

Adopted Levels, Gammas

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	S. Lalkovski, J. Timar and Z. Elekes		NDS 161, 1 (2019)	1-Apr-2019

Q(β^-)=-4693 10; S(n)=-8436.8 22; S(p)=-6506 4; Q(α)=-1327 5 2017Wa10

¹⁰⁵Cd Levels

Cross Reference (XREF) Flags

A	¹⁰⁵ In ε decay (5.07 min)	F	(HI,xny)
B	¹⁰⁵ Cd IT decay	G	⁷⁶ Ge(³⁴ S,5n γ)
C	¹⁰⁶ Cd(p,pn γ)	H	¹⁰⁶ Cd(d,t)
D	¹⁰² Pd(α ,n γ)	I	¹⁰⁶ Cd(³ He, α)
E	¹⁰⁶ Cd(³ He,2p2n γ)		

E(level) [†]	J π	T _{1/2}	XREF	Comments
0.0	5/2 ⁺	55.5 min 4	ABCDEFGH	% ε +% β^+ =100 μ =-0.7393 2 (2018Yo07) Q=0.377 15 (2018Yo07) J π : from optical double resonance measurements (1969La06), π =+ from log ft=5.3 to 7/2 ⁺ 25-keV level in ¹⁰⁵ Ag. T _{1/2} : weighted average of: 54.7 min 8 (1953Jo20), 55.0 min 6 (1968Bo25), 56.0 min 5 (1969St18); Others: 57 min 2 (1950Gu54), 50.7 min 10 (1961Ra06). <r ² >=4.5157 fm ² 71 (2004An14). configuration: vd _{5/2} ⁺¹ .
131.20 [‡] 7	7/2 ⁺	1.75 ns 11	ABCDEFGH	J π : 131.36 γ M1 to 5/2 ⁺ ; L(d,t)=4; L(³ He, α)=(4,2). T _{1/2} : weighted average of 1.75 ns 11 from γ -131 γ (t) in ¹⁰⁵ In ε decay (5.07 min) (1973Ro30) and 1.66 ns 12 in ⁹⁶ Mo(¹² C,3n γ) (2011Ki17). configuration: vg _{7/2} ⁺¹ .
196.16 6	(5/2 ⁺)		A D H	J π : 196.25 γ M1 to 5/2 ⁺ ; 636.1 γ from 9/2 ⁺ .
260.37 6	(7/2 ⁺)		ABCDEFGH	XREF: H(262). J π : L(d,t)=2; 260.27 γ M1+E2 to 5/2 ⁺ and 854.68 γ (M1+E2) from (9/2 ⁺).
604.39 7	(7/2 ⁺)		A CD FG	J π : 604.12 γ M1+E2 to 5/2 ⁺ .
679 10	(3/2 ⁺ ,5/2 ⁺)		I	J π : L(³ He, α)=2.
766.47 9	(5/2 ⁺)		A D HI	XREF: I(776). J π : L(³ He, α)=2; 570.40 γ (E2) to (5/2 ⁺) in ¹⁰² Pd(α ,n γ) (1978Ge05), 635.44 γ to 7/2 ⁺ ; log ft supports (5/2 ⁺) assignment.
770.95 [#] 9	9/2 ⁺		ABCDEFG I	XREF: I(776). J π : 770.75 γ E2 to 5/2 ⁺ , 639.74 γ M1+E2 to 7/2 ⁺ ; However L(³ He, α)=2 suggests (3/2 ⁺ ,5/2 ⁺).
799.77 [‡] 12	11/2 ⁺		ABCDEFG	J π : 668.30 γ E2 to 7/2 ⁺ ; band member.
832.54 9	9/2 ⁺		A CD FGHI	XREF: H(867). J π : 701.26 γ M1+E2 to 7/2 ⁺ , 832.58 γ E2 to 5/2 ⁺ .
1114.83 10	(9/2 ⁺)		A D H	XREF: H(940). J π : 344.4 γ to (9/2 ⁺), 983.85 γ to 7/2 ⁺ , 1115.2 γ to 5/2 ⁺ ;
1139.58 12	(7/2 ⁺)		A D	J π : 879.8 γ to (7/2 ⁺) and 1139 γ to 5/2 ⁺ ; log ft supports (7/2 ⁺) assignment.
1162.66 [@] 20	(11/2) ⁻		A CD FG I	J π : 331 γ E1 to 9/2 ⁺ , 363 γ E1 to 11/2 ⁺ ; L(³ He, α)=5; However, 9/2 ⁻ can not be excluded.
1182.48 13	(3/2 ⁺ to 9/2 ⁺)		A	configuration: vh _{11/2} ⁺¹ . J π : 1051.41 γ to 7/2 ⁺ , 1182.30 γ to 5/2 ⁺ .

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Adopted Levels, Gammas (continued) ^{105}Cd Levels (continued)

E(level) [†]	J ^π	T _{1/2}	XREF	Comments
1327.96 15	(5/2 ⁺)		A	J ^π : 213.0γ to (9/2 ⁺), 725.3γ to (7/2) ⁺ ; log <i>ft</i> supports (5/2 ⁺) assignment.
1386.68 9	(7/2 ⁺ , 9/2 ⁺)		A D	J ^π : 554.5γ to 9/2 ⁺ , 1386.98γ to 5/2 ⁺ ; log <i>ft</i> excludes 5/2 ⁺ .
1439.69 10	(9/2 ⁺)		A	J ^π : 325.53γ to (9/2 ⁺), 1308.72γ to 7/2 ⁺ , 673.4γ to (5/2 ⁺).
1495.24 12	(7/2 ⁺ , 9/2 ⁺)		A	J ^π : 662.49γ to 9/2 ⁺ , 1299.60γ to (5/2 ⁺); assignment supported by log <i>ft</i> .
1578.82 [#] 19	(13/2) ⁺		BCDEF	J ^π : 779.2γ M1 to 11/2 ⁺ , 807.8γ E2 to (9/2) ⁺ ; band member.
1579.10 12	(9/2 ⁺)		A	J ^π : 416.44γ to 11/2 ⁻ ; 808.16γ to 9/2 ⁺ ; from log <i>ft</i> =6.54 18 in ^{105}In ε decay.
1608.77 11	(5/2 ⁺ , 7/2, 9/2 ⁺)		A	J ^π : 838.1γ to 9/2 ⁺ , 1608.80γ to 5/2 ⁺ ; and log <i>ft</i> in ^{105}In ε decay (5.07 min).
1625.54 16	(7/2 ⁺ , 9/2 ⁺)		A	J ^π : 792.84γ to 9/2 ⁺ , 1625.8γ to 5/2 ⁺ ; and log <i>ft</i> in ^{105}In ε decay (5.07 min).
1635.49 14	(5/2 ⁺)		A	J ^π : no direct feeding from 9/2 ⁺ in ^{105}In ε decay (5.07 min); γ decay to (7/2 ⁺ , 9/2 ⁺) states; γ feeding from (7/2 ⁺ , 9/2 ⁺).
1686.3 [‡] 4	15/2 ⁺		BCDEF	J ^π : 886.6γ E2 to 11/2 ⁺ ; band member.
1702.0@ 3	(15/2) ⁻		CD FG	J ^π : 539.3γ E2 to (11/2) ⁻ ; band member.
1728.85 16	(7/2 ⁺ , 9/2 ⁺)		A D	J ^π : 896.0γ (E2) to 9/2 ⁺ and 1123.7γ to (7/2) ⁺ in $^{102}\text{Pd}(\alpha, n\gamma)$ (1978Ge05).
1822.73 13	(7/2 ⁺ , 9/2 ⁺ , 11/2 ⁺)		A	J ^π : 707.6γ to (9/2 ⁺), 1216.30γ to (7/2) ⁺ ; and log <i>ft</i> in ^{105}In ε decay (5.07 min).
2059.90 22	(7/2 ⁺ , 9/2 ⁺ , 11/2 ⁺)		A	J ^π : 1928.5γ to 7/2 ⁺ ; and log <i>ft</i> in ^{105}In ε decay (5.07 min).
2142.82 13	(7/2 ⁺ , 9/2 ⁺)		A I	XREF: I(2123). J ^π : L($^3\text{He}, \alpha$)=4,5; 1883.00γ to (7/2) ⁺ .
2193.73 17	(7/2 ⁺ , 9/2 ⁺)		A	J ^π : 2063.4γ to 7/2 ⁺ , 2193.4γ to 5/2 ⁺ ; and log <i>ft</i> in ^{105}In ε decay (5.07 min).
2277.83 13	(7/2 ⁺ , 9/2 ⁺ , 11/2 ⁺)		A	J ^π : 1161.0 γ to (9/2 ⁺), 2016.0γ to (7/2) ⁺ ; and log <i>ft</i> in ^{105}In ε decay (5.07 min).
2307.94 22	(7/2 ⁺ , 9/2 ⁺ , 11/2 ⁺)		A	J ^π : 1507.7γ to 11/2 ⁺ , 2047.72γ (7/2) ⁺ ; and log <i>ft</i> in ^{105}In ε decay (5.07 min).
2365.47 14	(7/2 ⁺ , 9/2 ⁺)		A	J ^π : 1761.3γ to (7/2) ⁺ , 2364.3γ to 5/2 ⁺ ; and log <i>ft</i> in ^{105}In ε decay (5.07 min).
2371.75 15	(7/2 ⁺ , 9/2 ⁺)		A	J ^π : 2371.0γ to 5/2 ⁺ , 2240.8γ to 7/2 ⁺ ; and log <i>ft</i> in ^{105}In ε decay (5.07 min).
2391.2 [#] 5	(17/2) ⁺		BCDEF	J ^π : 704.9γ M1+(E2) to 15/2 ⁺ , 812.5γ E2 to (13/2) ⁺ ; band member.
2420.15 19	(7/2 ⁺ , 9/2 ⁺)		A	J ^π : 277.75γ to (7/2 ⁺ , 9/2 ⁺), 2419.2γ to 5/2 ⁺ ; and log <i>ft</i> in ^{105}In ε decay (5.07 min).
2488.2@ 4	(19/2) ⁻		CD FG	J ^π : 786.2γ E2 to (15/2) ⁻ ; band member.
2517.6 [#] 5	(21/2 ⁺)	4.5 μs 5	B DEF	μ=+9.17 6 (1978Sp09, 2014StZZ) Q=(+).1.17 I (2016St14) J ^π : 126.4γ E2 to (17/2) ⁺ ; band member. T _{1/2} : from 1976HaXS and 1976SpZQ, but not assigned to this particular level. Assignment made by the evaluators. configuration: $\pi g_{9/2}^{+2} \nu g_{7/2}^{+1}$.
2552.38 23	(7/2 ⁺ , 9/2 ⁺ , 11/2 ⁺)		A	J ^π : 2421.3γ to 7/2 ⁺ ; and log <i>ft</i> in ^{105}In ε decay (5.07 min).
2587.8 [‡] 5	(19/2) ⁺		DEF	J ^π : 901.5γ (E2) to 15/2 ⁺ ; band member.
2643.8 5			D	
2677.24 11	(7/2 ⁺ , 9/2 ⁺)		A	J ^π : 1876.99γ to 11/2 ⁺ , 2072.4γ to (7/2) ⁺ ; and log <i>ft</i> in ^{105}In ε decay (5.07 min).
2730 10			I	
2853.58 21	(7/2 ⁺ , 9/2 ⁺)		A I	XREF: I(2818, 2874). J ^π : 2722.3γ to 7/2 ⁺ , 2854.1γ to 5/2 ⁺ ; L($^3\text{He}, \alpha$)=(4,5).
2978.5& 9	17/2 ⁺		F	J ^π : 1293 γ M1 to 15/2 ⁺ ; band member.
3165.30 19	(7/2 ⁺ , 9/2 ⁺)		A	J ^π : log <i>ft</i> in ^{105}In ε decay (5.07 min).

