1508	1602	1721
[keV]			(τ,d)	μb/sr		[eVb]	[μ_N^2]	J_f^π: 0^+	2^+	4^+	2^+	0^+
7740.8(4)	17^-											
7796.7(5)	17^-											
7862.2(11)	17^-											
7913.3(4)	$\langle 18^+\rangle$											
8102.3(4)	18^-											
8185.5(11)	$\langle 17\rangle$											
8284.0(4)	18^-											
8317.3(5)	18^-											
8355.0(5)	18^-											
8534.9(5)	$\langle 18\rangle$											
8544.2(11)	$\langle 18\rangle$											
8584.8(5)	19^-											
8640.5(5)	19^-											
8671.1(5)	19^-											
8824.5(5)	$\langle 20^+\rangle$											
6540+Y	J_1+8											
8965.0(11)	$\langle 19\rangle$											
8999.4(6)	$\langle 20^-\rangle$											
9175.0(5)	$\langle 20^-\rangle$											
9326.1(5)	$\langle 20^-\rangle$											
9420.2(6)	$\langle 21^-\rangle$											
9757.4(6)	$\langle 21^-\rangle$											
9879.5(6)	$\langle 21^-\rangle$											
9894.4(6)	$\langle 20\rangle$											
9897.3(7)	$\langle 22^-\rangle$											
10293.6(6)	$\langle 22^+\rangle$											
10413(1)	$\langle 23^-\rangle$											
10533(1)	$\langle 22^-\rangle$											
10678(1)	$\langle 22^-\rangle$											
8361+Y	J_1+10											
10977(1)	$\langle 24^-\rangle$											
11019(1)	$\langle 23^-\rangle$											
11907(1)	$\langle 24^-\rangle$											
11915(1)	$\langle 24^+\rangle$											
12489(1)	$\langle 25^-\rangle$											
10262+Y	J_1+12											
14270												
14533												
14565												
12244+Y	J_1+14											
14645												
14717												
14737												
14797												
14877												

(continued) **$^{108}_{48}$Cd**

E^* [keV]	J^π	L (τ,d)	C^2S' μb/sr	$d\sigma/d\Omega$	S_α	$I_{s,0}$ [eVb]	$B(M1)$ [μ_N^2]	Ref.	Branching ratios in percentage E_f^*: 0.0 633 1508 1602 1721 J_f^π: 0^+ 2^+ 4^+ 2^+ 0^+
14897									
14962									
15103									
0+X	$J\approx\langle 40\rangle$								
14306+Y	J_1+16								
1686.0+X	J+2								
3421.6+X	J+4								
16450+Y	J_1+18								
5218.7+X	J+6								
18676+Y	J_1+20								
7083.4+X	J+8								
20979+Y	J_1+22								
9021.6+X	J+10								
11037.5+X	J+12								
13133.8+X	J+14								
15310.4+X	J+16								
17566.4+X	J+18								
19902.7+X	J+20								
	77Fl04		72Au05	79Ja21	79Ja21			Ref.	

Additional data on this isotope can be found in [05Da16, 03Ga06, 02Go03, 02Ga25, 02Ga15, 01Le37, 00Ke01, 92Ku01, 90Ku01, 90Ar20, 86Ba39, 82Cr01].
Abundance: 0.89(3) %.
* Decay properties of these eight $J = 1$ levels are considered in [03Ga06]; cross sections $I_{s,0}$ of (γ,γ') reaction are recalculated into parameters $B(M1)$ (in units μ_N^2) or $B(E1)$ (in units $10^{-3}e^2fm^2$).
S_α was mesured in (d,^{6}Li) reaction [79Ja21]; see $d\sigma/d\Omega$=σ (d,^{6}Li) in the neighbour column.
Data for this isotope are considered in vol. LB I/18B.

Energy levels and branching ratios [00Bl21]. Part 2 **$^{108}_{48}$Cd**

E^* [keV]	J^π	L (τ,n)	$d\sigma/d\Omega$ μb/sr	$T_{1/2}$ or Γ_{cm}	Ref.	Branching ratios in percentage E_f^*: 2163 2239 0+Y 2541.4 2565.2 2601.6 2645.6 2683 J_f^π: 2^+ 4^+ J_1 6^+ 5^+ 5^- 4^+ $1,2^+$
0.0	0^+	0	433	Stable	77Fl04	
632.986(16)	2^+			6.86(7) ps	72Au05	
1508.46(2)	4^+			0.88(11) ps	79Ja21	
1601.84(2)	2^+			0.46(7) ps	72Au05	
1720.65(3)	0^+				72Au05	
1830(30)					79Ja21	
1913.43(3)	0^+	0	72		77Fl04	
2145.85(2)	3^+					
2162.72(3)	2^+				72Au05	
2202.22(3)	3^-				72Au05	

(continued) **$^{108}_{48}$Cd**

E^*	J^π	L	$d\sigma/d\Omega$	$T_{1/2}$ or	Ref.	Branching ratios in percentage							
						E_f^*:	2163	2239	0+Y	2541.4	2565.2	2601.6	2645.6	2683
[keV]		(τ,n)	μb/sr	Γ_{cm}		J_f^π:	2^+	4^+	J_1	6^+	5^+	5^-	4^+	$1,2^+$
2239.35(2)	4^+													
0+Y	J_1													
2365.77(2)	2^+				72Au05									
2374.56(5)	$\langle 0^+ \rangle$	0	31											
2486.30(4)	2^+				72Au05									
2541.38(4)	6^+				79Ja21									
2555.23(4)	$3^{\langle - \rangle}$				02Ga35									
2565.22(4)	5^+			0.2(1) ps				32(2)						
2601.65(5)	5^-				72Au05									
2619.97(4)	2^+				02Ga35									
2645.62(4)	4^+													
2678.0(1)*	1^-				72Au05									
2682.61(5)	1				02Ga35									
2707.06(4)	5^-				72Au05									
2738.89(6)	4^+				72Au05									
2740(14)	0^+–2^+													
2755.0	4^+,5^+				02Ga35									
2762.76(6)	3^+													
2790.8					02Ga35									
2805.04(5)	3													
2807.91(5)	6^+									5.2(4)	68(3)	0.84(16)		
2810.10(4)	4^-				72Au05									
2816.61(10)	2^+													
2819.97(7)	$2^{\langle - \rangle}$				02Ga35									
2876.02(6)	4^+				02Ga35									
2905.8	5^+				02Ga35									
2912.32(6)	$2,3^+$													
2936.11(3)	0^+–2^+				72Au05		55							
2975.39(7)	6^-			0.15(10) ns						6.8(10)		70(3)		
2976.5	4^+													
2993.10(7)	2^+				02Ga35									
2994.1(2)	6^+							38(9)						
2998.1														
3005.6(1)*	1													
3028.3														
3031.43(8)	2^+				02Ga35									
3046.7(2)*	1^+													
3057.57(5)	7^-			31(24) ps						27(4)		45.0(11)		
3059.4														
3059.8	$\langle 4,5 \rangle^+$													
3077.5	$\langle 4^+ \rangle$				02Ga35									
3081.78(9)	3^+													
3092.2	$\langle 3 \rangle$				02Ga35									
3110.49(10)	$\langle 8^+ \rangle$			0.3(1) ns						93(6)				
3138.9	0^-,1^-				72Au05									

(continued) **$^{108}_{48}$Cd**

E^* [keV]	J^π	L (τ,n)	$d\sigma/d\Omega$ μb/sr	$T_{1/2}$ or Γ_{cm}	Ref.	Branching ratios in percentage							
						E_f^*:	2163	2239	0+Y	2541.4	2565.2	2601.6	2645.6	2683
						J_f^π:	2^+	4^+	J_1	6^+	5^+	5^-	4^+	$1,2^+$
3171.04(12)	$2,3^+$													
3174.1					02Ga35									
3181.69(10)														
3189.68(11)	5–7				02Ga35					100				
3194.81(12)	2^+													
3221.8	$\langle 3,4\rangle^+$				02Ga35									
3221.9					02Ga35									
3223.83(6)	8^-			0.49(14) ns										
3228.0	$\langle 2^+\rangle$				02Ga35									
3248.2					02Ga35									
3248.83(18)	7^-									81(4)				
3259.6					02Ga35									
3264.92(12)	$1,2^+,3$													
3267.68(11)														
3284(16)	3^-–5^-				72Au05									
3292.5(2)*	1				72Au05									
3294.32(17)	3^+				72Au05									
3298.6					02Ga35									
3316.34(23)	$\langle 3^+\rangle$													
3321.9					02Ga35									
3326.02(20)	3													
3343.9	1				02Ga35									
3353.3					02Ga35									
3367.54(13)	$\langle 5,6^+\rangle$									65(6)				
3385.0	$2^+,3$				02Ga35									
3389.0	$5^{\langle +\rangle}$				02Ga35									
3389.4	$\langle 3\rangle$				02Ga35									
3400.4					02Ga35									
3407.2					02Ga35									
3407.8					02Ga35									
3413.1	$\langle 6^+\rangle$				02Ga35									
3428.0					02Ga35									
3433.0					02Ga35									
3435.0					02Ga35									
3436.9					02Ga35									
3450.0	$2^+,3^+$				02Ga35									
3454.1(2)*	1^+				02Ga35									3.4(6)
3459.8	5,6				02Ga35									
3460.5					02Ga35									
3470.1	$2^{\langle -\rangle}$				02Ga35									
3474.69(18)	8^-													
3482.21(11)	2													
3485.21(6)	9^-			47.1(21) ps										
3489.4					02Ga35									
3512.2					02Ga35									

(continued) **$^{108}_{48}$Cd**

E^* [keV]	J^π	L (τ,n)	$d\sigma/d\Omega$ μb/sr	$T_{1/2}$ or Γ_{cm}	Ref.	Branching ratios in percentage							
						E_f^*:	2163	2239	0+Y	2541.4	2565.2	2601.6	2645.6	2683
						J_f^π:	2^+	4^+	J_1	6^+	5^+	5^-	4^+	$1,2^+$
3525.3					02Ga35									
3527.1					02Ga35									
3535.83(20)	$\langle 3,4\rangle^+$													
3540.26(13)														
3554.87(15)	$\langle 3^+\rangle$													
3559.61(18)	$0^+,1^+$													
3561.2	$\langle 4–6\rangle^+$				02Ga35									
3566.4					02Ga35									
3571.8	2^+				02Ga35									
3576.2					02Ga35									
3605.3					02Ga35									
3611.5					02Ga35									
3629.1					02Ga35									
3642.2					02Ga35									
3643.2					02Ga35									
3656.3					02Ga35									
3656.5	$\langle 8^+\rangle$				02Ga35									
3667.0*	1				02Ga35									
3674.6					02Ga35									
3683.27(8)	8^+									92(5)				
3683.3					02Ga35									
3718.4					02Ga35									
3724.5	2^+				02Ga35									
3726.6					02Ga35									
3731.9					02Ga35									
3737.51(7)	9^-			6.2(7) ps										
3740.4														
3770.3	$\langle 7^+\rangle$				02Ga35									
3779.7					02Ga35									
3787.0					02Ga35									
3788.0	2^+				02Ga35									
≈3800	$\langle 0^+\rangle$	0	50		77Fl04									
3814.6(3)*	1^+				02Ga35									
3816.36(10)	$5^+,6^+$				02Ga35					24(2)	15(2)			
3826.0(5)*	1^+				02Ga35									
3860.97(11)	8^+									<34				
3875.7					02Ga35									
3881.6					02Ga35				100					
3872.26(10)	10^-			5.75(21) ps										
3890.7					02Ga35									
3904.0					02Ga35									
3946.0	2^+				02Ga35									
3968.2					02Ga35									
3968.6					02Ga35									
3969.0					02Ga35									

(continued) **$^{108}_{48}$Cd**

E^*	J^π	L	$d\sigma/d\Omega$	$T_{1/2}$ or	Ref.	Branching ratios in percentage								
						E_f^*:	2163	2239	0+Y	2541.4	2565.2	2601.6	2645.6	2683
[keV]		(τ,n)	μb/sr	Γ_{cm}		J_f^π:	2^+	4^+	J_1	6^+	5^+	5^-	4^+	$1,2^+$
3984.6					02Ga35									
4008.8					02Ga35									
4011.4					02Ga35									
4011.9	2^+				02Ga35									
4017.0					02Ga35									
4028.7	2^+				02Ga35									
4030.9					02Ga35									
4043.20(9)	$4,5^+$				02Ga35					41(4)			59(6)	
4082.8					02Ga35									
4083.6					02Ga35									
4096.1					02Ga35									
4109.5					02Ga35									
4152.68(8)	10^+			35.4(21) ps										
4160.7					02Ga35									
4179.36(18)								13.4(13)		57(6)	29(3)			
4188.21(8)	11^-			3.60(14) ps										
4196.5(7)	10^-			5.5(14) ps										
4203.5	$\langle 1^+ \rangle$				02Ga35									
4209.8	2^+				02Ga35									
4224.1					02Ga35									
4238.8	1^+				02Ga35									
4240.03(22)											32(3)			
4251.45(22)														
4278.6					02Ga35									
4282.3					02Ga35									
4293.9					02Ga35									
4315.7					02Ga35									
4323.4	$\langle 1^+,3^+ \rangle$				02Ga35									
4334.3					02Ga35									
4345.4					02Ga35									
4351.9					02Ga35									
4394.7					02Ga35									
4400.6					02Ga35									
4414.0					02Ga35									
4468.4					02Ga35									
4471.0					02Ga35									
4481.3					02Ga35									
4512.5(2)	6^+													
4525.44(22)										57(6)		43(5)		
4529.1					02Ga35									
4568.66(14)	11^-			1.66(21) ps										
4584.5	1^+				02Ga35									
4617.0					02Ga35									
4618.3(10)	$\langle 10 \rangle$													
4640.2					02Ga35									

(continued) **$^{108}_{48}$Cd**

E^*	J^π	L	$d\sigma/d\Omega$	$T_{1/2}$ or	Ref.	Branching ratios in percentage							
						E^*_f: 2163	2239	0+Y	2541.4	2565.2	2601.6	2645.6	2683
[keV]		(τ,n)	μb/sr	Γ_{cm}		J^π_f: 2^+	4^+	J_1	6^+	5^+	5^-	4^+	$1,2^+$
4640.4					02Ga35								
4649.4					02Ga35								
4656.4					02Ga35								
4663.3					02Ga35								
4663.9					02Ga35								
4698.3					02Ga35								
4708.79(10)	12^+			10.1(3) ps									
4755.5					02Ga35								
4755.74(21)	10^+												
4774.8					02Ga35								
4811.5	1^+–3^+												
4811.7					02Ga35								
4826.15(18)	12^-			1.11(7) ps									
4849.1					02Ga35								
4858.7					02Ga35								
4864.6					02Ga35								
4870.3					02Ga35								
4914.4					02Ga35								
5125.12(23)	12^-			2.1(3) ps									
5179.98(15)	13^-			0.69(7) ps									
3130+Y	J_1+4												
5502.62(12)	14^+			1.52(7) ps									
5574.29(20)	13^-												
5589.0(11)	11^-												
5591.82(16)	12^+												
5639.56(15)	12^-												
5760.67(18)	13^-												
5837.54(24)	$\langle 12\rangle$												
5982.5(3)	14^-												
6076.71(23)	14^-			<2 ps									
6124.36(17)	14^+												
6251.65(25)	14^-												
6404.2(4)	15^-												
6458.92(24)	16^+			<1.4 ps									
6488.03(21)	$\langle 14\rangle$												
6598.6(3)	15^-			0.48(+3-4) ps									
6891.08(22)	16^+												
4796+Y	J_1+6												
7212.8(5)	$\langle 16^-\rangle$												
7214.0(4)	$\langle 15^-\rangle$												
7275.4(4)	16^-			0.19(+4-6) ps									
7383.4(3)	$\langle 16\rangle$												
7386.1(3)	16^-												
7529.0(4)	16^-												
7564.2(10)	18^+												

(continued) **$^{108}_{48}$Cd**

E^*	J^π	L	$d\sigma/d\Omega$	$T_{1/2}$ or	Ref.	Branching ratios in percentage							
						E^*_f: 2163	2239	0+Y	2541.4	2565.2	2601.6	2645.6	2683
[keV]		(τ,n)	μb/sr	Γ_{cm}		J^π_f: 2^+	4^+	J_1	6^+	5^+	5^-	4^+	$1,2^+$
7725.4(5)	17^-												
7740.8(4)	17^-			0.28(4) ps									
7796.7(5)	17^-												
7862.2(11)	17^-												
7913.3(4)	$\langle 18^+ \rangle$												
8102.3(4)	18^-			0.52(+3-4) ps									
8185.5(11)	$\langle 17 \rangle$												
8284.0(4)	18^-												
8317.3(5)	18^-												
8355.0(5)	18^-												
8534.9(5)	$\langle 18 \rangle$												
8544.2(11)	$\langle 18 \rangle$												
8584.8(5)	19^-			0.201(14) ps									
8640.5(5)	19^-												
8671.1(5)	19^-												
8824.5(5)	$\langle 20^+ \rangle$												
6540+Y	J_1+8												
8965.0(11)	$\langle 19 \rangle$												
8999.4(6)	$\langle 20^- \rangle$												
9175.0(5)	$\langle 20^- \rangle$			0.14(+2-3) ps									
9326.1(5)	$\langle 20^- \rangle$												
9420.2(6)	$\langle 21^- \rangle$												
9757.4(6)	$\langle 21^- \rangle$												
9879.5(6)	$\langle 21^- \rangle$			0.208(7) ps									
9894.4(6)	$\langle 20 \rangle$												
9897.3(7)	$\langle 22^- \rangle$												
10293.6(6)	$\langle 22^+ \rangle$												
10413(1)	$\langle 23^- \rangle$												
10533(1)	$\langle 22^- \rangle$												
10678(1)	$\langle 22^- \rangle$												
8361+Y	J_1+10												
10977(1)	$\langle 24^- \rangle$												
11019(1)	$\langle 23^- \rangle$												
11907(1)	$\langle 24^- \rangle$												
11915(1)	$\langle 24^+ \rangle$												
12489(1)	$\langle 25^- \rangle$												
10262+Y	J_1+12												
14270													
14533													
14565													
12244+Y	J_1+14												
14645													
14717													
14737													
14797													

(continued) **$^{108}_{48}$Cd**

E^*	J^π	L	$d\sigma/d\Omega$	$T_{1/2}$ or	Ref.	Branching ratios in percentage							
						E_f^*: 2163	2239	0+Y	2541.4	2565.2	2601.6	2645.6	2683
[keV]		(τ,n)	μb/sr	Γ_{cm}		J_f^π: 2^+	4^+	J_1	6^+	5^+	5^-	4^+	$1,2^+$
14877													
14897													
14962													
15103													
0+X	$J\approx\langle 40\rangle$												
14306+Y	J_1+16												
1686.0+X	J+2												
3421.6+X	J+4												
16450+Y	J_1+18												
5218.7+X	J+6												
18676+Y	J_1+20												
7083.4+X	J+8												
20979+Y	J_1+22												
9021.6+X	J+10												
11037.5+X	J+12												
13133.8+X	J+14												
15310.4+X	J+16												
17566.4+X	J+18												
19902.7+X	J+20												
	77Fl04		77Fl04		Ref.								

Energy levels and branching ratios [00Bl21]. Part 3 **$^{108}_{48}$Cd**

E^*	J^π	Branching ratios in percentage								
	E_f^*: 2707.1	2807.9	2975.4	2994.1	3057.6	3110.5	3223.8	3248.8	3367.5	
[keV]	J_f^π: 5^-	6^+	6^-	6^+	7^-	$\langle 8^+\rangle$	8^-	7^-	$\langle 6^+\rangle$	
2975.39(7)	6^-	24(1)								
3057.57(5)	7^-	28.0(8)								
3110.49(10)	$\langle 8^+\rangle$		7.1(11)		x					
3223.83(6)	8^-			26.3(14)		73.7(7)				
3248.83(18)	7^-					19(6)				
3474.69(18)	8^-			15(7)		62(3)			23(2)	
3485.21(6)	9^-					44(2)		56		
3683.27(8)	8^+						8.3(6)			
3737.51(7)	9^-					44(7)		56		
3816.36(10)	$5^+,6^+$		20(2)							15(2)
3860.97(11)	8^+				45(4)		49(11)			
3872.26(10)	10^-							100		
4152.68(8)	10^+						0.4(2)			
4240.03(22)			68(7)							
4251.45(22)			45(4)		55(5)					
4618.3(10)	$\langle 10\rangle$						100			

Energy levels and branching ratios [00Bl21]. Part 4 **$^{108}_{48}$Cd**

E^*	J^π				Branching ratios in percentage						
		E_f^*:	3474.7	3485.2	3683.3	3737.5	3861.0	1534+Y	3872.3	4152.7	4188.2
[keV]		J_f^π:	8^-	9^-	8^+	9^-	8^+	J_1+2	10^-	10^+	11^-
3860.97(11)	8^+				6.7(11)						
4152.68(8)	10^+			24(2)	31(1)	31(2)	11(1)		2.9(2)		
4188.21(8)	11^-			100							
4196.5(7)	10^-		100								
4568.66(14)	11^-					80(6)			20(2)		
4708.79(10)	12^+									100	
4755.74(21)	10^+				100						
4826.15(18)	12^-								100		
5179.98(15)	13^-										100
3130+Y	J_1+4							100			
5591.82(16)	12^+									20(3)	
5639.56(15)	12^-								12(4)		29(4)

Energy levels and branching ratios [00Bl21]. Part 5 **$^{108}_{48}$Cd**

E^*	J^π					Branching ratios in percentage					
		E_f^*:	4196.5	4568.7	4618.3	4708.8	4755.7	4826.1	5125.1	5180.0	3130+Y
[keV]		J_f^π:	10^-	11^-	⟨10⟩	12^+	10^+	12^-	12^-	13^-	J_1+4
5125.12(23)	12^-		100								
5502.62(12)	14^+					100					
5574.29(20)	13^-			85(6)				15(3)			
5589.0(11)	11^-				100						
5591.82(16)	12^+					34(3)	46(6)				
5639.56(15)	12^-			58(6)					x	x	
5760.67(18)	13^-			12(4)				38(4)			
5837.54(24)	⟨12⟩					100					
5982.5(3)	14^-							100			
6076.71(23)	14^-							11.9(12)			
6124.36(17)	14^+					23(2)					
6251.65(25)	14^-							37(4)	63(8)		
6404.2(4)	15^-									100	
4796+Y	J_1+6										100

Energy levels and branching ratios [00Bl21]. Part 6 $^{108}_{48}Cd$

E^*	J^π		Branching ratios in percentage								
		E_f^*:	5502.6	5574.3	5591.8	5639.6	5760.7	5837.5	5982.5	6076.7	6124.4
[keV]		J_f^π:	14^+	13^-	12^+	12^-	13^-	$\langle 12\rangle$	14^-	14^-	14^+
5760.67(18)	13^-			12(2)		38(2)					
6076.71(23)	14^-						88(6)				
6124.36(17)	14^+		21(2)		56(3)						
6458.92(24)	16^+		100								
6488.03(21)	$\langle 14\rangle$		27(3)					73(5)			
6598.6(3)	15^-									100	
6891.08(22)	16^+		13.6(19)								86(6)
7212.8(5)	$\langle 16^-\rangle$								100		
7386.1(3)	16^-								<27	38(7)	

Energy levels and branching ratios [00Bl21]. Part 7 $^{108}_{48}Cd$

E^*	J^π		Branching ratios in percentage								
		E_f^*:	6251.6	6404.2	6458.9	6488.0	6598.6	6891.1	4796+Y	7214.0	7275.4
[keV]		J_f^π:	14^-	15^-	16^+	$\langle 14\rangle$	15^-	16^+	J_1+6	$\langle 15^-\rangle$	16^-
7214.0(4)	$\langle 15^-\rangle$						100				
7275.4(4)	16^-						100				
7383.4(3)	$\langle 16\rangle$					100					
7386.1(3)	16^-		62(7)								
7529.0(4)	16^-						48(4)			52(5)	
7564.2(10)	18^+				100						
7725.4(5)	17^-			100							
7740.8(4)	17^-									27(3)	45(3)
7796.7(5)	17^-				100						
7862.2(11)	17^-				38(4)						
7913.3(4)	$\langle 18^+\rangle$							100			
6540+Y	J_1+8								100		

Energy levels and branching ratios [00Bl21]. Part 8 $^{108}_{48}Cd$

E^*	J^π		Branching ratios in percentage								
		E_f^*:	7383.4	7386.1	7529.0	7564.2	7725.4	7740.8	7796.7	7862.2	8102.3
[keV]		J_f^π:	$\langle 16\rangle$	16^-	16^-	18^+	17^-	17^-	17^-	17^-	18^-
7740.8(4)	17^-				27(3)						
7862.2(11)	17^-				62(6)						
8102.3(4)	18^-							100			
8185.5(11)	$\langle 17\rangle$									100	
8284.0(4)	18^-			100							
8317.3(5)	18^-								29(1)	71(4)	

(continued) **$^{108}_{48}$Cd**

E^*	J^π	Branching ratios in percentage								
	E_f^*:	7383.4	7386.1	7529.0	7564.2	7725.4	7740.8	7796.7	7862.2	8102.3
[keV]	J_f^π:	⟨16⟩	16^-	16^-	18^+	17^-	17^-	17^-	17^-	18^-
8355.0(5)	18^-								100	
8534.9(5)	⟨18⟩	100								
8584.8(5)	19^-						9(1)			91(9)
8671.1(5)	19^-					100				
8824.5(5)	$\langle 20^+ \rangle$				100					
9175.0(5)	$\langle 20^- \rangle$									22(2)

Energy levels and branching ratios [00Bl21]. Part 9 **$^{108}_{48}$Cd**

E^*	J^π	Branching ratios in percentage								
	E_f^*:	8185.5	8284.0	8317.3	8355.0	8534.9	8544.2	8584.8	8640.5	8671.1
[keV]	J_f^π:	⟨17⟩	18^-	18^-	18^-	⟨18⟩	⟨18⟩	19^-	19^-	19^-
8544.2(11)	⟨18⟩	100								
8640.5(5)	19^-			71(4)	29(3)					
8965.0(11)	⟨19⟩						100			
8999.4(6)	$\langle 20^- \rangle$			15(3)					85(7)	
9175.0(5)	$\langle 20^- \rangle$							78(7)		
9326.1(5)	$\langle 20^- \rangle$		100							
9420.2(6)	$\langle 21^- \rangle$								19(2)	
9757.4(6)	$\langle 21^- \rangle$									100
9879.5(6)	$\langle 21^- \rangle$							26(3)		
9894.4(6)	⟨20⟩					100				

Energy levels and branching ratios [00Bl21]. Part 10 **$^{108}_{48}$Cd**

E^*	J^π	Branching ratios in percentage								
	E_f^*:	8824.5	6540+Y	8999.4	9175.0	9326.1	9420.2	9757.4	9879.5	9897.3
[keV]	J_f^π:	$\langle 20^+ \rangle$	J_1+8	$\langle 20^- \rangle$	$\langle 20^- \rangle$	$\langle 20^- \rangle$	$\langle 21^- \rangle$	$\langle 21^- \rangle$	$\langle 21^- \rangle$	$\langle 22^- \rangle$
9420.2(6)	$\langle 21^- \rangle$			81(7)						
9879.5(6)	$\langle 21^- \rangle$				74(5)					
9897.3(7)	$\langle 22^- \rangle$			23(3)			77(4)			
10293.6(6)	$\langle 22^+ \rangle$	100								
10413(1)	$\langle 23^- \rangle$						100			x
10533(1)	$\langle 22^- \rangle$					100				
10678(1)	$\langle 22^- \rangle$				24(4)				76(6)	
8361+Y	J_1+10		100							
10977(1)	$\langle 24^- \rangle$									30(3)
11019(1)	$\langle 23^- \rangle$							100		

Energy levels and branching ratios [00Bl21]. Part 11 **$^{108}_{48}$Cd**

E^*	J^π	Branching ratios in percentage									
	E_f^*:	10293.6	10413.2	10532.8	8361+Y	11018.6	10262+Y	12244+Y	0+X	14306+Y	1686+X
[keV]	J_f^π:	$\langle 22^+ \rangle$	$\langle 23^- \rangle$	$\langle 22^- \rangle$	J_1+10	$\langle 23^- \rangle$	J_1+12	J_1+14	$J \approx \langle 40 \rangle$	J_1+16	J+2
10977(1)	$\langle 24^- \rangle$		70(7)								
11907(1)	$\langle 24^- \rangle$			100							
11915(1)	$\langle 24^+ \rangle$	100									
12489(1)	$\langle 25^- \rangle$					100					
10262+Y	J_1+12				100						
12244+Y	J_1+14						100				
14306+Y	J_1+16							100			
1686.0+X	J+2								100		
3421.6+X	J+4										100
16450+Y	J_1+18									100	

Energy levels and branching ratios [00Bl21]. Part 12 **$^{108}_{48}$Cd**

E^*	J^π	Branching ratios in percentage									
	E_f^*:	3422+X	16450+Y	5219+X	18676+Y	7083+X	9022+X	11038+X	13134+X	15310+X	17566+X
[keV]	J_f^π:	J+4	J_1+18	J+6	J_1+20	J+8	J+10	J+12	J+14	J+16	J+18
5218.7+X	J+6	100									
18676+Y	J_1+20		100								
7083.4+X	J+8			100							
20979+Y	J_1+22				100						
9021.6+X	J+10					100					
11037.5+X	J+12						100				
13133.8+X	J+14							100			
15310.4+X	J+16								100		
17566.4+X	J+18									100	
19902.7+X	J+20										100

Energy levels and branching ratios [99Bl07, 06Bl02]. **$^{109}_{48}$Cd**

E^*	$2J^\pi$	L	S_N	σ (d,t)	σ (d,t)	$T_{1/2}$ or	Ref.	Branching ratios in percentage				
								E_f^*:	0.0	59.6	203	347	426
[keV]			(d,t)	μb/sr	μb/sr	Γ_{cm}		$2J_f^\pi$:	5^+	1^+	7^+	5^+	3^+,5^+
0.0	5^+	2	2.08	2400	980	461.4(12) d	75Ch07						
59.5(1)	1^+	0	0.39	1030	220	12(2) μs	75Ch07		100				
203.30(8)	7^+	4	3.50	220	160	36(+6-1) ps	75Ch07		100				
347.50(7)	5^+	2	0.66	470	100		75Ch07		58(2)	42(2)			
426.38(8)	3^+,5^+	2	0.24	210	120		75Ch07		95(3)		4.8(4)		
463.5(3)	11^-	5	1.14	70	50	10.9(5) μs	75Ch07				100		
623.8(1)	7^+,9^+	4	1.11	60		40(15) fs	75Ch07		86(3)		14(1)		

(continued) **$^{109}_{48}$Cd**

E^*	$2J^\pi$	L	S_N	σ (d,t)	σ (d,t)	$T_{1/2}$ or	Ref.	Branching ratios in percentage				
								E_f^*: 0.0	59.6	203	347	426
[keV]			(d,t)	μb/sr	μb/sr	Γ_{cm}		$2J_f^\pi$: 5^+	1^+	7^+	5^+	$3^+,5^+$
673.5(1)	5^+	2	0.06	30	70		75Ch07		79(20)	2.1(2)	19(1)	
721.8(1)	5^+	2	0.22	170			75Ch07	64(5)		10(5)	26(5)	
818(3)	$3^+,5^+$	2	0.05	30	60		75Ch07					
822.3(2)	9^+			incl				74(7)		26(3)		
891.2(1)	5^+	2	0.81	550		≥28 fs	75Ch07	19(2)	17(2)			49(5)
929.5(1)	$\langle 5^+ \rangle$	2	1.30	860			75Ch07	48(4)			14(1)	9(1)
985.8(2)*	15^-											
997.4(2)	9^+					≤20 fs				13(3)	65(3)	1.5(5)
1066.1(3)	11^+									93(9)		
1105(5)	$3^+,5^+$	2	0.07	40			75Ch07					
1105.5(2)	$7,9^+$							18(1)		75(8)		
1121.2(1)									34(4)		18(2)	47(3)
1133.6(1)	7^+					48(26) fs				100		
1173.5(2)	$3^+,5^+$	2	0.5	250			75Ch07				47(4)	16(2)
1219.2(2)											39(5)	
1318.3(2)	$3^+,5^+$	2	0.13	60			75Ch07				4(1)	
1352.2(2)	$7^+,9^+$							8.9(6)		54(3)	2.6(3)	10(1)
1388.5(2)								40(2)		18(2)		26(3)
1417.9(2)	1^+	0	0.04	50			75Ch07			81(6)		15(3)
1425.4(4)	$\langle 13^- \rangle$											
1429.8(10)	$\langle 7,9^+ \rangle$											
1458.7(2)										14(1)		
1475.7(2)	$7^+,9^+$							8(2)		9.9(6)	11(1)	21(1)
1479.7(2)										73(7)		
1539.4(2)	$7,9^+$							11(2)		41(6)		47(24)
1580.8(2)											30(4)	
1593.3											100	
1622.4(2)	$7^+,9^+$							24(3)		16(1)		20(2)
1633.5(2)										37(5)		42(5)
1729.9(2)										63(5)	37(5)	
1772.7(4)	$7^+,9^+$							38(1)		11(2)		51(3)
1787.6(8)												64(3)
1813.4(3)											100	
1821.7(2)*	19^-											
1854.3(5)	13^+											
1859.8(5)	$7^+,9^+$							100				
1869.2(2)											77(3)	23(3)
1937.4(3)										36(4)		64(7)
1944.0(2)										34(4)		
1955.9(6)										100		
1988.9(3)										100		
2033.8(2)								40(3)				52(3)
2046.4(3)											100	
2064.6(1)										50(2)	50(2)	
2065.1(11)	13^+											

(continued) **$^{109}_{48}$Cd**

E^*	$2J^\pi$	L	S_N	σ (d,t)	σ (d,t)	$T_{1/2}$ orRef.	Branching ratios in percentage				
							E_f^*: 0.0	59.6	203	347	426
[keV]			(d,t)	μb/sr	μb/sr	Γ_{cm}	$2J_f^\pi$: 5^+	1^+	7^+	5^+	3^+,5^+
2111.6(4)										77(4)	23(4)
2141.9(4)	$\langle 15^+ \rangle$										
2166.4(2)*	$\langle 17^- \rangle$						48(4)				
2198.9(2)							76(5)		24(2)		
2234.2(2)							36(4)		64(4)		
2271.3(5)										100	
2282.4(3)							43(6)		20(6)		37(6)
2325.7(4)							53(18)		47(8)		
2372.4(4)											
2391.8(3)							47(13)			53(7)	
2590.0(2)*	19^-										
2687.7(3)	17^+										
2700.6(2)	19^-										
2862.3(2)*	23^-										
2866.9(2)*	21^+										
2942.4(2)*	$\langle 19^+ \rangle$										
2974.1(2)*	21^-										
3043.0(2)*	$\langle 21^- \rangle$										
3059.5(2)*	21^+										
3282.7(4)	$21^{\langle + \rangle}$										
3346.2(6)	19^+										
3354.2(4)	21^-										
3370.2(2)*	23^-										
3383.4(2)*	23^+										
3410.8(2)	23^-										
3525.1(2)*	25^+										
3549.2(2)*	23^-										
3570.2(4)	$23^{\langle + \rangle}$										
3615.8(4)	23^-										
3621.1(2)	23^+										
3897.5(2)	25^-										
3910.8(6)*	25^+										
3940.1(2)*	27^+										
4021.7(3)	27^-										
4030.9(2)*	25^-										
4089.1(2)	$\langle 25^- \rangle$										
4233.0(2)	27^+										
4247.1(2)*	$\langle 29^+ \rangle$										
4293.4(5)	$25^{\langle + \rangle}$										
4296.6(2)	27^-										
4432.4(2)	$\langle 27^+ \rangle$										
4458.8(5)	27^-										
4591.2(11)	$\langle 27^- \rangle$										
4630.9(3)*	27^-										
4698.2(2)	29^+										

(continued) **$^{109}_{48}$Cd**

E^* [keV]	$2J^\pi$	L	S_N (d,t)	σ (d,t) μb/sr	σ (d,t) μb/sr	$T_{1/2}$ orRef. Γ_{cm}	E_f^*: $2J_f^\pi$:	Branching ratios in percentage 0.0 5^+	59.6 1^+	203 7^+	347 5^+	426 3^+,5^+
4725.1(2)*	31^+											
4875.4(5)	27^-											
4951.3(8)	$\langle 27^+ \rangle$											
5051.3(3)	31^-											
5063.7(5)	27^-											
5083.8(2)	31^+											
5122.6(6)	29^-											
5261.9(3)	$\langle 33^+ \rangle$											
5279.9(3)*	29^-											
5399.7(3)	31^-											
5441.5(3)	31^-											
5561.0(15)	$\langle 27 \rangle$											
5651.3(13)	$\langle 29^+ \rangle$											
5672.2(3)	33^+											
5731.4(3)	33^-											
5775.7(3)	35^+											
5786(1)	$\langle 31^- \rangle$											
5813.1(15)	29^+											
5861.2(15)	$\langle 29 \rangle$											
5955.0(3)												
5972.0(3)	35^-											
6004.1(11)	31^+											
6155.8(11)	35^+											
6164.7(3)	35^-											
6240.2(18)	$\langle 35^- \rangle$											
6305.0(15)	33^+											
6519.2(3)	$\langle 37^+ \rangle$											
6573.3(11)												
6670.2(21)	$\langle 39^- \rangle$											
6683.7(18)	35^+											
6704.1(15)	$\langle 33 \rangle$											
6796.2(4)	37^-											
6862.2(11)	$\langle 37^+ \rangle$											
7011.0(11)	39^-											
7077.7(3)	39^+											
7146.3(21)	37^+											
7244.7(15)	$\langle 35 \rangle$											
7385.9(15)	$\langle 39^+ \rangle$											
7555.2(11)	$\langle 39^- \rangle$											
7686.4(23)	39^+											
7822.5(15)	$\langle 37 \rangle$											
7909.6(3)	$\langle 41^+ \rangle$											
8202.6(12)	43^-											
8263.7(25)	43^+											
8429.5(18)	$\langle 39 \rangle$											

(continued) **$^{109}_{48}$Cd**

E^*	$2J^\pi$	L	S_N	σ (d,t)	σ (d,t)	$T_{1/2}$ or	Ref.	Branching ratios in percentage					
								E_f^*:	0.0	59.6	203	347	426
[keV]			(d,t)	μb/sr	μb/sr	Γ_{cm}		$2J_f^\pi$:	5^+	1^+	7^+	5^+	3^+,5^+
8599.1(6)	43^+												
8870(3)	43^+												
9378.5(6)	$\langle 45^+ \rangle$												
9502(3)	$\langle 45^+ \rangle$												
9569.6(16)	47^-												
10165(3)	$\langle 47^+ \rangle$												
10897(4)	$\langle 49^+ \rangle$												
11132.6(19)	$\langle 51^- \rangle$												
			75Ch07	75Ch07	64Ro17		Ref.						