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Adopted Levels, Gammas (continued) ^{105}Cd Levels (continued)

E(level) [†]	J ^π	XREF	Comments
3202.65 20	(9/2 ⁺)	A	J ^π : 2040.10γ to 11/2 ⁻ , 3072.8γ to 7/2 ⁺ ; and log ft in ^{105}In ε decay (5.07 min).
3337.7 4	(7/2 ⁺ , 9/2 ⁺ , 11/2 ⁺)	A	J ^π : 3206.3γ to 7/2 ⁺ .
3342.9@ 4	(23/2) ⁻	D FG	J ^π : 854.7γ E2 to (19/2) ⁻ ; band member.
3384.7& 8	21/2 ⁺	F	J ^π : 407γ E2 to 17/2 ⁺ , 896γ E1 to (19/2) ⁻ ; band member.
3621.8‡ 11	(23/2 ⁺)	EF	J ^π : 1034γ E2 to (19/2) ⁺ ; band member.
3774.2 ^a 10	23/2 ⁻	F	J ^π : 1286γ E2 to (19/2) ⁻ ; band member.
4098.4 10	(15/2 ⁻ to 23/2 ⁻)	F	J ^π : 1610γ to (19/2) ⁻ .
4193.4& 11	25/2 ⁺	F	J ^π : 809γ to 21/2 ⁺ ; band member.
4247.8@ 9	(27/2) ⁻	FG	J ^π : 904.5γ E2 to (23/2) ⁻ ; band member.
4524.6 11		F	
4600.2 ^a 13	27/2 ⁻	F	J ^π : 826γ E2 to 23/2 ⁻ ; band member.
4808.8‡ 15	(27/2 ⁺)	F	J ^π : 1187γ (Q) to 23/2 ⁺ ; band member.
4913.6 15	(21/2 ⁺ to 27/2 ⁺)	E	J ^π : 1291.8 to 23/2 ⁺ .
5010.8 10	(23/2, 25/2, 27/2 ⁻)	F	J ^π : 1668γ to (23/2) ⁻ in $^{92}\text{Mo}(^{16}\text{O}, 2\text{pn}\gamma)$ (2015Ra02).
5187.4& 15	29/2 ⁺	F	J ^π : 994γ E2 to 25/2 ⁺ ; band member.
5225.3 ^d 14	(29/2) ⁻	G	J ^π : 977.5γ M1 to (27/2) ⁻ ; band member.
5257.1 ^b 11	27/2 ⁻	F	J ^π : 1009γ M1 to (27/2) ⁻ , 1064γ E1 to 25/2 ⁺ ; band member.
5291.2@ 12	(31/2) ⁻	FG	J ^π : 1043.6γ E2 (27/2) ⁻ ; band member.
5658.2 ^a 14	31/2 ⁻	FG	J ^π : 1058γ E2 to 27/2 ⁻ ; band member.
5758.3 ^c 13	(29/2) ⁻	F	J ^π : 1510.4γ M1(+E2) to (27/2) ⁻ ; band member.
6235.1 ^b 15	31/2 ⁻	F	J ^π : 978γ E2 to 27/2 ⁻ ; band member.
6294.4& 18	33/2 ⁺	F	J ^π : 1107γ E2 to 29/2 ⁺ ; band member.
6303.5 ^d 17	(33/2) ⁻	G	J ^π : 1078.2γ E2 to 29/2 ⁻ ; band member.
6470.8@ 13	(35/2) ⁻	FG	J ^π : 1179.4γ E2 to 31/2 ⁻ ; band member.
6645.4 ^c 13	(33/2) ⁻	FG	J ^π : 887γ to 29/2 ⁻ , 1354.1γ M1 to 31/2 ⁻ ; band member.
6703.1 14	(31/2, 33/2, 35/2 ⁻)	F	J ^π : 1412γ to 31/2 ⁻ in $^{92}\text{Mo}(^{16}\text{O}, 2\text{pn}\gamma)$ (2015Ra02).
6783.3 ^a 13	(35/2) ⁻	F	J ^π : 1125γ to 31/2 ⁻ ; band member.
7297.1 14	(31/2, 33/2, 35/2 ⁻)	F	J ^π : 2006γ to 31/2 ⁻ in $^{92}\text{Mo}(^{16}\text{O}, 2\text{pn}\gamma)$ (2015Ra02).
7313.1 ^b 18	35/2 ⁻	F	J ^π : 1078γ E2 to 31/2 ⁻ ; band member.
7447.1 14	(31/2, 33/2, 35/2 ⁻)	F	J ^π : 2156γ to 31/2 ⁻ in $^{92}\text{Mo}(^{16}\text{O}, 2\text{pn}\gamma)$ (2015Ra02).
7506.4& 21	(37/2 ⁺)	F	J ^π : 1212γ to 33/2 ⁺ ; band member.
7536.4 ^d 20	(37/2) ⁻	G	J ^π : 1232.9γ to 33/2 ⁻ ; band member.
7644.6 ^c 14	(37/2) ⁻	F	J ^π : 999γ E2 to (33/2) ⁻ , 1174γ (M1) to 35/2 ⁻ ; band member.
7800.9@ 17	(39/2) ⁻	FG	J ^π : 1330.0γ E2 to 35/2 ⁻ ; band member.
8110.0 15	(35/2, 37/2, 39/2 ⁻)	F	J ^π : 1639γ to 35/2 ⁻ in $^{92}\text{Mo}(^{16}\text{O}, 2\text{pn}\gamma)$ (2015Ra02).
8434.0 15	(35/2, 37/2, 39/2 ⁻)	F	J ^π : 1963γ to 35/2 ⁻ in $^{92}\text{Mo}(^{16}\text{O}, 2\text{pn}\gamma)$ (2015Ra02).
8546.1 ^b 21	39/2 ⁻	F	J ^π : 1233γ E2 to 35/2 ⁻ .
8638.0 15	(35/2, 37/2, 39/2 ⁻)	F	J ^π : 2167γ to 35/2 ⁻ in $^{92}\text{Mo}(^{16}\text{O}, 2\text{pn}\gamma)$ (2015Ra02).
8758.7 ^c 17	(41/2) ⁻	F	J ^π : 1114γ E2 to 37/2 ⁻ ; band member.
8979.7 ^d 22	(41/2) ⁻	G	J ^π : 1443.3γ to 37/2 ⁻ ; band member.
9266.8@ 19	(43/2) ⁻	FG	J ^π : 1465.9γ E2 to 39/2 ⁻ ; band member.
9976.1 ^b 23	(43/2) ⁻	F	J ^π : 1430γ to 39/2 ⁻ ; band member.
10072.7 ^c 20	(45/2) ⁻	F	J ^π : 1314γ to 41/2 ⁻ ; band member.
10850.8@ 22	(47/2) ⁻	FG	J ^π : 1584.0γ to (43/2) ⁻ ; band member.

[†] From a least-squares fit to E_γ.[‡] Band(A): ΔJ=2 band, based on 7/2⁺.

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Adopted Levels, Gammas (continued)

 ^{105}Cd Levels (continued)

- # Band(a): $\Delta J=2$ band, based on $9/2^+$.
- @ Band(B): $\Delta J=2$ band, based on $11/2^-$.
- & Band(C): $\Delta J=2$ band, based on $17/2^+$.
- ^a Band(D): $\Delta J=2$ band, based on $23/2^-$.
- ^b Band(E): $\Delta J=2$ band, based on $27/2^-$.
- ^c Band(F): $\Delta J=2$ band, based on $(29/2^-)$.
- ^d Band(G): $\Delta J=2$ band, based on $(29/2^-)$.

Adopted Levels, Gammas (continued)

$\gamma(^{105}\text{Cd})$									
$E_i(\text{level})$	J_i^π	$E_\gamma^{\ddagger}$	$I_\gamma^{\ddagger}$	E_f	J_f^π	Mult.	δ	$\alpha^\ddagger$	Comments
131.20	7/2 ⁺	131.47 12	100	0.0	5/2 ⁺	M1		0.216	$\alpha(\text{K})=0.187$ 3; $\alpha(\text{L})=0.0233$ 4; $\alpha(\text{M})=0.00449$ 7; $\alpha(\text{N}+..)=0.000845$ 12 $\alpha(\text{N})=0.000800$ 12; $\alpha(\text{O})=4.57\times 10^{-5}$ 7 B(M1)(W.u.)=0.0046 3 Mult.: $A_2=-0.176$ 14 and $A_4=-0.033$ 16 in ¹⁰² Pd($\alpha,\text{n}\gamma$) (1978Ge05); $R_{\text{DCO}}=0.56$ 3 in ⁹² Mo(¹⁶ O,2pn γ) (2015Ra02). $\alpha(\text{K})=0.0629$ 9; $\alpha(\text{L})=0.00775$ 11; $\alpha(\text{M})=0.001490$ 21; $\alpha(\text{N}+..)=0.000281$ 4 $\alpha(\text{N})=0.000266$ 4; $\alpha(\text{O})=1.530\times 10^{-5}$ 22 Mult.: from $\alpha(\text{K})_{\text{exp}}=0.063$ 15 in ¹⁰⁵ In ε decay (5.07 min) (1976NeZU).
196.16	(5/2 ⁺)	196.25 7	100	0.0	5/2 ⁺	M1		0.0724	$\alpha(\text{K})=0.0629$ 9; $\alpha(\text{L})=0.00775$ 11; $\alpha(\text{M})=0.001490$ 21; $\alpha(\text{N}+..)=0.000281$ 4 $\alpha(\text{N})=0.000266$ 4; $\alpha(\text{O})=1.530\times 10^{-5}$ 22 Mult.: from $\alpha(\text{K})_{\text{exp}}=0.063$ 15 in ¹⁰⁵ In ε decay (5.07 min) (1976NeZU).
260.37	(7/2 ⁺)	64.31 8 128.90 25 260.27 10	2.7 7 6.7 5 100 5	196.16 (5/2 ⁺) 131.20 7/2 ⁺ 0.0 5/2 ⁺	(5/2 ⁺) 7/2 ⁺ 5/2 ⁺	M1+E2	+0.07 9	0.0345 6	$\alpha(\text{K})=0.0300$ 5; $\alpha(\text{L})=0.00367$ 8; $\alpha(\text{M})=0.000704$ 16; $\alpha(\text{N}+..)=0.000133$ 3 $\alpha(\text{N})=0.000126$ 3; $\alpha(\text{O})=7.26\times 10^{-6}$ 11 Mult.: $R_{\text{DCO}}=0.61$ 7 in ⁹² Mo(¹⁶ O,2pn γ) (2015Ra02); Also, $A_{22}=0.176$ 10; $A_{44}=0.000$ 13 and $\text{Pol}_{\text{exp}}/\text{Pol}_{\text{ad}}=0.56$ 38 in ⁹⁴ Zr(¹⁶ O,5n γ) (1978St01); $A_2=+0.20$ 2; $A_4=+0.030$ 26 in ¹⁰² Pd($\alpha,\text{n}\gamma$) (1978Ge05).
604.39	(7/2 ⁺)	473.09 14 604.12 16	8.7 8 100	131.20 7/2 ⁺ 0.0 5/2 ⁺	7/2 ⁺ 5/2 ⁺	M1+E2	-0.9 5	0.00410 11	$\alpha=0.00410$ 11; $\alpha(\text{K})=0.00356$ 11; $\alpha(\text{L})=0.000436$ 7; $\alpha(\text{M})=8.37\times 10^{-5}$ 13; $\alpha(\text{N}+..)=1.57\times 10^{-5}$ 3 $\alpha(\text{N})=1.488\times 10^{-5}$ 24; $\alpha(\text{O})=8.4\times 10^{-7}$ 4 Mult.: $R_{\text{DCO}}=0.62$ 14 (2015Ra02); $\text{Pol}=-0.004$ 8 in ⁹² Mo(¹⁶ O,2pn γ) (2015Ra02); Also, $A_{22}=-0.704$ 29 and $A_{44}=0.17$ 4 in ⁹⁴ Zr(¹⁶ O,5n γ) (1978St01) and $\text{Pol}_{\text{exp}}/\text{Pol}_{\text{ad}}=0.9$ 11 in ⁹⁴ Zr(¹⁶ O,5n γ) (1978St01); $A_2=-0.73$ 3; $A_4=+0.10$ 5 in ¹⁰² Pd($\alpha,\text{n}\gamma$) (1978Ge05).
766.47	(5/2 ⁺)	163.0 4 570.40 16	3.0 10 100	604.39 (7/2 ⁺) 196.16 (5/2 ⁺)	(7/2 ⁺) (5/2 ⁺)	(E2)		0.00460 7	$\alpha=0.00460$ 7; $\alpha(\text{K})=0.00397$ 6; $\alpha(\text{L})=0.000509$ 8; $\alpha(\text{M})=9.80\times 10^{-5}$ 14; $\alpha(\text{N}+..)=1.82\times 10^{-5}$ 3 $\alpha(\text{N})=1.729\times 10^{-5}$ 25; $\alpha(\text{O})=9.09\times 10^{-7}$ 13 Mult.: $A_2=+0.17$ 10 and $A_4=-0.20$ 17 in ¹⁰² Pd($\alpha,\text{n}\gamma$) (1978Ge05).
770.95	9/2 ⁺	635.44 17 766.85 18 166.9 3 510.67 17	28 5 68 20 7.3 10 61 30	131.20 7/2 ⁺ 0.0 5/2 ⁺ 604.39 (7/2 ⁺) 260.37 (7/2 ⁺)	7/2 ⁺ 5/2 ⁺ (7/2 ⁺) (7/2 ⁺)	M1		0.00633 9	$\alpha=0.00633$ 9; $\alpha(\text{K})=0.00552$ 8; $\alpha(\text{L})=0.000660$ 10; $\alpha(\text{M})=0.0001264$ 18; $\alpha(\text{N}+..)=2.39\times 10^{-5}$ 4 $\alpha(\text{N})=2.26\times 10^{-5}$ 4; $\alpha(\text{O})=1.326\times 10^{-6}$ 19 Mult.: $R_{\text{DCO}}=1.08$ 9 in ⁹² Mo(¹⁶ O,2pn γ) (2015Ra02).

Adopted Levels, Gammas (continued)

$\gamma(^{105}\text{Cd})$ (continued)