Additional data on this isotope can be found in [01Ha09, 00Ch04, 94Re06, 94Ju05, 90Ar20].
* Mean life and $B(E2)$ values for this level were determined in [01Ha09].
New bands and discussion om shears mechanism can be found in [00Ch04]; the assignment of 15 bands is presented in [06Bl02], four band are considered in [94Re06].
Spectroscopic factor S_{dt} is derived from the relation $d\sigma/d\Omega_{exp}$=3.33$d\sigma/d\Omega_{DWBA}S_N$ [75Ch07].
Data for this isotope are considered in vol. LB I/18B.

Energy levels and branching ratios [99Bl07, 06Bl02]. Part 2 **$^{109}_{48}$Cd**

E^*	$2J^\pi$					Branching ratios in percentage						
		E_f^*:	463	624	673	721.7	822.6	891.1	985.5	997.3	1066.4	1425.2
[keV]		$2J_f^\pi$:	11^-	7^+,9^+	5^+	5^+	9^+	5^+	15^-	9^+	11^+	$\langle 13^- \rangle$
891.2(1)	5^+					15(5)						
929.5(1)	$\langle 5^+ \rangle$			6(1)		23(1)						
985.8(2)*	15^-		100									
997.4(2)	9^+				20.4(16)							
1066.1(3)	11^+						7(2)					
1105.5(2)	$7,9^+$			7(1)								
1173.5(2)	3^+,5^+			37(2)								
1219.2(2)						61(5)						
1318.3(2)	3^+,5^+					96(6)						
1352.2(2)	7^+,9^+			3.3(3)	11.9(6)	0.9(3)	7.1(4)	1.3(2)				
1388.5(2)				16(2)								
1417.9(2)	1^+							3.3(18)				
1425.4(4)	$\langle 13^- \rangle$		100									
1458.7(2)				86(6)								
1475.7(2)	7^+,9^+			4.4(6)		7.4(6)	34(3)	5.1(4)				
1479.7(2)						27(5)						
1539.4(2)	$7,9^+$									0.0		
1580.8(2)					70(8)							
1622.4(2)	7^+,9^+			8(1)	18(2)	5(1)	4(1)	4.3(5)				
1633.5(2)					21(5)							
1787.6(8)						36(3)						

(continued) **$^{109}_{48}$Cd**

E^*	$2J^\pi$	Branching ratios in percentage									
	E_f^*:	463	624	673	721.7	822.6	891.1	985.5	997.3	1066.4	1425.2
[keV]	$2J_f^\pi$:	11^-	7^+,9^+	5^+	5^+	9^+	5^+	15^-	9^+	11^+	$\langle 13^- \rangle$
1821.7(2)*	19^-							100			
1854.3(5)	13^+					67(10)				33(5)	
1944.0(2)				66(7)							
2033.8(2)			8(3)								
2065.1(11)	13^+									100	
2141.9(4)	$\langle 15^+ \rangle$									100	
2166.4(2)*	$\langle 17^- \rangle$			33(4)				14(2)			4(1)
2372.4(4)				100							
2590.0(2)*	19^-							100			
2687.7(3)	17^+							100			
2700.6(2)	19^-							31(3)			

Energy levels and branching ratios [99Bl07, 06Bl02]. Part 3 **$^{109}_{48}$Cd**

E^*	$2J^\pi$	Branching ratios in percentage									
	E_f^*:	1821.2	2141.5	2166.4	2591.0	2687.61	2700.48	2861.3	2866.79	2942.9	2973.99
[keV]	$2J_f^\pi$:	19^-	$\langle 15^+ \rangle$	$\langle 17^- \rangle$	19^-	17^+	19^-	23^-	21^+	$\langle 19^+ \rangle$	21^-
2700.6(2)	19^-	69(14)									
2862.3(2)*	23^-	100									
2866.9(2)*	21^+	100									
2942.4(2)*	$\langle 19^+ \rangle$	67(1)	14(3)	19(3)							
2974.1(2)*	21^-	70(3)		22.5(13)			7.5(10)				
3043.0(2)*	$\langle 21^- \rangle$	60(6)		40(4)							
3059.5(2)*	21^+	99				1.3(3)					
3282.7(4)	$21^{\langle + \rangle}$								100		
3346.2(6)	19^+		100								
3354.2(4)	21^-	30(10)		30(10)				40(10)			
3370.2(2)*	23^-	57(4)			43(2)						
3383.4(2)*	23^+									50(2)	
3410.8(2)	23^-	25(4)					33(4)				42(4)
3525.1(2)*	25^+	1.7(3)						31.5(10)			
3549.2(2)*	23^-							79(5)			
3570.2(4)	$23^{\langle + \rangle}$								88(5)		
3615.8(4)	23^-	100									
3621.1(2)	23^+							21(8)		21(4)	
3897.5(2)	25^-							23(11)			63(11)
3910.8(6)*	25^+							10(3)			
4021.7(3)	27^-							100			
4030.9(2)*	25^-							11(2)			
4293.4(5)	$25^{\langle + \rangle}$								71(6)		
4458.8(5)	27^-							33(17)			
4591.2(11)	$\langle 27^- \rangle$							100			

Energy levels and branching ratios [99Bl07, 06Bl02]. Part 4 **$^{109}_{48}$Cd**

E^*	$2J^\pi$	Branching ratios in percentage									
	E_f^*:	3043.4	3058.5	3282.6	3355.3	3371.8	3382.6	3410.72	3524.4	3550.3	3570.1
[keV]	$2J_f^\pi$:	$\langle 21^- \rangle$	21^+	$21^{\langle + \rangle}$	$\langle 21 \rangle$	$\langle 23^- \rangle$	$\langle 23^+ \rangle$	23^-	25^+	$\langle 23 \rangle$	$23^{\langle + \rangle}$
3383.4(2)*	23^+	4(1)	45.9(7)								
3525.1(2)*	25^+		66(1)				0.7(1)				
3549.2(2)*	23^-				21(2)						
3570.2(4)	$23^{\langle + \rangle}$			12(3)							
3621.1(2)	23^+		58(8)								
3897.5(2)	25^-							14(14)			
3910.8(6)*	25^+		38(8)				38(5)		13(3)		
3940.1(2)*	27^+						64(2)		36(1)		
4030.9(2)*	25^-									81(4)	
4089.1(2)	$\langle 25^- \rangle$	100									
4233.0(2)	27^+						8(3)		46(5)		
4247.1(2)*	$\langle 29^+ \rangle$								100		
4293.4(5)	$25^{\langle + \rangle}$										29(9)
4296.6(2)	27^-					100					
4458.8(5)	27^-							67(17)			

Energy levels and branching ratios [99Bl07, 06Bl02]. Part 5 **$^{109}_{48}$Cd**

E^*	$2J^\pi$	Branching ratios in percentage									
	E_f^*:	3615.7	3621.07	3897.40	3910.6	3938.9	4022	4031.3	4088.4	4233.2	4247
[keV]	$2J_f^\pi$:	23^-	23^+	25^-	25^+	$\langle 27^+ \rangle$	$\langle 27^- \rangle$	$\langle 25 \rangle$			$\langle 29^+ \rangle$
4030.9(2)*	25^-	8(2)									
4233.0(2)	27^+		46(5)								
4432.4(2)	$\langle 27^+ \rangle$		100								
4630.9(3)*	27^-						6.0(7)	85(7)	9(3)		
4698.2(2)	29^+				100						
4725.1(2)*	31^+					91(2)					8.9(16)
4875.4(5)	27^-							100			
5051.3(3)	31^-						81(2)				
5083.8(2)	31^+					4(4)				72(10)	24(10)
5122.6(6)	29^-			100							
5261.9(3)	$\langle 33^+ \rangle$										100
5279.9(3)*	29^-							12(2)	3.9(10)		
5399.7(3)	31^-						100				

Energy levels and branching ratios [99Bl07, 06Bl02]. Part 6 **$^{109}_{48}$Cd**

E^*	$2J^\pi$	Branching ratios in percentage									
	E_f^*:	4293.6	4296.58	4590.9	4630.8	4698.0	4725.05	4875.3	5051.33	5063.0	5083.75
[keV]	$2J_f^\pi$:	$25^{\langle+\rangle}$	27^-	$\langle 27^-\rangle$	27^-	29^+	31^+	27^-	31^-	27^-	31^+
5051.3(3)	31^-		18.8(10)								
5063.7(5)	27^-	100									
5279.9(3)*	29^-				69(6)			8(1)		8(2)	
5672.2(3)	33^+					100					
5775.7(3)	35^+						100				
5861.2(15)	$\langle 29\rangle$			15(5)							
5972.0(3)	35^-								100		
6155.8(11)	35^+										100
6573.3(11)									100		

Energy levels and branching ratios [99Bl07, 06Bl02]. Part 7 **$^{109}_{48}$Cd**

E^*	$2J^\pi$	Branching ratios in percentage									
	E_f^*:	5261.80	5279.8	5441.4	5560	5672.0	5731.3	5775.65	5861.7	5972.0	6155.8
[keV]	$2J_f^\pi$:	$\langle 33^+\rangle$	29^-	31^-	$\langle 27\rangle$	33^+	33^-	35^+	$\langle 29\rangle$	35^-	31^+
5441.5(3)	31^-		100								
5731.4(3)	33^-			100							
5861.2(15)	$\langle 29\rangle$				85(9)						
5955.0(3)							100				
6164.7(3)	35^-						100				
6240.2(18)	$\langle 35^-\rangle$								100		
6519.2(3)	$\langle 37^+\rangle$	100									
6862.2(11)	$\langle 37^+\rangle$					100					
7011.0(11)	39^-									100	
7077.7(3)	39^+							100			
7385.9(15)	$\langle 39^+\rangle$										100

Energy levels and branching ratios [99Bl07, 06Bl02]. Part 8 **$^{109}_{48}$Cd**

E^*	$2J^\pi$	Branching ratios in percentage									
	E_f^*:	6164.6	6240.7	6519.1	6703.7	6796.1	7011.0	7077.7	7244.3	7822.1	7909.5
[keV]	$2J_f^\pi$:	35^-	$\langle 31\rangle$	$\langle 37^+\rangle$	$\langle 33\rangle$	37^-	39^-	39^+	$\langle 35\rangle$	$\langle 37\rangle$	$\langle 41^+\rangle$
6704.1(15)	$\langle 33\rangle$		100								
6796.2(4)	37^-	100									
7244.7(15)	$\langle 35\rangle$				100						
7555.2(11)	$\langle 39^-\rangle$					100					
7822.5(15)	$\langle 37\rangle$								100		
7909.6(3)	$\langle 41^+\rangle$			100							
8202.6(12)	43^-						100				

(continued) **$^{109}_{48}$Cd**

E^*	$2J^\pi$	Branching ratios in percentage									
	E_f^*:	6164.6	6240.7	6519.1	6703.7	6796.1	7011.0	7077.7	7244.3	7822.1	7909.5
[keV]	$2J_f^\pi$:	35^-	$\langle 31\rangle$	$\langle 37^+\rangle$	$\langle 33\rangle$	37^-	39^-	39^+	$\langle 35\rangle$	$\langle 37\rangle$	$\langle 41^+\rangle$
8429.5(18)	$\langle 39\rangle$									100	
8599.1(6)	43^+							100			
9378.5(6)	$\langle 45^+\rangle$										100

Energy levels and branching ratios [99Bl07, 06Bl02]. Part 9 **$^{109}_{48}$Cd**

E^*	$2J^\pi$	Branching ratios in percentage		
		E_f^*:	8202.6	9569.7
[keV]		$2J_f^\pi$:	43^-	47^-
9569.6(16)	47^-		100	
11132.6(19)	$\langle 51^-\rangle$			100

Energy levels and branching ratios [00De11]. **$^{110}_{48}$Cd**

E^*	J^π	σ (τ,n)	L	C^2S'	β_L	L	C^2S	J^π	ε	$I_{s,0}$	$\Gamma_\circ$	$B(M1)$	$B(E1)$	Ref.
[keV]		μb/sr		(τ,d)	(p,p′)		(d,t)	(d,t)	(p,t)	[eVb]	[meV]	[μ_N^2]	$10^{-3}ef$	
0.0	0^+	343	1	0.75		0	0.930	1+	0.96					77Fi04
657.765(2)	2^+		1	0.21	0.196	2	0.110,0.2		1.20					72Au02
1473.12(4)	0^+	144	1	0.05		0	0.024	1+						77Fi04
1475.800(3)	2^+			incl		2	0.142	5+						72Au02
1542.454(3)*	4^+					4	0.187	7+						92Bl02
1731.33(14)	0^+		1	0.05										72Au02
1783.48(2)	2^+													
1809.48(9)	$\langle 2^+\rangle$													
2000														
2078.86(1)	3^-				0.164									
2078.88(2)	0^+					0	0.019	1+						92Bl02
2162.817(3)	3^+					2	0.035	5+						92Bl02
2184(2)	$\langle 1^-\rangle$													
2198(2)	2^+,3^+					2	0.002	5+						92Bl02
2220.077(3)	4^+				0.083	4	0.298	7+						92Bl02
2250.55(1)	4^+													
2287.45(8)	2^+			$\langle 0.01\rangle$		2	0.02,0.002							92Bl02
2332.08(20)	$\langle 0^+\rangle$					0	0.056	1+						92Bl02
2355.81(5)	2^+			$\langle 0.07\rangle$		2	0.01,0.002							72Au02
2365(2)	2^+					2	≈0.002							92Bl02
2377(2)	4^+													
2381(2)						2	0.003,0.01							92Bl02

(continued) **$^{110}_{48}$Cd**

E^* [keV]	J^π	σ (τ,n) μb/sr	L	C^2S' (τ,d)	β_L (p,p′)	L	C^2S (d,t)	J^π (d,t)	ε (p,t)	$I_{s,0}$ [eVb]	$\Gamma_\circ$ [meV]	$B(M1)$ [μ_N^2]	$B(E1)$ $10^{-3}ef$	Ref.
2385(2)	$\langle 2^+ \rangle$													
2405(2)	$\langle 0^+,2^- \rangle$													
2432(2)	2^+					2	0.075,0.23							92Bl02
2433.25(3)	3^+													
2451(2)														
2477.38(7)	2^+					2	0.046,0.15							92Bl02
2479.946(5)*	6^+													
2481.59(5)	$\langle 2^+ \rangle$	26												77Fi04
2539.69(7)*	5^-		4	0.41										72Au02
2561.32(1)	4^+					2	0.010,0.59							92Bl02
2566.46(6)	$\langle 2^+ \rangle$,3^+													
2633.1(1)	$\langle 2^+,3^+ \rangle$					2	0.038,0.12							92De41
2649.95(6)	1^-									25.1(6)	15.3(4)		2.35(5)	05Ko32
2659.882(8)	5^-													
2662(3)	3^+					2,4	0.052,0.6	5+,7+						92Bl02
2662.0(1)	0^+													01Co01
2705.684(11)	4^+					4	0.058	7+						92Bl02
2707.413(9)	$\langle 4 \rangle^+$													01Co01
2754(14)														
2757(3)	2^-													
2758.25(8)	$\langle 1\text{–}3 \rangle^+$					2	0.010	3+						92Bl02
2787.37(5)	2^+					2	0.041	3+						92Bl02
2793.433(8)	$\langle 4^+ \rangle$													01Co01
2813(3)														
2834(3)	$3^+,4^+$					4	0.077	7+						92Bl02
2842.692(10)	5^-													01Co01
2869.20(8)	2^+					2	0.013,0.02							92Bl02
2876.811(12)	6^+													
2879.23(1)*	7^-													
2895.986(13)	6^-													
2915(3)	4^+					2,4	0.032,0.14	5+,7+						92Bl02
2917.63(8)	$2^+,3^-$													01Co01
2926.763(4)	5^+													01Co01
2938(3)	2^+					2	≈0.002							92Bl02
2975.29(7)	2^+					2	0.002,0.01							92Bl02
2982(3)														
2984.49(6)	$\langle 5^-,6^- \rangle$					5	0.101	11–						92Bl02
2984.63(14)	3^+													
2992(2)	$\langle 5^- \rangle$													
2993.6(2)	$\langle 0^+ \rangle$													01Co01
2994.1(1)***	$\langle 3^+,4^+ \rangle$													01Co01
3008.4(7)														
3029.086(12)	7^-													
3040(3)						0,2	0.005,0.01	1+,3+						92Bl02
3043.88(19)	1^+									21.8(30)	17.6(6)	0.161(5)		01Co01

(continued) **$^{110}_{48}$Cd**

E^* [keV]	J^π	σ (τ,n) μb/sr	L	C^2S' (τ,d)	β_L (p,p′)	L	C^2S (d,t)	J^π (d,t)	$I_{s,0}$ [eVb]	$\Gamma_\circ$ [meV]	$B(M1)$ [μ_N^2]	$B(E1)$ $10^{-3}ef$	Ref.
3052(3)	2^+					0,2	0.021,0.04	1+,3+					92Bl02
3055.776(13)	8^-												
3061(3)	4^+												
3064.6(5)	6^+												
3073(3)**						0	0.004	[1+]					92Bl02
3074.95(2)**	6^-					5	0.079	[11–]					92Bl02
3078.36(8)	1					0,2	0.02,0.002	1+,3+	9.5(17)	7.8(12)	0.069(10)	0.77(11)	05Ko32
3101.90(4)	$1,2^+$												
3106(3)	$3^+,4^+$					2	0.269	5+					92Bl02
3118(3)	2^+												
3121.62(3)	6^+												
3128.40(8)	1,2					2	0.01,0.004						92Bl02
3135.15(10)	$\langle 2^+–4^+\rangle$												
3142(2)	$\langle 2^+–4^+\rangle$					2,4	0.002,0.14	5+,7+					92Bl02
3148(3)	0^+					0	0.003	1+					92Bl02
3171.1(2)	$2^+–4^+$		$\langle 1\rangle$	$\langle 0.07\rangle$		2,4	0.004,0.01	5+,7+					92Bl02
3179(3)**						[5]	0.112	[11–]					92Bl02
3181(2)**	$\langle 4^+\rangle$					[2]	0.004	[5+]					92Bl02
3184.54(3)	$\langle 6^-\rangle$												
3187.354(21)	8^+												
3193.0(4)	$1^+–3^+$					2	0.01,0.001						92Bl02
3201(2)**	$\langle 2^-\rangle$												
3203(3)**													
3208.75(10)	$2^-,3^-$												
3239.83(5)	6^+												
3247(16)													
3251(3)	3^-												
3256.48(14)	$1^+–3^+$					2	0.03,0.006						92Bl02
3262(3)	$1^+–3^+$					2	0.057,0.1						92Bl02
3275.45**	8^+					[4]	0.122	[7+]					92Bl02
3277.8(1)**						[2]	0.006	[3+]					92Bl02
3281	$1^{\langle +\rangle}$								13.1(4)	12.2(4)	0.090(3)	0.99(3)	05Ko32
3298.13(20)	1^-								3.6(3)	3.4(3)	0.025(2)	0.27(2)	05Ko32
3309(2)	2^+					2	0.01,0.005						92Bl02
3314.44(4)	$1^+,2^+$												
3329(17)													
3334.83(3)	7^-		$\langle 2\rangle$	$\langle 0.2\rangle$									72Au02
3340(3)	$\langle 5^-,6^+\rangle$												
3340.82(14)													
3345.84(2)*	9^-												
3353(3)	$2^+,3^+$					2	0.002	5+					92Bl02
3359.06(20)	1^-								40.0(8)	39.1(8)		2.96(6)	05Ko32
3362(3)**	$1^+–4^+$					[2]	0.005	[3+,5+]					92Bl02
3366.8(4)**						[4]	0.036	[7+]					92Bl02
3373(2)	4^+												

(continued) **$^{110}_{48}$Cd**

E^* [keV]	J^π	σ (τ,n) μb/sr	L	C^2S' (τ,d)	β_L (p,p′)	L	C^2S (d,t)	J^π (d,t)	ε (p,t)	$I_{s,0}$ [eVb]	$\Gamma_\circ$ [meV]	$B(M1)$ [μ_N^2]	$B(E1)$ $10^{-3}ef$	Ref.
3385						4	0.046	7+						92Bl02
3391.212(16)	$\langle 7^- \rangle$													
3397(4)	1^+–3^+					2	0.003							92Bl02
3403.45(11)	$\langle 1^- \rangle$		2	0.08										72Au02
3412.5(21)	4^+					4	0.034	7+						92Bl02
3427(3)	0^+					0	0.002	1+						92Bl02
3427.337(21)	8^-													
3439.73(1)*	$\langle 8^+ \rangle$													
3442(3)***	1^+,2^+					2	0.025,0.03							00De11
3447(3)	1^-													
3460.5(21)	1^+,2^+					2	0.004,0.01							92Bl02
3466.42(6)	1^+,2^+													
3471(3)**	1^+–4^+					2,4	0.007,0.02	3+,7+						92Bl02
3475.42**	1									6.0(3)	6.3(3)	0.039(2)	0.43(2)	05Ko32
3476(3)	1^-													
3487(3)**														
3488(2)**	$\langle 0^+ \rangle$					[0]	0.004	[1+]						92Bl02
3492.66(6)						[5]	0.047	[11–]						92Bl02
3493.1(4)														92Bl02
3498.5(21)	2^+													
3510(4)	1^+,2^+					2	0.046	3+						92Bl02
3517(18)	0^-,1^-		0	0.07										72Au02
3525.27(5)	6^+													
3537(3)						2	0.047,0.02							92Bl02
3581(4)														
3596.43(15)	1^+									5.7(4)	6.4(5)	0.036(3)		05Ko32
3603(4)***	1^+–3^+					2	0.01,0.005							00De11
3604(43)	X^-													
3611.05(2)*	10^+													
3614(18)			0	0.13		2	0.003,0.01							72Au02
3630(3)**						[5]	0.094	[11–]						92Bl02
3631(3)**	2^+					[2]	0.027,0.02	[3+,5+]						92Bl02
3634.68(12)	1^+–3^+													
3641.14(4)	8^-													
3657(3)	$\langle 2^+ \rangle$					2	0.014,0.03							92Bl02
3668(4)	1^+–3^+					2	0.01,0.002							92Bl02
3683.19(5)	9^-													
3686(4)**						[5]	0.014	[11–]						92Bl02
3689(4)**	3^-					[2]	0.005	[5+]						92Bl02
3696(4)						[2,5]	0.051,0.01	[5+,11–]						92Bl02
3713(4)						0,2,4	0.003,0.01	3+,7+						92Bl02
3726.58(24)	1^+,2^+													
3730(19)														
3737(3)	2^+	53				2	0.019,0.02							77Fi04
3760(4)	1^+–3^+					2	0.004							92Bl02

(continued) **$^{110}_{48}$Cd**

E^* [keV]	J^π	σ (τ,n) μb/sr	L	C^2S' (τ,d)	L	C^2S (d,t)	J^π (d,t)	$I_{s,0}$ [eVb]	$\Gamma_\circ$ [meV]	$B(M1)$ [μ_N^2]	$B(E1)$ $10^{-3}ef$	Ref.
3771.77(3)	1^+				2	0.004		37.7(40)	46.5(17)	0.225(8)		05Ko32
3781.98(4)	9^-											
3791.3(10)	8^+											
3808(4)	2^+,3^+				2	0.007	5+					
3812(19)	1^-–3^-		2	1.1								72Au02
3823.31(2)	10^-											
3827(3)	1^+–3^+				2	0.01,0.003						92Bl02
3847(4)**	2^+											
3854(4)	$1^{\langle+\rangle}$				0,2	0.005,0.01	1+,3+	7.7(10)	9.9(13)	0.045(6)	0.50(6)	05Ko32
3862	$1^{\langle+\rangle}$				2	0.01,0.005		29.7(98)	38.4(21)	0.173(10)	1.91(11)	05Ko32
3890(3)	2^+,3^+				2	0.005	5+					92Bl02
3897(19)	0^-,1^-		0	0.06								72Au02
3922(3)	2^+				2	0.026,0.02						92Bl02
3950(20)			$\langle$3,4$\rangle$									72Au02
3957(4)												
3968(4)	1^+–3^+				2	0.01,0.001						92Bl02
3988(4)	1^+–3^+											
3992.8(2)	$\langle 9^-\rangle$											
4001(3)	2^+				2	0.005	3+					92Bl02
4024(4)	0^+				0	0.005	1+					92Bl02
4039(3)	1^+–3^+				2	0.01,0.003						92Bl02
4067(5)												
4077.17(2)*	10^+											
4078(4)***	1^+–3^+				2	0.002						00De11
4102(3)	1^+–3^+				2	0.002,0.01						92Bl02
4128(4)	0^+				0	0.002	1=					92Bl02
4143(5)												
4154(4)	1^+–3^+				2	0.003						92Bl02
4171(3)	1^+–3^+				2	0.005						92Bl02
4172.08(2)*	12^+											
4172.73(3)	11^-											
4181(4)**					[2,5]	0.007,0.03	[5+,11–]					92Bl02
4182.0(1)**	10^-											
4200(5)	2^+											
4290	$[0^+]$	55										77Fi04
4334.31(7)	10^-											
4421.64(21)	$\langle 10^+\rangle$											
4438.16(11)	9^+											
4559.15(5)	11^-											
4619.9(3)	10^+											
4660	$[0^+]$	43										77Fi04
4736.85(19)	11^-											
4888.30(4)*	12^+											
4930.3(3)	12^-											
5026.34(8)*	14^+											

(continued) **$^{110}_{48}$Cd**

E^* [keV]	J^π	σ (τ,n) μb/sr	L	C^2S' (τ,d)	β_L (p,p′)	L	C^2S (d,t)	J^π (d,t)	ε (p,t)	$I_{s,0}$ [eVb]	$\Gamma_\circ$ [meV]	$B(M1)$ [μ_N^2]	$B(E1)$ Ref. $10^{-3}ef$
5092.0(10)	12^-												
5114.0(4)	12^+												
5213.1(4)	12^-												
5215.5(7)	$\langle 11^+ \rangle$												
5248.7(10)	13^-												
5497.0(4)	13^-												
5499.8(4)	13^+												
5676.1(3)	14^+												
5758.7(3)	13^-												
5789.8(4)	14^+												
5857.0(5)	14^+												
5892.9(9)	12^+,13^+												
5915.3(5)	14^+												
5967.0(3)	14^-												
5984.4(4)	14^-												
6079.8(10)													
6100.7(3)	16^+												
6101.6(5)	14^-												
6178.3(4)	15^+												
6181.3(3)	15^-												
6216.7(4)	$\langle 14 \rangle$												
6354.5(5)	15^-												
6489.6(7)	$\langle 1 \rangle$												
6543.8(11)	$\langle 15^- \rangle$												
6568.6(5)	14												
6576.1(5)	16^+												
6584.3(5)	14												
6645.9(6)	$\langle 16^+ \rangle$												
6671.0(6)	$\langle 15^- \rangle$												
6672.5(4)	16^-												
6798.7(7)	16^+												
6837.0(7)	16^+												
6879.4(5)	15												
6963.0(6)	16^-												
6992.9(4)	17^-												
7047.0(4)	16^-												
7184.1(5)	17^+												
7280.8(5)	16												
7285.6(5)	$\langle 16 \rangle$												
7325.2(4)	18^+												
7342.1(7)													
7443.2(5)	$\langle 17^- \rangle$												
7523.2(5)	18^-												
7575.4(7)	17^-												
7594.4(8)													

(continued) **$^{110}_{48}$Cd**

E^* [keV]	J^π	σ (τ,n) μb/sr	L	C^2S' (τ,d)	β_L (p,p′)	L	C^2S (d,t)	J^π (d,t)	ε (p,t)	$I_{s,0}$ [eVb]	$\Gamma_\circ$ [meV]	$B(M1)$ [μ_N^2]	$B(E1)$ Ref. $10^{-3}ef$
7653.5(6)	18^+												
7758.8(6)	17												
7778.2(7)													
7797.5(6)	17												
7800.9(12)	$\langle 18^+ \rangle$												
7945.7(5)	19^-												
7969.7(7)	18^-												
8016.3(6)	17												
8277.8(5)	18												
8292.1(6)	18												
8373.1(8)													
8405.2(11)	$\langle 19^- \rangle$												
8481.1(11)	$\langle 19^+ \rangle$												
8530.5(8)	$\langle 18 \rangle$												
8595.4(6)	19												
8629.7(6)	20^-												
8648.2(5)	20^+												
8862.1(6)	$\langle 20^+ \rangle$												
8967.7(6)	20												
9106.6(6)	21^-												
9430.2(7)	21												
9574.2(15)	$\langle 21^- \rangle$												
9962.2(6)	22^+												
9971.7(12)	22^-												
9991.2(12)	22												
10229.1(12)	$\langle 22^+ \rangle$												
10495.6(12)	23^-												
10665.0(13)	23												
11320.3(6)	24^+												
11451.0(16)	24												
11454.7(16)	$\langle 24^- \rangle$												
12081.6(16)	$\langle 25^- \rangle$												
12763(3)	26^+												
13032.7(19)	$\langle 26^- \rangle$												
14206(4)	28^+												
15357													
15587													
15644													
15680													
15738													
15777													
15874													
15940													

(continued) **$^{110}_{48}$Cd**

E^*	J^π	σ (τ,n)	L	C^2S'	β_L	L	C^2S	J^π	ε	$I_{s,0}$	$\Gamma_\circ$	$B(M1)$	$B(E1)$	Ref.
[keV]		μb/sr		(τ,d)	(p,p′)		(d,t)	(d,t)	(p,t)	[eVb]	[meV]	[μ_N^2]	$10^{-3}ef$	
16001														
		77Fi04		72Au02	00De11		92Bl02		72Co22	05Ko32	05Ko32	05Ko32	05Ko32	Ref.

Additional data on this isotope can be found in [01Ko49, 01Ha09, 01Co01, 00Ko47, 00Co08, 99Lo15, 98Ko35, 95Be01, 94Ju04, 94Jo0A, 94Be0A, 93Ki18, 93De01, 92Pi08, 92Ku01, 92De41, 90Ku01, 90Ke02, 90Ju01, 90Ar20, 86Ba39, 82Cr01, 72Co22, 69Ko01].
Abundance: 12.49(18) %.
* Mean life and $B(E2)$ values for this level were determined in [01Ha09].
** Common parameters are given for close doublet, unresolved in (d,t) measurements.
*** Not given in Adopted Levels [00De11].
Orbitals (J^π) which are taking part in transitions of (d,t) reaction as well as parameters β_L – deformation parameters – were estimated in [00De11] as unweighted average from [69Lu02, 69Ko01]; β_L and EWSR for 4^+ states can be found in [92Pi08].
$B(E1)$ are given in units $10^{-3}e^2fm^2$ [05Ko32].
Data for this isotope are considered in vol. LB I/18B.