$E_i(\text{level})$	J_i^π	$E_\gamma^\ddagger$	$I_\gamma^\ddagger$	E_f	J_f^π	Mult.	δ	$\alpha^\dagger$	Comments
770.95	9/2 ⁺	639.74 13	100	131.20	7/2 ⁺	M1+E2	-4.3 6	0.00339 5	$\alpha=0.00339$ 5; $\alpha(\text{K})=0.00294$ 5; $\alpha(\text{L})=0.000370$ 6; $\alpha(\text{M})=7.10\times 10^{-5}$ 10; $\alpha(\text{N}+..)=1.324\times 10^{-5}$ 19 $\alpha(\text{N})=1.256\times 10^{-5}$ 18; $\alpha(\text{O})=6.78\times 10^{-7}$ 10 Mult.: $R_{\text{DCO}}=0.52$ 3 and $\text{Pol}=-0.03$ 3 in $^{92}\text{Mo}(^{16}\text{O},2\text{pn}\gamma)$ (2015Ra02); Also, $A_{22}=-0.185$ 12 and $A_{44}=0.139$ 18 in $^{94}\text{Zr}(^{16}\text{O},5\text{n}\gamma)$ (1978St01); $\text{Pol}_{\text{exp}}/\text{Pol}_{\text{ad}}=0.63$ 38 in $^{94}\text{Zr}(^{16}\text{O},5\text{n}\gamma)$ (1978St01).
		770.75 19	34 3	0.0	5/2 ⁺	E2		0.00210 3	$\alpha=0.00210$ 3; $\alpha(\text{K})=0.00182$ 3; $\alpha(\text{L})=0.000225$ 4; $\alpha(\text{M})=4.32\times 10^{-5}$ 6; $\alpha(\text{N}+..)=8.08\times 10^{-6}$ 12 $\alpha(\text{N})=7.65\times 10^{-6}$ 11; $\alpha(\text{O})=4.22\times 10^{-7}$ 6 Mult.: $A_2=+0.35$ 5 and $A_4=-0.13$ 9 in $^{102}\text{Pd}(\alpha,\text{n}\gamma)$ (1978Ge05); $R_{\text{DCO}}=1.11$ 5 in $^{92}\text{Mo}(^{16}\text{O},2\text{pn}\gamma)$ (2015Ra02); Also, $A_{22}=0.190$ 32 and $A_{44}=-0.06$ 4 in $^{94}\text{Zr}(^{16}\text{O},5\text{n}\gamma)$ (1978St01) and $\text{Pol}_{\text{exp}}/\text{Pol}_{\text{ad}}=1.0$ 7 in $^{94}\text{Zr}(^{16}\text{O},5\text{n}\gamma)$ (1978St01).
799.77	11/2 ⁺	668.30 14	100	131.20	7/2 ⁺	E2		0.00301 5	$\alpha=0.00301$ 5; $\alpha(\text{K})=0.00261$ 4; $\alpha(\text{L})=0.000327$ 5; $\alpha(\text{M})=6.29\times 10^{-5}$ 9; $\alpha(\text{N}+..)=1.173\times 10^{-5}$ 17 $\alpha(\text{N})=1.113\times 10^{-5}$ 16; $\alpha(\text{O})=6.01\times 10^{-7}$ 9 Mult.: $A_2=+0.30$ 2 and $A_4=-0.12$ 3 in $^{102}\text{Pd}(\alpha,\text{n}\gamma)$ (1978Ge05); $R_{\text{DCO}}=0.98$ 4 and $\text{Pol}=+0.12$ 3 in $^{92}\text{Mo}(^{16}\text{O},2\text{pn}\gamma)$ (2015Ra02); Also, $A_{22}=0.212$ 10 and $A_{44}=-0.041$ 14 in $^{94}\text{Zr}(^{16}\text{O},5\text{n}\gamma)$ (1978St01) and $\text{Pol}_{\text{exp}}/\text{Pol}_{\text{ad}}=1.17$ 19 in $^{94}\text{Zr}(^{16}\text{O},5\text{n}\gamma)$ (1978St01).
832.54	9/2 ⁺	227.81 20	11.3 23	604.39	(7/2 ⁺)	(M1)		0.0487	$\alpha(\text{K})=0.0423$ 6; $\alpha(\text{L})=0.00520$ 8; $\alpha(\text{M})=0.000998$ 15; $\alpha(\text{N}+..)=0.000188$ 3 $\alpha(\text{N})=0.000178$ 3; $\alpha(\text{O})=1.029\times 10^{-5}$ 15 Mult.: $A_2=-0.31$ 9; $A_4=0.000$ 14 in $^{102}\text{Pd}(\alpha,\text{n}\gamma)$ (1978Ge05); Also, $R_{\text{DCO}}=0.55$ 4 in $^{92}\text{Mo}(^{16}\text{O},2\text{pn}\gamma)$ (2015Ra02).
		636.1 4	2.8 23	196.16	(5/2 ⁺)				
		701.26 14	15.5 10	131.20	7/2 ⁺	M1+E2	2.0 4	0.00272 5	$\alpha=0.00272$ 5; $\alpha(\text{K})=0.00237$ 4; $\alpha(\text{L})=0.000292$ 5; $\alpha(\text{M})=5.60\times 10^{-5}$ 9; $\alpha(\text{N}+..)=1.049\times 10^{-5}$ 17 $\alpha(\text{N})=9.94\times 10^{-6}$ 16; $\alpha(\text{O})=5.51\times 10^{-7}$ 11 Mult.: $A_2=-0.82$ 10 and $A_4=-0.13$ 15 in $^{102}\text{Pd}(\alpha,\text{n}\gamma)$ (1978Ge05); $R_{\text{DCO}}=0.65$ 11 in $^{92}\text{Mo}(^{16}\text{O},2\text{pn}\gamma)$ (2015Ra02); Also, $A_{22}=-0.50$ 5 and $A_{44}=0.13$ 8 in $^{94}\text{Zr}(^{16}\text{O},5\text{n}\gamma)$ (1978St01); $\text{Pol}_{\text{exp}}/\text{Pol}_{\text{ad}}=1.7$ 8 in $^{94}\text{Zr}(^{16}\text{O},5\text{n}\gamma)$ (1978St01).
		832.58 18	100	0.0	5/2 ⁺	E2		0.001741 25	$\alpha=0.001741$ 25; $\alpha(\text{K})=0.001514$ 22; $\alpha(\text{L})=0.000185$ 3; $\alpha(\text{M})=3.55\times 10^{-5}$ 5; $\alpha(\text{N}+..)=6.66\times 10^{-6}$ 10

Adopted Levels, Gammas (continued)

$\gamma(^{105}\text{Cd})$ (continued)

$E_i(\text{level})$	J_i^π	$E_\gamma^\ddagger$	$I_\gamma^\ddagger$	E_f	J_f^π	Mult.	δ	$\alpha^\ddagger$	Comments
1114.83	(9/2 ⁺)	344.4 7 854.68 14	49 19 100	770.95 9/2 ⁺ 260.37 (7/2) ⁺		(M1+E2)		0.00176 13	$\alpha(\text{N})=6.31\times 10^{-6}$ 9; $\alpha(\text{O})=3.52\times 10^{-7}$ 5 Mult.: $A_2=+0.30$ 3 and $A_4=-0.08$ 4 in ¹⁰² Pd($\alpha,\text{n}\gamma$) (1978Ge05); $R_{\text{DCO}}=0.97$ 6 and $\text{Pol}=+0.09$ 4 in ⁹² Mo(¹⁶ O,2pn γ) (2015Ra02); Also, $A_{22}=0.267$ 12 and $A_{44}=-0.088$ 17 in ⁹⁴ Zr(¹⁶ O,5n γ) (1978St01); $\text{Pol}_{\text{exp}}/\text{Pol}_{\text{ad}}=0.92$ 32 in ⁹⁴ Zr(¹⁶ O,5n γ) (1978St01). $\alpha=0.00176$ 13; $\alpha(\text{K})=0.00154$ 12; $\alpha(\text{L})=0.000184$ 11; $\alpha(\text{M})=3.53\times 10^{-5}$ 21; $\alpha(\text{N}+..)=6.6\times 10^{-6}$ 5 $\alpha(\text{N})=6.3\times 10^{-6}$ 4; $\alpha(\text{O})=3.6\times 10^{-7}$ 4 Mult.: $A_2=-0.20$ 17 and $A_4=-0.16$ 27 in ¹⁰² Pd($\alpha,\text{n}\gamma$) (1978Ge05).
1139.58	(7/2 ⁺)	983.85 17 1115.2 3 535.42 14 879.8 5 943.5 4 1139.06 19	24 5 59 5 20 5 11 4 51 5 100	131.20 7/2 ⁺ 0.0 5/2 ⁺ 604.39 (7/2) ⁺ 260.37 (7/2) ⁺ 196.16 (5/2) ⁺ 0.0 5/2 ⁺					
1162.66	(11/2) ⁻	331 [#]	100 [#]	832.54 9/2 ⁺		E1		0.00596 9	$\alpha=0.00596$ 9; $\alpha(\text{K})=0.00521$ 8; $\alpha(\text{L})=0.000618$ 9; $\alpha(\text{M})=0.0001181$ 17; $\alpha(\text{N}+..)=2.21\times 10^{-5}$ 3 $\alpha(\text{N})=2.09\times 10^{-5}$ 3; $\alpha(\text{O})=1.166\times 10^{-6}$ 17 Mult.: $A_2=-0.28$ 2 and $A_4=-0.01$ 4 in ¹⁰² Pd($\alpha,\text{n}\gamma$) (1978Ge05); $R_{\text{DCO}}=1.29$ 10 and $\text{Pol}=+0.07$ 3 in ⁹² Mo(¹⁶ O,2pn γ) (2015Ra02). Also, $A_{22}=-0.251$ 9 and $A_{44}=0.024$ 9 in ⁹⁴ Zr(¹⁶ O,5n γ) (1978St01); $\text{Pol}_{\text{exp}}/\text{Pol}_{\text{ad}}=-0.97$ 25 in ⁹⁴ Zr(¹⁶ O,5n γ) (1978St01). $\alpha=0.00470$ 7; $\alpha(\text{K})=0.00410$ 6; $\alpha(\text{L})=0.000486$ 7; $\alpha(\text{M})=9.29\times 10^{-5}$ 13; $\alpha(\text{N}+..)=1.739\times 10^{-5}$ 25 $\alpha(\text{N})=1.647\times 10^{-5}$ 23; $\alpha(\text{O})=9.23\times 10^{-7}$ 13 Mult.: $R_{\text{DCO}}=0.61$ 7 in ⁹² Mo(¹⁶ O,2pn γ) (2015Ra02). $\alpha=0.00391$ 7; $\alpha(\text{K})=0.00341$ 6; $\alpha(\text{L})=0.000405$ 8; $\alpha(\text{M})=7.73\times 10^{-5}$ 14; $\alpha(\text{N}+..)=1.45\times 10^{-5}$ 3 $\alpha(\text{N})=1.371\times 10^{-5}$ 25; $\alpha(\text{O})=7.72\times 10^{-7}$ 14 Mult.: $A_2=-0.27$ 3; $A_4=-0.02$ 4 in ¹⁰² Pd($\alpha,\text{n}\gamma$) (1978Ge05); $R_{\text{DCO}}=0.55$ 3 and $\text{Pol}=+0.07$ 3 in ⁹² Mo(¹⁶ O,2pn γ) (2015Ra02); Also, $A_{22}=-0.239$ 12 and $A_{44}=0.025$ 13 in ⁹⁴ Zr(¹⁶ O,5n γ) (1978St01); $\text{Pol}_{\text{exp}}/\text{Pol}_{\text{ad}}=-1.08$ 22 in ⁹⁴ Zr(¹⁶ O,5n γ) (1978St01). $\alpha=0.00298$ 5; $\alpha(\text{K})=0.00259$ 4; $\alpha(\text{L})=0.000315$ 5; $\alpha(\text{M})=6.06\times 10^{-5}$ 9; $\alpha(\text{N}+..)=1.145\times 10^{-5}$ 16 $\alpha(\text{N})=1.082\times 10^{-5}$ 16; $\alpha(\text{O})=6.35\times 10^{-7}$ 9 E_γ : observed only by 1985Ve01 in ¹⁰⁵ In ε decay.
		363 [#]	3.6 [#] 7	799.77 11/2 ⁺		E1		0.00470 7	
		392 [#]	90.3 [#] 9	770.95 9/2 ⁺		E1(+M2)	0.033 12	0.00391 7	
		1032 [#]	10.3 [#] 9	131.20 7/2 ⁺		[M2]		0.00298 5	

Adopted Levels, Gammas (continued)

$\gamma(^{105}\text{Cd})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	$\alpha^\dagger$	Comments
1182.48	(3/2 ⁺ to 9/2 ⁺)	1051.41 20	66 7	131.20	7/2 ⁺			
		1182.30 30	100	0.0	5/2 ⁺			
1327.96	(5/2 ⁺)	213.0 3	29 7	1114.83	(9/2 ⁺)			
		496.0 6	53 33	832.54	9/2 ⁺			
		725.3 9	100	604.39	(7/2) ⁺			
1386.68	(7/2 ⁺ ,9/2 ⁺)	204.3 6	6.4 30	1182.48	(3/2 ⁺ to 9/2 ⁺)			
		554.5 5	12 6	832.54	9/2 ⁺			
		620.03 18	6.3 10	766.47	(5/2 ⁺)			
		782.0 4	23 4	604.39	(7/2) ⁺			
		1126.1 4	40 4	260.37	(7/2) ⁺			
		1190.34 15	43 5	196.16	(5/2 ⁺)			
		1255.64 16	50 8	131.20	7/2 ⁺			
		1386.98 24	100	0.0	5/2 ⁺			
1439.69	(9/2 ⁺)	325.53 13	23 4	1114.83	(9/2 ⁺)			
		607.8 4	38 36	832.54	9/2 ⁺			
		673.4 4	100	766.47	(5/2 ⁺)			
		834.6 5	16 5	604.39	(7/2) ⁺			
		1176.9 4	12 3	260.37	(7/2) ⁺			
		1308.72 22	43 3	131.20	7/2 ⁺			
1495.24	(7/2 ⁺ ,9/2 ⁺)	662.49 12	58 4	832.54	9/2 ⁺			
		890.70 30	100	604.39	(7/2) ⁺			
		1299.60 30	15 4	196.16	(5/2 ⁺)			
1578.82	(13/2) ⁺	779.2 @ 3	14 @ 4	799.77	11/2 ⁺	M1	0.00234 4	$\alpha=0.00234$ 4; $\alpha(\text{K})=0.00204$ 3; $\alpha(\text{L})=0.000241$ 4; $\alpha(\text{M})=4.61\times 10^{-5}$ 7; $\alpha(\text{N}+..)=8.73\times 10^{-6}$ 13 $\alpha(\text{N})=8.24\times 10^{-6}$ 12; $\alpha(\text{O})=4.88\times 10^{-7}$ 7 Mult.: $A_2=-0.85$ 15 and $A_4=+0.1$ 2 in ¹⁰² Pd($\alpha,\text{n}\gamma$) (1978Ge05); Also, $R_{\text{DCO}}=0.63$ 7 (2015Ra02).
		807.8 2	100 3	770.95	9/2 ⁺	E2	0.00187 3	$\alpha=0.00187$ 3; $\alpha(\text{K})=0.001627$ 23; $\alpha(\text{L})=0.000200$ 3; $\alpha(\text{M})=3.83\times 10^{-5}$ 6; $\alpha(\text{N}+..)=7.18\times 10^{-6}$ 10 $\alpha(\text{N})=6.80\times 10^{-6}$ 10; $\alpha(\text{O})=3.78\times 10^{-7}$ 6 Mult.: $A_2=+0.30$ 4 and $A_4=-0.12$ 6 in ¹⁰² Pd($\alpha,\text{n}\gamma$) (1978Ge05); $R_{\text{DCO}}=0.99$ 3 and $\text{Pol}=+0.04$ 4 in ⁹² Mo(¹⁶ O,2p $\text{n}\gamma$) (2015Ra02); Also, $A_{22}=0.155$ 18 and $A_{44}=-0.065$ 25 in ⁹⁴ Zr(¹⁶ O,5 $\text{n}\gamma$) (1978St01); $\text{Pol}_{\text{exp}}/\text{Pol}_{\text{ad}}=1.4$ 6 in ⁹⁴ Zr(¹⁶ O,5 $\text{n}\gamma$) (1978St01).
1579.10	(9/2 ⁺)	192.1 9	43 19	1386.68	(7/2 ⁺ ,9/2 ⁺)			
		416.44 25	27 4	1162.66	(11/2) ⁻			
		808.16 12	100	770.95	9/2 ⁺			
1608.77	(5/2 ⁺ ,7/2,9/2 ⁺)	280.85 14	58 13	1327.96	(5/2 ⁺)			
		838.1 5	63 25	770.95	9/2 ⁺			
		841.6 4	20 6	766.47	(5/2 ⁺)			
		1004.41 17	36 4	604.39	(7/2) ⁺			

Adopted Levels, Gammas (continued)

 $\gamma(^{105}\text{Cd})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	$\alpha^\dagger$	Comments
1608.77	(5/2 ⁺ , 7/2, 9/2 ⁺)	1348.49 20 1477.0 4 1608.80 30	100 36 5 31 5	260.37 (7/2) ⁺ 131.20 7/2 ⁺ 0.0 5/2 ⁺				
1625.54	(7/2 ⁺ , 9/2 ⁺)	238.3 8 792.84 24 1494.45 21 1625.8 6	100 53 18 88 24 46 14	1386.68 (7/2 ⁺ , 9/2 ⁺) 832.54 9/2 ⁺ 131.20 7/2 ⁺ 0.0 5/2 ⁺				
1635.49	(5/2 ⁺)	140.09 12 248.8 4	48 19 100	1495.24 (7/2 ⁺ , 9/2 ⁺) 1386.68 (7/2 ⁺ , 9/2 ⁺)				
1686.3	15/2 ⁺	886.6 @ 3	100 @	799.77 11/2 ⁺		E2	0.001501 21	$\alpha=0.001501$ 21; $\alpha(\text{K})=0.001306$ 19; $\alpha(\text{L})=0.0001589$ 23; $\alpha(\text{M})=3.05\times 10^{-5}$ 5; $\alpha(\text{N}+..)=5.71\times 10^{-6}$ $\alpha(\text{N})=5.41\times 10^{-6}$ 8; $\alpha(\text{O})=3.04\times 10^{-7}$ 5 Mult.: $A_2=+0.29$ 3 and $A_4=-0.07$ 4 in $^{102}\text{Pd}(\alpha, n\gamma)$ (1978Ge05); $R_{\text{DCO}}=0.96$ 6 and $\text{Pol}=+0.13$ 3 in $^{92}\text{Mo}(^{16}\text{O}, 2p n\gamma)$ (2015Ra02); Also, $A_{22}=0.231$ 16 and $A_{44}=-0.042$ 26 in $^{94}\text{Zr}(^{16}\text{O}, 5n\gamma)$ (1978St01); $\text{Pol}_{\text{exp}}/\text{Pol}_{\text{ad}}=1.36$ 30 in $^{94}\text{Zr}(^{16}\text{O}, 5n\gamma)$ (1978St01).
1702.0	(15/2) ⁻	539.3 @ 2	100 @	1162.66 (11/2) ⁻		E2	0.00537 8	$\alpha=0.00537$ 8; $\alpha(\text{K})=0.00463$ 7; $\alpha(\text{L})=0.000600$ 9; $\alpha(\text{M})=0.0001154$ 17; $\alpha(\text{N}+..)=2.14\times 10^{-5}$ 3 $\alpha(\text{N})=2.03\times 10^{-5}$ 3; $\alpha(\text{O})=1.058\times 10^{-6}$ 15 Mult.: $A_2=+0.28$ 3; $A_4=-0.13$ 4 in $^{102}\text{Pd}(\alpha, n\gamma)$ (1978Ge05); $\text{Pol}=+0.13$ 2 in $^{92}\text{Mo}(^{16}\text{O}, 2p n\gamma)$ (2015Ra02); Also, $A_{22}=0.281$ 8 and $A_{44}=-0.097$ 10 in $^{94}\text{Zr}(^{16}\text{O}, 5n\gamma)$ (1978St01); $\text{Pol}_{\text{exp}}/\text{Pol}_{\text{ad}}=0.87$ 10 in $^{94}\text{Zr}(^{16}\text{O}, 5n\gamma)$ (1978St01).
1728.85	(7/2 ⁺ , 9/2 ⁺)	119.1 12 290.0 9 896.0 @ 3	74 30 74 56 100 @	1608.77 (5/2 ⁺ , 7/2, 9/2 ⁺) 1439.69 (9/2 ⁺) 832.54 9/2 ⁺		(E2)	0.001465 21	$\alpha=0.001465$ 21; $\alpha(\text{K})=0.001275$ 18; $\alpha(\text{L})=0.0001549$ 22; $\alpha(\text{M})=2.97\times 10^{-5}$ 5; $\alpha(\text{N}+..)=5.57\times 10^{-6}$ $\alpha(\text{N})=5.27\times 10^{-6}$ 8; $\alpha(\text{O})=2.96\times 10^{-7}$ 5 Mult.: $A_2=+0.33$ 7; $A_4=+0.05$ 10 in $^{102}\text{Pd}(\alpha, n\gamma)$ (1978Ge05).
1822.73	(7/2 ⁺ , 9/2 ⁺ , 11/2 ⁺)	960.9 6 1123.7 11 243.0 3 707.6 5 1057.07 14	22 19 15 11 35 5 51 25 100	766.47 (5/2 ⁺) 604.39 (7/2) ⁺ 1579.10 (9/2 ⁺) 1114.83 (9/2 ⁺) 766.47 (5/2 ⁺)				
2059.90	(7/2 ⁺ , 9/2 ⁺ , 11/2 ⁺)	1216.30 23 330.90 23 451.7 4 1799.3 7	58 8 100 21 6 47 19	604.39 (7/2) ⁺ 1728.85 (7/2 ⁺ , 9/2 ⁺) 1608.77 (5/2 ⁺ , 7/2, 9/2 ⁺) 260.37 (7/2) ⁺				