Energy levels and branching ratios [00De11]. Part 2 **$^{110}_{48}$Cd**

E^*	L	J^π	$T_{1/2}$ or	Ref.		Branching ratios in percentage					
					E_f^*:	0.0	658	1473	1476	1542	1731
[keV]	(τ,n)	(d,t)	Γ_{cm}		J_f^π:	0+	2+	0+	2+	4+	0+
0.0	0	1+	Stable	77Fi04							
657.765(2)			5.39(7) ps	72Au02		100					
1473.12(4)	0	1+		77Fi04		x	100				
1475.800(3)		5+	0.68(10) ps	72Au02		35.3(1)	65(1)				
1542.454(3)*		7+	0.73(9) ps	92Bl02			100				
1731.33(14)				72Au02		x	87(4)	x	13.3(11)		
1783.48(2)			1.0(+14-4) ps			22(1)	78(1)				
1809.48(9)							100				
2000											
2078.86(1)			0.7(2) ps				84(2)		13.2(6)		
2078.88(2)		1+		92Bl02		<43	<32				
2162.817(3)		5+		92Bl02			60.2(1)		28.0(2)	11.8(2)	
2184(2)											
2198(2)		5+		92Bl02							
2220.077(3)		7+		92Bl02			8.0(2)		28.8(2)	63.2(4)	
2250.55(1)							7.8(1)		4(2)	75(3)	
2287.45(8)				92Bl02			100				
2332.08(20)		1+		92Bl02			81(2)				
2355.81(5)				72Au02			100				
2365(2)				92Bl02							
2377(2)											
2381(2)				92Bl02							

(continued) **$^{110}_{48}$Cd**

E^*	L	J^π	$T_{1/2}$ or	Ref.	Branching ratios in percentage					
				E_f^*:	0.0	658	1473	1476	1542	1731
[keV]	(τ,n)	(d,t)	Γ_{cm}	J_f^π:	0+	2+	0+	2+	4+	0+
2385(2)										
2405(2)										
2432(2)				92Bl02						
2433.25(3)						23(2)		56(2)	4(2)	
2451(2)										
2477.38(7)				92Bl02	51(2)			49(5)		
2479.946(5)*			<2 ps						100	
2481.59(5)				77Fi04		56(3)		29(2)		
2539.69(7)*			0.6(2) ps	72Au02					96.2(9)	
2561.32(1)				92Bl02		19.0(1)		64(3)	14.6(10)	
2566.46(6)						78(5)				
2633.1(1)				92De41		70(6)			30(3)	
2649.95(6)				05Ko32	76(7)		24(3)			
2659.882(8)									65.1(7)	
2662(3)		5+,7+		92Bl02						
2662.0(1)				01Co01		57(4)		43(9)		
2705.684(11)		7+		92Bl02					100	
2707.413(9)				01Co01					66(3)	
2754(14)										
2757(3)										
2758.25(8)		3+		92Bl02		19(6)		56(4)		
2787.37(5)		3+		92Bl02	2.7(1)	83(3)	1.6(1)			
2793.433(8)				01Co01					28(8)	
2813(3)										
2834(3)		7+		92Bl02						
2842.692(10)				01Co01					76.6(16)	
2869.20(8)				92Bl02	1.7(1)	93(2)		2.8(2)		
2876.811(12)									35(4)	
2879.23(1)*			693(42) ps							
2895.986(13)										
2915(3)		5+,7+		92Bl02						
2917.63(8)				01Co01		22(4)		52(4)		
2926.763(4)				01Co01					36.8(6)	
2938(3)				92Bl02						
2975.29(7)				92Bl02	7.7(3)	92(4)				
2982(3)										
2984.49(6)		11–		92Bl02					100	
2984.63(14)						[60]				
2992(2)										
2993.6(2)				01Co01						
2994.1(1)***				01Co01						
3008.4(7)					44(22)	56(22)				
3029.086(12)			>1.4 ps							
3040(3)		1+,3+		92Bl02						
3043.88(19)				01Co01	61(11)	39(11)				

(continued) **$^{110}_{48}$Cd**

E^*	L	J^π	$T_{1/2}$ or	Ref.	Branching ratios in percentage					
					E_f^*: 0.0	658	1473	1476	1542	1731
[keV]	(τ,n)	(d,t)	Γ_{cm}		J_f^π: 0+	2+	0+	2+	4+	0+
3052(3)		1+,3+		92Bl02						
3055.776(13)			3500(5) ps							
3061(3)										
3064.6(5)									1.7(3)	
3073(3)**		[1+]		92Bl02						
3074.95(2)**		[11–]		92Bl02						
3078.36(8)		1+,3+		05Ko32	28(1)	57(1)		13(1)		
3101.90(4)					0.8(1)	47(1)		9(1)		
3106(3)		5+		92Bl02						
3118(3)										
3121.62(3)									0.58(14)	
3128.40(8)				92Bl02	39(3)			36(4)		
3135.15(10)									100	
3142(2)		5+,7+		92Bl02						
3148(3)		1+		92Bl02						
3171.1(2)		5+,7+		92Bl02		100				
3179(3)**		[11–]		92Bl02						
3181(2)**		[5+]		92Bl02						
3184.54(3)										
3187.354(21)			55(6) ps							
3193.0(4)				92Bl02		55.9(13)		8(1)		
3201(2)**										
3203(3)**										
3208.75(10)									100	
3239.83(5)									4.2(2)	
3247(16)										
3251(3)										
3256.48(14)				92Bl02		100				
3262(3)				92Bl02						
3275.45**		[7+]	0.6(2) ps	92Bl02						
3277.8(1)**		[3+]		92Bl02		100				
3281				05Ko32						
3298.13(20)				05Ko32	60(13)	40(13)				
3309(2)				92Bl02						
3314.44(4)					12(4)	34(1)		17(9)		1.1(4)
3329(17)										
3334.83(3)				72Au02						
3340(3)										
3340.82(14)						100				
3345.84(2)*			49(3) ps							
3353(3)		5+		92Bl02						
3359.06(20)				05Ko32	100					
3362(3)**		[3+,5+]		92Bl02						
3366.8(4)**		[7+]		92Bl02		100				
3373(2)										

(continued) **$^{110}_{48}$Cd**

E^*	L	J^π	$T_{1/2}$ or	Ref.	Branching ratios in percentage					
					E_f^*: 0.0	658	1473	1476	1542	1731
[keV]	(τ,n)	(d,t)	Γ_{cm}		J_f^π: 0+	2+	0+	2+	4+	0+
3385		7+		92Bl02						
3391.212(16)										
3397(4)				92Bl02						
3403.45(11)				72Au02	19(2)	81(2)				
3412.5(21)		7+		92Bl02						
3427(3)		1+		92Bl02						
3427.337(21)			6.0(6) ps							
3439.73(1)*			0.45(2) ps							
3442(3)***				00De11						
3447(3)										
3460.5(21)				92Bl02						
3466.42(6)						100				
3471(3)**		3+,7+		92Bl02						
3475.42**				05Ko32	71(2)	7.0(4)	15.9(4)			6.0(4)
3476(3)										
3487(3)**										
3488(2)**		[1+]		92Bl02						
3492.66(6)		[11–]		92Bl02						
3493.1(4)				92Bl02		100				
3498.5(21)										
3510(4)		3+		92Bl02						
3517(18)				72Au02						
3525.27(5)									9.2(2)	
3537(3)				92Bl02						
3581(4)										
3596.43(15)				05Ko32	88(6)		12(4)			
3603(4)***				00De11						
3604(43)										
3611.05(2)*			560(28) ps							
3614(18)				72Au02						
3630(3)**		[11–]		92Bl02						
3631(3)**		[3+,5+]		92Bl02						
3634.68(12)										
3641.14(4)										
3657(3)				92Bl02						
3668(4)				92Bl02						
3683.19(5)										
3686(4)**		[11–]		92Bl02						
3689(4)**		[5+]		92Bl02						
3696(4)		[5+,11–]		92Bl02						
3713(4)		3+,7+		92Bl02						
3726.58(24)					100					
3730(19)										
3737(3)				77Fi04						
3760(4)				92Bl02						

(continued)

$^{110}_{48}$Cd

E^*	L	J^π	$T_{1/2}$ or	Ref.	Branching ratios in percentage					
					E_f^*: 0.0	658	1473	1476	1542	1731
[keV]	(τ,n)	(d,t)	Γ_{cm}		J_f^π: 0+	2+	0+	2+	4+	0+
3771.77(3)				05Ko32	100					
3781.98(4)										
3791.3(10)										
3808(4)		5+								
3812(19)				72Au02						
3823.31(2)			3.5(3) ps							
3827(3)				92Bl02						
3847(4)**										
3854(4)		1+,3+		05Ko32						
3862				05Ko32						
3890(3)		5+		92Bl02						
3897(19)				72Au02						
3922(3)				92Bl02						
3950(20)				72Au02						
3957(4)										
3968(4)				92Bl02						
3988(4)										
3992.8(2)										
4001(3)		3+		92Bl02						
4024(4)		1+		92Bl02						
4039(3)				92Bl02						
4067(5)										
4077.17(2)*			0.7(2) ps							
4078(4)***				00De11						
4102(3)				92Bl02						
4128(4)		1=		92Bl02						
4143(5)										
4154(4)				92Bl02						
4171(3)				92Bl02						
4172.08(2)*			8.3(4) ps							
4172.73(3)			2.08(14) ps							
4181(4)**		[5+,11–]		92Bl02						
4182.0(1)**			1.04(14) ps							
4200(5)										
4290	0			77Fi04						
4334.31(7)										
4421.64(21)										
4438.16(11)										
4559.15(5)			1.7(+14-7) ps							
4619.9(3)										
4660	0			77Fi04						
4736.85(19)										
4888.30(4)*			1.39(14) ps							
4930.3(3)										
5026.34(8)*			1.39(14) ps							

(continued) **$^{110}_{48}$Cd**

E^*	L	J^π	$T_{1/2}$ or	Ref.	Branching ratios in percentage					
				E_f^*:	0.0	658	1473	1476	1542	1731
[keV]	(τ,n)	(d,t)	Γ_{cm}	J_f^π:	0+	2+	0+	2+	4+	0+
5092.0(10)			3.3(4) ps							
5114.0(4)										
5213.1(4)										
5215.5(7)										
5248.7(10)			<1.4 ps							
5497.0(4)										
5499.8(4)										
5676.1(3)										
5758.7(3)										
5789.8(4)										
5857.0(5)										
5892.9(9)										
5915.3(5)										
5967.0(3)										
5984.4(4)										
6079.8(10)										
6100.7(3)			<1.0 ps							
6101.6(5)			<1.0 ps							
6178.3(4)										
6181.3(3)										
6216.7(4)										
6354.5(5)										
6489.6(7)					x	x				
6543.8(11)										
6568.6(5)										
6576.1(5)										
6584.3(5)										
6645.9(6)										
6671.0(6)										
6672.5(4)										
6798.7(7)										
6837.0(7)										
6879.4(5)										
6963.0(6)										
6992.9(4)										
7047.0(4)										
7184.1(5)										
7280.8(5)										
7285.6(5)										
7325.2(4)										
7342.1(7)										
7443.2(5)										
7523.2(5)										
7575.4(7)										
7594.4(8)										

(continued) **$^{110}_{48}$Cd**

E^*	L	J^π	$T_{1/2}$ or	Ref.	Branching ratios in percentage						
					E_f^*:	0.0	658	1473	1476	1542	1731
[keV]	(τ,n)	(d,t)	Γ_{cm}		J_f^π:	0+	2+	0+	2+	4+	0+
7653.5(6)											
7758.8(6)											
7778.2(7)											
7797.5(6)											
7800.9(12)											
7945.7(5)											
7969.7(7)											
8016.3(6)											
8277.8(5)											
8292.1(6)											
8373.1(8)											
8405.2(11)											
8481.1(11)											
8530.5(8)											
8595.4(6)											
8629.7(6)											
8648.2(5)											
8862.1(6)											
8967.7(6)											
9106.6(6)											
9430.2(7)											
9574.2(15)											
9962.2(6)											
9971.7(12)											
9991.2(12)											
10229.1(12)											
10495.6(12)											
10665.0(13)											
11320.3(6)											
11451.0(16)											
11454.7(16)											
12081.6(16)											
12763(3)											
13032.7(19)											
14206(4)											
15357			31 keV								
15587			36 keV								
15644			≈15 keV								
15680			17 keV								
15738			23 keV								
15777			25 keV								
15874			45 keV								
15940			15 keV								
16001			10 keV								
	77Fi04			Ref.							

Energy levels and branching ratios [00De11]. Part 3

$^{110}_{48}$Cd

E^*	J^π		Branching ratios in percentage									
		E_f^*:	1783	2079	2079	2163	2220	2250	2287	2356	2433	2479.9
[keV]	(d,t)	J_f^π:	2+	3–	0+	3+	4+	4+	2+	⟨X+⟩	3+	6+
2078.86(1)			3.15(18)									
2078.88(2)	1+		100									
2250.55(1)			13.2(11)									
2332.08(20)	1+		19(5)									
2433.25(3)			16(3)									
2479.946(5)*								0.035(3)				
2481.59(5)			15(2)									
2539.69(7)*				3.9(1)								
2561.32(1)							2.1(4)					
2566.46(6)			22(3)									
2659.882(8)								7.0(5)				
2707.413(9)						34(7)						
2758.25(8)	3+									25(4)		
2793.433(8)				14(3)		46(2)	8.1(7)				3.8(5)	
2842.692(10)											21(2)	
2869.20(8)			2.1(7)									
2876.811(12)								55.7(9)				9.1(4)
2879.23(1)*												74.1(4)
2895.986(13)												6.52(17)
2926.763(4)						32.2(2)	25.0(2)				0.01	5.4(4)
2984.63(14)					[40]							
3029.086(12)												48.7(10)
3064.6(5)							32.8(9)					65.5(14)
3074.95(2)**	[11–]											17.7(7)
3078.36(8)	1+,3+								1.9(3)			
3101.90(4)				8(1)								
3121.62(3)							4.5(2)	0.72(9)				59.5(14)
3128.40(8)			25(5)									
3187.354(21)												100
3193.0(4)			8.4(10)			28(9)						
3239.83(5)							12					52.4(12)
3275.45**	[7+]											99.0(9)
3314.44(4)				25(1)		4.2(3)				5.9(4)		
3391.212(16)												32(4)
3439.73(1)*												70.3(10)
3492.66(6)	[11–]											30(4)
3525.27(5)							8.2(7)					19.3(9)
3634.68(12)			78(22)		22(7)							
3791.3(10)												38(1)
6489.6(7)			x									

Energy levels and branching ratios [00De11]. Part 4 **$^{110}_{48}$Cd**

E^*	J^π		Branching ratios in percentage									
		E_f^*:	2482	2539.7	2561.3	2660	2706	2707	2793	2842.7	2877	2879.2
[keV]	(d,t)	J_f^π:	3	5–	4+	5–	4+	⟨4⟩+	⟨4+⟩	5–	6+	7–
2659.882(8)				28(7)								
2707.413(9)							x					
2787.37(5)	3+		13(4)									
2842.692(10)						2.7(3)						
2879.23(1)*				24.5(7)		1.44(4)						
2895.986(13)				75.9(5)		17.5(5)						
2917.63(8)					26(4)							
2926.763(4)				0.1(1)	0.14(1)	0.07(2)	0.10	0.11	0.11			
3029.086(12)				36.5(3)		7.0(8)						7.7(5)
3055.776(13)												70.2(6)
3074.95(2)**	[11–]			58.5(14)						23.8(7)		
3121.62(3)				19.6(7)	4.3(2)	10.8						
3184.54(3)				70(3)						29.8(9)		
3239.83(5)										27(2)		4.6(7)
3275.45**	[7+]										1.04(14)	
3334.83(3)				x								55(3)
3345.84(2)*												90.7(9)
3391.212(16)												x
3427.337(21)												83(2)
3439.73(1)*											21.6(5)	
3492.66(6)	[11–]			70(4)								
3525.27(5)											9(2)	
3641.14(4)												60(2)
3781.98(4)												38.3(8)
3791.3(10)											49(2)	
3992.8(2)												100

Energy levels and branching ratios [00De11]. Part 5 **$^{110}_{48}$Cd**

E^*	J^π		Branching ratios in percentage									
		E_f^*:	2896.0	2918	2927	3029.1	3055.8	3065	3074.9	3187.3	3275.4	3345.8
[keV]	(d,t)	J_f^π:	6–	2+,3–	5+	7–	8–	6+	6–	8+	8+	9–
3055.776(13)			29.8(5)									
3101.90(4)				38(7)								
3334.83(3)							45.1(9)					
3345.84(2)*							9.31(16)					
3391.212(16)			60.2(13)						7.3(8)			
3427.337(21)			3(2)				13.8(7)					
3439.73(1)*											8.2(2)	
3492.66(6)	[11–]				x							
3525.27(5)								54(2)				
3611.05(2)*										1.9(2)	82.0(6)	3.9(2)

(continued) **$^{110}_{48}$Cd**

E^*	J^π	Branching ratios in percentage									
	E_f^*:	2896.0	2918	2927	3029.1	3055.8	3065	3074.9	3187.3	3275.4	3345.8
[keV]	(d,t) J_f^π:	6–	2+,3–	5+	7–	8–	6+	6–	8+	8+	9–
3641.14(4)					14.4(4)			25.8(10)			
3683.19(5)					53.7(8)	35.3(11)					8.4(3)
3781.98(4)						55.6(12)				6.2(4)	
3823.31(2)						83.3(8)					16.7(5)
4077.17(2)*										93.5(7)	
4172.73(3)											100
4182.0(1)**											25(4)
4334.31(7)											100
4421.64(21)											100
4438.16(11)									100		
4619.9(3)									71(8)	29(14)	

Energy levels and branching ratios [00De11]. Part 6 **$^{110}_{48}$Cd**

E^*	J^π	Branching ratios in percentage									
	E_f^*:	3427.3	3439.7	3611.0	3641.1	3683.2	3782.0	3823.3	4077.2	4171	4172.1
[keV]	(d,t) J_f^π:	8–	⟨8+⟩	10+	8–	9–	9–	10–	10+		12+
3611.05(2)*			12.21(11)								
3683.19(5)		2.56(13)									
3791.3(10)			12.3(8)								
4077.17(2)*			7(1)								
4172.08(2)*				100							
4182.0(1)**		62(2)				12(4)					
4334.31(7)					x						
4559.15(5)						78(2)		22(8)			
4736.85(19)							100				
4888.30(4)*									100		
4930.3(3)								94(9)			
5026.34(8)*											100
5114.0(4)									100		
5497.0(4)										36(9)	18(5)
5499.8(4)											100
5676.1(3)											32(4)
5758.7(3)											33(2)
5789.8(4)											88(6)

Energy levels and branching ratios [00De11]. Part 7 **$^{110}_{48}$Cd**

E^*	J^π		Branching ratios in percentage									
		E_f^*:	4172.7	4181	4559.1	4736.8	4888.3	4930.3	5026.3	5092.0	5114.0	5213.1
[keV]	(d,t)	J_f^π:	11–		11–	11–	12+	12–	14+	12–	12+	12–
4930.3(3)			6(1)									
5092.0(10)				100								
5114.0(4)			<13									
5248.7(10)			x									
5497.0(4)					45(5)							
5676.1(3)							68(3)					
5758.7(3)			10(2)		6(2)	5(1)		24(8)		6(2)		5(1)
5857.0(5)							81(6)				19(5)	
5915.3(5)							100					
5967.0(3)								21(2)		58(9)		12(3)
5984.4(4)								x				
6100.7(3)									100			
6101.6(5)								83(19)		17(3)		
6178.3(4)									28(11)			
6181.3(3)									44(3)			
6216.7(4)									100			
6568.6(5)									100			
6576.1(5)									20(4)			
6584.3(5)									100			
6671.0(6)									60(20)			

Energy levels and branching ratios [00De11]. Part 8 **$^{110}_{48}$Cd**

E^*	J^π		Branching ratios in percentage									
		E_f^*:	5215.5	5248.7	5497.0	5499.8	5676.1	5758.7	5789.8	5857.0	5892.9	5915.3
[keV]	(d,t)	J_f^π:	⟨11+⟩	13–	13–	13+	14+	13–	14+	14+		14+
5758.7(3)				10(2)								
5789.8(4)						12(6)						
5892.9(9)			100									
5967.0(3)				9(2)								
5984.4(4)								100				
6079.8(10)											100	
6178.3(4)						61(17)			11(3)			
6181.3(3)				40(2)	16(2)							
6543.8(11)				100								
6576.1(5)							80(2)					
6645.9(6)									100			
6671.0(6)				40(20)								
6798.7(7)										100		
6837.0(7)												100

Energy levels and branching ratios [00De11]. Part 9 **$^{110}_{48}$Cd**

E^*	J^π		Branching ratios in percentage									
		E_f^*:	5967.0	5984.4	6100.7	6178.3	6181.3	6216.7	6354.5	6568.6	6576.1	6584.3
[keV]	(d,t)	J_f^π:	14–	14–	16+	15+	15–	⟨14⟩	15–	14	16+	14
6354.5(5)				100								
6672.5(4)			89(6)				10.8(12)					
6879.4(5)										38(6)		62(6)
6963.0(6)									100			
6992.9(4)					17(2)		83(3)					
7047.0(4)			41(9)		59(12)							
7184.1(5)						100						
7285.6(5)								100				
7325.2(4)					100							
7342.1(7)				100								
7443.2(5)							15(8)					
7653.5(6)											100	
7778.2(7)									25(6)			

Energy levels and branching ratios [00De11]. Part 10 **$^{110}_{48}$Cd**

E^*	J^π		Branching ratios in percentage									
		E_f^*:	6645.9	6671.0	6672.5	6879.4	6963.0	6992.9	7047.0	7184.1	7280.8	7285.6
[keV]	(d,t)	J_f^π:	⟨16+⟩	⟨15–⟩	16–	15	16–	17–	16–	17+	16	⟨16⟩
7280.8(5)						100						
7443.2(5)				x	85(15)							
7523.2(5)					100							
7575.4(7)							100					
7594.4(8)							100					
7758.8(6)											100	
7778.2(7)							45(15)					
7797.5(6)											100	
7800.9(12)			100									
7945.7(5)								100				
7969.7(7)									100			
8016.3(6)											100	
8481.1(11)										100		
8530.5(8)												100

Energy levels and branching ratios [00De11]. Part 11 **$^{110}_{48}$Cd**

E^*	J^π		Branching ratios in percentage									
		E_f^*:	7325.2	7342.1	7443.2	7523.2	7653.5	7758.8	7778.2	7797.5	7945.7	8016.3
[keV]	(d,t)	J_f^π:	18+		⟨17–⟩	18–	18+	17		17	19–	17
7778.2(7)				30(15)								
8277.8(5)			41(6)					18(6)		29(6)		12(6)
8292.1(6)			100									
8373.1(8)									100			
8405.2(11)					100							
8629.7(6)						100						
8648.2(5)			100									
8862.1(6)							100					
9106.6(6)											100	

Energy levels and branching ratios [00De11]. Part 12 **$^{110}_{48}$Cd**

E^*	J^π		Branching ratios in percentage								
		E_f^*:	8277.8	8292.1	8405.2	8595.4	8629.7	8648.2	8862.1	8967.7	9106.6
[keV]	(d,t)	J_f^π:	18	18	⟨19–⟩	19	20–	20+	⟨20+⟩	20	21–
8595.4(6)			95(7)	5.3(18)							
8967.7(6)						100					
9430.2(7)										100	
9574.2(15)					100						
9962.2(6)								73(3)	27(9)		
9971.7(12)							100				
10229.1(12)									100		
10495.6(12)											100

Energy levels and branching ratios [00De11]. Part 13 **$^{110}_{48}$Cd**

E^*	J^π		Branching ratios in percentage								
		E_f^*:	9430.2	9962.2	9971.7	9991.2	10495.6	10665.0	11320.3	11454.7	12763
[keV]	(d,t)	J_f^π:	21	22+	22–	22	23–	23	24+	⟨24–⟩	26+
9991.2(12)			100								
10665.0(13)						100					
11320.3(6)				100							
11451.0(16)								100			
11454.7(16)					100						
12081.6(16)							100				
12763(3)									100		
13032.7(19)										100	
14206(4)											100

Energy levels and branching ratios [03Bl10].

$^{111}_{48}$Cd

E^* [keV]	$2J^\pi$	L (d,p)	σ (d,p) μb/sr	σ (d,t) μb/sr	S_{dt}/S_{dp}	$I_{s,0}$ [eVb]	g$\Gamma_\circ$ [meV]	g$\Gamma_\circ^{red}$ [meV′]	$B(M1)$ [μ_N^2]	$B(E1)$ $10^{-3}ef$	S_N (p,d)	$T_{1/2}$ or Γ_{cm}	Ref.
0.0	1^+	0	2450	810							0.54	Stable	64Ro17
245.390(16)	5^+	2	1520	1210	0.80							84.5(4) ns	64Ro17
342.135(16)	3^+	2	2010	210	0.10							24(3) ps	64Ro17
396.214(21)	11^-	5	720	150								48.50(9) m	64Ro17
416.72(3)	7^+	4	300	170								0.12(3) ns	64Ro17
620.18(3)	5^+	2	480	190	0.40							9.7 ps	64Ro17
680.48(5)	$\langle 9\rangle^-$		420	50									64Ro17
700(10)	$\langle 7^+,9^+\rangle$	$\langle 4\rangle$	incl	incl									64Ro17
704.93(10)	7^+		incl	incl									
736(10)	$3^+,5^+$											>1 ns	
752.81(5)	5^+												
754.9(4)	3^+												
831.26(9)	$\langle 7^-\rangle$												
853.94(7)	7^+												
855.6(10)	3^+												
864.8(3)	3^+	2	1560	190	0.12								64Ro17
866.60(6)	3^+		incl	incl								2.8(+7-4) ps	
967.90(7)	15^-												
986.53(9)	9^+												
1016.76(8)	3^+		820	250									64Ro17
1020(10)	1^+	0	incl	incl									64Ro17
1046.76(7)	$\langle 7^+\rangle$		incl	incl									
1057.49(9)													
1078.25(7)	3^+												
1115.56(9)	3^+	2	280	140								0.08(4) ps	64Ro17
1118.41(7)	7^+		incl	incl									
1130(1)												80 ps	
1151.00(9)	$\langle 5^+\rangle$	$\langle 2\rangle$	incl	incl	0.5								64Ro17
1185.73(10)	1^+	0	180	60									64Ro17
1189.96(10)	3^+		incl	incl									
1256.59(9)	11^+												
1274.68(8)	$\langle 5^+\rangle$												
1288.89(25)													
1298.58(9)	$\langle 7^+\rangle$												
1321.61(10)													
1325.94(10)	$1^+,3^+$												
1326.62(10)	5^-												
1330												1 ps	
1339.72(12)	$\langle 13^-\rangle$												
1340.67(6)	1,3												
1341.33(10)	$\langle 5\rangle$												
1346.19(10)													
1391.81(7)	3^+												
1472.98(12)	1^+												
1506.05(10)	$\langle 9^-\rangle$												

(continued) **$^{111}_{48}$Cd**

E^* [keV]	$2J^\pi$	L (d,p)	σ (d,p) μb/sr	σ (d,t) μb/sr	S_{dt}/S_{dp}	$I_{s,0}$ [eVb]	g$\Gamma_\circ$ [meV]	g$\Gamma_\circ^{red}$ [meV′]	$B(M1)$ $[\mu_N^2]$	$B(E1)$ $10^{-3}ef$	S_N (p,d)	$T_{1/2}$ or Γ_{cm}	Ref.
1511.57(10)													
1546.33(10)	3^+	2	510										64Ro17
1552.10(8)	3^+	2	incl										64Ro17
1552.44(13)	$\langle 7^+,9^+\rangle$												
1565.72(10)	$\langle 11^-\rangle$												
1613.32(13)													
1660(10)	$\langle 1^+\rangle$	$\langle 0\rangle$	110										64Ro17
1666.00(15)													
1682.75(12)													
1691.95(18)	3^+												
1717.47(22)	$3^+,5^+$	2	300										64Ro17
1739.73(10)	3^+												
1789.30(12)	3^+												
1800.94(14)	$\langle 7^-\rangle$												
1826.71(17)	9,11												
1828.63(11)	3^+												
1842.50(18)	3,1												
1849.0(4)													
1852.1(3)	19^-												
1860(10)	$3^+,5^+$	2	180										64Ro17
1907.4(3)													
1921.1(10)	$\langle 13^+\rangle$												
1971.80(12)	7^-												
1974.75(15)	$3^+,5^+$	2	180										64Ro17
1992.71(16)													
2005.8(3)													
2016.0(5)	$3^+,5^+$	2	240										64Ro17
2038.6(4)													
2045.29(23)	$\langle 1^+\rangle$												
2096.95(21)													
2134.88(19)													
2147.5(4)	$\langle 17^-\rangle$												
2154.21(14)													
2165.6(5)													
2195.7(10)	$\langle 15^+\rangle$												
2197						3.7(4)	4.59(22)	0.433(20)	0.037(4)	0.41(5)			05Ko32
2200(10)													
2226.3(11)													
2236.1(3)						1.6(2)	2.14(8)	0.191(7)	0.017(3)	0.18(3)			05Ko32
2242.5(4)													
2280.5(4)	$1^+,3^+$												
2311						3.0(3)	4.16(9)	0.337(7)	0.029(3)	0.32(3)			05Ko32
2325.6(5)	1,3												
2331.5(6)													
2382.9(3)						0.4(1)	0.60(2)	0.044(1)	0.004(1)	0.04(1)			05Ko32

(continued) **$^{111}_{48}$Cd**

E^* [keV]	$2J^\pi$	L (d,p)	σ (d,p) μb/sr	σ (d,t) μb/sr	S_{dt}/S_{dp}	$I_{s,0}$ [eVb]	g$\Gamma_\circ$ [meV]	g$\Gamma_\circ^{red}$ [meV′]	$B(M1)$ $[\mu_N^2]$	$B(E1)$ $10^{-3}ef$	S_N (p,d)	$T_{1/2}$ or Γ_{cm}	Ref.
2415						1.9(8)	2.86(93)	0.203(66)	0.018(6)	0.19(6)			05Ko32
2419						6.2(5)	9.38(33)	0.662(23)	0.057(4)	0.63(5)			05Ko32
2446.1(4)													
2449						0.5(1)	0.83(2)	0.056(2)	0.005(1)	0.05(1)			05Ko32
2475.3(11)													
2495.1(4)													
2538						0.9(1)	1.57(3)	0.096(2)	0.008(1)	0.09(1)			05Ko32
2556.9(4)													
2560						2.8(2)	4.72(7)	0.282(4)	0.024(2)	0.27(2)			05Ko32
2588.2(5)													
2653.2(7)													
2659						0.7(1)	1.37(3)	0.073(2)	0.006(1)	0.07(1)			05Ko32
2671						2.1(2)	3.94(6)	0.207(3)	0.018(2)	0.20(2)			05Ko32
2692.3(5)						0.9(1)	1.70(3)	0.087(2)	0.008(1)	0.08(1)			05Ko32
2698						0.9(1)	1.74(3)	0.089(2)	0.008(1)	0.08(1)			05Ko32
2709.9(4)						1.8(2)	3.43(5)	0.173(3)	0.015(1)	0.16(1)			05Ko32
2714.5(4)													
2733.2(3)						0.9(1)	1.71(3)	0.084(2)	0.007(1)	0.08(1)			05Ko32
2740.1(5)	⟨19⟩												
2756						0.7(1)	1.48(3)	0.071(1)	0.006(1)	0.07(1)			05Ko32
2768.4(5)													
2775						1.5(1)	3.00(4)	0.141(2)	0.012(1)	0.13(1)			05Ko32
2788						0.4(1)	0.82(3)	0.038(1)	0.003(1)	0.04(1)			05Ko32
2831						0.6(1)	1.27(3)	0.056(1)	0.005(1)	0.05(1)			05Ko32
2847.0(6)	23^-												
2860.1(11)						2.9(2)	6.21(8)	0.266(3)	0.023(2)	0.25(2)			05Ko32
2950.88(11)													
2977.9(5)													
3039						2.4(1)	5.81(5)	0.207(2)	0.018(1)	0.20(1)			05Ko32
3059						1.2(6)	3.01(76)	0.105(26)	0.009(3)	0.10(3)			05Ko32
3076.11(24)													
3100.6(6)													
3113						0.5(1)	1.29(2)	0.043(1)	0.004(1)	0.04(1)			05Ko32
3126.4(6)													
3131						4.4(6)	11.21(103)	0.365(34)	0.032(2)	0.35(2)			05Ko32
3147						0.7(1)	1.77(2)	0.057(1)	0.005(1)	0.05(1)			05Ko32
3173						1.9(1)	4.90(4)	0.153(1)	0.013(1)	0.15(1)			05Ko32
3185						0.8(1)	2.11(3)	0.065(1)	0.006(1)	0.06(1)			05Ko32
3207						1.1(2)	2.84(10)	0.086(3)	0.007(1)	0.08(1)			05Ko32
3230.3(10)	⟨23^+⟩												
3246						0.8(1)	2.15(3)	0.063(1)	0.005(1)	0.06(1)			05Ko32
3259						0.7(1)	1.96(3)	0.057(1)	0.005(1)	0.05(1)			05Ko32
3302						1.8(2)	5.11(7)	0.142(2)	0.012(1)	0.14(1)			05Ko32
3323						1.3(3)	3.61(29)	0.098(8)	0.009(1)	0.09(1)			05Ko32
3351						1.7(13)	4.92(457)	0.131(121)	0.011(6)	0.12(7)			05Ko32

(continued) **$^{111}_{48}$Cd**

E^* [keV]	$2J^\pi$	L (d,p)	σ (d,p) μb/sr	σ (d,t) μb/sr	S_{dt}/S_{dp}	$I_{s,0}$ [eVb]	g$\Gamma_\circ$ [meV]	g$\Gamma_\circ^{red}$ [meV′]	$B(M1)$ [μ_N^2]	$B(E1)$ $10^{-3}ef$	S_N (p,d)	$T_{1/2}$ or Γ_{cm}	Ref.
3362						1.1(1)	3.18(3)	0.084(1)	0.007(1)	0.08(1)			05Ko32
3384						0.9(1)	2.64(3)	0.068(1)	0.006(1)	0.07(1)			05Ko32
3394						0.8(1)	2.31(3)	0.059(1)	0.005(1)	0.06(1)			05Ko32
3455						2.6(2)	8.18(16)	0.198(4)	0.017(1)	0.19(2)			05Ko32
3467						6.7(8)	20.81(187)	0.500(45)	0.043(2)	0.48(2)			05Ko32
3483						3.5(5)	10.95(80)	0.259(19)	0.022(2)	0.25(2)			05Ko32
3498						2.7(2)	8.53(8)	0.199(2)	0.017(1)	0.19(1)			05Ko32
3526						8.7(9)	28.15(249)	0.642(57)	0.055(5)	0.61(6)			05Ko32
3542						1.6(1)	5.33(5)	0.120(1)	0.010(1)	0.11(1)			05Ko32
3553						0.7(1)	2.34(4)	0.052(1)	0.005(1)	0.05(1)			05Ko32
3566						0.8(1)	2.75(4)	0.061(1)	0.005(1)	0.06(1)			05Ko32
3573						0.7(1)	2.19(4)	0.048(1)	0.004(1)	0.05(1)			05Ko32
3671						0.4(1)	1.27(4)	0.026(1)	0.002(1)	0.02(1)			05Ko32
3691						0.6(1)	2.26(5)	0.045(1)	0.004(1)	0.04(1)			05Ko32
3702						1.5(2)	5.23(8)	0.103(2)	0.009(1)	0.10(1)			05Ko32
3710						2.3(2)	8.09(13)	0.158(3)	0.014(1)	0.15(1)			05Ko32
3715						0.6(1)	2.12(7)	0.041(1)	0.004(1)	0.04(1)			05Ko32
3717.4(7)	$\langle 27^+ \rangle$												
3733						0.4(1)	1.58(7)	0.030(1)	0.003(1)	0.03(1)			05Ko32
3740						2.6(2)	9.59(18)	0.183(3)	0.016(1)	0.18(1)			05Ko32
3756						0.6(1)	2.27(8)	0.043(2)	0.004(1)	0.04(1)			05Ko32
3763.0(7)	27^-												
3781						0.5(1)	2.03(7)	0.038(1)	0.003(1)	0.04(1)			05Ko32
3801						0.9(2)	3.31(10)	0.060(2)	0.005(1)	0.06(1)			05Ko32
3828						3.5(7)	13.24(164)	0.320(107)	0.028(3)	0.31(4)			05Ko32
3856						4.7(13)	18.33(613)	0.320(107)	0.028(3)	0.31(4)			05Ko32
3900						2.8(2)	10.91(20)	0.184(3)	0.016(1)	0.18(1)			05Ko32
3921						0.8(2)	3.11(18)	0.052(3)	0.004(1)	0.05(1)			05Ko32
4555.9(9)	31^-												
5501.7(10)	35^-												
6648.8(11)	39^-												
7951.2(12)	43^-												
9407.2(15)	47^-												
			64Ro17	64Ro17	64Ro17	05Ko32	05Ko32	05Ko32	05Ko32	05Ko32	83Ao01		Ref.