Adopted Levels, Gammas (continued)

$\gamma(^{105}\text{Cd})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	$\alpha^\dagger$	Comments
2059.90	(7/2 ⁺ ,9/2 ⁺ ,11/2 ⁺)	1928.5 8	22 9	131.20	7/2 ⁺			
2142.82	(7/2 ⁺ ,9/2 ⁺)	754.5 5	63 26	1386.68	(7/2 ⁺ ,9/2 ⁺)			
		1538.55 15	89 16	604.39	(7/2 ⁺) ⁺			
		1883.00 30	100	260.37	(7/2 ⁺) ⁺			
		2012.4 4	45 13	131.20	7/2 ⁺			
2193.73	(7/2 ⁺ ,9/2 ⁺)	1589.9 3	18 9	604.39	(7/2 ⁺) ⁺			
		2063.4 8	100	131.20	7/2 ⁺			
		2193.4 2	36 18	0.0	5/2 ⁺			
2277.83	(7/2 ⁺ ,9/2 ⁺ ,11/2 ⁺)	1095.36 11	100 23	1182.48	(3/2 ⁺ to 9/2 ⁺)			
		1161.0 4	100 38	1114.83	(9/2 ⁺)			
		1674.6 3	43 12	604.39	(7/2 ⁺) ⁺			
		2016.0 4	41 15	260.37	(7/2 ⁺) ⁺			
2307.94	(7/2 ⁺ ,9/2 ⁺ ,11/2 ⁺)	1507.7 4	35 15	799.77	11/2 ⁺			
		2047.72 24	100	260.37	(7/2 ⁺) ⁺			
2365.47	(7/2 ⁺ ,9/2 ⁺)	87.38 19	91 13	2277.83	(7/2 ⁺ ,9/2 ⁺ ,11/2 ⁺)			
		637.5 6	97 86	1728.85	(7/2 ⁺ ,9/2 ⁺)			
		730.04 24	84 13	1635.49	(5/2 ⁺)			
		1761.3 4	100	604.39	(7/2 ⁺) ⁺			
		2105.4 4	80 23	260.37	(7/2 ⁺) ⁺			
		2364.3 5	43 17	0.0	5/2 ⁺			
2371.75	(7/2 ⁺ ,9/2 ⁺)	642.40 25	100	1728.85	(7/2 ⁺ ,9/2 ⁺)			
		792.84 24	23 8	1579.10	(9/2 ⁺)			
		2176.3 3	31 3	196.16	(5/2 ⁺)			
		2240.8 4	21 6	131.20	7/2 ⁺			
		2371.0 5	30 3	0.0	5/2 ⁺			
2391.2	(17/2 ⁺)	704.9 @ 3	29 @ 15	1686.3	15/2 ⁺	M1+(E2)	0.00279 17	$\alpha=0.00279$ 17; $\alpha(\text{K})=0.00242$ 16; $\alpha(\text{L})=0.000294$ 12; $\alpha(\text{M})=5.64\times 10^{-5}$ 21; $\alpha(\text{N}+..)=1.06\times 10^{-5}$ 5 $\alpha(\text{N})=1.00\times 10^{-5}$ 4; $\alpha(\text{O})=5.7\times 10^{-7}$ 5 Mult.: $A_2=-0.73$ 30 and $A_4=+0.4$ 4 in ¹⁰² Pd($\alpha,\text{n}\gamma$) (1978Ge05); $R_{\text{DCO}}=0.59$ 7 and Pol= -0.03 4 in ⁹² Mo(¹⁶ O,2pn γ) (2015Ra02); Also, $A_{22}=-0.12$ 4 and $A_{44}=0.05$ 5 in ⁹⁴ Zr(¹⁶ O,5n γ) (1978St01); Pol _{exp} /Pol _{ad} =1.0 15 in ⁹⁴ Zr(¹⁶ O,5n γ) (1978St01).
		812.5 @ 19	100 @ 5	1578.82	(13/2 ⁺) ⁺	E2	0.00185 3	$\alpha=0.00185$ 3; $\alpha(\text{K})=0.001605$ 25; $\alpha(\text{L})=0.000197$ 3; $\alpha(\text{M})=3.78\times 10^{-5}$ 6; $\alpha(\text{N}+..)=7.07\times 10^{-6}$ 11 $\alpha(\text{N})=6.70\times 10^{-6}$ 11; $\alpha(\text{O})=3.72\times 10^{-7}$ 6 Mult.: $A_2=+0.14$ 11 and $A_4=-0.13$ 18 in ¹⁰² Pd($\alpha,\text{n}\gamma$) (1978Ge05); Also, $R_{\text{DCO}}=1.19$ 11 in ⁹² Mo(¹⁶ O,2pn γ) (2015Ra02).
2420.15	(7/2 ⁺ ,9/2 ⁺)	277.75 20	64 28	2142.82	(7/2 ⁺ ,9/2 ⁺)			
		2223.2 4	100	196.16	(5/2 ⁺)			

Adopted Levels, Gammas (continued)

$\gamma(^{105}\text{Cd})$ (continued)

$E_i(\text{level})$	J_i^π	$E_\gamma^{\ddagger}$	$I_\gamma^{\ddagger}$	E_f	J_f^π	Mult.	$\alpha^\dagger$	Comments
2420.15	(7/2 ⁺ , 9/2 ⁺)	2419.2 4	40 15	0.0	5/2 ⁺			
2488.2	(19/2) ⁻	786.2 @ 2	100 @	1702.0	(15/2) ⁻	E2	0.00200 3	$\alpha=0.00200$ 3; $\alpha(\text{K})=0.001737$ 25; $\alpha(\text{L})=0.000214$ 3; $\alpha(\text{M})=4.10\times 10^{-5}$ 6; $\alpha(\text{N}+..)=7.68\times 10^{-6}$ 11 $\alpha(\text{N})=7.28\times 10^{-6}$ 11; $\alpha(\text{O})=4.03\times 10^{-7}$ 6 Mult.: $A_2=+0.29$ 5 and $A_4=-0.14$ 8 in ¹⁰² Pd($\alpha, n\gamma$) (1978Ge05); $R_{\text{DCO}}=0.98$ 3 (2015Ra02) and Pol= $+0.07$ 3 in ⁹² Mo(¹⁶ O, 2pn γ) (2015Ra02); Also, $A_{22}=0.277$ 10 and $A_{44}=-0.106$ 13 in ⁹⁴ Zr(¹⁶ O, 5n γ) (1978St01); Pol _{exp} /Pol _{ad} =0.99 20 in ⁹⁴ Zr(¹⁶ O, 5n γ) (1978St01).
2517.6	(21/2 ⁺)	126.4 @ 2	100 @	2391.2	(17/2) ⁺	E2	0.649	B(E2)(W.u.)=0.080 9 $\alpha(\text{K})=0.510$ 8; $\alpha(\text{L})=0.1127$ 18; $\alpha(\text{M})=0.0222$ 4; $\alpha(\text{N}+..)=0.00384$ 6 $\alpha(\text{N})=0.00374$ 6; $\alpha(\text{O})=9.83\times 10^{-5}$ 15 Mult.: $A_2=+0.02$ 9 and $A_4=-0.14$ 16 in ¹⁰² Pd($\alpha, n\gamma$) (1978Ge05); Also, $R_{\text{DCO}}=0.97$ 3 in ⁹² Mo(¹⁶ O, 2pn γ) (2015Ra02).
2552.38	(7/2 ⁺ , 9/2 ⁺ , 11/2 ⁺)	823.60 30 1947.90 30 2421.3 20	77 15 100 65 30	1728.85 604.39 131.20	(7/2 ⁺ , 9/2 ⁺) (7/2) ⁺ 7/2 ⁺			
2587.8	(19/2) ⁺	901.5 @ 3	100 @	1686.3	15/2 ⁺	(E2)	0.001444 21	$\alpha=0.001444$ 21; $\alpha(\text{K})=0.001257$ 18; $\alpha(\text{L})=0.0001526$ 22; $\alpha(\text{M})=2.93\times 10^{-5}$ 5; $\alpha(\text{N}+..)=5.49\times 10^{-6}$ $\alpha(\text{N})=5.20\times 10^{-6}$ 8; $\alpha(\text{O})=2.92\times 10^{-7}$ 4 Mult.: $A_2=+0.38$ 10 and $A_4=-0.29$ 17 in ¹⁰² Pd($\alpha, n\gamma$) (1978Ge05); $R_{\text{DCO}}=0.97$ 8 and Pol= $+0.08$ 2 in ⁹² Mo(¹⁶ O, 2pn γ) (2015Ra02).
2643.8		915.0 @ 4	100 @	1728.85	(7/2 ⁺ , 9/2 ⁺)			
2677.24	(7/2 ⁺ , 9/2 ⁺)	1040.7 3 1068.2 3 1098.33 23 1237.91 11 1876.99 19 1906.3 8 1910.4 4 2072.4 3	52 7 45 9 40 4 100 13 100 17 43 8 47 7 26 7	1635.49 1608.77 1579.10 1439.69 799.77 770.95 766.47 604.39	(5/2 ⁺) (5/2 ⁺ , 7/2, 9/2 ⁺) (9/2 ⁺) (9/2 ⁺) 11/2 ⁺ 9/2 ⁺ (5/2 ⁺) (7/2) ⁺			
2853.58	(7/2 ⁺ , 9/2 ⁺)	1244.1 ^b 2 2722.3 2 2854.1 8	22 11 100 39 11	1608.77 131.20 0.0	(5/2 ⁺ , 7/2, 9/2 ⁺) 7/2 ⁺ 5/2 ⁺			
2978.5	17/2 ⁺	1275 ^{#b} 1293 [#]	21 [#] 7 100 [#] 10	1702.0 1686.3	(15/2) ⁻ 15/2 ⁺	M1	0.000778 11	$\alpha=0.000778$ 11; $\alpha(\text{K})=0.000663$ 10; $\alpha(\text{L})=7.73\times 10^{-5}$ 11;

Adopted Levels, Gammas (continued)

 $\gamma(^{105}\text{Cd})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ	I_γ	E_f	J_f^π	Mult.	$\alpha^\dagger$	Comments
								$\alpha(\text{M})=1.479\times 10^{-5}$ 21; $\alpha(\text{N}+..)=2.23\times 10^{-5}$ $\alpha(\text{N})=2.64\times 10^{-6}$ 4; $\alpha(\text{O})=1.577\times 10^{-7}$ 22; $\alpha(\text{IPF})=1.95\times 10^{-5}$ 3 Mult.: $\text{R}_{\text{DCO}}=0.57$ 4 (2015Ra02) and $\text{Pol}=-0.19$ 5 in $^{92}\text{Mo}(^{16}\text{O},2\text{pn}\gamma)$ (2015Ra02).
3165.30	(7/2 ⁺ ,9/2 ⁺)	792.84 ^b 24	51 17	2371.75 (7/2 ⁺ ,9/2 ⁺)				
		799.73 14	84 6	2365.47 (7/2 ⁺ ,9/2 ⁺)				
		1779.4 4	100	1386.68 (7/2 ⁺ ,9/2 ⁺)				
3202.65	(9/2 ⁺)	1379.1 4	64 16	1822.73 (7/2 ⁺ ,9/2 ⁺ ,11/2 ⁺)				
		2040.10 23	34 12	1162.66 (11/2) ⁻				
		2371.0 ^b 5	100	832.54 9/2 ⁺				
		2596.7 5	24 12	604.39 (7/2) ⁺				
		2942.1 7	10 5	260.37 (7/2) ⁺				
		3072.8 4	62 20	131.20 7/2 ⁺				
3337.7	(7/2 ⁺ ,9/2 ⁺ ,11/2 ⁺)	966.3 4	71 14	2371.75 (7/2 ⁺ ,9/2 ⁺)				
		3076.5 6	27 11	260.37 (7/2) ⁺				
		3206.3 9	100	131.20 7/2 ⁺				
3342.9	(23/2) ⁻	854.7 [@] 2	100 [@]	2488.2 (19/2) ⁻		E2	0.001636 23	$\alpha=0.001636$ 23; $\alpha(\text{K})=0.001423$ 20; $\alpha(\text{L})=0.0001737$ 25; $\alpha(\text{M})=3.33\times 10^{-5}$ 5; $\alpha(\text{N}+..)=6.24\times 10^{-6}$ $\alpha(\text{N})=5.91\times 10^{-6}$ 9; $\alpha(\text{O})=3.31\times 10^{-7}$ 5 Mult.: $\text{A}_2=-0.20$ 17 and $\text{A}_4=-0.16$ 27 in $^{102}\text{Pd}(\alpha,\text{n}\gamma)$ (1978Ge05) $\text{R}_{\text{DCO}}=0.95$ 5 and $\text{Pol}=+0.10$ 3 in $^{92}\text{Mo}(^{16}\text{O},2\text{pn}\gamma)$ (2015Ra02); Also, $\text{A}_{22}=0.331$ 16 and $\text{A}_{44}=-0.113$ 23 in $^{94}\text{Zr}(^{16}\text{O},5\text{n}\gamma)$ (1978St01); $\text{Pol}_{\text{exp}}/\text{Pol}_{\text{ad}}=0.43$ 25 in $^{94}\text{Zr}(^{16}\text{O},5\text{n}\gamma)$ (1978St01).
3384.7	21/2 ⁺	407 [#]	100 [#] 3	2978.5 17/2 ⁺		E2	0.01228	$\alpha(\text{K})=0.01052$ 15; $\alpha(\text{L})=0.001432$ 20; $\alpha(\text{M})=0.000276$ 4; $\alpha(\text{N}+..)=5.08\times 10^{-5}$ 8 $\alpha(\text{N})=4.84\times 10^{-5}$ 7; $\alpha(\text{O})=2.35\times 10^{-6}$ 4 Mult.: $\text{R}_{\text{DCO}}=0.97$ 6 and $\text{Pol}=+0.02$ 7 in $^{92}\text{Mo}(^{16}\text{O},2\text{pn}\gamma)$ (2015Ra02).
		896 [#]	7.1 [#] 8	2488.2 (19/2) ⁻		E1	0.000601 9	$\alpha=0.000601$ 9; $\alpha(\text{K})=0.000526$ 8; $\alpha(\text{L})=6.10\times 10^{-5}$ 9; $\alpha(\text{M})=1.163\times 10^{-5}$ 17; $\alpha(\text{N}+..)=2.19\times 10^{-6}$ 3 $\alpha(\text{N})=2.07\times 10^{-6}$ 3; $\alpha(\text{O})=1.212\times 10^{-7}$ 17 Mult.: $\text{R}_{\text{DCO}}=0.49$ 7 in $^{92}\text{Mo}(^{16}\text{O},2\text{pn}\gamma)$ (2015Ra02).
3621.8	(23/2 ⁺)	1034 [#]	100 [#]	2587.8 (19/2) ⁺		E2	0.001059 15	$\alpha=0.001059$ 15; $\alpha(\text{K})=0.000923$ 13; $\alpha(\text{L})=0.0001107$ 16; $\alpha(\text{M})=2.12\times 10^{-5}$ 3; $\alpha(\text{N}+..)=3.99\times 10^{-6}$

Adopted Levels, Gammas (continued)

$\gamma(^{105}\text{Cd})$ (continued)