Additional data on this isotope can be found in [01Ko49, 94Re06, 94Ju05, 90Ve10, 67Ko07].
Abundance: 12.80(12) %.
$B(E1)$ are given in units $10^{-3}e^2fm^2$ [05Ko32].
Data for this isotope are considered in vol. LB I/18B.

Energy levels and branching ratios [03Bl10]. Part 2

$^{111}_{48}$Cd

E^*	$2J^\pi$		Branching ratios in percentage									
		E_f^*:	0.0	245	342	396	417	620	680	705	752.81	831.26
[keV]		$2J_f^\pi$:	1^+	5^+	3^+	11^-	7^+	5^+	$\langle 9\rangle^-$	7^+	5^+	$\langle 7^-\rangle$
245.390(16)	5^+		100									
342.135(16)	3^+		98	1.70(9)								
396.214(21)	11^-			100								
416.72(3)	7^+			100								
620.18(3)	5^+		74(7)	21(2)	4.5(4)		0.5(1)					
680.48(5)	$\langle 9\rangle^-$					100						
704.93(10)	7^+								x			
752.81(5)	5^+		23(5)	51(3)	19(5)		7(2)					
754.9(4)	3^+		53	26	21							
831.26(9)	$\langle 7^-\rangle$					100						
853.94(7)	7^+			73			27(2)					
855.6(10)	3^+		100									
864.8(3)	3^+		51(9)	18(9)	31(5)							
866.60(6)	3^+		31(2)	50(10)	17(2)		2.9(8)					
967.90(7)	15^-					100						
986.53(9)	9^+			28(1)			72(6)					
1016.76(8)	3^+		86	6.5(9)							7.1(9)	
1046.76(7)	$\langle 7^+\rangle$			8(6)	76(8)			11(3)			5(2)	
1057.49(9)			9	18(1)	71(14)			<63			1.6	
1078.25(7)	3^+		46(7)	49(5)				3.0(5)				
1115.56(9)	3^+		57(11)		28(9)			15(2)				
1118.41(7)	7^+			46(5)	39(9)		≤20	11(3)			5(2)	
1151.00(9)	$\langle 5^+\rangle$		8(1)							92(5)		
1185.73(10)	1^+		100									
1189.96(10)	3^+		3.3(16)					97				
1256.59(9)	11^+						95(11)					
1274.68(8)	$\langle 5^+\rangle$			[71]			[13]					
1288.89(25)						2(1)			83			15
1298.58(9)	$\langle 7^+\rangle$			44(22)			56(7)					x
1321.61(10)			96(12)		4(1)							
1325.94(10)	$1^+,3^+$		100									
1326.62(10)	5^-				20(1)				80(12)			
1339.72(12)	$\langle 13^-\rangle$					97(16)						
1340.67(6)	1,3		[77]								[23]	
1341.33(10)	$\langle 5\rangle$				75(1)		25(7)					
1346.19(10)				20(5)	5(1)		20(6)	55(19)				
1391.81(7)	3^+		7(1)	63(6)	25(3)						4.9(11)	
1472.98(12)	1^+		34		56						≤84	
1506.05(10)	$\langle 9^-\rangle$					35(6)			65(6)			
1511.57(10)			2.9(9)	38(9)			14(5)	28(3)				
1546.33(10)	3^+		22(11)	24(5)				24(7)			29(6)	
1552.10(8)	3^+		14(3)	27(4)	58(11)		<2.2	<44				
1552.44(13)	$\langle 7^+,9^+\rangle$						x	x				
1565.72(10)	$\langle 11^-\rangle$					62(6)						
1613.32(13)				31(8)	43(8)			9(3)				

(continued) **$^{111}_{48}$Cd**

E^*	$2J^\pi$		Branching ratios in percentage									
		E_f^*:	0.0	245	342	396	417	620	680	705	752.81	831.26
[keV]		$2J_f^\pi$:	1^+	5^+	3^+	11^-	7^+	5^+	$\langle 9\rangle^-$	7^+	5^+	$\langle 7^-\rangle$
1666.00(15)							36(11)					
1682.75(12)				14(3)			52(12)			≈24		
1691.95(18)	3^+		74(5)		11(4)						16(4)	
1717.47(22)	3^+,5^+		[42]					[43]				
1739.73(10)	3^+		8(3)	27(7)								
1789.30(12)	3^+		20(5)	26(12)	31(6)						23(5)	
1800.94(14)	$\langle 7^-\rangle$					30(5)						57(6)
1828.63(11)	3^+		24(9)		32(10)							
1842.50(18)	3,1		27(8)	13(3)				10(5)				
1849.0(4)			40(8)		45(16)		15(3)					
1907.4(3)							86					
1971.80(12)	7^-					48(12)			25(6)			27(5)
1974.75(15)	3^+,5^+				59(9)			28(9)			9(4)	
1992.71(16)									42(11)			34
2005.8(3)			61(14)		11(6)							29(11)
2016.0(5)	3^+,5^+		44(14)								47(14)	
2038.6(4)			12(3)	38(13)	51(21)							
2045.29(23)	$\langle 1^+\rangle$		27(7)									
2096.95(21)										≤19	19(8)	
2134.88(19)				17(9)	35(10)							
2154.21(14)				14(3)	8(3)		44(13)					
2165.6(5)			25(8)									
2236.1(3)			31(8)	14(5)							13(6)	
2242.5(4)					23(10)			20(7)				
2280.5(4)	1^+,3^+				21(8)			62(21)				
2325.6(5)	1,3		41(12)		59(18)							
2382.9(3)							33(7)					
2446.1(4)					44(9)			25(11)		6(3)		
2495.1(4)			30(8)		38(4)							
2556.9(4)				67(17)								
2588.2(5)					42(10)		49(10)					
2653.2(7)				42(13)				58(17)				
2692.3(5)			31(11)				22(7)				37(14)	
2714.5(4)							44(7)					
2733.2(3)					34(7)							
2768.4(5)			45(13)		15(4)		40(11)					
2950.88(11)				57(21)	18(6)			3.3(11)				
3076.11(24)							40(8)	28(10)				
3126.4(6)								75(20)			20(6)	

Energy levels and branching ratios [03Bl10]. Part 3 **$^{111}_{48}$Cd**

E^*	$2J^\pi$		Branching ratios in percentage									
		E_f^*:	853.94	855.6	864.8	866.60	967.90	986.53	1016.76	1046.76	1078.25	1115.56
[keV]		$2J_f^\pi$:	7^+	3^+	3^+	3^+	15^-	9^+	3^+	$\langle 7^+ \rangle$	3^+	3^+
1078.25(7)	3^+					1.5(6)						
1189.96(10)	3^+					≤2.6						
1256.59(9)	11^+							5(2)				
1274.68(8)	$\langle 5^+ \rangle$		[16]									
1339.72(12)	$\langle 13^- \rangle$						3.2(16)					
1340.67(6)	1,3								≤7.4			
1472.98(12)	1^+								7(2)		3.1(12)	
1565.72(10)	$\langle 11^- \rangle$						38(5)					
1613.32(13)			13(5)			4(1)						
1666.00(15)								64(3)				
1717.47(22)	3^+,5^+											[15]
1739.73(10)	3^+					65(8)						
1826.71(17)	9,11									100		
1828.63(11)	3^+								44(9)			
1842.50(18)	3,1				50(10)							
1852.1(3)	19^-						100					
1907.4(3)			14(7)									
1921.1(10)	$\langle 13^+ \rangle$							100				
1974.75(15)	3^+,5^+								≤16			
2016.0(5)	3^+,5^+											9(4)
2096.95(21)			58(12)									
2147.5(4)	$\langle 17^- \rangle$						71(18)					
2154.21(14)												8(3)
2165.6(5)						75(23)						
2236.1(3)									31(9)		4(2)	
2242.5(4)									57(20)			
2382.9(3)				35(9)								
2714.5(4)			21(8)							24(6)		
2733.2(3)												15(5)
2950.88(11)						22(6)						
2977.9(5)			67(13)							33(13)		
3076.11(24)									23(4)			

Energy levels and branching ratios [03Bl10]. Part 4 **$^{111}_{48}$Cd**

E^*	$2J^\pi$		Branching ratios in percentage									
		E_f^*:	1118.41	1189.96	1256.59	1274.68	1288.89	1321.61	1325.94	1326.62	1339.72	1340.67
[keV]		$2J_f^\pi$:	7^+	3^+	11^+	$\langle 5^+ \rangle$			1^+,3^+	5^-	$\langle 13^- \rangle$	1,3
1511.57(10)			17(3)									
1682.75(12)						10(2)						
1828.63(11)	3^+			≤12								
1974.75(15)	3^+,5^+			4(2)								

(continued) **$^{111}_{48}$Cd**

E^*	$2J^\pi$					Branching ratios in percentage							
		E_f^*:	1118.41	1189.96	1256.59	1274.68	1288.89	1321.61	1325.94	1326.62	1339.72	1340.67
[keV]		$2J_f^\pi$:	7^+	3^+	11^+	$\langle 5^+ \rangle$			$1^+,3^+$	5^-	$\langle 13^- \rangle$	1,3
1992.71(16)										24(6)		
2005.8(3)									≤89			
2096.95(21)			8(3)	16(6)								
2134.88(19)									28(10)			
2147.5(4)	$\langle 17^- \rangle$										29(3)	
2154.21(14)				26(13)								
2195.7(10)	$\langle 15^+ \rangle$				100							
2280.5(4)	$1^+,3^+$			17(6)								
2331.5(6)											100	
2382.9(3)												32(8)
2446.1(4)												25(6)
2495.1(4)											14(4)	
2556.9(4)								33(8)				
2588.2(5)											9.0(10)	
2692.3(5)			10(3)									
2709.9(4)							86(12)		14(3)			
2714.5(4)											11(3)	
3076.11(24)			5(2)									
3126.4(6)											5.0(19)	

Energy levels and branching ratios [03Bl10]. Part 5 **$^{111}_{48}$Cd**

E^*	$2J^\pi$					Branching ratios in percentage						
		E_f^*:	1346.19	1472.98	1552.10	1565.72	1666.00	1691.95	1739.73	1852.1	1974.75	2045.29
[keV]		$2J_f^\pi$:		1^+	3^+	$\langle 11^- \rangle$		3^+	3^+	19^-	$3^+,5^+$	$\langle 1^+ \rangle$
1800.94(14)	$\langle 7^- \rangle$					13(3)						
2045.29(23)	$\langle 1^+ \rangle$				52(8)			21(4)				
2134.88(19)				20(10)								
2226.3(11)										100		
2236.1(3)				6(2)								
2475.3(11)										100		
2495.1(4)				18(5)								
2733.2(3)			17(3)						14(6)		6(2)	13(5)
2740.1(5)	$\langle 19 \rangle$									54(15)		
2847.0(6)	23^-									100		
3076.11(24)							4(1)					

Energy levels and branching ratios [03Bl10]. Part 6

$^{111}_{48}$Cd

E^*	$2J^\pi$	Branching ratios in percentage									
	E_f^*:	2147.5	2195.7	2740.1	2847.0	3100.6	3763.0	4555.9	5501.7	6648.8	7951.2
[keV]	$2J_f^\pi$:	$\langle 17^- \rangle$	$\langle 15^+ \rangle$	$\langle 19 \rangle$	23^-		27^-	31^-	35^-	39^-	43^-
2740.1(5)	$\langle 19 \rangle$	46(15)									
2860.1(11)			100								
3100.6(6)				100							
3230.3(10)	$\langle 23^+ \rangle$			100							
3717.4(7)	$\langle 27^+ \rangle$					100					
3763.0(7)	27^-				100						
4555.9(9)	31^-						100				
5501.7(10)	35^-							100			
6648.8(11)	39^-								100		
7951.2(12)	43^-									100	
9407.2(15)	47^-										100

Energy levels and branching ratios [96De55, 01Ga44].

$^{112}_{48}$Cd

E^*	J^π	L	σ (τ,n)	σ (t,p)	σ (d,d′)	β_L	L	C^2S	$2J^\pi$	S_α	$d\sigma/d\Omega$	$I_{s,0}$	$\Gamma_\circ$	$\Gamma_\circ^{red}$	Ref.
[keV]		(τ,n)	(τ,n)	μb/sr	μb/sr	(α, α')	(d,t)	(d,t)	(d,t)	(d,^{6}Li)	μb/sr	[eVb]	[meV]	[meV′]	
0.0	0^+	0	288	4504			0	1.140		0.021	1.6(2)				87Me19
617.517(3)	2^+			152	9240	0.19	2	0.375		0.023	0.43(9)				77Sp05
1224.34(1)	0^+	0	157	120	80					0.002	0.10(4)				77Fi04
1312.39(1)	2^+			60	600		2	0.134	5+	0.005	0.07(3)				90Bl10
1415.56(2)	4^+			8.1	170		4	0.169		0.004	0.09(5)				90Bl10
1433.31(2)	0^+			32	27					0.001	incl				
1468.83(1)	2^+			7.7	120		2	0.013	3+,5+	0.004	0.05(5)				90Bl10
1870.86(1)	4^+			88	43					0.001	0.05(3)				
1871.00(19)	0^+			incl			0	0.025							90Bl10
1954.8	2,3				20										
2005.19(2)	3^-			94	1710	0.15	3	0.014		≤0.02	0.35(8)				67BaZV
2064.51(2)	3^+							0.009	5+		0.12(5)				90Bl10
2081.72(2)	4^+			27	220		4	0.093			incl				90Bl10
2121.53(2)	2^+				12		2	0.012	3+		0.10(4)				90Bl10
2156.18(2)	2^+			11	23		2	0.012	3+,5+		incl				90Bl10
2167(1)	2^+,3^-			incl	16										
2167.70(2)	6^+														
2231.19(2)	2^+			35	38		2	0.006			0.017				90Bl10
2300.74(3)	0^+			106	30		0	0.133			0.05(3)				90Bl10
2305				incl											
2335															
2373.28(2)	5^-			80	110		5	0.232			0.09(4)				90Bl10
2403.03(2)	3^+							0.003	5+		0.10(4)				90Bl10
2416.00(6)	3^-				170			0.006	7–		incl				90Bl10
2418(2)	$\langle 1,2^+ \rangle$											0.7(1)	0.3(1)	0.024(5)	99Le31

(continued) **$^{112}_{48}$Cd**

E^* [keV]	J^π	L (τ,n)	σ (τ,n)	σ (t,p) μb/sr	σ (d,d′) μb/sr	L (d,t)	C^2S (d,t)	$2J^\pi$ (d,t)	$d\sigma/d\Omega$ μb/sr	$I_{s,0}$ [eVb]	$\Gamma_\circ$ [meV]	$\Gamma_\circ^{red}$ [meV′]	Ref.
2454.52(6)	4^+			40	140		0.110	7+					90Bl10
2493.16(1)	4^+				140		0.054	7+					90Bl10
2501	0^+					0	0.010						90Bl10
2506.73(2)	1^-									17(1)	9.1(4)	0.58(3)	99Le31
2506.33(2)	2^+			55	150	2	0.034	3+,5+	0.17(6)				90Bl10
2506.9(1)	$4,5^+$								incl				
2517							0.004	3+,11–					90Bl10
2532.4(1)*	2^+												97Dr03
2561.2(2)	$1,2^+$			9									97Dr03
2570.29(3)	5^-			incl			0.098	11–	0.09(4)				90Bl10
2571.68(9)	6^+				20								
2584(4)	1^-												
2589(1)	$\langle 6^+\rangle$				13								
2591.05(1)	4^-						0.005	7–					90Bl10
2632(5)	5^-								0.17(6)				
2635.00(2)	2^+				10		0.440	5+	incl				90Bl10
2650.16(5)	0^+	0	42			0	0.033		incl				77Fi04
2649(1)	3^-				19				incl				
2653(1)	1^-				16				incl				
2665.62(4)	5^+				20								
2668.9(1)*	2^-			$\langle 6\rangle$									
2674.02(7)	2^+				46	2	0.1,0.07	3+,5+					90Bl10
2694(2)	1									1.0(2)	0.7(1)	0.033(5)	99Le31
2711.29(3)	4^+				86		0.372	7+					90Bl10
2718(4)	$\langle 0^+\rangle$			120									
2723.88(3)	2^+				130		0.407	5+					90Bl10
2765.75(3)	2^+			170	256	2	0.06,0.01	3+,5+					90Bl10
2773.18(4)													
2775(1)	$\langle 6^+\rangle$				7								
2791.79(7)	5^-				13								
2793.68(4)	7^-												
2799(28)	$1^+,2^+$						0.012	3+					90Bl10
2816.90(3)	4^+				60								
2817.80(3)	6^-				20		0.04,0.6	3+,11–					90Bl10
2829.22(4)	1			283						4.5(3)	3.1(2)	0.137(8)	99Le31
2830(1)	4^+			incl	14								
2834.43(7)	0^+			incl	7	0	0.032						90Bl10
2835(1)	4^+				14								
2840.29(2)	5				15								
2844(1)					8								
2852.92(4)	2^+				27								
2853	0^+					0	0.004						90Bl10
2866.86(2)	3^-			89	178		0.01,0.6	5+,7+					90Bl10
2867.48(7)	3^+			incl									01Co01
2877(1)	$\langle 2^+\rangle$				7								

(continued) **$^{112}_{48}$Cd**

E^* [keV]	J^π	L (τ,n)	σ (τ,n)	σ (t,p) μb/sr	σ (d,d′) μb/sr	β_L (α,α')	L (d,t)	C^2S (d,t)	$2J^\pi$ (d,t)	$I_{s,0}$ [eVb]	$\Gamma_\circ$ [meV]	$\Gamma_\circ^{red}$ [meV′]	Ref.
2881.26(2)	8^+				5								
2882.74(5)	0^+						0	0.015					90Bl10
2893.58(5)	4^+				46			0.446	7+				90Bl10
2897(1)	$\langle 4^+\rangle$				39								
2899.09(6)	5												
2916(1)					<10								
2921.84(14)	6^+												
2924.83(3)	$\langle 5^-\rangle$				8								
2924(29)	0^+						0	0.003					90Bl10
2926(1)	2^+				15								
2928(5)	5^-												
2931.5(1)*	1^+				6			0.014	3+	12.4(6)	13(1)	0.53(2)	90Bl10
2932.01(5)	6^-				incl								
2935.63(2)	7^-												
2942(1)	2^+				11								
2945.0(3)*	$\langle 2^+\rangle$				25			0.02,0.06	5+,7+				90Bl10
2947.76(6)	2^+				20								
2961.93(3)	4^-												01Co01
2962(1)	$\langle 2\rangle^+$												
2962(4)	3^-,4^-							0.01+0.02	7–,5–				90Bl10
2967(1)	2^+				27								
2969.84(11)	5^+												
2972.48(9)	5^+												
2974(4)	2^+,4^+			42	10								87Me19
2980.82(3)	2^+				22		2	0.013,0.006					90Bl10
2988(8)													
3002.13(2)	$\langle 3^+\rangle$							0.003,0.062	5+,7+				90Bl10
3011.15(8)													
3022(1)	$\langle 3^-\rangle$				4								
3028.31(9)	6^+												
3049.23(7)	1^-				6								
3051.27(16)	5^+				15								
3058(1)	2^+,3^-				6								
3066.31(13)	3^-				32								
3068.68(2)	4^+							0.016,0.043	3+,7+				90Bl10
3071.28(8)	$\langle 1^+$–$4^+\rangle$			46									87Me19
3071.49(5)	$\langle 1^+$–$4^+\rangle$												
3075.27(5)	5				33								
3081.6(2)					4			0.004,0.015	5+,11–				90Bl10
3091(1)	$\langle 6^+\rangle$				3								
3093.17(4)	8^-												
3102.14(14)	2^+				incl		2	0.014,0.016	3+,5+				90Bl10
3102.65(8)	4^+				18								
3105.61(5)	2^+				14		2	0.099,0.019	3+,5+				90Bl10
3109.86(6)				19									87Me19

(continued) **$^{112}_{48}$Cd**

E^* [keV]	J^π	L (τ,n)	σ (τ,n)	σ (t,p) μb/sr	σ (d,d′) μb/sr	β_L (α,α')	L (d,t)	C^2S (d,t)	$2J^\pi$ (d,t)	$I_{s,0}$ [eVb]	$\Gamma_\circ$ [meV]	$\Gamma_\circ^{red}$ [meV′]	Ref.
3124(1)	$2^+,3^-$				<40								
3130.97(2)	5^-							0.004,0.045	3+,11−				90Bl10
3131(2)	3^-				60								
3133.26(8)	1^-									26(1)	22(1)	0.72(3)	99Le31
3135.84(4)	$\langle 2^-\rangle$			25									87Me19
3145.39(5)	4^+												
3163.03(6)	2^+												
3165.54(6)	$\langle 6^-\rangle$												
3169.56(3)	2^+				16			0.156	7+				90Bl10
3175(4)	3^-			33									87Me19
3176.83(18)	4^+												
3178.80(6)	2^+				41			0.032,0.079	3+,7+				90Bl10
3189.86(7)	4–6												01Ga44
3190.06(3)	$\langle 2\rangle^+$				25		2	0.073,0.023	3+,5+				90Bl10
3194.50(8)	2^+												01Ga44
3201.42(23)	5^-												01Ga44
3203.25(11)	$3^{\langle+\rangle}$												01Ga44
3205.75(15)	4^+				30			0.014,0.176	3+,7+				90Bl10
3206.45(6)	2–4												01Ga44
3206.71(3)	2–4												01Ga44
3230.558(23)	8^+												
3231.41(5)	1^+							0.026	3+	9.8(5)	8.8(4)	0.26(1)	90Bl10
3239.22(4)	7^+												
3242.59(8)	2^+			156	64		2	0.011,0.013	3+,5+				90Bl10
3246.88(4)	$\langle 2,3\rangle$												01Ga44
3247.24(5)	$\langle 6^+\rangle$				incl								01Ga44
3248.40(5)	7^-												
3251.86(17)	0^+												01Ga44
3252.84(6)	$6^{\langle-\rangle}$												
3254.46(7)	4^+							0.009,0.033	5+,7+				01Ga44
3258.1(3)													01Ga44
3266.61(4)	4^+				43			0.068	7+				01Ga44
3269.49(5)	4												01Ga44
3290.1(1)													01Ga44
3291.16(5)	$\langle 6^+\rangle$				39								01Ga44
3300.99(22)	1									7.5(4)	9.6(5)	0.27(1)	99Le31
3302(4)	6^+			28									87Me19
3303.34(3)	2,3			incl			2	0.038,0.114	3+,5+				90Bl10
3309(6)													
3309(2)	$\langle 5^-\rangle$				18								
3312.19(4)	1–3							0.014,0.090	3+,11−				90Bl10
3318.28(2)	9^-												
3319.88(3)													01Ga44
3322.67(2)	10^+												
3325.96(2)	3^-												01Ga44

(continued) **$^{112}_{48}$Cd**

E^* [keV]	J^π	L (τ,n)	σ (τ,n)	σ (t,p) μb/sr	σ (d,d′) μb/sr	β_L (α,α')	L (d,t)	C^2S (d,t)	$2J^\pi$ (d,t)	$I_{s,0}$ [eVb]	$\Gamma_\circ$ [meV]	$\Gamma_\circ^{red}$ [meV′]	Ref.
3329.24(5)	[5$^-$]				20								01Ga44
3332.05(3)	3–5							0.051	5+				90Bl10
3332.47(5)	1–3												01Ga44
3336.03(7)	2,3			41									01Ga44
3341.86(5)	3$^+$												01Ga44
3344(1)	3$^-$												
3350(2)	2$^+$				32		2	0.035,0.006	3+,5+				90Bl10
3353.37(7)	[0$^+$]						0	0.015					90Bl10
3363.59(6)	2$^+$						2	0.023,0.004					90Bl10
3364.01(9)	[2$^+$]				16								01Ga44
3369.63(4)	2,3												01Ga44
3375.47(7)	1,2$^+$									1.4(2)	1.4(2)	0.036(5)	99Le31
3375.54(4)	⟨8⟩												
3376.17(12)	7$^-$												
3378.49(3)	[2$^+$]				36		2	0.003,0.004	3+,5+				90Bl10
3383.63(5)	6,7$^-$												01Ga44
3392.77(15)	1												01Ga44
3393.39(5)	1–3												01Ga44
3393.63(7)	1–3$^+$												01Ga44
3399.25(5)	8$^+$												
3402.93(7)	3$^+$							0.050	5+				90Bl10
3417(2)	4$^+$			23	37								87Me19
3422.6(2)	[4$^+$]				28			0.005,0.007	1+,3+				90Bl10
3425.61(7)	2,3												01Ga44
3426.3(2)	0–4												01Ga44
3428.8(2)	2$^+$												01Ga44
3430.16(4)	5$^+$,⟨7⟩							0.004,0.020	1+,3+				
3433.80(8)	3–5												01Ga44
3452.00(7)	[X$^+$]												01Ga44
3452.9(1)	3$^+$												01Ga44
3453.9(3)													01Ga44
3455.40(8)	0–3$^+$				18								01Ga44
3471.4(3)													01Ga44
3478.47(9)	1,2$^+$												01Ga44
3487(5)	⟨6$^+$⟩												
3487.55(7)	3$^+$												01Ga44
3489.88(4)	3,5												01Ga44
3494.32(3)	⟨7⟩												
3500.4(2)*	0–3$^+$												01Ga44
3511.7(4)	3–6												01Ga44
3512.79(9)	3$^+$												01Ga44
3522.51(5)	1–3												01Ga44
3529.1(1)*	7$^-$												
3531.33(10)	3$^+$												01Ga44
3540.2(3)*	1,2$^+$				15								01Ga44

(continued) **$^{112}_{48}$Cd**

E^* [keV]	J^π	L (τ,n)	σ (τ,n)	σ (t,p) μb/sr	σ (d,d′) μb/sr	β_L (α,α')	L (d,t)	C^2S (d,t)	$2J^\pi$ (d,t)	S_α (d,^{6}Li)	$I_{s,0}$ [eVb]	$\Gamma_\circ$ [meV]	$\Gamma_\circ^{red}$ [meV′]	Ref.
3543.1(1)*	8^+													
3556.84(14)	$1,2^+$										0.8(2)	0.9(2)	0.020(5)	99Le31
3557.2(2)*	$1,2^+$				40									01Ga44
3567.8(2)*	$\langle 1\rangle$										0.9(2)	1.0(2)	0.023(5)	99Le31
3571.300(20)	9^-													
3572.4(2)*	$1,2^+$													01Ga44
3577.5(2)*	$1,2^+$													01Ga44
3579.34(5)	2,3													01Ga44
3584.6(1)*	$7^{\langle+\rangle}$													
3594.59(7)	1										1.3(1)	1.4(2)	0.031(5)	01Ga44
3598.8(1)	$3^{\langle+\rangle}$				45									01Ga44
3613.3(1)	3				40									
3618.4(2)	2–4													01Ga44
3622.2(1)	1–3													01Ga44
3627.7(3)	$\langle 6^+\rangle$				23									01Ga44
3646.44(4)	1–3													01Ga44
3652.16(7)	1													01Ga44
3658.9(1)*	8^-													
3665.78(5)	3^-				44									01Ga44
3676.73(9)	2,3													01Ga44
3682.8(1)	1										4.4(7)	5.1(8)	0.104(20)	99Le31
3684.264(23)	10^+													
3685.4(1)*	7^-													
3687.9(1)	1													01Ga44
3690.7(2)	2,3				20									01Ga44
3696.2(2)*	$0–3^+$													01Ga44
3703.8(1)					20									01Ga44
3707.5(1)*	1										5.9(5)	7.0(5)	0.14(1)	99Le31
3720.7(3)	2–6				20									01Ga44
3722.7(3)	0–4													01Ga44
3731.9(1)	1–3													01Ga44
3737.22(7)	8^+													
3739.6(1)	3^+				20									01Ga44
3743.78(6)	3^+													01Ga44
3746.5(3)	2–6													01Ga44
3755.5(2)	1				18									01Ga44
3763.94(4)	1–3				11									01Ga44
3770.5(1)	2,3													01Ga44
3782.2(1)	3^+													01Ga44
3785.85(9)	$9^{\langle-\rangle}$													
3787.3(4)	2^+													01Ga44
3801.1(3)	2–6													
3804.9(2)	0–4													01Ga44
3809.556(22)	10^-													
3810.04(8)	1										17(1)	24(2)	0.44(3)	99Le31

(continued) **$^{112}_{48}$Cd**

E^* [keV]	J^π	L (τ,n)	σ (τ,n)	σ (t,p) μb/sr	σ (d,d′) μb/sr	β_L (α,α')	L (d,t)	C^2S (d,t)	$2J^\pi$ (d,t)	S_α (d,^{6}Li)	$I_{s,0}$ [eVb]	$\Gamma_\circ$ [meV]	$\Gamma_\circ^{red}$ [meV′]	Ref.
3810.9(1)	1–3													01Ga44
3832.7(1)	1–3													01Ga44
3838.8(2)*	1,2$^+$													
3844.3(1)	0–4													01Ga44
3846.2(4)*	1										1.8(3)	2.4(4)	0.042(8)	99Le31
3854.4(4)	2$^+$													01Ga44
3864.6(3)	4$^+$													
3869.0(1)	1										11(1)	18(1)	0.32(2)	99Le31
3878.6(2)	1–3													01Ga44
3892.2(2)*	0–3$^+$													
3913.942(23)	9$^+$													
3929.2(3)	0–4	0	51											77Fi04
3931.1(4)*	12$^+$													
3932.2(2)	1										4.5(6)	6.1(8)	0.10(1)	99Le31
3933.1(2)	1													01Ga44
3939.3(2)	1–3													01Ga44
3951.4(3)*	1,2$^+$													01Ga44
3963.8(5)	1,2													01Ga44
3966.71(4)	9$^+$													
3970.0(2)*	1,2$^+$													97Dr03
3990.5(1)*	10$^+$													
3997.4(2)*	1,2$^+$										6.3(10)	8.7(14)	0.14(2)	99Le31
4004.0(3)*	0–3$^+$													
4033.9(2)	0–4													01Ga44
4060(5)	4$^+$													
4118(5)	4$^+$													
4126.02(4)	10$^+$													
4172(5)	3$^-$													
4174.69(4)	10$^+$													
4221(5)	7$^-$													
4248(5)	3$^-$													
4279(5)	3$^-$													
4283.48(4)	10$^+$													
4284.46(7)	9$^-$													
4285.38(4)	11$^-$													
4320(5)	4$^+$													
4338(5)	7$^-$													
4364(5)	4$^+$													
4383.26(7)	11$^+$													
4385(5)	3$^-$													
4385.34(4)	10$^-$													
4419(5)	$\langle 4^+ \rangle$													
4467.99(3)	11$^-$													
4468(5)	3$^-$													
4499(5)	3$^-$													

(continued) **$^{112}_{48}$Cd**

E^* [keV]	J^π	L (τ,n)	σ (τ,n)	σ (t,p) μb/sr	σ (d,d′) μb/sr	β_L (α,α')	C^2S (d,t)	$2J^\pi$ (d,t)	S_α (d,^{6}Li)	$d\sigma/d\Omega$ μb/sr	$I_{s,0}$ [eVb]	$\Gamma_\circ$ [meV]	$\Gamma_\circ^{red}$ [meV′]	Ref.
4587.39(3)	12^+													
4687.42(5)	11^+													
4720		0	24											77Fi04
4871.52(4)	14^+													
5106.27(4)	$\langle 13^-\rangle$													
7632(1)	1^-											60		70Sc27
	01Ga44		77Fi04	87Me19	94He22	67BaZV	90Bl10	90Bl10	79Ja21	79Ja21	99Le31	99Le31	99Le31	Ref.

Additional data on this isotope can be found in [01Ko49, 01Ga44, 00Ko47, 99Ga20, 99Ga15, 97LeZZ, 97Dr03, 94Dr0A, 94Jo0A, 94He22, 94Ke0A, 93De09, 93De01, 92Pi08, 92Ku01, 90Ku01, 90Ar20, 86Ba39, 84Pi01, 82Cr01, 72Co22, 67Ba15].
Abundance: 24.13(21) %.
* E^* corrected according to [97Dr03] or introduced there as a new level.
** $B(E1)$ in units $10^{-3}e^2fm^2$ instead of $B(M1)$ for levels with J^π=1^- determined in [97Dr03].
According to [01Ga44] the levels at E^*=3417 keV is concluded not to exist.
β_L – deformation parameters – from (p,p′) reaction collected from many experiments as well as β_L and EWSR for 4^+ states [92Pi08] can be found in [96De55].
Additional branchings can be found in [01Ga44]; discussion on collective excitations – in [93De09].
Data for this isotope are considered in vol. LB I/18B.

Energy levels and branching ratios [96De55, 01Ga44]. Part 2 **$^{112}_{48}$Cd**

E^* [keV]	$2J^\pi$ (d,t)	$B(M1)$ [μ_N^2]	ε (p,t)	$T_{1/2}$ or Γ_{cm}	Ref.	Branching ratios in percentage					
						E_f^*:	0.0	617	1224	1312	1415
						$2J_f^\pi$:	0+	2+	0+	2+	4+
0.0			0.93	Stable	87Me19						
617.517(3)			1.20	6.51(6) ps	77Sp05		100				
1224.34(1)				4.2(11) ps	77Fi04		x	100			
1312.39(1)	5+			2.0(3) ps	90Bl10		27(1)	73(4)			
1415.56(2)				0.90(8) ps	90Bl10			100			
1433.31(2)				1.9(1) ns			x	63(6)	x	37(4)	
1468.83(1)	3+,5+			2.7(5) ps	90Bl10		37(1)	62(1)	0.8(2)		
1870.86(1)								33.3(3)		33(6)	11.6(2)
1871.00(19)					90Bl10			87(9)		3.0(8)	
1954.8											
2005.19(2)					67BaZV			83(8)		16.5(20)	
2064.51(2)	5+				90Bl10			38(5)		42(6)	20(1)
2081.72(2)					90Bl10			4.6(4)		32.0(4)	49.8(4)
2121.53(2)	3+				90Bl10			100			
2156.18(2)	3+,5+				90Bl10		11(1)	81(6)		2.0(6)	
2167(1)											
2167.70(2)											99.0(7)
2231.19(2)					90Bl10			92(10)	3.3(5)	2.2(3)	

(continued) **$^{112}_{48}$Cd**

E^*	$2J^\pi$	$B(M1)$	ε	$T_{1/2}$ or	Ref.	Branching ratios in percentage				
					E_f^*:	0.0	617	1224	1312	1415
[keV]	(d,t)	[μ_N^2]	(p,t)	Γ_{cm}	$2J_f^\pi$:	0+	2+	0+	2+	4+
2300.74(3)					90Bl10		100			
2305										
2335										
2373.28(2)					90Bl10					97.3(5)
2403.03(2)	5+				90Bl10		41(2)			
2416.00(6)	7–				90Bl10		53(5)		33(4)	
2418(2)		0.006(1)			99Le31					
2454.52(6)	7+				90Bl10					100
2493.16(1)	7+				90Bl10		100			
2501					90Bl10					
2506.73(2)		1.65(8)**			99Le31					
2506.33(2)	3+,5+				90Bl10	70(8)	20(2)	2.5(6)	2.0(6)	
2506.9(1)										100
2517	3+,11–				90Bl10					
2532.4(1)*					97Dr03					
2561.2(2)					97Dr03					
2570.29(3)	11–				90Bl10					36(2)
2571.68(9)										45.7(4)
2584(4)										
2589(1)										
2591.05(1)	7–				90Bl10					61.5(7)
2632(5)										
2635.00(2)	5+				90Bl10					
2650.16(5)					77Fi04					
2649(1)										
2653(1)										
2665.62(4)										31(1)
2668.9(1)*							19(2)		76(7)	
2674.02(7)	3+,5+				90Bl10		100			
2694(2)		0.009(1)			99Le31					
2711.29(3)	7+				90Bl10					100
2718(4)										
2723.88(3)	5+				90Bl10	3.6(4)	88(10)	0.63(16)	1.2(4)	
2765.75(3)	3+,5+				90Bl10		100			
2773.18(4)										
2775(1)										
2791.79(7)										
2793.68(4)										
2799(28)	3+				90Bl10					
2816.90(3)										
2817.80(3)	3+,11–				90Bl10					
2829.22(4)		0.035(2)			99Le31	26(2)	26(2)		49(5)	
2830(1)										
2834.43(7)					90Bl10		100			
2835(1)										

(continued) **$^{112}_{48}$Cd**

E^*	$2J^\pi$	$B(M1)$	ε	$T_{1/2}$ or	Ref.	Branching ratios in percentage				
					E_f^*:	0.0	617	1224	1312	1415
[keV]	(d,t)	[μ_N^2]	(p,t)	Γ_{cm}	$2J_f^\pi$:	0+	2+	0+	2+	4+
2840.29(2)										100
2844(1)										
2852.92(4)						x			x	
2853					90Bl10					
2866.86(2)	5+,7+				90Bl10					32(4)
2867.48(7)					01Co01					
2877(1)										
2881.26(2)										
2882.74(5)					90Bl10					
2893.58(5)	7+				90Bl10					
2897(1)										
2899.09(6)										100
2916(1)										
2921.84(14)										16(2)
2924.83(3)										
2924(29)					90Bl10					
2926(1)										
2928(5)										
2931.5(1)*	3+	0.137(5)			90Bl10					
2932.01(5)										
2935.63(2)										
2942(1)										
2945.0(3)*	5+,7+				90Bl10					
2947.76(6)										
2961.93(3)					01Co01					
2962(1)						67(17)				
2962(4)	7–,5–				90Bl10					
2967(1)										
2969.84(11)										37.2(9)
2972.48(9)										65(3)
2974(4)					87Me19					
2980.82(3)					90Bl10					
2988(8)										
3002.13(2)	5+,7+				90Bl10					
3011.15(8)										
3022(1)										
3028.31(9)										
3049.23(7)										
3051.27(16)										
3058(1)										
3066.31(13)										
3068.68(2)	3+,7+				90Bl10					100
3071.28(8)					87Me19					
3071.49(5)										
3075.27(5)										100

(continued) **$^{112}_{48}$Cd**

E^*	$2J^\pi$	$B(M1)$	ε	$T_{1/2}$ or	Ref.	Branching ratios in percentage				
					E_f^*:	0.0	617	1224	1312	1415
[keV]	(d,t)	[μ_N^2]	(p,t)	Γ_{cm}	$2J_f^\pi$:	0+	2+	0+	2+	4+
3081.6(2)	5+,11–				90Bl10					
3091(1)										
3093.17(4)										
3102.14(14)	3+,5+				90Bl10					
3102.65(8)										
3105.61(5)	3+,5+				90Bl10					
3109.86(6)					87Me19					
3124(1)										
3130.97(2)	3+,11–				90Bl10					
3131(2)										
3133.26(8)		2.07(9)**			99Le31					15.9(16)
3135.84(4)					87Me19					
3145.39(5)										
3163.03(6)										
3165.54(6)										
3169.56(3)	7+				90Bl10		56(7)	44(4)		
3175(4)					87Me19					
3176.83(18)										
3178.80(6)	3+,7+				90Bl10					
3189.86(7)					01Ga44					
3190.06(3)	3+,5+				90Bl10					
3194.50(8)					01Ga44					
3201.42(23)					01Ga44					
3203.25(11)					01Ga44					
3205.75(15)	3+,7+				90Bl10					
3206.45(6)					01Ga44					
3206.71(3)					01Ga44					
3230.558(23)										
3231.41(5)	3+	0.068(3)			90Bl10					
3239.22(4)										
3242.59(8)	3+,5+				90Bl10					
3246.88(4)					01Ga44					
3247.24(5)					01Ga44					
3248.40(5)										
3251.86(17)					01Ga44					
3252.84(6)										
3254.46(7)	5+,7+				01Ga44					
3258.1(3)					01Ga44					
3266.61(4)	7+				01Ga44					
3269.49(5)					01Ga44					
3290.1(1)					01Ga44					
3291.16(5)					01Ga44					
3300.99(22)		0.069(4)			99Le31					
3302(4)					87Me19					
3303.34(3)	3+,5+				90Bl10		94(9)			

(continued) **$^{112}_{48}$Cd**

E^*	$2J^\pi$	$B(M1)$	ε	$T_{1/2}$ or	Ref.	Branching ratios in percentage				
					E_f^*:	0.0	617	1224	1312	1415
[keV]	(d,t)	[μ_N^2]	(p,t)	Γ_{cm}	$2J_f^\pi$:	0+	2+	0+	2+	4+
3309(6)										
3309(2)										
3312.19(4)	3+,11–				90Bl10					
3318.28(2)										
3319.88(3)					01Ga44					
3322.67(2)										
3325.96(2)					01Ga44					
3329.24(5)					01Ga44					
3332.05(3)	5+				90Bl10					
3332.47(5)					01Ga44					
3336.03(7)					01Ga44					
3341.86(5)					01Ga44					
3344(1)										
3350(2)	3+,5+				90Bl10					
3353.37(7)					90Bl10					
3363.59(6)					90Bl10					
3364.01(9)					01Ga44					
3369.63(4)					01Ga44		100			
3375.47(7)		0.009(1)			99Le31					
3375.54(4)										
3376.17(12)										
3378.49(3)	3+,5+				90Bl10					
3383.63(5)					01Ga44					
3392.77(15)					01Ga44	100				
3393.39(5)					01Ga44					
3393.63(7)					01Ga44					
3399.25(5)										
3402.93(7)	5+				90Bl10					
3417(2)					87Me19					
3422.6(2)	1+,3+				90Bl10					
3425.61(7)					01Ga44					
3426.3(2)					01Ga44					
3428.8(2)					01Ga44					
3430.16(4)	1+,3+									
3433.80(8)					01Ga44					
3452.00(7)					01Ga44					
3452.9(1)					01Ga44					
3453.9(3)					01Ga44					
3455.40(8)					01Ga44					
3471.4(3)					01Ga44					
3478.47(9)					01Ga44					
3487(5)										
3487.55(7)					01Ga44					
3489.88(4)					01Ga44					
3494.32(3)										

(continued) **$^{112}_{48}$Cd**

E^* [keV]	$2J^\pi$ (d,t)	$B(M1)$ [μ_N^2]	ε (p,t)	$T_{1/2}$ or Γ_{cm}	Ref.	Branching ratios in percentage				
					E_f^*:	0.0	617	1224	1312	1415
					$2J_f^\pi$:	0+	2+	0+	2+	4+
3500.4(2)*					01Ga44					
3511.7(4)					01Ga44					
3512.79(9)					01Ga44					
3522.51(5)					01Ga44					
3529.1(1)*										
3531.33(10)					01Ga44					
3540.2(3)*					01Ga44					
3543.1(1)*										
3556.84(14)		0.005(1)			99Le31					
3557.2(2)*					01Ga44					
3567.8(2)*		0.006(1)			99Le31					
3571.300(20)										
3572.4(2)*					01Ga44					
3577.5(2)*					01Ga44					
3579.34(5)					01Ga44					
3584.6(1)*										
3594.59(7)		0.008(1)			01Ga44					
3598.8(1)					01Ga44					
3613.3(1)										
3618.4(2)					01Ga44					
3622.2(1)					01Ga44					
3627.7(3)					01Ga44					
3646.44(4)					01Ga44					
3652.16(7)					01Ga44					
3658.9(1)*										
3665.78(5)					01Ga44					
3676.73(9)					01Ga44					
3682.8(1)		0.027(4)			99Le31					
3684.264(23)										
3685.4(1)*										
3687.9(1)					01Ga44					
3690.7(2)					01Ga44					
3696.2(2)*					01Ga44					
3703.8(1)					01Ga44					
3707.5(1)*		0.036(3)			99Le31					
3720.7(3)					01Ga44					
3722.7(3)					01Ga44					
3731.9(1)					01Ga44					
3737.22(7)										
3739.6(1)					01Ga44					
3743.78(6)					01Ga44					
3746.5(3)					01Ga44					
3755.5(2)					01Ga44					
3763.94(4)					01Ga44					
3770.5(1)					01Ga44					

(continued) **$^{112}_{48}$Cd**

E^*	$2J^\pi$	$B(M1)$	ε	$T_{1/2}$ or	Ref.	Branching ratios in percentage				
						E_f^*:	0.0	617	1224	1312	1415
[keV]	(d,t)	$[\mu_N^2]$	(p,t)	Γ_{cm}		$2J_f^\pi$:	0+	2+	0+	2+	4+
3782.2(1)					01Ga44						
3785.85(9)											
3787.3(4)					01Ga44						
3801.1(3)											
3804.9(2)					01Ga44						
3809.556(22)											
3810.04(8)		0.11(1)			99Le31						
3810.9(1)					01Ga44						
3832.7(1)					01Ga44						
3838.8(2)*											
3844.3(1)					01Ga44						
3846.2(4)*		0.011(2)			99Le31						
3854.4(4)					01Ga44						
3864.6(3)											
3869.0(1)		0.082(6)			99Le31						
3878.6(2)					01Ga44						
3892.2(2)*											
3913.942(23)											
3929.2(3)					77Fi04						
3931.1(4)*											
3932.2(2)		0.026(4)			99Le31						
3933.1(2)					01Ga44						
3939.3(2)					01Ga44						
3951.4(3)*					01Ga44						
3963.8(5)					01Ga44						
3966.71(4)											
3970.0(2)*					97Dr03						
3990.5(1)*											
3997.4(2)*		0.035(6)			99Le31						
4004.0(3)*											
4033.9(2)					01Ga44						
4060(5)											
4118(5)											
4126.02(4)											
4172(5)											
4174.69(4)											
4221(5)											
4248(5)											
4279(5)											
4283.48(4)											
4284.46(7)											
4285.38(4)											
4320(5)											
4338(5)											
4364(5)											

(continued) **$^{112}_{48}$Cd**

E^*	$2J^\pi$	$B(M1)$	ε	$T_{1/2}$ or	Ref.	Branching ratios in percentage					
						E_f^*:	0.0	617	1224	1312	1415
[keV]	(d,t)	[μ_N^2]	(p,t)	Γ_{cm}		$2J_f^\pi$:	0+	2+	0+	2+	4+
4383.26(7)											
4385(5)											
4385.34(4)											
4419(5)											
4467.99(3)											
4468(5)											
4499(5)											
4587.39(3)											
4687.42(5)											
4720					77Fi04						
4871.52(4)											
5106.27(4)											
7632(1)				5.4(10) fs	70Sc27		55(4)	11.7(9)	8.0(7)		
	90Bl10	99Le31	72Co22		Ref.						

Energy levels and branching ratios [96De55, 01Ga44]. Part 3 **$^{112}_{48}$Cd**

E^*	$2J^\pi$					Branching ratios in percentage					
		E_f^*:	1433.2	1468.9	1870.7	2005.3	2064.6	2081.7	2121.7	2156.2	2168.0
[keV]	(d,t)	$2J_f^\pi$:	0+	2+	4+	3–	3+	4+	2+	2+	6+
1870.86(1)				21.8(2)							
1871.00(19)				10.0(20)							
2005.19(2)				0.79(8)							
2081.72(2)				9.4(4)	4.3(7)						
2156.18(2)	3+,5+			6.7(14)							
2167.70(2)					0.965(25)						
2231.19(2)				1.7(2)		0.56(14)					
2373.28(2)						1.46(3)		1.236(22)			
2403.03(2)	5+			59(2)							
2416.00(6)	7–		3(1)	5(1)		6.8(7)					
2506.33(2)	3+,5+			4.8(6)							
2570.29(3)	11–					7.3(3)					
2571.68(9)					51.2(3)						3.09(8)
2591.05(1)	7–					13.3(7)	25.2(14)				
2665.62(4)					39(5)		30(1)				
2668.9(1)*						4.9(2)					
2723.88(3)	5+					6.2(6)					
2793.68(4)											64(3)
2852.92(4)						x					
2866.86(2)	5+,7+			7(2)		47(5)	7(2)				
2881.26(2)											100
2921.84(14)								84(2)			

(continued) **$^{112}_{48}$Cd**

E^*	$2J^\pi$		Branching ratios in percentage								
		E_f^*:	1433.2	1468.9	1870.7	2005.3	2064.6	2081.7	2121.7	2156.2	2168.0
[keV]	(d,t)	$2J_f^\pi$:	0+	2+	4+	3–	3+	4+	2+	2+	6+
2935.63(2)											34.6(29)
2962(1)						33(9)					
2972.48(9)								35(2)			
3028.31(9)								75(2)			25(2)
3133.26(8)						65(7)					
3239.22(4)											35(2)
3291.16(5)											59(1)
3430.16(4)	1+,3+										100
3494.32(3)											100
3584.6(1)*											100
7632(1)			2.2(2)	1.9(2)	11.7(9)			0.50(4)	0.70(6)	0.40(3)	

Energy levels and branching ratios [96De55, 01Ga44]. Part 4 **$^{112}_{48}$Cd**

E^*	$2J^\pi$		Branching ratios in percentage								
		E_f^*:	2231.1	2300.6	2373.3	2416.2	2506.6	2570.2	2571.6	2665.8	2674.1
[keV]	(d,t)	$2J_f^\pi$:	2+	0+	5–	3–	2+	5–	6+	5+	
2570.29(3)	11–				56.5(6)						
2793.68(4)					34(2)				2.2(1)		
2817.80(3)	3+,11–				69(6)			30.9(6)			
2866.86(2)	5+,7+					8(2)					
2932.01(5)					99(17)			1.1(3)			
2935.63(2)					56.7(4)			1.7(2)			
2969.84(11)									62.8(9)		
3133.26(8)						19(3)					
3176.83(18)									82.5(6)		
3230.558(23)									55.7(2)		
3239.22(4)									12(2)	52(1)	
3291.16(5)					41(19)						
3303.34(3)	3+,5+										6.4(16)
3383.63(5)								100			
3399.25(5)									64.8(5)		
3737.22(7)									100		
7632(1)			0.20(2)	0.50(4)			0.40(3)				

Energy levels and branching ratios [96De55, 01Ga44]. Part 5 $^{112}_{48}Cd$

E^*	$2J^\pi$	Branching ratios in percentage								
	E_f^*:	2723.7	2793.9	2817.8	2832	2850	2881.3	2921.2	2932.0	2935.63
[keV]	(d,t)	$2J_f^\pi$: 2+	7–	6–	0+	2+	8+	6+	6–	7–
2935.63(2)			7.0(41)							
3093.17(4)			70(5)	4.5(8)					10.9(15)	15.0(3)
3176.83(18)			9.2(1)				8.3(2)			
3230.558(23)			14.5(4)				29.8(4)			
3248.40(5)									40.3(8)	52.4(8)
3252.84(6)			100							
3318.28(2)			85.6(5)				5.4(2)			7.4(9)
3322.67(2)							87(1)			
3375.54(4)										100
3376.17(12)									96(2)	
3399.25(5)							18.9(5)			
3529.1(1)*			51(2)							20(2)
3571.300(20)			57.1(7)							20.3(9)
3684.264(23)							100			
3913.942(23)							21.8(6)			
7632(1)		0.20(2)			3.12(14)	1.91(15)				

Energy levels and branching ratios [96De55, 01Ga44]. Part 6 $^{112}_{48}Cd$

E^*	$2J^\pi$	Branching ratios in percentage							
	E_f^*:	3093.2	3108	3176.6	3177	3193	3239.2	3248.4	3309
[keV]	(d,t)	$2J_f^\pi$: 8–	2+	8+	2+	2	7+	7–	
3248.40(5)		7.3(5)							
3318.28(2)		1.5(1)							
3322.67(2)				12.8(1)					
3376.17(12)		4.0(18)							
3399.25(5)					16.33(5)				
3529.1(1)*		29.5(8)							
3571.300(20)		14.0(6)							
3658.9(1)*								40(2)	
3785.85(9)		100							
3809.556(22)		86.7(13)							
3913.942(23)							69(1)		
3990.5(1)*				76(4)					
4126.02(4)				100					
7632(1)			0.50(4)			0.20(2)		0.50(4)	0.1

Energy levels and branching ratios [96De55, 01Ga44]. Part 7

$^{112}_{48}$Cd

E^*	$2J^\pi$		Branching ratios in percentage								
		E_f^*:	3318.3	3322.7	3376.2	3399.2	3542.8	3571.3	3684.3	3913.9	3930.8
[keV]	(d,t)	$2J_f^\pi$:	9–	10+	7–	8+	8+	9–	10+	9+	12+
3571.300(20)			9(2)								
3658.9(1)*			59.5(11)								
3685.4(1)*					100						
3809.556(22)			11.6(21)					1.7(4)			
3913.942(23)						9.5(3)					
3931.1(4)*				100							
3966.71(4)				100							
3990.5(1)*						3.6(2)			20(1)		
4174.69(4)			100								
4283.48(4)							100				
4284.46(7)					100						
4285.38(4)			100								
4383.26(7)				83(2)							17(2)
4385.34(4)			100								
4467.99(3)								100			
4587.39(3)									100		
4687.42(5)										100	
4871.52(4)											100
5106.27(4)											100

Energy levels and branching ratios [98Bl04, 05Bl05].

$^{113}_{48}$Cd

E^*	$2J^\pi$	L	C^2S	σ (d,p)	L	σ (d,p)	$G_{\ell j}$	σ (d,t)	L	σ (d,t)	$G_{\ell j}$	S_N	g$\Gamma_\circ$	Ref.
[keV]		(d,p)	(d,p)	μb/sr	(d,p)	μb/sr	(d,p)	μb/sr	(d,t)	μb/sr	(d,t)	(p,d)	[meV]	
0	1^+	0	0.34	2820	0	703	0.253	1070	0	3135	0.245	0.71		69Go03
263.54(3)	11^-	5	0.40	538	5	1069	0.430	<50	5	563	0.946			69Go03
298.60(1)	3^+	2	0.40	1907	2	1994	0.237	1510	2	2304	0.251			67Ko07
316.21(2)	5^+	2	0.14	1245	2	875	0.067	incl	2	6153	0.618			69Go03
458.63(2)	7^+	4	0.26	250	4	376	0.192	260	4	783	1.196			69Go03
522.26(2)	7^-				3	416	0.030	50	3	314	0.136			64Ro17
530(10)	7^+,9^+	4	0.36	350				incl						69Go03
583.96(2)	5^+	2	0.05	490	2	345	0.029	220	2	1090	0.101			69Go03
626.6					2	23	0.002							05Bu0B
638.19(3)	9^-				5	12	0.011		⟨5⟩	5	0.015			05Bu0B
680.53(2)	3^+	2	0.27	1431	2	1228	0.148	220	2	748	0.077			69Go03
708.57(2)	5^+				2	23	0.002	incl	2	346	0.033			05Bu0B
760(10)	1^+	0	0.14	1210										69Go03
815.34(3)	15^-													
816.71(2)	7^+	4	0.12	122	4	124	0,058		4	195	0.298			69Go03
855.28(3)	5^-													
869.8(2)	15^-													

(continued) **$^{113}_{48}$Cd**

E^* [keV]	$2J^\pi$	L (d,p)	C^2S (d,p)	σ (d,p) μb/sr	L (d,p)	σ (d,p) μb/sr	$G_{\ell j}$ (d,p)	σ (d,t) μb/sr	L (d,t)	σ (d,t) μb/sr	$G_{\ell j}$ (d,t)	S_N (p,d)	g$\Gamma_\circ$ [meV]	Ref.
878.5(1)	$\langle 3^+ \rangle$				2	64	0.008	400	2	374	0.038			67Ko07
883.6(1)	1^+	0	0.07	600	0	190	0.055	incl	0	98	0.006			69Go03
897.53(4)	3^+	2	0.21	1200	$\langle 2 \rangle$	14	0.003	incl	$\langle 2 \rangle$	19	0.003			69Go03
939.79(2)	9^+					2			4	21	0.020			05Bu0B
960(10)														
988.4(1)	1^+	0	0.04	372	0	93	0.032	360	0	665	0.028			69Go03
999.42(7)														
1002.87(4)	3^+							incl						
1007.20(5)	$\langle 5^+ \rangle$				2	33	0.003	incl	2	534	0.041			05Bu0B
1034.09(6)	$\langle 3^+ \rangle$				2	29	0.003		2	187	0.0015			05Bu0B
1037.40(3)	$\langle 7^+ \rangle$													
1047.65(4)	7^+													
1049.66(9)	3^+													
1050.7	1^+				$\langle 0 \rangle$	43	0.011		0	67	0.003			05Bu0B
1051.25(2)	7^-													
1109.32(3)	13^-					1				1				05Bu0B
1124.64(2)	9^+													
1126.25(6)	3^+				$\langle 4 \rangle$	8	0.002		2	14	0.004			05Bu0B
1170(20)														
1177.72(2)	$\langle 9^- \rangle$													
1177.8(3)	$\langle 3^+ \rangle$				2	14	0.0009	470	2	114	0.008			64Ro17
1181.35(4)														
1190.72(5)														
1192.09(4)	X^-													
1194.6(2)	3^-													94Ne14
1195.3(2)	5^+–9^+			790	2	401	0.33	incl	2	2560	0.175			69Go03
1209.53(15)	13^-													
1214.67(2)	11^+													
1261.92(4)	$\langle 9 \rangle$								4	59	0.072			05Bu0B
1268.21(5)	3^+				2	142	0.013							05Bu0B
1279.62(7)	3^+	2	0.03	290										69Go03
1301.07(7)	$3^+,5^+$				2	16	0.0014							05Bu0B
1312.9	$\langle 11 \rangle$				$\langle 5 \rangle$	12	0.0047							05Bu0B
1313.75(3)	$\langle 9^+ \rangle$								$\langle 4 \rangle$	26	0.036			05Bu0B
1322.03(12)	$\langle 7^-,9^- \rangle$													
1327.6(4)														
1329.8	7^+				$\langle 4 \rangle$	4	0.0013		4	8	0.012			05Bu0B
1346.53(4)	11^-				5	18	0.0068		5	4	0.0044			05Bu0B
1351.58(7)	5,7													
1364.76(7)	5^+								2	9	0.0007			05Bu0B
1367.57(2)	7^+													
1387.47(8)	$5^+,3^+$													
1390.56(9)	$\langle 1^+,3^+ \rangle$													
1395.83(3)	9^+				$\langle 4 \rangle$	12	0.0019		4	31	0.026			05Bu0B
1405.8(1)	5^+				2	55	0.0043		2	262	0.018			05Bu0B

(continued) **$^{113}_{48}$Cd**

E^* [keV]	$2J^\pi$	L (d,p)	C^2S (d,p)	σ (d,p) μb/sr	L (d,p)	σ (d,p) μb/sr	$G_{\ell j}$ (d,p)	σ (d,t) μb/sr	L (d,t)	σ (d,t) μb/sr	$G_{\ell j}$ (d,t)	S_N (p,d)	g$\Gamma_\circ$ [meV]	Ref.
1407.5(3)	$\langle 9^+\rangle$													
1410.68(6)														
1430(10)	$\langle 3\rangle^+$	2	0.08	394										69Go03
1433.0	7^+								4	14	0.018			05Bu0B
1450.30(7)	11^-			90	5	32	0.010			2				69Go03
1461.67(4)														
1473.4										10				05Bu0B
1477.9	11^-				5	55	0.019							05Bu0B
1479.08(5)	3^+													
1493.03(9)	3^+	2	0.06	394	2	215	0.023		2	80	0.0057			69Go03
1504.90(4)	7^+													
1513.72(4)														
1542.28(9)	$\langle 1^+\rangle$													
1561.69(3)	X^+							<50						
1575.7(1)	7^-	$\langle 3\rangle$	0.02	135										69Go03
1579.2					2	115	0.023		2	267	0.016			05Bu0B
1607.2(1)	5^+	2	0.02	230	2	109	0.008		2	571	0.036			69Go03
1620.43(3)														
1626.41(4)														
1647.23(5)														
1656.6(3)	$\langle 19^-\rangle$													
1657.41(5)	11^-													
1658.51(7)														
1662.2	3^+				2	28	0.0034	50	$\langle 2\rangle$	69	0.0033			05Bu0B
1670.9(1)														
1675.09(9)	3^+	$\langle 2\rangle$	0.02	136										69Go03
1689.6										39				05Bu0B
1700.1	$\langle 11^-\rangle$								$\langle 5\rangle$	18	0.034			05Bu0B
1711.0	$[3^+,5^+]$				$\langle 2\rangle$	10	0.0009							05Bu0B
1713.0	$\langle 3^-\rangle$								$\langle 1\rangle$	35	0.0010			05Bu0B
1732.84(4)	11^+													
1735.0	11^-				5	42	0.0128							05Bu0B
1737.53(7)														
1743.6(2)	$\langle 5^+\rangle$								2	66	0.0032			05Bu0B
1746.0(1)	$\langle 3^-\rangle$													
1758(10)	$\langle 5^-,7^-\rangle$													67Ko07
1769.4	$\langle 3^+\rangle$				2	21	0.0033		2	13	0.0010			05Bu0B
1778.9(2)	9^-													
1781.4	$\langle 3^+\rangle$								2	95	0.0088			05Bu0B
1786.5									2	66	0.0079			05Bu0B
1788.9	$\langle 1^+\rangle$								$\langle 0\rangle$	3	0.0016			05Bu0B
1798.9(1)	$\langle 1,3\rangle$													
1813.1	$\langle 7^+\rangle$								4	46	0.054			05Bu0B
1814.5(2)	$\langle 1,3\rangle$			190	$\langle 2\rangle$	53	0.0028						0.87(17)	69Go03
1823.24(4)	$\langle 13^-\rangle$													

(continued) **$^{113}_{48}$Cd**

E^* [keV]	$2J^\pi$	L (d,p)	C^2S (d,p)	σ (d,p) μb/sr	L (d,p)	σ (d,p) μb/sr	$G_{\ell j}$ (d,p)	σ (d,t) μb/sr	L (d,t)	σ (d,t) μb/sr	$G_{\ell j}$ (d,t)	S_N (p,d)	g$\Gamma_\circ$ [meV]	Ref.
1825.1	5^+								2	90	0.0057			05Bu0B
1833.5	3^+				2	96	0.0012		2	61	0.0050			05Bu0B
1842.7(1)	$\langle 3^- \rangle$			143										69Go03
1852.3	1^+				$\langle 0 \rangle$	8	0.0023		0	243	0.0094			05Bu0B
1855(2)*													0.76(23)	94Ge07
1867.9(1)	7^-,9^-													
1871.7(3)	3^+			85					2	164	0.013		0.49(20)	69Go03
1889.0	5^+				2	99	0.0053		2	250	0.0154			05Bu0B
1892.3(1)	7^-													67Ko07
1896.44(4)														
1900(10)	$\langle 1^+ \rangle$	$\langle 0 \rangle$	0.02	180										69Go03
1902.4(1)	13^-													
1903.97(9)														
1904.35(11)	7^-				3	208	0.0089		$\langle 3 \rangle$	12	0.042			05Bu0B
1911.4	$\langle 5^+ \rangle$								$\langle 2 \rangle$	11	0.0011			05Bu0B
1923.3	5^+								2	25	0.0016			05Bu0B
1942(2)	$\langle 3^+ \rangle$					20			2	32	0.0026		1.16(17)	94Ge07
1969.8	7^+				$\langle 4 \rangle$	23	0.0034		4	18	0.022			05Bu0B
1986(10)	5^-,7^-			151										67Ko07
1998.8	$\langle 11^- \rangle$					34			$\langle 5 \rangle$	15	0.028			05Bu0B
2005.3										7				05Bu0B
2015.6	1^+								0	22	0.0007			05Bu0B
2027.7										2				05Bu0B
2037.8(2)	5^-,7^-	3	0.04	340										69Go03
2042.1(1)	3^+												3.61(103)	94Ge07
2044.9	1^-				1	59	0.014		1	225	0.0089			05Bu0B
2046.23(7)	15^+													
2062.9										2				
2072.7	5^+								2	38	0.0056			05Bu0B
2080.9	1^+	$\langle 0 \rangle$	0.01	62	$\langle 0 \rangle$	15	0.0029		0	64	0.0023			69Go03
2099.2	5^+								2	28	0.0017			05Bu0B
2113.0(2)	7^-			170	$\langle 3 \rangle$	11	0.0004							69Go03
2128(2)				140						9			0.54(21)	69Go03
2135.0	1^+	$\langle 0 \rangle$		90	$\langle 0 \rangle$	2	0.0025		0	42	0.0013			69Go03
2146.8	$\langle 7^- \rangle$				$\langle 2 \rangle$	134	0.008		$\langle 3 \rangle$	5	0.0006			05Bu0B
2155.7	3^+								2	46	0.0032			05Bu0B
2164.5(1)														
2173.6(1)	3^-	1	0.04	745	$\langle 1 \rangle$	166	0.0098		1	83	0.0028		7.70(61)	69Go03
2179.9									2	51	0.0017			05Bu0B
2182(2)	$\langle 3 \rangle^-$	1	0.03	506									2.97(37)	69Go03
2195.6	1^-,3^-				$\langle 1 \rangle$	71	0.0037		1	43	0.0019			05Bu0B
2203.5	7^+								4	9	0.010			05Bu0B
2213.8	7^-				3	112	0.0045		$\langle 3 \rangle$	5	0.0020			05Bu0B
2219.64(4)														
2229.0	$\langle 3^+ \rangle$								$\langle 2 \rangle$	49	0.0028			05Bu0B

(continued) **$^{113}_{48}$Cd**

E^* [keV]	$2J^\pi$	L (d,p)	C^2S (d,p)	σ (d,p) μb/sr	L (d,p)	σ (d,p) μb/sr	$G_{\ell j}$ (d,p)	σ (d,t) μb/sr	L (d,t)	σ (d,t) μb/sr	$G_{\ell j}$ (d,t)	S_N (p,d)	g$\Gamma_\circ$ [meV]	Ref.
2241.1	5^+								2	115	0.0062			05Bu0B
2242.1	$\langle 7^-\rangle$	$\langle 3\rangle$		426	$\langle 3\rangle$	251	0.0095							69Go03
2252.9					$\langle 3\rangle$	93	0.0063							05Bu0B
2267.6	7^-			160	3	122	0.0054		3	4	0.0019		1.35(40)	69Go03
2278.3	1^+								0	49	0.0014			05Bu0B
2288.7						34								05Bu0B
2292.9	7^+								4	12	0.0159			05Bu0B
2313.5	$[3^+,5^+]$								$\langle 2\rangle$	12				05Bu0B
2319.6(2)	3^-	1	0.01	215	$\langle 1\rangle$	36	0.0034						0.75(24)	69Go03
2324.5(4)	$\langle 21^+\rangle$													05Bl05
2327.4	$\langle 3^-\rangle$			70	$\langle 1\rangle$	23	0.0014							05Bu0B
2336.4										13			1.21(23)	69Go03
2352.0	3^+					11			2	16	0.0012		2.10(35)	94Ge07
2361.9	5^+			170		22			2	13	0.0045			69Go03
2381.1	$\langle 3^-\rangle$				$\langle 1\rangle$	31	0.0029		1	48	0.0020			05Bu0B
2396.6	5^+								2	91	0.0049			05Bu0B
2409(2)	$7^+,9^+$	$\langle 4\rangle$		325									2.18(34)	69Go03
2413.3	$\langle 3^+\rangle$				$\langle 2\rangle$	69	0.0047		2	37	0.0024		1.81(36)	94Ge07
2425.1(2)	$[3^-]$				$\langle 1\rangle$	273	0.013			5			4.68(44)	94Ge07
2438.0	$\langle 3^+\rangle$								2	27	0.0017			05Bu0B
2448.4	$3^+,5^+$			325	$\langle 1,2\rangle$	103			2	39	0.0027		1.58(27)	69Go03
2472.3	$3^+,5^+$								2	27	0.0017			05Bu0B
2480.8	$\langle 3^-\rangle$				$\langle 1\rangle$	56	0.0046			14				05Bu0B
2487.9	$\langle 3^-\rangle$				$\langle 1\rangle$	19	0.0027							05Bu0B
2499.6	1^+					8			0	15	0.0003			05Bu0B
2533.7	$[3^+]$								$\langle 2\rangle$	44	0.0022			05Bu0B
2537.9	$\langle 7^-\rangle$	$\langle 3\rangle$	0.03	291	$\langle 3\rangle$	25	0.0012						4.68(45)	69Go03
2538.3(4)	$\langle 19^+\rangle$													05Bl05
2548.2	$3^+,5^+$								2	26	0.0015		0.96(22)	94Ge07
2555.9	3^-				1	56	0.0046						1.28(27)	94Ge07
2575.4	$\langle 3^-\rangle$	$\langle 1\rangle$	0.02	430						17			2.45(36)	69Go03
2586.6	1^+								0	94	0.0024			
2588(2)	3^-												15.1(12)	94Ge07
2591.7	$\langle 3^-\rangle$				$\langle 1\rangle$	41	0.0004							
2599.1	$\langle 5^+\rangle$								2	34	0.0017			
2612.2	$3^+,5^+$								2	69	0.0039			
2613.4(4)	$\langle 23^-\rangle$													05Bl05
2627.1	1^+	$\langle 0\rangle$	0.04	400					0	19	0.0004			69Go03
2632.7	$\langle 5^+\rangle$				2	245	0.011							
2690(10)				566										69Go03
2710(2)													2.3(7)	94Ge07
2743(2)													1.36(29)	94Ge07
2753(2)													1.14(28)	94Ge07
2757.8	$\langle 25^+\rangle$													00Bu06
2759.3(1)	$\langle 3^+,5^+\rangle$			312										69Go03

(continued) **$^{113}_{48}$Cd**

E^* [keV]	$2J^\pi$	L (d,p)	C^2S (d,p)	σ (d,p) μb/sr	L (d,p)	σ (d,p) μb/sr	$G_{\ell j}$ (d,p)	σ (d,t) μb/sr	L (d,t)	σ (d,t) μb/sr	$G_{\ell j}$ (d,t)	S_N (p,d)	g$\Gamma_\circ$ [meV]	Ref.
2773(2)	$\langle 3^- \rangle$	$\langle 1 \rangle$	0.02	302									1.51(27)	69Go03
2796(2)													4.18(50)	94Ge07
2817(2)	1^+	0	0.03	230									1.47(30)	69Go03
2878(2)													2.9(9)	94Ge07
2902(2)													1.52(33)	94Ge07
2913													1.7(4)	94Ge07
2929													1.3(4)	94Ge07
2943													1.6(4)	94Ge07
2962.6(4)	$\langle 23^+ \rangle$													05Bl05
3040													1.1(4)	94Ge07
3058													2.3(6)	94Ge07
3105													1.5(5)	94Ge07
3158													3.1(9)	94Ge07
3222													3.4(9)	94Ge07
3281													1.8(6)	94Ge07
3301													2.4(6)	94Ge07
3333													1.5(8)	94Ge07
3378													2.0(7)	94Ge07
3412													2.7(7)	94Ge07
3434													6.3(25)	94Ge07
3448.9(4)	$\langle 27^- \rangle$													05Bl05
3456													9.3(19)	94Ge07
3473.9(5)	$\langle 29^+ \rangle$													05Bl05
3480													2.5(7)	94Ge07
3486													3.6(10)	94Ge07
3526													4.4(10)	94Ge07
3547													2.9(9)	94Ge07
3610													17.4(27)	94Ge07
3650													14.0(36)	94Ge07
3741													3.7(12)	94Ge07
3814													11.2(25)	94Ge07
3850													5.3(17)	94Ge07
3902													16.0(34)	94Ge07
3985													21.7(76)	94Ge07
4201.5(5)	$\langle 31^- \rangle$													05Bl05
			69Go03	69Go03		05Bu0B	05Bu0B	64Ro17		05Bu0B	05Bu0B		94Ge07	Ref.
												83Ao01		Ref.

Additional data on this isotope can be found in [01Ko49, 00Fo13, 00Fo10, 00Bu23, 00Bu06, 97YaZZ, 97WaZY, 97Wa20, 94Ne14, 94Wa0A].

Abundance: 12.22(12) %.

* not included in Adopted Levels [05Bl05]

Estimated uncertainty in energies of levels seen in (γ, γ') reaction is about 2 keV [94Ge07].

Parameters $I_{s,0}$, g$\Gamma_\circ^{red}$, $B(M1)$ and $B(E1)$ from NRF measurements can be found in [94Ge07].

Data for this isotope are considered in vol. LB I/18B.

Energy levels and branching ratios [98Bl04, 05Bl05]. Part 2

$^{113}_{48}$Cd

E^*	$2J^\pi$	L	β_L	σ (d,p)	S_{dt}/S_{dp}	$T_{1/2}$ or	Ref.	Branching ratios in percentage					
								E_f^*: 0	263	299	316	459	522
[keV]			(p,p′)	μb/sr		Γ_{cm}		$2J_f^\pi$: 1^+	11^-	3^+	5^+	7^+	7^-
0	1^+			2250		$7.7(3)\cdot10^{15}$ yr	69Go03						
263.54(3)	11^-					14.1(5) yr	69Go03	100					
298.60(1)	3^+	2	0.19	3770	0.40	29(9) ps	67Ko07	100					
316.21(2)	5^+					10.8(3) ns	69Go03	97(4)		3.0(4)			
458.63(2)	7^+			210			69Go03				100		
522.26(2)	7^-			410	0.12	0.322(12) ns	64Ro17		99(2)		1.2(1)		
530(10)	7^+,9^+						69Go03						
583.96(2)	5^+	2	0.22	480	0.46	6.9(14) ps	69Go03	96(1)		1.3(2)	2.4(2)	<10	
626.6							05Bu0B						
638.19(3)	9^-						05Bu0B		89				11(2)
680.53(2)	3^+	2	0.11	1460	0.15	12(3) fs	69Go03	68(2)		14(1)	13.7(3)		
708.57(2)	5^+						05Bu0B	45(1)		5(1)	45(1)	5	
760(10)	1^+						69Go03						
815.34(3)	15^-								100				
816.71(2)	7^+						69Go03			2.3(1)	72(1)	25(1)	
855.28(3)	5^-										2.5(8)		93(2)
869.8(2)	15^-								100				
878.5(1)	$\langle 3^+ \rangle$	2	0.098	630			67Ko07	39(6)			39(6)	3(1)	
883.6(1)	1^+						69Go03	97(2)		3(2)			
897.53(4)	3^+						69Go03			70(1)	6(3)	16(1)	
939.79(2)	9^+						05Bu0B				34(1)	66(1)	
960(10)													
988.4(1)	1^+						69Go03	98(8)					
999.42(7)												100	
1002.87(4)	3^+							29(5)					
1007.20(5)	$\langle 5^+ \rangle$						05Bu0B				71(11)	25(5)	
1034.09(6)	$\langle 3^+ \rangle$						05Bu0B	58(12)		39(10)			
1037.40(3)	$\langle 7^+ \rangle$							21(2)		33(9)	38(11)		
1047.65(4)	7^+										62(2)	26(1)	
1049.66(9)	3^+							71(5)			16(8)		
1050.7	1^+						05Bu0B						
1051.25(2)	7^-												29(1)
1109.32(3)	13^-						05Bu0B		78(2)				
1124.64(2)	9^+										22(2)	53(2)	
1126.25(6)	3^+						05Bu0B	88(5)		11(4)			
1170(20)													
1177.72(2)	$\langle 9^- \rangle$												52(2)
1177.8(3)	$\langle 3^+ \rangle$			700	0.67		64Ro17			100			
1181.35(4)													90(6)
1190.72(5)										100			
1192.09(4)	X^-												27(2)
1194.6(2)	3^-					7.5 ps	94Ne14	6(1)					46(3)
1195.3(2)	5^+–9^+						69Go03			100			
1209.53(15)	13^-								100				
1214.67(2)	11^+											93(3)	

(continued)

$^{113}_{48}$Cd

E^* [keV]	$2J^\pi$	L	β_L (p,p′)	σ (d,p) μb/sr	S_{dt}/S_{dp}	$T_{1/2}$ or Γ_{cm}	Ref.	Branching ratios in percentage					
								E_f^*:	0	263	299	316	459	522
								$2J_f^\pi$:	1^+	11^-	3^+	5^+	7^+	7^-
1261.92(4)	⟨9⟩						05Bu0B					24(12)	35(4)	
1268.21(5)	3^+						05Bu0B		63(6)		37(5)			
1279.62(7)	3^+						69Go03		93(9)		2(1)	2.5(7)		
1301.07(7)	3^+,5^+						05Bu0B		18(4)					
1312.9	⟨11⟩						05Bu0B							
1313.75(3)	⟨9^+⟩						05Bu0B						6.5(16)	
1322.03(12)	⟨7^-,9^-⟩									51(14)				49(2)
1327.6(4)														
1329.8	7^+						05Bu0B							
1346.53(4)	11^-						05Bu0B							100
1351.58(7)	5,7										16(5)		3(1)	26(9)
1364.76(7)	5^+						05Bu0B				65(5)		11(1)	
1367.57(2)	7^+												9(6)	
1387.47(8)	5^+,3^+								7(3)		53(12)		41(12)	
1390.56(9)	⟨1^+,3^+⟩								72(21)		8(4)			
1395.83(3)	9^+						05Bu0B					58(4)	42(4)	
1405.8(1)	5^+						05Bu0B		46(9)		54(15)			
1407.5(3)	⟨9^+⟩												7(3)	
1410.68(6)													100	
1430(10)	⟨3⟩$^+$						69Go03							
1433.0	7^+						05Bu0B							
1450.30(7)	11^-						69Go03							
1461.67(4)														
1473.4							05Bu0B							
1477.9	11^-						05Bu0B							
1479.08(5)	3^+								29(4)		13(3)			
1493.03(9)	3^+						69Go03		3(1)			61(17)		
1504.90(4)	7^+													
1513.72(4)														
1542.28(9)	⟨1^+⟩													
1561.69(3)	X^+			330	<0.15									
1575.7(1)	7^-						69Go03			35(8)				
1579.2							05Bu0B							
1607.2(1)	5^+						69Go03		6(1)		26(6)			
1620.43(3)														69(8)
1626.41(4)														
1647.23(5)														
1656.6(3)	⟨19^-⟩													
1657.41(5)	11^-													
1658.51(7)										42(6)				33(3)
1662.2	3^+			260	0.19		05Bu0B							
1670.9(1)														
1675.09(9)	3^+			130			69Go03				25(10)			
1689.6							05Bu0B							
1700.1	⟨11^-⟩						05Bu0B							

(continued)

$^{113}_{48}$Cd

E^* [keV]	$2J^\pi$	L	β_L (p,p′)	σ (d,p) μb/sr	S_{dt}/S_{dp}	$T_{1/2}$ or Γ_{cm}	Ref.	Branching ratios in percentage E_f^*: 0 / $2J_f^\pi$: 1^+	263 11^-	299 3^+	316 5^+	459 7^+	522 7^-
1711.0	[3+,5+]						05Bu0B						
1713.0	⟨3−⟩						05Bu0B						
1732.84(4)	11^+												
1735.0	11^-						05Bu0B						
1737.53(7)													100
1743.6(2)	⟨5+⟩						05Bu0B						100
1746.0(1)	⟨3−⟩							47(17)			24(7)		
1758(10)	⟨5−,7−⟩	3	0.2				67Ko07						
1769.4	⟨3+⟩						05Bu0B						
1778.9(2)	9^-								83(16)				
1781.4	⟨3+⟩						05Bu0B						
1786.5							05Bu0B						
1788.9	⟨1+⟩						05Bu0B						
1798.9(1)	⟨1,3⟩							2.8(5)			9(3)		
1813.1	⟨7+⟩						05Bu0B						
1814.5(2)	⟨1,3⟩			90			69Go03						
1823.24(4)	⟨13−⟩												
1825.1	5^+						05Bu0B						
1833.5	3^+						05Bu0B						
1842.7(1)	⟨3−⟩						69Go03						53(9)
1852.3	1^+						05Bu0B						
1855(2)*							94Ge07						
1867.9(1)	7^-,9^-								9(2)				53(4)
1871.7(3)	3^+						69Go03						
1889.0	5^+						05Bu0B						
1892.3(1)	7^-	3	0.13				67Ko07		13(4)				35.0(4)
1896.44(4)													
1900(10)	⟨1+⟩			200			69Go03						
1902.4(1)	13^-												
1903.97(9)													
1904.35(11)	7^-						05Bu0B					93(16)	
1911.4	⟨5+⟩						05Bu0B						
1923.3	5^+						05Bu0B						
1942(2)	⟨3+⟩					607(+90-70) fs	94Ge07						
1969.8	7^+						05Bu0B						
1986(10)	5−,7^-	3	0.12				67Ko07						
1998.8	⟨11^-⟩						05Bu0B						
2005.3							05Bu0B						
2015.6	1^+						05Bu0B						
2027.7							05Bu0B						
2037.8(2)	5−,7^-						69Go03					9(3)	
2042.1(1)	3^+			180			94Ge07						
2044.9	1^-						05Bu0B						
2046.23(7)	15^+												
2062.9													

(continued)

$^{113}_{48}$Cd

E^* [keV]	$2J^\pi$	L	β_L (p,p′)	σ (d,p) μb/sr	S_{dt}/S_{dp}	$T_{1/2}$ or Γ_{cm}	Ref.	Branching ratios in percentage E_f^*: 0 263 299 316 459 522 $2J_f^\pi$: 1^+ 11^- 3^+ 5^+ 7^+ 7^-
2072.7	5^+						05Bu0B	
2080.9	1^+						69Go03	
2099.2	5^+						05Bu0B	
2113.0(2)	7^-						69Go03	64(17)
2128(2)							69Go03	
2135.0	1^+						69Go03	
2146.8	$\langle 7^- \rangle$						05Bu0B	
2155.7	3^+			250			05Bu0B	
2164.5(1)								
2173.6(1)	3^-					90(7) fs	69Go03	37(7)
2179.9							05Bu0B	
2182(2)	$\langle 3 \rangle^-$					228(+85-50) fs	69Go03	
2195.6	1^-,3^-						05Bu0B	
2203.5	7^+						05Bu0B	
2213.8	7^-						05Bu0B	
2219.64(4)								
2229.0	$\langle 3^+ \rangle$						05Bu0B	
2241.1	5^+						05Bu0B	
2242.1	$\langle 7^- \rangle$						69Go03	
2252.9							05Bu0B	
2267.6	7^-						69Go03	
2278.3	1^+						05Bu0B	
2288.7							05Bu0B	
2292.9	7^+						05Bu0B	
2313.5	$[3^+,5^+]$						05Bu0B	
2319.6(2)	3^-						69Go03	82(34)
2324.5(4)	$\langle 21^+ \rangle$						05Bl05	
2327.4	$\langle 3^- \rangle$						05Bu0B	
2336.4							69Go03	
2352.0	3^+					$3.0(+16-6)\cdot10^2$ fs	94Ge07	
2361.9	5^+						69Go03	
2381.1	$\langle 3^- \rangle$						05Bu0B	
2396.6	5^+						05Bu0B	
2409(2)	7^+,9^+						69Go03	
2413.3	$\langle 3^+ \rangle$						94Ge07	
2425.1(2)	$[3^-]$						94Ge07	
2438.0	$\langle 3^+ \rangle$						05Bu0B	
2448.4	3^+,5^+						69Go03	
2472.3	3^+,5^+						05Bu0B	
2480.8	$\langle 3^- \rangle$						05Bu0B	
2487.9	$\langle 3^- \rangle$						05Bu0B	
2499.6	1^+						05Bu0B	
2533.7	$[3^+]$						05Bu0B	
2537.9	$\langle 7^- \rangle$						69Go03	
2538.3(4)	$\langle 19^+ \rangle$						05Bl05	

(continued) **$^{113}_{48}$Cd**

E^* [keV]	$2J^\pi$	L	β_L (p,p′)	σ (d,p) μb/sr	S_{dt}/S_{dp}	$T_{1/2}$ or Γ_{cm}	Ref.	Branching ratios in percentage					
								E_f^*:	0	263	299	316	459	522
								$2J_f^\pi$:	1^+	11^-	3^+	5^+	7^+	7^-
2548.2	$3^+,5^+$						94Ge07							
2555.9	3^-						94Ge07							
2575.4	$\langle 3^- \rangle$						69Go03							
2586.6	1^+													
2588(2)	3^-						94Ge07							
2591.7	$\langle 3^- \rangle$													
2599.1	$\langle 5^+ \rangle$													
2612.2	$3^+,5^+$													
2613.4(4)	$\langle 23^- \rangle$						05Bl05							
2627.1	1^+						69Go03							
2632.7	$\langle 5^+ \rangle$													
2690(10)							69Go03							
2710(2)							94Ge07							
2743(2)							94Ge07							
2753(2)							94Ge07							
2757.8	$\langle 25^+ \rangle$						00Bu06							
2759.3(1)	$\langle 3^+,5^+ \rangle$						69Go03				62(12)			
2773(2)	$\langle 3^- \rangle$						69Go03							
2796(2)							94Ge07							
2817(2)	1^+						69Go03							
2878(2)							94Ge07							
2902(2)							94Ge07							
2913							94Ge07							
2929							94Ge07							
2943							94Ge07							
2962.6(4)	$\langle 23^+ \rangle$						05Bl05							
3040							94Ge07							
3058							94Ge07							
3105							94Ge07							
3158							94Ge07							
3222							94Ge07							
3281							94Ge07							
3301							94Ge07							
3333							94Ge07							
3378							94Ge07							
3412							94Ge07							
3434							94Ge07							
3448.9(4)	$\langle 27^- \rangle$						05Bl05							
3456							94Ge07							
3473.9(5)	$\langle 29^+ \rangle$						05Bl05							
3480							94Ge07							
3486							94Ge07							
3526							94Ge07							
3547							94Ge07							
3610							94Ge07							

(continued) **$^{113}_{48}$Cd**

E^*	$2J^\pi$	L	β_L	σ (d,p)	S_{dt}/S_{dp}	$T_{1/2}$ or	Ref.	Branching ratios in percentage						
								E_f^*:	0	263	299	316	459	522
[keV]			(p,p′)	μb/sr		Γ_{cm}		$2J_f^\pi$:	1^+	11^-	3^+	5^+	7^+	7^-
3650							94Ge07							
3741							94Ge07							
3814							94Ge07							
3850							94Ge07							
3902							94Ge07							
3985							94Ge07							
4201.5(5)	⟨31$^-$⟩						05Bl05							
			67Ko07	64Ro17			Ref.							
					64Ro17		Ref.							

Energy levels and branching ratios [98Bl04, 05Bl05]. Part 3 **$^{113}_{48}$Cd**

E^*	$2J^\pi$					Branching ratios in percentage					
		E_f^*:	584	638	680.5	708.6	815.3	816.7	855.3	883.6	897.5
[keV]		$2J_f^\pi$:	5^+	9^-	3^+	5^+	15^-	7^+	5^-	1^+	3^+
680.53(2)	3^+		3.6(2)								
855.28(3)	5^-			4.4(3)							
878.5(1)	⟨3^+⟩		19(5)								
897.53(4)	3^+		8.6(3)								
988.4(1)	1^+					2.4(4)					
1002.87(4)	3^+				49(3)	22(6)					
1007.20(5)	⟨5^+⟩		4.6(8)								
1034.09(6)	⟨3^+⟩		2.8(6)								
1037.40(3)	⟨7^+⟩		5(1)		3(1)						
1047.65(4)	7^+		10(1)					1.4(6)			
1049.66(9)	3^+				13(3)						
1051.25(2)	7^-			59(1)	12(2)						
1109.32(3)	13^-			3.4(5)			18.7(6)				
1124.64(2)	9^+					12.6(5)		10.0(5)			
1126.25(6)	3^+									1.1(3)	
1177.72(2)	⟨9^-⟩								31.4(12)		
1181.35(4)				10(4)							
1192.09(4)	X^-			73(4)							
1194.6(2)	3^-		1.9(2)						46(2)		
1261.92(4)	⟨9⟩		28(4)					13(3)			
1301.07(7)	3^+,5^+		70(13)								
1313.75(3)	⟨9^+⟩		94(4)								
1327.6(4)			100								
1351.58(7)	5,7		42(7)						9(3)		
1364.76(7)	5^+		24(7)								
1367.57(2)	7^+							59(9)			0.9(9)
1407.5(3)	⟨9^+⟩		93(19)								

(continued) **$^{113}_{48}$Cd**

E^*	$2J^\pi$		Branching ratios in percentage								
		E_f^*:	584	638	680.5	708.6	815.3	816.7	855.3	883.6	897.5
[keV]		$2J_f^\pi$:	5^+	9^-	3^+	5^+	15^-	7^+	5^-	1^+	3^+
1450.30(7)	11^-				68(21)						
1461.67(4)									100		
1479.08(5)	3^+					14(4)			43(10)		
1493.03(9)	3^+		20(6)		7(3)	6(2)					
1504.90(4)	7^+		100								
1513.72(4)			12(3)	44(2)							
1542.28(9)	$\langle 1^+ \rangle$									56(21)	
1561.69(3)	X^+							49(2)			40(2)
1575.7(1)	7^-			65(19)							
1607.2(1)	5^+		46(18)		22(9)						
1620.43(3)									31(3)		
1657.41(5)	11^-						100				
1658.51(7)				24(3)							
1675.09(9)	3^+				36(7)					38(11)	
1746.0(1)	$\langle 3^- \rangle$								29(9)		
1798.9(1)	$\langle 1,3 \rangle$		78(11)								
1823.24(4)	$\langle 13^- \rangle$						61(4)				
1867.9(1)	$7^-,9^-$								38(12)		
1892.3(1)	7^-								52(15)		
1896.44(4)							33(7)				
1903.97(9)							100				
2037.8(2)	$5^-,7^-$							54(4)			
2042.1(1)	3^+						100				
2113.0(2)	7^-			36(18)							
2173.6(1)	3^-									22(5)	
2319.6(2)	3^-								18(5)		
2759.3(1)	$\langle 3^+,5^+ \rangle$							30(9)			

Energy levels and branching ratios [98Bl04, 05Bl05]. Part 4 **$^{113}_{48}$Cd**

E^*	$2J^\pi$		Branching ratios in percentage									
		E_f^*:	939.8	988.4	1002.9	1007.2	1034.1	1047.6	1051.2	1109.3	1124.6	1126.2
[keV]		$2J_f^\pi$:	9^+	1^+	3^+	$\langle 5^+ \rangle$	$\langle 3^+ \rangle$	7^+	7^-	13^-	9^+	3^+
1124.64(2)	9^+		3.3(4)									
1177.72(2)	$\langle 9^- \rangle$								17(2)			
1214.67(2)	11^+		7(4)									
1279.62(7)	3^+			1.6(5)				0.7(6)				
1301.07(7)	$3^+,5^+$											11(4)
1351.58(7)	5,7					2.8(7)						
1367.57(2)	7^+		29(2)									
1390.56(9)	$\langle 1^+,3^+ \rangle$			13(4)								7(2)
1542.28(9)	$\langle 1^+ \rangle$				44(8)							

(continued) **$^{113}_{48}$Cd**

E^*	$2J^\pi$		Branching ratios in percentage									
		E_f^*:	939.8	988.4	1002.9	1007.2	1034.1	1047.6	1051.2	1109.3	1124.6	1126.2
[keV]		$2J_f^\pi$:	9^+	1^+	3^+	$\langle 5^+ \rangle$	$\langle 3^+ \rangle$	7^+	7^-	13^-	9^+	3^+
1561.69(3)	X^+		10(3)									
1626.41(4)											100	
1647.23(5)			100									
1670.9(1)										100		
1732.84(4)	11^+		64(5)									
1798.9(1)	$\langle 1,3 \rangle$						11(5)					
1823.24(4)	$\langle 13^- \rangle$									39(4)		
1871.7(3)	3^+		100									
1896.44(4)										53(4)		
1904.35(11)	7^-							7(3)				
2037.8(2)	$5^-,7^-$		37(14)									

Energy levels and branching ratios [98Bl04, 05Bl05]. Part 5 **$^{113}_{48}$Cd**

E^*	$2J^\pi$		Branching ratios in percentage									
		E_f^*:	1177.7	1194.6	1209.5	1214.7	1268.2	1279.6	1367.6	1513.7	1626.4	1657.4
[keV]		$2J_f^\pi$:	$\langle 9^- \rangle$	3^-	13^-	11^+	3^+	3^+	7^+			11^-
1367.57(2)	7^+					1.8(8)						
1450.30(7)	11^-							32(9)				
1493.03(9)	3^+						1.7(6)					
1513.72(4)			44									
1732.84(4)	11^+					21(2)			15(15)			
1778.9(2)	9^-				17(4)							
1842.7(1)	$\langle 3^- \rangle$			47(18)								
1896.44(4)												6(2)
1902.4(1)	13^-					38(3)			62(3)			
2046.23(7)	15^+					100						
2146.8	$\langle 7^- \rangle$									100		
2164.5(1)						100						
2173.6(1)	3^-			14(5)								
2219.64(4)											100	

Energy levels and branching ratios [98Bl04, 05Bl05]. Part 6 **$^{113}_{48}$Cd**

E^*	$2J^\pi$		Branching ratios in percentage		
		E^*_f:	1658.5	1746.0	1798.9
[keV]		$2J^\pi_f$:		$\langle 3^- \rangle$	$\langle 1,3 \rangle$
1896.44(4)			7(2)		
2173.6(1)	3^-			28(5)	
2759.3(1)	$\langle 3^+,5^+ \rangle$				8(2)

Energy levels and branching ratios [02Bl20]. **$^{114}_{48}$Cd**

E^*	J^π	L	σ (t,p)	L	$(2J+1)S$	σ (d,p)	I_p	I_γ	$I_{s,0}$	$\Gamma_{\gamma 0}$	$B(M1)$	$B(E1)$	S_α	Ref.
[keV]		(t,p)	μb/sr		(d,p)	μb/sr	*rel.*		[eVb]	[meV]	[μ_N^2]	$10^{-3}ef$	(d,^{6}Li)	
0	0^+	0	5772(289)	0	0.42	177		9500					0.028	67Co15
558.456(2)	2^+	2	194(10)	2	0,44	54.3		7443					0.028	67Co15
1134.53(1)	0^+	0	139(7)	0	0.05	29.8		447					0.002	67Co15
1209.71(1)	2^+	2	60(3)	$\langle 2 \rangle$	$\leq$0.1	<5		1825					0.005	67Co15
1283.74(1)	4^+	2	12(1)	$\langle 4 \rangle$	$\leq$0.1	<2		446					0.005	67Co15
1305.61(1)	0^+	0	incl	0	0.05	24.5		424					0.001	67Co15
1364.34(1)	2^+	2	10(1)	2	0.06	8.8		988					0.002	67Co15
1684(2)*														
1732.25(1)	4^+	$\langle 2 \rangle$	8(1)					92						88Hu09
1784(5)	2^+	$\langle 2 \rangle$	17(1)											88Hu09
1841.95(1)	2^+					2.0		415						
1859.70(1)	0^+	0	322(16)	0	0.17	76.9		109						67Co15
1864.26(1)	3^+					incl		278					$\leq$0.1	79Ja21
1932.08(1)	4^+							64						
1958.09(1)	3^-	3	101(6)	$\langle 3 \rangle$	0.09	8.4		471					0.037	67Co15
1990.3(2)	6^+													
2048.03(1)	2^+	2	19(2)	2	0.05	7.8		293		0.24(11)				67Co15
2152.27(1)	$3^+,4^+$							29						
2204.56(1)	3^+						<2	176						
2218.86(2)	2^+	2	13.7(13)	2	0.18	24.7	99(21)	283						67Co15
2298.93(2)	5^-	$\langle 5 \rangle$	71(4)			41.1	146(19)							88Hu09
2317.1(7)	2^+													
2384.76(1)	3^-					6.3	22(4)	147						
2387.3(10)	3^-					incl								77Ha38
2391.50(4)	4^+	4	131(7)				6(1)	24						88Hu09
2396	1^-								1.4(4)	0.7(2)		0.14(4)		05Ko32
2400.2(20)	$\langle 6 \rangle^+$													
2412.5(5)	$\langle 6 \rangle$						6(2)							
2437.64(8)	0^+						14(4)	78						
2456.00(1)	1^-						<3	417	20.9(35)	11.0(18)		2.12(36)		77Ha38
2460.76(1)	4^-						17(4)	52						77Ha38
2465.2(7)														
2503.4(2)	$0^+,1^+$	0	207(10)	0	0.03	14.6	54(10)							67Co15

(continued)

$^{114}_{48}$Cd

E^* [keV]	J^π	L (t,p)	σ (t,p) μb/sr	L (d,p)	$(2J+1)S$ (d,p)	σ (d,p) μb/sr	I_p *rel.*	I_γ	$I_{s,0}$ [eVb]	$\Gamma_{\gamma 0}$ [meV]	$B(M1)$ [μ_N^2]	$B(E1)$ $10^{-3}ef$	Ref.
2525.42(1)	2^+	2	incl	2	0.24	31.7	75(11)	133					67Co15
2535.81(2)	$\langle 5^- \rangle$						21(4)						77Ha38
2553.87(8)	0^+			0	0.22	130	319(17)	48					67Co15
2580.36(1)	2^-						<3	166					
2636.52(6)	0^+			0	0.13	62	183(11)	53					67Co15
2646	1								1.0(3)	0.6(2)	0.008(2)	0.09(3)	05Ko32
2650	1								1.2(4)	0.8(2)	0.010(3)	0.12(4)	05Ko32
2650.12(1)	2^+	2	249(12)	2	1.4	241	155(9)	97					67Co15
2660.90(3)	1^+–3^+					incl	660(31)	93					
2669.3(20)	$\langle 8^+ \rangle$					incl							
2701.07(2)	3^+			3	0.34	39.6	115(11)	49					67Co15
2735.2(4)	$\langle 7^- \rangle$						15(1)						
2749.26(2)	2^+	2	210(11)	2	0.43	75.4	220(23)	64					67Co15
2756.92(7)	3^-,4^-						<15	28					77Ha38
2767.85(10)	1^-					93	<13	174	10.9(13)	7.2(8)		0.97(11)	77Ha38
2771.0(1)**							241(11)						
2788.50(2)	1^+,2^+						43(4)	82					
2799.99(5)	1						61(6)	138	16.5(25)	11.3(13)	0.134(15)		94Ge07
2806.59(3)	3^+					35.8	incl	30					
2812.05(2)	2^+			2	0.20		85(22)	100					67Co15
2820.22(3)	4^+						21(4)	10					
2828.2(2)	0^+,1^+	$\langle 4 \rangle$	16(3)	0	0.92	51	138(9)						67Co15
2847(6)	2^-–4^-			3	0.35								67Co15
2872.8(2)	$\langle 4^+ \rangle$	4	64(3)			35.8	135(10)						88Hu09
2902.6(8)	3^+,0^+						141(6)						
2910.2(3)	0^+,1^+			0	0.33	212	445(16)						67Co15
2915.8(3)**							135(11)						
2936.1(3)	4^+	4	109(6)			27.0	64(5)						88Hu09
2936.12(5)	$\langle 3^- \rangle$					incl	incl	47					
2941.8(3)						incl	33(4)						
2953.24(2)	2^+					210	1000(25)	75					
2957.26(5)	1^-–3^-				1.5		<50	86					67Co15
2991.8(8)**							4(1)						
2999.56(2)	1						<3	137	14.2(27)	11.1(11)	0.107(10)	1.18(11)	94Ge07
3002.22(3)	2^+					31.7	80(6)	30					
3024.6(2)	1^+–3^+			2	0.17	28.8	120(8)						67Co15
3052.90(4)	0^+	0	244(12)	0	0.03	17.7	57(5)	73					67Co15
3077.38(3)	1^+,2^+			2	0.16	34.5	67(9)	42					67Co15
3087(1)	1,2						10(2)			0.86(26)			94Ge07
3098.5(3)**							<3						
3108.60(2)	$1^{\langle + \rangle}$						<4	211	20.5(19)	17.2(13)	0.148(12)	1.64(13)	94Ge07
3110.2(20)*	1								incl	incl			94Ge07
3118.0(3)				$\langle 2,3 \rangle$	0.2	26.0	91(6)						67Co15
3128.5(2)				$\langle 2,3 \rangle$	0.2	32.2	148(9)						67Co15
3140.7(5)		$\langle 6+0 \rangle$	67(3)				<2						88Hu09

(continued) **$^{114}_{48}$Cd**

E^* [keV]	J^π	L (t,p)	σ (t,p) μb/sr	L (d,p)	$(2J+1)S$ (d,p)	σ (d,p) μb/sr	I_p *rel.*	I_γ	$I_{s,0}$ [eVb]	$\Gamma_{\gamma\circ}$ [meV]	$B(M1)$ [μ_N^2]	$B(E1)$ $10^{-3}ef$	Ref.
3143.3(20)	$\langle 10^+\rangle$												
3157.16(4)	1^-						5(1)	98					
3167.1(3)	0^+–2^+						<2						
3175.3(9)**							7(2)						
3183.1(4)**							49(6)						
3196.6(4)	2^-–4^-			3	0.17	27.3	49(6)						67Co15
3206.0(3)	2^+						<15	37					
3209.7(8)**							47(10)						
3213.2(3)	$1^{\langle+\rangle}$								2.7(3)	2.5(3)	0.019(2)	0.21(3)	94Ge07
3218.56(4)	$1^{\langle+\rangle}$						758(61)	326	14.0(9)	12.6(8)	0.098(6)	1.08(7)	94Ge07
3221(6)	1^+–3^+			2	1.1	208							67Co15
3232.4(4)				2	0.26	51.8	178(14)						
3250(15)	$\langle 8^+\rangle$												
3254(5)		$\langle 5+0\rangle$	41(3)	2	0.22	42.6							88Hu09
3258.09(1)	1^-,2^-	incl	incl				<15	76					
3260.1(2)**							132(16)						
3267.27(10)	1^+–3^+					incl	35(10)						67Co15
3282.6(4)	$\langle 9^-\rangle$												
3285(6)	1^+–3^+					14.5							67Co15
3315.7(3)	$\langle 0$–$2\rangle$			0	0.06	58.4							
3333.8(14)*		$\langle 4\rangle$	40(3)			61.3							88Hu09
3350.8(3)	0^+,1^+		incl			incl							67Co15
3372.6(22)*													
3381(6)													
3383(6)													
3409.2(10)	1^+–3^+			2	0.34	68.6	230(28)						67Co15
3445.1(3)						45.8	194(25)						
3462.1(3)	$\langle 1^+$–$3^+\rangle$	1	48(3)	2	0.26	66.9	147(20)						67Co15
3480(6)	X^-												
3501.15(8)	0^+–2^+												
3504.0(5)	$\langle 10^+\rangle$												
3508.7(9)*													
3521(6)	X^-												
3557(6)													
3566(6)	$\langle 4^+$,$1^-\rangle$	$\langle 4,1\rangle$	13(3)										88Hu09
3583.8(9)*													
3604(7)	$\langle 0\rangle$	$\langle 0\rangle$	68(3)										88Hu09
3612.0(19)*						60.7							
3654.5(8)*													
3668.0(24)*													
3682(1)	1,2									2.7(7)			94Ge07
3707(1)	1,2									2.6(9)			94Ge07
3711.3(20)	$\langle 12^+\rangle$												
3712(6)	1^+–3^+			2	0.28	55.6							67Co15
3724.8(21)*													

(continued) **$^{114}_{48}$Cd**

E^* [keV]	J^π	L (t,p)	σ (t,p) μb/sr	L (d,p)	$(2J+1)S$ (d,p)	σ (d,p) μb/sr	I_p *rel.*	I_γ	$I_{s,0}$ [eVb]	$\Gamma_{\gamma\circ}$ [meV]	$B(M1)$ [μ_N^2]	$B(E1)$ $10^{-3}ef$	S_α (d,^{6}Li)	Ref.
3747(1)	1								9.7(14)	11.9(9)	0.058(4)	0.65(5)		94Ge07
3790(1)	1			2	0.2	48.8			1.1(4)	1.4(5)	0.007(2)	0.07(2)		67Co15
3795.7(9)*	1								2.5(7)	3.1(9)	0.015(4)	0.16(5)		05Ko32
3821.5(23)*	1								3.6(17)	4.5(14)	0.021(6)	0.23(7)		94Ge07
3857(1)	1								2.5(5)	3.2(6)	0.014(3)	0.16(3)		94Ge07
3880.3(9)*														
3891.0(9)*														
3902(6)														
3916(1)	1								5.9(12)	7.8(16)	0.034(7)	0.37(8)		94Ge07
3933.4(16)*	1,2									3.9(14)				94Ge07
3949	1								4.6(11)	6.2(15)	0.026(6)	0.29(7)		05Ko32
3970.8(23)*														
3993(1)	1								9.1(19)	12.6(26)	0.051(11)	0.57(12)		94Ge07
4008.1(18)*														
4027.3(5)	$\langle 11^- \rangle$													
4059.3(25)*	1									14.1(35)				94Ge07
4075(1)	1,2									11.5(32)				94Ge07
4102.9(13)*														
4142(6)														
4170.6(11)*														
4210.6(10)*														
4231.1(9)*														
4256.4(5)	$\langle 12^+ \rangle$													
4268.4(10)*														
4441.0(24)*														
4489.4(17)*														
4541.7(9)*														
4604.2(6)	$\langle 14^+ \rangle$													
4605.2(5)	$\langle 13^- \rangle$													
4648.9(10)*														
4703.0(21)*														
4742.9(11)*														
4917.0(26)*														
5691	$\langle 16^+ \rangle$													00Fo13

(continued) **$^{114}_{48}$Cd**

E^*	J^π	L	σ (t,p)	L	$(2J+1)S$	σ (d,p)	I_p	I_γ	$I_{s,0}$	$\Gamma_{\gamma 0}$	$B(M1)$	$B(E1)$	S_α	Ref.
[keV]		(t,p)	μb/sr		(d,p)	μb/sr	*rel.*		[eVb]	[meV]	$[\mu_N^2]$	$10^{-3}ef$	(d,^{6}Li)	
			88Hu09		67Co15	67Co15	84Mh01		05Ko32	05Ko32	05Ko32	05Ko32	79Ja21	Ref. Ref.

Additional data on this isotope can be found in [04Ju03, 03Ba57, 03Ba19, 01Ko49, 00Ko47, 00Fo13, 00Bu23, 00Bu06, 97Ju03, 96Ve07, 96Va25, 96Ju03, 94Jo0A, 94KhZX, 94Ge07, 94Fr14, 93De01, 90Ar20, 86Ba39, 82Cr01].
Abundance: 28.73(42) %.
* E^* of the intermediate state in $(n_{th}, \gamma\gamma)$ measurements [96Va25].
** Additional levels introduced in [84Mh01].
I_p – relative intensities of the proton yield in (d,p) reaction and I_γ – sum of depopulating transitions of the level (per 10000 captured neutrons) are from [84Mh01].
For ground state transitions from levels at 2456, 2767, 2999 keV values $B(E1)$ in units $10^{-4}e^2fm^2$ were found to be 6.4(6), 2.7(3) and 3.2(3), correspondingly [94Ge07].
$B(E1)$ in units $10^{-3}e^2fm^2$ [05Ko32].
Data for this isotope are considered in vol. LB I/18B.

Energy levels and branching ratios [02Bl20]. Part 2 **$^{114}_{48}$Cd**

E^*	J^π	L	S_N	σ (d,^{6}Li)	ε	$T_{1/2}$ or	Ref.	Branching ratios in percentage						
								E_f^*:	0	558	1134	1210	1284	1306	1364
[keV]			(d,τ)	μb/sr	(p,t)	Γ_{cm}		J_f^π:	0^+	2^+	0^+	2^+	4^+	0^+	2^+
0	0^+	4	0.18	1.79(22)	[1.0]	Stable	67Co15								
558.456(2)	2^+	4	0.52	0.40(10)	1.0	10.2(6) ps	67Co15		100						
1134.53(1)	0^+			0.080(45)		9.9(6) ps	67Co15		x	100					
1209.71(1)	2^+			0.054(38)		3.1(3) ps	67Co15		22(2)	78(4)	$2{\cdot}10^{-4}$				
1283.74(1)	4^+	4	0.28	0.107(54)		1.39(8) ps	67Co15			100					
1305.61(1)	0^+			incl		4.7(3) ns	67Co15		x	37(3)	x	63(5)			
1364.34(1)	2^+	4	0.15	0.027(27)		5.2(4) ps	67Co15		47(3)	52(4)	1.27(12)	0.09(1)	0.005(1)		
1684(2)*															
1732.25(1)	4^+					4.8(3) ps	88Hu09			31(2)		35(3)	12(1)		22(1)
1784(5)	2^+						88Hu09								
1841.95(1)	2^+			0.161(66)		0.65(12) ps			15(1)	41(3)	28(1)	2.1(1)		6(1)	8(1)
1859.70(1)	0^+			incl		1.8(4) ps	67Co15		x	94(8)					6(1)
1864.26(1)	3^+			incl			79Ja21			41(2)		48(2)	11(1)		0.2
1932.08(1)	4^+											49(2)	33(3)		17(1)
1958.09(1)	3^-	1	0.15	0.54(12)			67Co15			73(7)		26(1)	0.2(16)		0.7(2)
1990.3(2)	6^+					0.82(10) ps							100		
2048.03(1)	2^+			0.107(75)		0.38(11) ps	67Co15		6(1)	81(4)		3.7(3)		8.5(5)	
2152.27(1)	3^+,4^+									<17		40(4)	25(2)		<5
2204.56(1)	3^+									33(2)		24(1)	24(2)		14(2)
2218.86(2)	2^+			0.027			67Co15			99(6)					1.2(2)
2298.93(2)	5^-			0.11(5)			88Hu09						97		
2317.1(7)	2^+			0.11(5)					13(4)		21(5)	66(5)			

(continued)

$^{114}_{48}$Cd

E^* [keV]	J^π	L	S_N (d,τ)	σ (d,^{6}Li) μb/sr	ε (p,t)	$T_{1/2}$ or Γ_{cm}	Ref.	E_f^*: J_f^π:	0 0^+	Branching ratios in percentage 558 2^+	1134 0^+	1210 2^+	1284 4^+	1306 0^+	1364 2^+
2384.76(1)	3^-			incl						75(4)		19(1)			
2387.3(10)	3^-	1	0.14				77Ha38			100					
2391.50(4)	4^+						88Hu09						93(7)		
2396	1^-						05Ko32								
2400.2(20)	$\langle 6\rangle^+$					1.0(3) ps									
2412.5(5)	$\langle 6\rangle$														
2437.64(8)	0^+								11	82(5)		7.0(9)			
2456.00(1)	1^-	1	0.07				77Ha38		87(35)						13(3)
2460.76(1)	4^-		incl				77Ha38			33(6)			34(2)		
2465.2(7)															100
2503.4(2)	0^+,1^+						67Co15								
2525.42(1)	2^+			0.27(9)			67Co15		14(2)	20(4)		23(2)		17(1)	13(1)
2535.81(2)	$\langle 5^-\rangle$	1	0.66	incl			77Ha38								
2553.87(8)	0^+			incl			67Co15		x	100					
2580.36(1)	2^-									26(5)		65(4)			
2636.52(6)	0^+			<0.03			67Co15			92(6)		7.8(3)			
2646	1						05Ko32								
2650	1						05Ko32								
2650.12(1)	2^+			incl			67Co15		73(4)						20(3)
2660.90(3)	1^+–3^+			incl						100					
2669.3(20)	$\langle 8^+\rangle$					1.4(4) ps									
2701.07(2)	3^+						67Co15			37(6)		31(4)			
2735.2(4)	$\langle 7^-\rangle$														
2749.26(2)	2^+			0.21(8)			67Co15		7(1)	88(6)					
2756.92(7)	3^-,4^-	1	0.12	incl			77Ha38			49(10)			24(5)		
2767.85(10)	1^-		incl	incl			77Ha38		65(4)	34(3)					
2771.0(1)**															
2788.50(2)	1^+,2^+								23(2)	77(5)					
2799.99(5)	1						94Ge07		83(5)	17(2)					
2806.59(3)	3^+									52(10)			47(5)		
2812.05(2)	2^+						67Co15		21(5)	59(4)					10(1)
2820.22(3)	4^+														
2828.2(2)	0^+,1^+			0.03(3)			67Co15								
2847(6)	2^-–4^-			incl			67Co15								
2872.8(2)	$\langle 4^+\rangle$						88Hu09								
2902.6(8)	3^+,0^+														
2910.2(3)	0^+,1^+						67Co15								
2915.8(3)**															
2936.1(3)	4^+						88Hu09								
2936.12(5)	$\langle 3^-\rangle$			<0.03						42(8)			55(13)		
2941.8(3)				incl											
2953.24(2)	2^+									93(7)					
2957.26(5)	1^-–3^-			incl			67Co15			90(6)					
2991.8(8)**															
2999.56(2)	1						94Ge07		86(5)	12(3)					

(continued)

$^{114}_{48}$Cd

E^* [keV]	J^π	L	S_N (d,τ)	σ (d,^{6}Li) μb/sr	ε (p,t)	$T_{1/2}$ or Γ_{cm}	Ref.	Branching ratios in percentage						
								E_f^*:	0	558	1134	1210	1284	1306	1364
								J_f^π:	0^+	2^+	0^+	2^+	4^+	0^+	2^+
3002.22(3)	2^+								93(21)						
3024.6(2)	1^+–3^+						67Co15								
3052.90(4)	0^+	4	0.31				67Co15		88(9)						
3077.38(3)	1^+,2^+						67Co15		51(5)	24(5)					
3087(1)	1,2						94Ge07								
3098.5(3)**															
3108.60(2)	$1^{\langle+\rangle}$						94Ge07		27(4)	73(4)					
3110.2(20)*	1						94Ge07								
3118.0(3)							67Co15								
3128.5(2)							67Co15								
3140.7(5)							88Hu09								
3143.3(20)	$\langle 10^+\rangle$														
3157.16(4)	1^-									53(3)	45(9)				
3167.1(3)	0^+–2^+									47		28			25
3175.3(9)**															
3183.1(4)**															
3196.6(4)	2^-–4^-	1	0.45				67Co15								
3206.0(3)	2^+													49(8)	
3209.7(8)**															
3213.2(3)	$1^{\langle+\rangle}$						94Ge07		100						
3218.56(4)	$1^{\langle+\rangle}$						94Ge07		4(1)	85(4)					4(1)
3221(6)	1^+–3^+						67Co15								
3232.4(4)															
3250(15)	$\langle 8^+\rangle$														
3254(5)							88Hu09								
3258.09(1)	1^-,2^-									69(7)					
3260.1(2)**															
3267.27(10)	1^+–3^+						67Co15								
3282.6(4)	$\langle 9^-\rangle$														
3285(6)	1^+–3^+						67Co15								
3315.7(3)	$\langle 0$–$2\rangle$									100					
3333.8(14)*							88Hu09								
3350.8(3)	0^+,1^+						67Co15								
3372.6(22)*															
3381(6)															
3383(6)															
3409.2(10)	1^+–3^+						67Co15								
3445.1(3)															
3462.1(3)	$\langle 1^+$–$3^+\rangle$						67Co15								
3480(6)	X^-														
3501.15(8)	0^+–2^+									49(4)					51(4)
3504.0(5)	$\langle 10^+\rangle$														
3508.7(9)*															
3521(6)	X^-														
3557(6)															

(continued)

$^{114}_{48}$Cd

E^* [keV]	J^π	L	S_N (d,τ)	σ (d,^{6}Li) μb/sr	ε (p,t)	$T_{1/2}$ or Γ_{cm}	Ref.	Branching ratios in percentage E_f^*: 0 / J_f^π: 0^+	558 2^+	1134 0^+	1210 2^+	1284 4^+	1306 0^+	1364 2^+
3566(6)	$\langle 4^+,1^-\rangle$						88Hu09							
3583.8(9)*														
3604(7)	$\langle 0\rangle$						88Hu09							
3612.0(19)*														
3654.5(8)*														
3668.0(24)*														
3682(1)	1,2						94Ge07							
3707(1)	1,2						94Ge07							
3711.3(20)	$\langle 12^+\rangle$													
3712(6)	1^+–3^+						67Co15							
3724.8(21)*														
3747(1)	1						94Ge07							
3790(1)	1						67Co15							
3795.7(9)*	1						05Ko32							
3821.5(23)*	1						94Ge07							
3857(1)	1						94Ge07							
3880.3(9)*														
3891.0(9)*														
3902(6)														
3916(1)	1						94Ge07							
3933.4(16)*	1,2						94Ge07							
3949	1						05Ko32							
3970.8(23)*														
3993(1)	1						94Ge07							
4008.1(18)*														
4027.3(5)	$\langle 11^-\rangle$													
4059.3(25)*	1						94Ge07							
4075(1)	1,2						94Ge07							
4102.9(13)*														
4142(6)														
4170.6(11)*														
4210.6(10)*														
4231.1(9)*														
4256.4(5)	$\langle 12^+\rangle$													
4268.4(10)*														
4441.0(24)*														
4489.4(17)*														
4541.7(9)*														
4604.2(6)	$\langle 14^+\rangle$													
4605.2(5)	$\langle 13^-\rangle$													
4648.9(10)*														
4703.0(21)*														
4742.9(11)*														
4917.0(26)*														
5691	$\langle 16^+\rangle$						00Fo13							

(continued) **$^{114}_{48}$Cd**

E^*	J^π	L	S_N	σ (d,^{6}Li)	ε	$T_{1/2}$ or	Ref.	Branching ratios in percentage						
								E_f^*:	0	558	1134	1210	1284	1306	1364
[keV]			(d,τ)	μb/sr	(p,t)	Γ_{cm}		J_f^π:	0^+	2^+	0^+	2^+	4^+	0^+	2^+
			77Ha38	79Ja21	72Co22		Ref.								
							Ref.								

Energy levels and branching ratios [02Bl20]. Part 3 **$^{114}_{48}$Cd**

E^*	J^π		Branching ratios in percentage									
		E_f^*:	1732	1841.95	1859.70	1864.26	1932.08	1958.09	1990.3	2048.03	2152.27	2204.56
[keV]		J_f^π:	4^+	2^+	0^+	3^+	$\langle 4\rangle^+$	3^-	6^+	2^+	3^+,4^+	3^+
1864.26(1)	3^+		0.02									
1932.08(1)	4^+		1.2(5)									
1958.09(1)	3^-		0.05(1)									
2048.03(1)	2^+			0.092(9)		0.072(17)		0.137(14)				
2152.27(1)	3^+,4^+		15(1)	8.1(4)		9.8(5)	1.8(2)					
2204.56(1)	3^+		1.5(1)	1.5(1)		1.3(1)		0		0.1(1)		
2218.86(2)	2^+		0.20(5)		0.06(2)					0.016(3)		
2298.93(2)	5^-						3(1)					
2384.76(1)	3^-							5.9(4)		0.23(5)		0.135(6)
2391.50(4)	4^+		4.2(8)				2.3(3)					
2400.2(20)	$\langle 6\rangle^+$		100									
2460.76(1)	4^-		3.3(6)			20(2)		6.0(4)				4.2(2)
2525.42(1)	2^+				2.3(1)	1.3(1)		7(1)				0.2
2553.87(8)	0^+				x							
2580.36(1)	2^-			0.9(1)				3.7(1)		3.3(5)		1.0(3)
2650.12(1)	2^+							2.9(3)		2.0(1)		
2669.3(20)	$\langle 8^+\rangle$								100			
2701.07(2)	3^+			4.9(6)				22(1)				2.9(6)
2735.2(4)	$\langle 7^-\rangle$								x			
2749.26(2)	2^+										4(1)	
2756.92(7)	3^-,4^-		19(2)					7(1)				
2767.85(10)	1^-				1.4(3)							
2812.05(2)	2^+							8.6(8)				1.3(2)
2820.22(3)	4^+							61(4)		25(2)		
2953.24(2)	2^+									2.9(7)	4.1(5)	
2957.26(5)	1^-–3^-				4.2(9)							
3052.90(4)	0^+									6.9(9)		
3077.38(3)	1^+,2^+									20(2)		
3206.0(3)	2^+							18(3)				
3218.56(4)	$1^{\langle+\rangle}$							3.7(4)				
3258.09(1)	1^-,2^-			18(2)								
3445.1(3)										100		

Energy levels and branching ratios [02Bl20]. Part 4 **$^{114}_{48}$Cd**

E^*	J^π		Branching ratios in percentage									
		E_f^*:	2218.86	2298.93	2384.76	2391.50	2400.2	2437.64	2456.01	2460.76	2525.42	2553.87
[keV]		J_f^π:	2^+	5^-	3^-	4^+	$\langle 6\rangle^+$	0^+	1^-	4^-	2^+	0^+
2384.76(1)	3^-		0.187(16)									
2412.5(5)	$\langle 6\rangle$			x								
2525.42(1)	2^+		1.8(1)		0.1							
2535.81(2)	$\langle 5^-\rangle$			100								
2580.36(1)	2^-		0.2(1)									
2650.12(1)	2^+		1.8(1)					0.07(4)	0.13(8)		0.11(4)	
2660.90(3)	1^+–3^+				0.3(1)							
2669.3(20)	$\langle 8^+\rangle$						x					
2701.07(2)	3^+				0.4(1)	0.4(1)				1.5(1)		
2735.2(4)	$\langle 7^-\rangle$			x								
2756.92(7)	3^-,4^-								0.7(1)			
2788.50(2)	1^+,2^+										0.31(3)	
2806.59(3)	3^+										0.26(4)	
2820.22(3)	4^+		14(2)									
2936.12(5)	$\langle 3^-\rangle$									2.5(3)		
2957.26(5)	1^-–3^-		1.9(3)							1.6(4)		
2999.56(2)	1		1.7(2)									
3002.22(3)	2^+										4.5(10)	
3052.90(4)	0^+		4.9(4)									
3077.38(3)	1^+,2^+											2.7(5)
3206.0(3)	2^+		32(1)									
3218.56(4)	$1^{\langle+\rangle}$		3.1(3)									
3258.09(1)	1^-,2^-				4.6(5)				7.5(11)			

Energy levels and branching ratios [02Bl20]. Part 5 **$^{114}_{48}$Cd**

E^*	J^π		Branching ratios in percentage										
		E_f^*:	2580.36	2636.52	2650.12	2660.90	2669.3	2701.07	2735.2	2756.92	2799.99	2806.59	2812.05
[keV]		J_f^π:	2^-	0^+	2^+		$\langle 8^+\rangle$	3^+	$\langle 7^-\rangle$	3^-,$\langle 4^-\rangle$	$\langle 1^+$,$2^+\rangle$	3^+	2^+
2788.50(2)	1^+,2^+				0.046(9)								
2806.59(3)	3^+		0.6(3)										
2812.05(2)	2^+		0.18(9)	0.05(4)				0.21(2)					
2936.12(5)	$\langle 3^-\rangle$				0.3(1)								
2957.26(5)	1^-–3^-							2.57(14)					
3002.22(3)	2^+					2.1(2)							
3077.38(3)	1^+,2^+							0.7(1)			0.4(1)	0.4(1)	
3143.3(20)	$\langle 10^+\rangle$						x						
3157.16(4)	1^-									1.3(1)			0.2(1)
3218.56(4)	$1^{\langle+\rangle}$										0.2(1)		
3282.6(4)	$\langle 9^-\rangle$								100				
3504.0(5)	$\langle 10^+\rangle$						100						

Energy levels and branching ratios [02Bl20]. Part 6

$^{114}_{48}$Cd

E^*	J^π		Branching ratios in percentage										
		E_f^*:	2820.22	2936.12	2953.24	2957.26	3002.22	3108.64	3143.3	3282.6	3504.0	3712	4027.3
[keV]		J_f^π:	4^+	$\langle 3^- \rangle$	2^+		2^+	1^-	$\langle 10^+ \rangle$	$\langle 9^- \rangle$	$\langle 10^+ \rangle$		$\langle 11^- \rangle$
3052.90(4)	0^+		0.1(1)										
3108.60(2)	$1^{\langle + \rangle}$					0.1(1)							
3206.0(3)	2^+			0.2			0.2						
3218.56(4)	$1^{\langle + \rangle}$							0.07(7)					
3258.09(1)	$1^-,2^-$				0.6(1)								
3711.3(20)	$\langle 12^+ \rangle$								100				
4027.3(5)	$\langle 11^- \rangle$									100			
4256.4(5)	$\langle 12^+ \rangle$										100		
4604.2(6)	$\langle 14^+ \rangle$											100	
4605.2(5)	$\langle 13^- \rangle$												100

Energy levels and branching ratios [99Bl28, 05Bl06].

$^{115}_{48}$Cd

E^*	$2J^\pi$	L	S_N	σ (d,p)	σ (d,p)	S_{dt}/S_{dp}	σ (d,t)	$T_{1/2}$ or	Ref.
[keV]			(d,p)	μb/sr	μb/sr		μb/sr	Γ_{cm}	
0.0	1^+	0	0.70	2800	2290		1560	53.46(5) h	68Mo04
181.0(5)	$\langle 11 \rangle^-$	5	3.96	460	600		250	44.56(24) d	68Mo04
229.1(2)	$\langle 3 \rangle^+$	2	2.12	2290	2440	0.20	480		68Mo04
360.5(2)	$\langle 5 \rangle^+$	2	0.58	720	1210	1.00	1250		68Mo04
389(5)	$7^+,9^+$	4	2.16	270	incl	incl	incl		68Mo04
393.9(4)	$\langle 7 \rangle^-$							0.75(3) ns	
417.2(6)	$\langle 9^- \rangle$								
472.7(2)	$3^+,5^+$	2	9.74	820	1420		420		68Mo04
473.8(6)	$X^{\langle + \rangle}$						incl		
507.3(4)	$3^+,5^+$	2	0.41	450					68Mo04
649.1(2)	1^+	0	0.17	700	600		150		68Mo04
700.5(2)	$\langle 15^- \rangle$								05Bl06
719.9(4)	$\langle 5^- \rangle$	$\langle 3 \rangle$	0.02	30					68Mo04
749.4(5)	$3^+,5^+$	2	0.20	210					68Mo04
776.6(3)	$3^+,5^+$	2	0.50	550	1210	0.30	360		68Mo04
803(8)	1^+	0	0.01	50					68Mo04
872(8)	$5^-,7^-$	3	0.03	50	<50		<50		68Mo04
896				40					
962.7(3)	1^+	0	0.03	120	150		120		68Mo04
1042	$\langle 1^-,3^- \rangle$	$\langle 1 \rangle$	0.007	40					68Mo04
1062	$7^+,9^+$	4	0.36	40					68Mo04
1085	$3^+,5^+$	2	0.14	190	400	0.62	250		68Mo04
1092.1(4)	$\langle 3^- \rangle$								
1126.3(6)				40					68Mo04
1175	1^+	0	0.04	170	150		120		68Mo04
1214	$5^-,7^-$	3	0.19	30			incl		68Mo04

(continued) **$^{115}_{48}$Cd**

E^* [keV]	$2J^\pi$	L	S_N (d,p)	σ (d,p) μb/sr	σ (d,p) μb/sr	S_{dt}/S_{dp}	σ (d,t) μb/sr	$T_{1/2}$ or Γ_{cm}	Ref.
1224.6(6)									
1248	$3^+,5^+$	2	0.07	100	180	<0.28	50		68Mo04
1260							incl		
1308*		2	0.07	80					68Mo04
1317.3(5)	$3^+,5^+$	2	0.13	170					68Mo04
1348	$\langle 7^+,9^+\rangle$	$\langle 4\rangle$	0.23	30	720		270		64Ro17
1358.3(8)	$3^+,5^+$	2	0.28	360			incl		68Mo04
1478.1(3)	$\langle 19^-\rangle$								05Bl06
1485.6(5)									
1544									
1574									
1597(1)	$3^+,5^+$	2	0.03	40					68Mo04
1620	$\langle 1^+$–$5^+\rangle$	2,0	0.06	80					68Mo04
1725									
1742.1(12)									
1818	$3^+,5^+$	2	0.04	60					68Mo04
1840	$X^{\langle +\rangle}$	2,0	0.02	60					68Mo04
1876(15)	$\langle 3^+,5^+\rangle$	$\langle 2\rangle$	0.08	100					68Mo04
1906		2,4	0.1,1.0	250					68Mo04
1928	$1^-,3^-$	$\langle 1\rangle$	0.06	390					68Mo04
1954									
1976	$X^{\langle +\rangle}$	2,4	0.5,0.2	80					68Mo04
1999	$1^-,3^-$	1	0.13	760					68Mo04
2019	$1^-,3^-$	1	0.06	320					68Mo04
2077.7(16)									
2113.2(3)	$1^+,3$								
2155.4(4)	$\langle 21^+\rangle$								05Bl06
2156.1(3)	$\langle 3\rangle^-$								
2183.9(8)									
2314.4(4)	$\langle 3\rangle^-$								
2383.5(4)	$\langle 3\rangle$								
2397.2(4)	$\langle 23^-\rangle$								05Bl06
2486.5(4)	$\langle 1^-,3\rangle$								
2494.1(6)									
2526.9(6)									
2569.1(6)									
2601.5(4)	$\langle 25^+\rangle$								05Bl06
2635.9(5)									
2659.4(6)									
2680.4(5)									
2713.9(5)									
2906.3(6)	$1^-,3^-$								
3188.0(4)	$\langle 27^-\rangle$								05Bl06
3262.3(5)	$\langle 29^+\rangle$								05Bl06

(continued) **$^{115}_{48}$Cd**

E^* [keV]	$2J^\pi$	L	S_N (d,p)	σ (d,p) μb/sr	σ (d,p) μb/sr	S_{dt}/S_{dp}	σ (d,t) μb/sr	$T_{1/2}$ or Γ_{cm}	Ref.
3832.8(5)	$\langle 31^- \rangle$		68Mo04	68Mo04	64Ro17	64Ro17	64Ro17		05Bl06 Ref.

Additional data on this isotope can be found in [00Fo13, 00Fo10, 00Bu23, 00Bu06, 64Si18].
* not included in Adopted Levels [05Bl06]
Data for this isotope are considered in vol. LB I/18B.

Energy levels and branching ratios [99Bl28, 05Bl06]. Part 2 **$^{115}_{48}$Cd**

E^*	$2J^\pi$		Branching ratios in percentage								
		E_f^*:	0.0	181.0	229.1	360.5	393.9	417.2	472.7	473.8	507.3
[keV]		$2J_f^\pi$:	1^+	$\langle 11 \rangle^-$	$\langle 3 \rangle^+$	$\langle 5 \rangle^+$	$\langle 7 \rangle^-$	$\langle 9^- \rangle$	$3^+,5^+$	$X^{\langle + \rangle}$	$3^+,5^+$
229.1(2)	$\langle 3 \rangle^+$		100								
360.5(2)	$\langle 5 \rangle^+$		10.2(13)		90(22)						
393.9(4)	$\langle 7 \rangle^-$			100							
417.2(6)	$\langle 9^- \rangle$			100							
472.7(2)	$3^+,5^+$		91(11)		9.1(21)						
473.8(6)	$X^{\langle + \rangle}$					100					
507.3(4)	$3^+,5^+$		100								
649.1(2)	1^+		96(12)		4.1(8)						
719.9(4)	$\langle 5^- \rangle$						69(8)	24(3)	6(3)		
749.4(5)	$3^+,5^+$					87(10)				13(7)	
776.6(3)	$3^+,5^+$		52(9)		26(4)	22(3)					
962.7(3)	1^+		85(9)			15(3)					
1092.1(4)	$\langle 3^- \rangle$		3.6(11)		2.6(3)	1.1(3)	46(6)				3.1(6)
1126.3(6)			65(6)		25(10)				10(5)		
1224.6(6)					46(5)				33(7)		20(6)
1317.3(5)	$3^+,5^+$		38(5)		25(5)	18(2)			18(3)		
1358.3(8)	$3^+,5^+$										61(7)
1485.6(5)			41(5)		40(5)						
2113.2(3)	$1^+,3$		37(3)		11(1)	2.9(3)			18(3)		8.0(8)
2156.1(3)	$\langle 3 \rangle^-$		38(3)		18(2)	4.2(4)			0.5(1)		4.1(6)
2183.9(8)			11.0(10)			13(2)			57(6)		
2314.4(4)	$\langle 3 \rangle^-$		1.8(2)						77(7)		1.4(2)
2383.5(4)	$\langle 3 \rangle$		32(3)			16(2)			41(4)		
2486.5(4)	$\langle 1^-,3 \rangle$		17(2)		3.8(8)						12(1)
2494.1(6)			86(9)		14(3)						
2526.9(6)			100								
2569.1(6)			36(5)		44(5)	8(2)				12(4)	
2635.9(5)			100								
2659.4(6)			69(7)		17(3)				13.8(17)		
2680.4(5)			12(3)		62(7)						27(3)

(continued) **$^{115}_{48}$Cd**

E^*	$2J^\pi$	Branching ratios in percentage								
	E_f^*:	0.0	181.0	229.1	360.5	393.9	417.2	472.7	473.8	507.3
[keV]	$2J_f^\pi$:	1^+	$\langle 11\rangle^-$	$\langle 3\rangle^+$	$\langle 5\rangle^+$	$\langle 7\rangle^-$	$\langle 9^-\rangle$	$3^+,5^+$	$X^{\langle +\rangle}$	$3^+,5^+$
2713.9(5)		100								
2906.3(6)	$1^-,3^-$	100								

Energy levels and branching ratios [99Bl28, 05Bl06]. Part 3 **$^{115}_{48}$Cd**

E^*	$2J^\pi$	Branching ratios in percentage									
	E_f^*:	649.1	719.9	749.4	776.6	962.7	1092.1	1126.3	1224.6	1317.3	1485.6
[keV]	$2J_f^\pi$:	1^+	$\langle 5^-\rangle$	$3^+,5^+$	$3^+,5^+$	1^+	$\langle 3^-\rangle$			$3^+,5^+$	
1092.1(4)	$\langle 3^-\rangle$		43(5)								
1358.3(8)	$3^+,5^+$		39(16)								
1485.6(5)			18(3)								
1742.1(12)			100								
2077.7(16)			100								
2113.2(3)	$1^+,3$	15(1)			1.6(3)	7.3(7)					
2156.1(3)	$\langle 3\rangle^-$	16(2)	1.2(2)	2.9(3)	8.1(6)	0.7(1)		1.7(2)	2.3(2)	0.7(1)	1.9(3)
2183.9(8)		18(3)									
2314.4(4)	$\langle 3\rangle^-$	4.9(15)	2.4(4)	1.7(3)			5.0(5)				6.2(6)
2383.5(4)	$\langle 3\rangle$		11(3)								
2486.5(4)	$\langle 1^-,3\rangle$		19(3)				36(4)				12(1)

Energy levels and branching ratios [01Bl04]. **$^{116}_{48}$Cd**

E^*	J^π	L	ε	σ (t,p)	S_α	σ (d,^{6}Li)	$I_{s,0}$	$\Gamma_{\gamma\circ}$	$B(M1)$	$B(E1)$	$T_{1/2}$ or	Ref.
[keV]			(t,p)	μb/sr	(d,^{6}Li)	μb/sr	[eVb]	[meV]	[μ_N^2]	$10^{-3}ef$	Γ_{cm}	
0.0	0^+	0	1.75	5.63(28)	0.022	1.13(14)*					$>1.2\cdot10^{21}$ yr	87Wa34
513.490(15)	2^+	2	0.15	0.132(7)	0.032	0.355(76)					14.1(5) ps	87Wa34
1212.99(1)	2^+	[2]	0.05	0.035(3)	0.004	0.081(36)					1.9(3) ps	87Wa34
1219.44(2)	4^+	[4]	1.74		0.007	incl					1.7(4) ps	87Wa34
1282.56(2)	0^+				0.002	0.065(32)					65(4) ps	79Ja21
1380.31(2)	0^+	0	0.13	0.117(6)	0.002	0.081(39)					1.2(2) ps	87Wa34
1642.49(2)	2^+				0.004	0.032(23)						79Ja21
1869.7	4^+											05Ri19
1915.81(2)	3^+			0.305(15)								91Ar17
1921.55(2)	3^-	[3]	0.08	incl	0.026	0.258(65)						87Wa34
1928.4(1)	0^+	[0]	0.33	incl		incl						87Wa34
1951.36(2)	2^+	2	0.03	0.030(2)								87Wa34
2026.66(4)	6^+											91Ar17
2037.04(6)	2^+											91Ar17

(continued) **$^{116}_{48}$Cd**

E^* [keV]	J^π	L	ε (t,p)	σ (t,p) μb/sr	S_α (d,^{6}Li)	σ (d,^{6}Li) μb/sr	$I_{s,0}$ [eVb]	$\Gamma_{\gamma\circ}$ [meV]	$B(M1)$ [μ_N^2]	$B(E1)$ $10^{-3}ef$	$T_{1/2}$ or Γ_{cm}	Ref.
2041.90(4)	4^+											91Ar17
2118.42(4)	$\langle 2\rangle^+$					<0.02						91Ar17
2188.7(6)												
2194.9(5)												
2248.83(3)	5^-	5	1.36	0.054(3)		0.048(28)						87Wa34
2291.6(4)	5^-	[5]	0.29	0.019(1)		0.113(43)						87Wa34
2292.5(1)	2^+	[2]	0.02	incl								87Wa34
2293.2(6)												91Ar17
2293.7(3)	$\langle 2,3^+\rangle$											91Ar17
2296.29(5)	X^+				0.013							79Ja21
2339.77(6)	4^-,$\langle 3^+\rangle$											91Ar17
2376.45(5)	4^+	4	13.0	0.057(3)		0.129(46)						87Wa34
2377.07(2)	3^+		incl			incl						87Wa34
2391.49(4)	$\langle 2^+,3\rangle$											91Ar17
2435.02(14)	2^+	2	0.16	0.076(4)								87Wa34
2478.12(7)	$1^{\langle -\rangle}$						18.2(11)	9.7(6)		1.82(11)		05Ko32
2488							3.9(6)	2.1(3)	0.035(6)			05Ko32
2493.48(15)												91Ar17
2503.82(5)												91Ar17
2517.47(5)												91Ar17
2559(10)	2^+	2	0.29									87Wa34
2564.7(10)	6^+											
2604.85(5)	2^+–4^+			0.175(9)								91Ar17
2627.7(4)												
2648(8)												
2653.90(7)												91Ar17
2659							7.3(7)	4.5(4)	0.062(6)			05Ko32
2672.90(8)												91Ar17
2693.0(4)	$\langle 7^-\rangle$											
2720.08(7)	1^-	1	0.10	0.076(7)								87Wa34
2727.25(20)												91Ar17
2759.8(5)	$\langle 1,2^+\rangle$						3.0(7)	2.0(5)	0.025(6)	0.27(6)		05Ko32
2764.6(4)												
2779.7(15)	$\langle 10^+\rangle$											
2782.6(5)	2^+	2	0.10	0.064(3)								87Wa34
2786.14(15)												91Ar17
2803.00(7)	$\langle 2\rangle$											91Ar17
2810.5(3)	$1,2^+$											91Ar17
2817.6(6)												
2822.06(24)												91Ar17
2824	8^+											
2828.2(4)	$\langle 6^-\rangle$											
2828.6(3)	$1,2^+$			0.034(1)			20.8(27)	14.5(10)		1.83(13)		05Ko32
2837(11)	$\langle 6^+\rangle$	$\langle 6\rangle$	7.75	incl								87Wa34
2845	1^+						9.8(23)	6.9(13)	0.077(15)			05Ko32

(continued) **$^{116}_{48}$Cd**

E^* [keV]	J^π	L	ε (t,p)	σ (t,p) μb/sr	S_α (d,^{6}Li)	σ (d,^{6}Li) μb/sr	$I_{s,0}$ [eVb]	$\Gamma_{\gamma\circ}$ [meV]	$B(M1)$ [μ_N^2]	$B(E1)$ $10^{-3}ef$	$T_{1/2}$ or Γ_{cm}	Ref.
2862.44(18)	2^+,3											91Ar17
2873.0(12)	8^+											
2909.78(17)	1,2^+			0.018(1)								91Ar17
2957.9(4)	$\langle 4^+$–$6^+\rangle$											
2973(12)	$\langle 3^-\rangle$	$\langle 3\rangle$	0.10	0.064(4)								87Wa34
3014.74(24)												
3040.0(4)	10^+											
3050(14)	4^+	4	5.23	0.041(2)								87Wa34
3068	1^+						25.4(12)	20.7(10)	0.186(9)			05Ko32
3118.18(15)	1^-	1	0.10	0.072(5)								87Wa34
3156	1^-						6.0(6)	5.2(5)		0.48(5)		05Ko32
3175.67(23)												
3217.00(24)	2^+	2	0.08	0.049(2)								87Wa34
3282	1						1.0(6)	0.9(6)	0.007(4)	0.08(5)		05Ko32
3299.3(4)												
3321(14)	3^-	3	0.07	0.049(2)								87Wa34
3346.94(23)	$\langle 1,2^+\rangle$											
3382.3(4)	$\langle 9^-\rangle$											
3398.6(4)	1						1.7(4)	1.7(4)	0.011(3)	0.13(3)		05Ko32
3423	1^+						2.8(5)	2.8(5)	0.018(3)			05Ko32
3433.3(5)												
3472.10(13)	4^+	4	11.7	0.560(5)								87Wa34
3578.4(5)	12^+											
3601	1						5.7(5)	6.4(6)	0.036(3)	0.39(4)		05Ko32
3641	1						1.1(3)	1.3(4)	0.007(2)	0.08(2)		05Ko32
3655	1						3.6(21)	4.2(10)	0.022(5)	0.25(6)		05Ko32
3732	1						5.5(5)	6.7(7)	0.033(3)	0.37(4)		05Ko32
3763	1						1.9(6)	2.4(7)	0.012(4)	0.13(4)		05Ko32
3782	1						8.1(29)	10.0(14)	0.048(7)	0.53(7)		05Ko32
3849	1						6.7(6)	8.6(8)	0.039(4)	0.43(4)		05Ko32
3876	1						4.3(5)	5.6(7)	0.025(3)	0.27(3)		05Ko32
3895	1						14.1(38)	18.6(21)	0.082(9)	0.90(10)		05Ko32
3916.1(4)	$\langle 1,2^+\rangle$											
3976	1						3.2(5)	4.4(7)	0.018(3)	0.20(3)		05Ko32
3997	1						1.6(5)	2.2(7)	0.009(3)	0.10(3)		05Ko32
4027	1						4.7(6)	6.7(9)	0.027(4)	0.29(4)		05Ko32
4059.2(5)	$\langle 11^-\rangle$											
4380.4(5)	$\langle 14^+\rangle$											

(continued) **$^{116}_{48}$Cd**

E^* [keV]	J^π	L	ε (t,p)	σ (t,p) μb/sr	S_α (d,^{6}Li)	σ (d,^{6}Li) μb/sr	$I_{s,0}$ [eVb]	$\Gamma_{\gamma\circ}$ [meV]	$B(M1)$ [μ_N^2]	$B(E1)$ $10^{-3}ef$	$T_{1/2}$ or Γ_{cm}	Ref.
5342	$\langle 16^+ \rangle$											00Fo13
			87Wa34	87Wa34	79Ja21	79Ja21	05Ko32	05Ko32	05Ko32	05Ko32		Ref.

Additional data on this isotope can be found in [05Ri19, 01Wa42, 01Ko49, 00Ko47, 00Fo13, 00Bu23, 00Bu06, 97Ju03, 96Ju03, 92Ku01, 91Ar17, 90Ku01, 90Ar20, 72De06].
Abundance: 7.49(18) %.
* For all cadmium isotopes this cross section was measured at 16° and corresponds to α spectroscopic factor S_α given in the nearby column [79Ja21].
$B(E1)$ are given in units $10^{-3}e^2fm^2$ [05Ko32].
Data for this isotope are considered in vol. LB I/18B.

Energy levels and branching ratios [01Bl04]. Part 2 **$^{116}_{48}$Cd**

E^*	J^π	Branching ratios in percentage									
	E_f^*:	0.0	513	1213	1219	1283	1380	1642	1916	1921.55	2026.66
[keV]	J_f^π:	0^+	2^+	2^+	4^+	0^+	0^+	2^+	3	3^-	6^+
513.490(15)	2^+	100									
1212.99(1)	2^+	33(1)	67(2)								
1219.44(2)	4^+		100								
1282.56(2)	0^+		82(16)	18(3)							
1380.31(2)	0^+		100								
1642.49(2)	2^+	38(7)	62(12)	0.6(2)							
1915.81(2)	3^+		37(1)	37(3)	19(4)			7.2(5)			
1921.55(2)	3^-		77(2)	23(3)							
1928.4(1)	0^+		100								
1951.36(2)	2^+	11.9(4)	69(2)	1.0(4)	1.9(3)	16(1)					
2026.66(4)	6^+				100						
2037.04(6)	2^+						100				
2041.90(4)	4^+		62(2)		19(1)			19(1)			
2118.42(4)	$\langle 2 \rangle^+$		62(3)	3.7(5)		34(5)					
2188.7(6)				100							
2194.9(5)			100								
2248.83(3)	5^-		x		100						
2291.6(4)	5^-										75
2292.5(1)	2^+							93(7)			
2293.2(6)				100							
2293.7(3)	$\langle 2,3^+ \rangle$		100								
2296.29(5)	X^+			96(5)							
2339.77(6)	4^-,$\langle 3^+ \rangle$				91(7)					9(2)	
2376.45(5)	4^+				95(4)						
2377.07(2)	3^+		15(1)	79(1)							
2391.49(4)	$\langle 2^+,3 \rangle$		80(2)	13(1)				7(1)			
2435.02(14)	2^+	39(2)				61(4)					

(continued) **$^{116}_{48}$Cd**

E^*	J^π	Branching ratios in percentage									
	E_f^*:	0.0	513	1213	1219	1283	1380	1642	1916	1921.55	2026.66
[keV]	J_f^π:	0^+	2^+	2^+	4^+	0^+	0^+	2^+	3	3^-	6^+
2478.12(7)	$1^{\langle-\rangle}$	100									
2503.82(5)			5.6(13)					25(2)			
2517.47(5)			23(9)	70(5)		7(1)					
2564.7(10)	6^+										100
2604.85(5)	2^+–4^+	8(4)	54(3)		39(2)						
2627.7(4)				43(5)					57		
2653.90(7)			100								
2672.90(8)					30(2)				8(2)	7(2)	
2693.0(4)	$\langle 7^-\rangle$										x
2720.08(7)	1^-		84(3)		11(1)						
2727.25(20)			77(7)		23(12)						
2759.8(5)	$\langle 1,2^+\rangle$	26(3)	74								
2764.6(4)			65(6)				21(6)	15(7)			
2782.6(5)	2^+			100							
2786.14(15)			100								
2803.00(7)	$\langle 2\rangle$		86(4)							14(4)	
2810.5(3)	$1,2^+$	100									
2817.6(6)				100							
2822.06(24)			49(5)		51(9)						
2824	8^+										100
2828.6(3)	$1,2^+$	72(14)	28(4)								
2862.44(18)	$2^+,3$		63(13)	37(8)							
2873.0(12)	8^+										100
2909.78(17)	$1,2^+$		100								
2957.9(4)	$\langle 4^+$–$6^+\rangle$										11(3)
3014.74(24)			62(6)	38(4)							
3175.67(23)			63(13)		37(7)			0.4(1)			
3217.00(24)	2^+	5(1)	87(17)				4(1)	3(1)			
3346.94(23)	$\langle 1,2^+\rangle$	3(1)	42(8)	29(6)		0.13(4)		7(1)			
3398.6(4)	1	47(5)									
3433.3(5)			73(15)			27(6)					
3472.10(13)	4^+		15(3)				24(5)			9(2)	
3916.1(4)	$\langle 1,2^+\rangle$	14(3)		65(13)							

Energy levels and branching ratios [01Bl04]. Part 3 **$^{116}_{48}$Cd**

E^*	J^π	Branching ratios in percentage									
	E_f^*:	2041.90	2118.42	2188.7	2194.9	2248.83	2291.6	2478.12	2517.47	2564.7	2693.0
[keV]	J_f^π:	4^+	$\langle 2\rangle^+$			5^-	5^-	$1^{\langle-\rangle}$		6^+	$\langle 7^-\rangle$
2291.6(4)	5^-			25							
2292.5(1)	2^+		7(4)								
2296.29(5)	X^+		3.8(23)								

(continued) **$^{116}_{48}$Cd**

E^*	J^π	Branching ratios in percentage									
	E_f^*:	2041.90	2118.42	2188.7	2194.9	2248.83	2291.6	2478.12	2517.47	2564.7	2693.0
[keV]	J_f^π:	4^+	$\langle 2\rangle^+$			5^-	5^-	$1^{\langle -\rangle}$		6^+	$\langle 7^-\rangle$
2376.45(5)	4^+	5(2)									
2377.07(2)	3^+		6(1)								
2503.82(5)						69(3)					
2672.90(8)						55(3)					
2693.0(4)	$\langle 7^-\rangle$					x					
2720.08(7)	1^-	4.8(13)									
2779.7(15)	$\langle 10^+\rangle$									100	
2828.2(4)	$\langle 6^-\rangle$					x					
2957.9(4)	$\langle 4^+$–$6^+\rangle$					64(3)	25(1)				
3118.18(15)	1^-							100			
3299.3(4)									100		
3346.94(23)	$\langle 1,2^+\rangle$				4			15(2)			
3382.3(4)	$\langle 9^-\rangle$										x
3398.6(4)	1								53(11)		
3472.10(13)	4^+							37(7)			

Energy levels and branching ratios [01Bl04]. Part 4 **$^{116}_{48}$Cd**

E^*	J^π	Branching ratios in percentage							
	E_f^*:	2782.6	2824	2862.44	2873.0	3040.0	3382.3	3578.4
[keV]	J_f^π:	2^+	8^+		8^+	10^+	$\langle 9^-\rangle$	12^+
3040.0(4)	10^+		71		29			
3472.10(13)	4^+			15(3)				
3578.4(5)	12^+					x		
3916.1(4)	$\langle 1,2^+\rangle$	21(4)						
4059.2(5)	$\langle 11^-\rangle$						x	
4380.4(5)	$\langle 14^+\rangle$							x

Energy levels and branching ratios [02Bl10]. **$^{117}_{48}$Cd**

E^*	$2J^\pi$	L	S'	σ (d,p)	$T_{1/2}$ or	Ref.	Branching ratios in percentage				
							E_f^*:	0	135	136	278	293
[keV]			(d,p)	μb/sr	Γ_{cm}		$2J_f^\pi$:	1^+	3^+	$\langle 11\rangle^-$	$\langle 9\rangle^-$	$\langle 7\rangle^-$
0	1^+	0	0.66	2420	2.49(4) h	64Ro17						
135.4(1)	3^+	2		3750	≤1 ns	64Ro17		100				
136.4(2)	$\langle 11\rangle^-$	5			3.36(5) h	64Ro17						
278.4(2)	$\langle 9\rangle^-$									100		
292(10)	$\langle 3^+,5^+\rangle$	$\langle 2\rangle$		310		64Ro17						
293.5(2)	$\langle 7\rangle^-$			incl	3.6(2) ns					100		

(continued)

$^{117}_{48}$Cd

E^* [keV]	$2J^\pi$	L	S' (d,p)	σ (d,p) μb/sr	$T_{1/2}$ or Γ_{cm}	Ref.	E_f^*: $2J_f^\pi$:	Branching ratios in percentage 0 1^+	135 3^+	136 $\langle 11\rangle^-$	278 $\langle 9\rangle^-$	293 $\langle 7\rangle^-$
337.7(1)	$\langle 3\rangle^+$							94(6)	6(1)			
426.2(1)	$\langle 3\rangle^+$	$\langle 2\rangle$		850		64Ro17		100				
442.6(1)	$3^+,5^+$			incl				32(3)	63(7)			
498.0(2)	$\langle 7\rangle^+$				0.95(7) ns				16(3)		30(3)	53(9)
509(10)				590		64Ro17						
522.1(1)	$\langle 5\rangle^+$			incl				17(1)	72(4)			
605.7(2)	$\langle 5,7\rangle^-$										16(3)	84(8)
639.4(2)	$\langle 15^-\rangle$									100		
665.2(2)	5^+	2		1500		64Ro17		47(5)	53(6)			
690.8(3)	5^+								55(14)			
779(10)												
820.1(1)	$\langle 5^+\rangle$			390		64Ro17		4.2(5)	19(1)			3(1)
863.3(2)	$\langle 5^+,7^+\rangle$											10(4)
980(10)												
1073.2(2)	$\langle 3^-,5^-\rangle$			200		64Ro17						42(5)
1079.8(2)	$\langle 5^+\rangle$											28(3)
1229(10)	$\langle 1^+\rangle$			360		64Ro17						
1277.0(2)	$\langle 5^+,7^+\rangle$								11(2)			
1352.3(3)				400		64Ro17						
1355.9(2)	$\langle 5^+\rangle$			incl					57(6)			
1367.0(3)	$\langle 19^-\rangle$											
1476(10)	$\langle 3^+,5^+\rangle$			350		64Ro17						
1609.0(2)								100				
1679(10)	$\langle 3^+,5^+\rangle$			180		64Ro17						
1784.2(4)									46(13)			
1943(10)												
1995.4(2)	$\langle 1^-,3^-\rangle$							64(6)				
2013.2(2)	$\langle 1^-,3^-\rangle$							69(6)	24(4)			
2131(10)												
2192.1(2)	$\langle 1^-,3^-\rangle$							19(2)	34(3)			
2198.7(5)	$\langle 23^-\rangle$											
2232(10)												
2301.6(2)	$\langle 1^-,3^-\rangle$											
2354.6(4)												
2382.6(3)	$\langle 3^-\rangle$									62(7)		10(3)
2443(10)												
2514.1(3)	$\langle 1^-,3^-\rangle$							74(10)				
2554.5(4)												
2574(10)												
2641.2(3)	$\langle 1^-,3^-\rangle$								14(5)			
2787(10)												
2888.3(3)	$\langle 1^-,3^-\rangle$							100				
2925(10)												
2937.2(8)	$\langle 27^-\rangle$											
3000.8(5)	$\langle 1^-,3^-\rangle$											

(continued) **$^{117}_{48}$Cd**

E^*	$2J^\pi$	L	S'	σ (d,p)	$T_{1/2}$ or	Ref.	Branching ratios in percentage					
							E_f^*:	0	135	136	278	293
[keV]			(d,p)	μb/sr	Γ_{cm}		$2J_f^\pi$:	1^+	3^+	$\langle 11\rangle^-$	$\langle 9\rangle^-$	$\langle 7\rangle^-$
3032.4(4)	$\langle 3^-\rangle$								32(8)			21(8)
3064(10)												
3158(10)												
3644.0(10)	$\langle 31^-\rangle$											
4538.9(13)	$\langle 35^-\rangle$											
				64Ro17		Ref.						

Additional data on this isotope can be found in [00Fo13, 00Fo10, 64Si18].

Energy levels and branching ratios [02Bl10]. Part 2 **$^{117}_{48}$Cd**

E^*	$2J^\pi$		Branching ratios in percentage									
		E_f^*:	338	443	498.0	522.1	605.7	639.40	690.8	863.3	1073.2	1352.3
[keV]		$2J_f^\pi$:	$\langle 3\rangle^+$	$3^+,5^+$	$\langle 7\rangle^+$	$\langle 5\rangle^+$	$\langle 5,7\rangle^-$	$\langle 15^-\rangle$	5^+	$\langle 5^+,7^+\rangle$	$\langle 3^-,5^-\rangle$	
442.6(1)	$3^+,5^+$		5(1)									
522.1(1)	$\langle 5\rangle^+$		11(1)									
690.8(3)	5^+		45(5)									
820.1(1)	$\langle 5^+\rangle$		5(1)	2.7(5)	17(2)	50(3)						
863.3(2)	$\langle 5^+,7^+\rangle$			34(8)	24(4)	31(8)						
1073.2(2)	$\langle 3^-,5^-\rangle$						58(5)					
1079.8(2)	$\langle 5^+\rangle$			24(2)	16(2)	33(6)						
1277.0(2)	$\langle 5^+,7^+\rangle$			9(5)		23(2)			6(2)	51(9)		
1352.3(3)							100					
1355.9(2)	$\langle 5^+\rangle$			43(9)								
1367.0(3)	$\langle 19^-\rangle$							100				
1784.2(4)				54(33)								
1995.4(2)	$\langle 1^-,3^-\rangle$		36(4)									
2013.2(2)	$\langle 1^-,3^-\rangle$						7(4)					
2192.1(2)	$\langle 1^-,3^-\rangle$		26(3)	12(2)							5(1)	3.6(7)
2301.6(2)	$\langle 1^-,3^-\rangle$		31(5)				44(7)				19(4)	6(2)
2354.6(4)							100					
2382.6(3)	$\langle 3^-\rangle$						11(2)				17(12)	
2514.1(3)	$\langle 1^-,3^-\rangle$						26(8)					
2554.5(4)			100									
2641.2(3)	$\langle 1^-,3^-\rangle$					18(6)	68(10)					
3000.8(5)	$\langle 1^-,3^-\rangle$		49(12)			51(21)						
3032.4(4)	$\langle 3^-\rangle$								47(15)			

Energy levels and branching ratios [02Bl10]. Part 3

$^{117}_{48}$Cd

E^*	$2J^\pi$	Branching ratios in percentage				
		E_f^*:	1367.0	2198.7	2937.2	3644.0
[keV]		$2J_f^\pi$:	$\langle 19^- \rangle$	$\langle 23^- \rangle$	$\langle 27^- \rangle$	$\langle 31^- \rangle$
2198.7(5)	$\langle 23^- \rangle$		100			
2937.2(8)	$\langle 27^- \rangle$			100		
3644.0(10)	$\langle 31^- \rangle$				100	
4538.9(13)	$\langle 35^- \rangle$					100

Energy levels and branching ratios [95Ki07].

$^{118}_{48}$Cd

E^*	J^π	L	S_α	$d\sigma/d\Omega$	$T_{1/2}$ or	Ref.	Branching ratios in percentage				
							E_f^*:	0.0	488	1165	1269	1286
[keV]			(d,^{6}Li)	μb/sr	Γ_{cm}		J_f^π:	0^+	2^+	4^+	2^+	0^+
0.0	0^+	0	0.019	0.724(77)	50.3(2) m	79Ja21						
487.77(8)	2^+	2	0.037	0.324(51)	17.9(15) ps	79Ja21		100				
1164.94(9)	4^+			0.050(22)	<1.9 ps	79Ja21			100			
1269	$\langle 7^- \rangle$	$\langle 7 \rangle$		0.271(47)		79Ja21						
1269.55(8)	2^+			incl		05Ri19		41(4)	59(6)			
1285.61(12)	0^+			incl	9.7(14) ps				100			
1460(30)	$\langle 0^+ \rangle$	$\langle 0 \rangle$	0.002	0.050(22)		79Ja21						
1615.1(1)	0^+			0.053(22)	<7.1 ps	79Ja21			100		<5.1	
1915.8(1)	2^+								72(7)		28(3)	
1929.1(1)	4^+			0.456(64)		05Ri19			23(2)	29(3)	48(5)	
1935	3^-	3	0.061	incl		79Ja21						
1935.9(1)	6^+					05Ri19				100		
2023.0(4)	$\langle 2^+ \rangle$					03Wa13						
2073.7(1)	0^+					05Ri19			100			
2091.6(1)	3^+					05Ri19			x	x	x	
2110(30)				0.090(32)		79Ja21						
2182.1(3)	$\langle 5^- \rangle$											
2223.3(1)	$\langle 5^- \rangle$			0.034(20)		05Ri19			x	90(9)		
2322.31(10)	$\langle 4^+ \rangle$									87(9)		
2395(30)				0.158(42)		79Ja21						
2471.84(11)	$\langle 5^- \rangle$											
2557.6						03Wa13						
2575(30)				0.101(34)		79Ja21						
2590.9(10)	$\langle 8^+ \rangle$											
2621.00(11)												
2640.55(25)												
2653.0						03Wa13						
2662.0						03Wa13						
2723.4						03Wa13						
2745.8						03Wa13						
2756.00(20)						03Wa13						
2788.72(19)	$\langle 1 \rangle$							95(9)	5.1(6)			

(continued) **$^{118}_{48}$Cd**

E^*	J^π	L	S_α	$d\sigma/d\Omega$	$T_{1/2}$ or	Ref.	Branching ratios in percentage				
							E_f^*: 0.0	488	1165	1269	1286
[keV]			(d,^{6}Li)	μb/sr	Γ_{cm}		J_f^π: 0^+	2^+	4^+	2^+	0^+
2822.4						03Wa13					
2923.3						03Wa13					
2954.4						03Wa13					
2978.8						03Wa13					
3017.9(15)	$\langle 10^+ \rangle$										
3031.85(18)						03Wa13					
3181.73(23)	2,3,4							65(6)	35(4)		
3224.32(17)	$\langle 1 \rangle$						63(6)	12(1)			22(3)
3237.1						03Wa13					
3260.0(1)						03Wa13					
3265.77(19)	2,3,4							47(5)	47(5)		
3290.4(1)						03Wa13					
3329.0(4)						03Wa13			100		
3347.0(3)						03Wa13					
3381.8(3)								100			
3460.4(2)						03Wa13					
3466.0(4)						03Wa13					
3483.3(3)						03Wa13					
3579.0(18)	$\langle 12^+ \rangle$										
4367.0(20)	$\langle 14^+ \rangle$										
5325	$\langle 16^+ \rangle$					00Fo13					
				79Ja21		Ref.					

Additional data on this isotope can be found in [05Ri19, 03Wa13, 00Fo13, 90Ku01].

Energy levels and branching ratios [95Ki07]. Part 2 **$^{118}_{48}$Cd**

E^*	J^π	Branching ratios in percentage									
	E_f^*:	1916	1929	1936	2091.6	2182.1	2223.3	2322.3	2590.9	2621.0	2640.5
[keV]	J_f^π:	2^+	$\langle 3,4^+ \rangle$	$\langle 6^+ \rangle$	3^+		3,4,5	$3,4^+$	$\langle 8^+ \rangle$		
2182.1(3)	$\langle 5^- \rangle$			100							
2223.3(1)	$\langle 5^- \rangle$		10(1)								
2322.31(10)	$\langle 4^+ \rangle$	13(1)			x						
2471.84(11)	$\langle 5^- \rangle$		x				x				
2590.9(10)	$\langle 8^+ \rangle$			x							
2621.00(11)			x				100				
2640.55(25)				100							
2756.00(20)							78(8)	22(2)			
3017.9(15)	$\langle 10^+ \rangle$								x		
3031.85(18)						17(2)	38(4)			13(2)	16(2)
3265.77(19)	2,3,4		6.0(6)								

Energy levels and branching ratios [95Ki07]. Part 3

$^{118}_{48}$Cd

E^*	J^π		Branching ratios in percentage			
		E^*_f:	2756.0	2788.7	3017.9	3579.0
[keV]		J^π_f:		$\langle 1 \rangle$	$\langle 10^+ \rangle$	$\langle 12^+ \rangle$
3031.85(18)			16(2)			
3224.32(17)	$\langle 1 \rangle$			2.9(3)		
3579.0(18)	$\langle 12^+ \rangle$				x	
4367.0(20)	$\langle 14^+ \rangle$					x

Energy levels and branching ratios [00Oh01].

$^{119}_{48}$Cd

E^*	$2J^\pi$	$T_{1/2}$ or
[keV]		Γ_{cm}
0.0	3^+	2.69(2) m
27.00(6)	$1^+,3^+$	2.3(4) ns
146.54(11)	$\langle 11^- \rangle$	2.20(2) m
213.91(11)	$\langle 9^- \rangle$	≤1.5 ns
228.27(9)	$\langle 7^-,9^- \rangle$	43(3) ns
393.21(7)	X^+	
399.17(7)	$\langle 3^-,5 \rangle$	
427.28(8)	$\langle 7^+ \rangle$	1.6(1) ns
525.00(9)	$\langle 3^- – 7^+ \rangle$	
570.84(7)	$\langle 5,7^+ \rangle$	
655.52(10)	$\langle 5,7^+ \rangle$	
682	$\langle 15^- \rangle$	
806.14(6)	$\langle 5,7^+ \rangle$	
866.47(13)	$\langle 5,7,9 \rangle$	
924.26(11)	$\langle 5,7^+ \rangle$	
1053.65(6)	$\langle 5^+,7^+ \rangle$	
1086.84(9)	$\langle 5,7^+ \rangle$	
1130.82(10)	$\langle 5,7^+ \rangle$	
1278.82(9)	$\langle 5^+,7^+ \rangle$	
1401.77(7)	$\langle 5^+,7^+ \rangle$	
1432	$\langle 19^- \rangle$	
1538.83(15)	$\langle 5,7^+ \rangle$	
1925.52(13)	$\langle 5^+,7^+ \rangle$	
2088.21(15)	$\langle 5^+,7^+ \rangle$	
2327	$\langle 23^- \rangle$	
2424.20(20)	$\langle 5^+ – 9^+ \rangle$	
2442.54(25)	$\langle 5^+,7^+ \rangle$	
2676.52(19)	$\langle 5^+,7^+ \rangle$	
2813.51(19)	$\langle 5^+,7^+ \rangle$	
2862.4(5)	$\langle 5^+ – 9^+ \rangle$	
3223	$\langle 27^- \rangle$	
3338		

(continued) **$^{119}_{48}$Cd**

E^* [keV]	$2J^\pi$	$T_{1/2}$ or Γ_{cm}
3988		

Additional data on this isotope can be found in [00Fo13, 00Fo10, 75Ka09].
Levels of the negative-parity band built on $11/2^-$ isomer are from [00Fo10].

Energy levels and branching ratios [00Oh01]. Part 2 **$^{119}_{48}$Cd**

E^*	$2J^\pi$	Branching ratios in percentage									
	E_f^*:	0.0	27.0	146.5	213.9	228.3	393.2	399.2	427.3	525.0	570.8
[keV]	$2J_f^\pi$:	3^+	$1^+,3^+$	$\langle 11^-\rangle$	$\langle 9^-\rangle$	$\langle 7^-,9^-\rangle$	X^+	$\langle 3^-,5\rangle$	$\langle 7^+\rangle$		$\langle 5,7^+\rangle$
27.00(6)	$1^+,3^+$	100									
213.91(11)	$\langle 9^-\rangle$			100							
228.27(9)	$\langle 7^-,9^-\rangle$			100	<4.6						
393.21(7)	X^+	6.5(9)	93(6)								
399.17(7)	$\langle 3^-,5\rangle$	88(14)	12(1)								
427.28(8)	$\langle 7^+\rangle$		9(1)		48(5)	44(5)					
525.00(9)	$\langle 3^- – 7^+\rangle$		100				x				
570.84(7)	$\langle 5,7^+\rangle$	17(2)	83(6)				x				
655.52(10)	$\langle 5,7^+\rangle$	39(6)	58(9)				3(1)				
806.14(6)	$\langle 5,7^+\rangle$	1.3(5)	50(4)			4(1)	11(2)	26(2)	3(1)		2.5(7)
866.47(13)	$\langle 5,7,9\rangle$					21(5)			79(8)		
924.26(11)	$\langle 5,7^+\rangle$		23(10)				57(7)	20(4)			
1053.65(6)	$\langle 5^+,7^+\rangle$	1.4(2)	20(2)			6.8(5)	18(2)	11(2)	34	1.3(3)	6.0(4)
1086.84(9)	$\langle 5,7^+\rangle$						29(5)			15(3)	6(2)
1130.82(10)	$\langle 5,7^+\rangle$						79(10)	10(3)			
1278.82(9)	$\langle 5^+,7^+\rangle$		19(3)				10(2)		44(3)	13(3)	
1401.77(7)	$\langle 5^+,7^+\rangle$	10(1)	15(2)			12(2)	26(2)	7(1)	5(1)	2(1)	6(1)
1538.83(15)	$\langle 5,7^+\rangle$		17(3)				17(3)	8(3)	19(4)	20(5)	
1925.52(13)	$\langle 5^+,7^+\rangle$	17(3)	45(4)				6(2)	26(3)			
2088.21(15)	$\langle 5^+,7^+\rangle$	9(2)	68(1)				9(2)	14(2)			
2424.20(20)	$\langle 5^+ – 9^+\rangle$					23(6)			77(8)		
2442.54(25)	$\langle 5^+,7^+\rangle$	54(14)	27(14)				9(4)	9(4)			
2676.52(19)	$\langle 5^+,7^+\rangle$	11(6)	19(6)							41(9)	
2813.51(19)	$\langle 5^+,7^+\rangle$	6(3)	78(8)						16(4)		
2862.4(5)	$\langle 5^+ – 9^+\rangle$								100		

Energy levels and branching ratios [00Oh01]. Part 3

$^{119}_{48}$Cd

E^*	$2J^\pi$		Branching ratios in percentage				
		E_f^*:	655.5	806.1	1053.6	1130.8	1401.8
[keV]		$2J_f^\pi$:	$\langle 5,7^+\rangle$	$\langle 5,7^+\rangle$	$\langle 5^+,7^+\rangle$	$\langle 5,7^+\rangle$	$\langle 5^+,7^+\rangle$
806.14(6)	$\langle 5,7^+\rangle$		2.6(7)				
1053.65(6)	$\langle 5^+,7^+\rangle$			2.2(3)			
1086.84(9)	$\langle 5,7^+\rangle$		19(3)	31(6)			
1130.82(10)	$\langle 5,7^+\rangle$			11(2)			
1278.82(9)	$\langle 5^+,7^+\rangle$			12(1)	2.4(10)		
1401.77(7)	$\langle 5^+,7^+\rangle$		5(2)	8(1)		4(1)	
1538.83(15)	$\langle 5,7^+\rangle$			19(4)			
1925.52(13)	$\langle 5^+,7^+\rangle$				6(2)		
2676.52(19)	$\langle 5^+,7^+\rangle$						30(9)

Energy levels and branching ratios [02Ki17].

$^{120}_{48}$Cd

E^*	J^π	S_α	$d\sigma/d\Omega$	$T_{1/2}$ or	Ref.	Branching ratios in percentage					
						E_f^*:	0.0	505.9	1204	1900	2034	2094
[keV]		(d,^{6}Li)	μb/sr	Γ_{cm}		J_f^π:	0^+	2^+	$\langle 4^+\rangle$	$\langle 3^-\rangle$	$\langle 6^+\rangle$	
0.0	0^+	0.017	0.475(52)	50.80(21) s	79Ja21							
505.94(17)	2^+	0.032	0.237(37)	18.0(21) ps	79Ja21		100					
975(25)			0.062(23)		79Ja21							
1203.2(5)	4^+		0.041(17)	3.5(28) ps	05Ri19			100				
1323	$\langle 7^-\rangle$		0.315(42)		79Ja21							
1323.07(17)	2^+		incl		05Ri19		x	x				
1388.6(11)	0^+			<13 ps	05Ri19			100				
1744.9(11)	$\langle 0^+\rangle$			<13 ps				100				
1899.9(19)	$\langle 3^+\rangle$	0.055	0.291(51)		79Ja21							
1920.5(3)	$\langle 2^+\rangle$				03Wa13							
1997.9(2)	$\langle 4^+\rangle$				03Wa13							
2032.8(10)	6^+		0.088(28)		05Ri19				100			
2093.9(13)	2^+				03Wa13							
2128.9(5)	$\langle 5^-\rangle$				05Ri19				100			
2362.3(2)					03Wa13							
2449.8(11)									100			
2524.7(8)											58(12)	
2886.2(10)	$\langle 8^+\rangle$										100	
2921.4(10)											x	
3129.8(11)	$\langle 10^+\rangle$											
3329.0(11)								100				
3423.6(2)					03Wa13					x		x
3500.6(2)					03Wa13			x	x			x
3536.0(8)							x	x				
3549.9(2)					03Wa13			x	x			
3559.0(11)								100				
3746.1(15)	$\langle 12^+\rangle$											

(continued) **$^{120}_{48}$Cd**

E^*	J^π	S_α	$d\sigma/d\Omega$	$T_{1/2}$ or	Ref.	Branching ratios in percentage					
						E_f^*: 0.0	505.9	1204	1900	2034	2094
[keV]		(d,^{6}Li)	μb/sr	Γ_{cm}		J_f^π: 0^+	2^+	$\langle 4^+ \rangle$	$\langle 3^- \rangle$	$\langle 6^+ \rangle$	
3880.1(10)						100					
4579.9(18)	$\langle 14^+ \rangle$										
5522.7(21)	$\langle 16^+ \rangle$				00Fo13						
		79Ja21	79Ja21		Ref.						

Additional data on this isotope can be found in [05Ri19, 03Wa13, 00Fo13, 90Ku01].

Energy levels and branching ratios [02Ki17]. Part 2 **$^{120}_{48}$Cd**

E^*	J^π	Branching ratios in percentage						
		E_f^*:	2129.6	2886.2	2921.4	3129.8	3746.1	4579.9
[keV]		J_f^π:		$\langle 8^+ \rangle$		$\langle 10^+ \rangle$	$\langle 12^+ \rangle$	$\langle 14^+ \rangle$
2524.7(8)			42					
3129.8(11)	$\langle 10^+ \rangle$			x	x			
3746.1(15)	$\langle 12^+ \rangle$					x		
4579.9(18)	$\langle 14^+ \rangle$						x	
5522.7(21)	$\langle 16^+ \rangle$							x