<u>E_i(level)</u>	<u>J_i^{π}</u>	<u>E_{γ}^{$\ddagger$}</u>	<u>I_{γ}^{$\ddagger$}</u>	<u>E_f</u>	<u>J_f^{π}</u>	<u>Mult.</u>	<u>$\alpha^{\ddagger}$</u>	<u>Comments</u>
3774.2	23/2 ⁻	1286 [#]	100 [#]	2488.2	(19/2) ⁻	E2	0.000686 10	$\alpha(\text{N})=3.77\times 10^{-6}$ 6; $\alpha(\text{O})=2.15\times 10^{-7}$ 3 Mult.: R _{DCO} =0.95 9 (2015Ra02). $\alpha=0.000686$ 10; $\alpha(\text{K})=0.000581$ 9; $\alpha(\text{L})=6.86\times 10^{-5}$ 10; $\alpha(\text{M})=1.313\times 10^{-5}$ 19; $\alpha(\text{N}+..)=2.35\times 10^{-5}$ 4 $\alpha(\text{N})=2.34\times 10^{-6}$ 4; $\alpha(\text{O})=1.357\times 10^{-7}$ 19; $\alpha(\text{IPF})=2.10\times 10^{-5}$ 3 Mult.: R _{DCO} =0.99 5 and Pol=+0.19 8 in ⁹² Mo(¹⁶ O,2pn γ) (2015Ra02).
4098.4	(15/2 ⁻ to 23/2 ⁻)	1610 [#]	100 [#]	2488.2	(19/2) ⁻	E2	0.00187 3	$\alpha=0.00187$ 3; $\alpha(\text{K})=0.001621$ 23; $\alpha(\text{L})=0.000199$ 3; $\alpha(\text{M})=3.82\times 10^{-5}$ 6; $\alpha(\text{N}+..)=7.15\times 10^{-6}$ 10 $\alpha(\text{N})=6.77\times 10^{-6}$ 10; $\alpha(\text{O})=3.76\times 10^{-7}$ 6 Mult.: R _{DCO} =0.97 7 and Pol=+0.05 4 in ⁹² Mo(¹⁶ O,2pn γ) (2015Ra02).
4193.4	25/2 ⁺	809 [#]	100 [#]	3384.7	21/2 ⁺			
4247.8	(27/2 ⁻)	904.5 ^{&}	100 ^{&}	3342.9	(23/2) ⁻	E2	0.001433 20	$\alpha=0.001433$ 20; $\alpha(\text{K})=0.001247$ 18; $\alpha(\text{L})=0.0001514$ 22; $\alpha(\text{M})=2.90\times 10^{-5}$ 4; $\alpha(\text{N}+..)=5.45\times 10^{-6}$ $\alpha(\text{N})=5.16\times 10^{-6}$ 8; $\alpha(\text{O})=2.90\times 10^{-7}$ 4 Mult.: R _{DCO} =0.96 5 in ⁹² Mo(¹⁶ O,2pn γ) (2015Ra02); Pol=+0.04 2 in ⁹² Mo(¹⁶ O,2pn γ) (2015Ra02); Also, A ₂₂ =0.185 29; A ₄₄ =-0.03 4 in ⁹² Mo(¹⁶ O,2pn γ) (1978St01); Pol _{exp} /Pol _{ad} =1.2 7 in ⁹² Mo(¹⁶ O,2pn γ) (1978St01); Mult.: R _{DCO} =1.06 11 in ⁷⁶ Ge(³⁴ S,5n γ) (1995Je04).
4524.6	27/2 ⁻	426 [#]	100 [#]	4098.4	(15/2 ⁻ to 23/2 ⁻)	E2	0.001775 25	$\alpha=0.001775$ 25; $\alpha(\text{K})=0.001543$ 22; $\alpha(\text{L})=0.000189$ 3; $\alpha(\text{M})=3.62\times 10^{-5}$ 5; $\alpha(\text{N}+..)=6.79\times 10^{-6}$ 10 $\alpha(\text{N})=6.43\times 10^{-6}$ 9; $\alpha(\text{O})=3.58\times 10^{-7}$ 5 Mult.: R _{DCO} =0.91 6 in ⁹² Mo(¹⁶ O,2pn γ) (2015Ra02).
4600.2		826 [#]	100 [#]	3774.2	23/2 ⁻			
4808.8	(27/2 ⁺)	1187 [#]	100 [#]	3621.8	(23/2 ⁺)	(Q)		
4913.6	(21/2 ⁺ to 27/2 ⁺)	1291.8 ^a	100 ^a	3621.8	(23/2 ⁺)			
5010.8	(23/2,25/2,27/2 ⁻)	486 [#]	100 [#] 35	4524.6				
		1668 [#]	<50 [#]	3342.9	(23/2) ⁻	E2	0.001156 17	$\alpha=0.001156$ 17; $\alpha(\text{K})=0.001007$ 14; $\alpha(\text{L})=0.0001213$ 17; $\alpha(\text{M})=2.32\times 10^{-5}$ 4; $\alpha(\text{N}+..)=4.36\times 10^{-6}$ $\alpha(\text{N})=4.13\times 10^{-6}$ 6; $\alpha(\text{O})=2.35\times 10^{-7}$ 4 Mult.: R _{DCO} =0.98 2 and Pol=+0.17 7 in ⁹² Mo(¹⁶ O,2pn γ) (2015Ra02).
5187.4	29/2 ⁺	994 [#]	100 [#]	4193.4	25/2 ⁺			
5225.3	(29/2 ⁻)	977.5 ^a	100 ^a	4247.8	(27/2 ⁻)	M1	0.001398 20	$\alpha=0.001398$ 20; $\alpha(\text{K})=0.001222$ 18; $\alpha(\text{L})=0.0001435$ 20;

Adopted Levels, Gammas (continued)

$\gamma(^{105}\text{Cd})$ (continued)

$E_i(\text{level})$	J_i^π	$E_\gamma^{\ddagger}$	$I_\gamma^{\ddagger}$	E_f	J_f^π	Mult.	$\alpha^\dagger$	Comments
5257.1	27/2 ⁻	1009 [#]	42 [#] 8	4247.8	(27/2 ⁻)	M1	0.001303 19	$\alpha(\text{M})=2.75\times 10^{-5}$ 4; $\alpha(\text{N}+..)=5.20\times 10^{-6}$ $\alpha(\text{N})=4.91\times 10^{-6}$ 7; $\alpha(\text{O})=2.92\times 10^{-7}$ 4 Mult.: $\text{R}_{\text{DCO}}=0.52$ 12 in ⁷⁶ Ge(³⁴ S,5n γ) (1995Je04). $\alpha=0.001303$ 19; $\alpha(\text{K})=0.001139$ 16; $\alpha(\text{L})=0.0001336$ 19; $\alpha(\text{M})=2.56\times 10^{-5}$ 4; $\alpha(\text{N}+..)=4.84\times 10^{-6}$ $\alpha(\text{N})=4.57\times 10^{-6}$ 7; $\alpha(\text{O})=2.72\times 10^{-7}$ 4 Mult.: $\text{R}_{\text{DCO}}=0.79$ 10 and $\text{Pol}=-0.12$ 4 in ⁹² Mo(¹⁶ O,2pn γ) (2015Ra02). $\alpha=0.000432$ 6; $\alpha(\text{K})=0.000378$ 6; $\alpha(\text{L})=4.37\times 10^{-5}$ 7; $\alpha(\text{M})=8.33\times 10^{-6}$ 12; $\alpha(\text{N}+..)=1.573\times 10^{-6}$ 22 $\alpha(\text{N})=1.486\times 10^{-6}$ 21; $\alpha(\text{O})=8.73\times 10^{-8}$ 13 Mult.: $\text{R}_{\text{DCO}}=0.65$ 9 and $\text{Pol}=+0.05$ 6 in ⁹² Mo(¹⁶ O,2pn γ) (2015Ra02). $\alpha=0.001037$ 15; $\alpha(\text{K})=0.000904$ 13; $\alpha(\text{L})=0.0001084$ 16; $\alpha(\text{M})=2.08\times 10^{-5}$ 3; $\alpha(\text{N}+..)=3.90\times 10^{-6}$ $\alpha(\text{N})=3.69\times 10^{-6}$ 6; $\alpha(\text{O})=2.11\times 10^{-7}$ 3 Mult.: $\text{R}_{\text{DCO}}=1.12$ 16 in ⁷⁶ Ge(³⁴ S,5n γ) (1995Je04); Also, $\text{R}_{\text{DCO}}=0.98$ 6 and $\text{Pol}=+0.12$ 7 in ⁹² Mo(¹⁶ O,2pn γ) (2015Ra02); Others: $\text{A}_{22}=0.22$ 4 and $\text{A}_{44}=-0.08$ 6 in ⁹⁴ Zr(¹⁶ O,5n γ) (1978St01); $\text{Pol}_{\text{exp}}/\text{Pol}_{\text{ad}}=1.0$ 15 in ⁹⁴ Zr(¹⁶ O,5n γ) (1978St01).
5291.2	(31/2) ⁻	1043.6 ^a	100 ^a	4247.8	(27/2 ⁻)	E2	0.001037 15	$\alpha=0.001007$ 14; $\alpha(\text{K})=0.000877$ 13; $\alpha(\text{L})=0.0001051$ 15; $\alpha(\text{M})=2.01\times 10^{-5}$ 3; $\alpha(\text{N}+..)=3.79\times 10^{-6}$ $\alpha(\text{N})=3.58\times 10^{-6}$ 5; $\alpha(\text{O})=2.05\times 10^{-7}$ 3 Mult.: $\text{R}_{\text{DCO}}=0.97$ 9 in ⁹² Mo(¹⁶ O,2pn γ) (2015Ra02). $\alpha=0.00059$ 3; $\alpha(\text{K})=0.00045$ 3; $\alpha(\text{L})=5.2\times 10^{-5}$ 4; $\alpha(\text{M})=1.00\times 10^{-5}$ 6; $\alpha(\text{N}+..)=8.3\times 10^{-5}$ 5 $\alpha(\text{N})=1.79\times 10^{-6}$ 11; $\alpha(\text{O})=1.06\times 10^{-7}$ 8; $\alpha(\text{IPF})=8.1\times 10^{-5}$ 5 Mult.: E2 in 1995Je04, from $\text{R}_{\text{DCO}}=0.91$ 30. M1 in 2015Ra02, from $\text{R}_{\text{DCO}}=0.48$ 11 and $\text{Pol}=-0.02$ 8. $\alpha=0.001199$ 17; $\alpha(\text{K})=0.001044$ 15; $\alpha(\text{L})=0.0001259$ 18; $\alpha(\text{M})=2.41\times 10^{-5}$ 4; $\alpha(\text{N}+..)=4.53\times 10^{-6}$ $\alpha(\text{N})=4.29\times 10^{-6}$ 6; $\alpha(\text{O})=2.43\times 10^{-7}$ 4 Mult.: $\text{R}_{\text{DCO}}=0.96$ 12 and $\text{Pol}=+0.07$ 4 in ⁹² Mo(¹⁶ O,2pn γ) (2015Ra02). $\alpha=0.000913$ 13; $\alpha(\text{K})=0.000796$ 12; $\alpha(\text{L})=9.50\times 10^{-5}$ 14; $\alpha(\text{M})=1.82\times 10^{-5}$ 3; $\alpha(\text{N}+..)=4.07\times 10^{-6}$ 6 $\alpha(\text{N})=3.24\times 10^{-6}$ 5; $\alpha(\text{O})=1.86\times 10^{-7}$ 3; $\alpha(\text{IPF})=6.50\times 10^{-7}$ 9 Mult.: $\text{R}_{\text{DCO}}=1.14$ 11 in ⁹² Mo(¹⁶ O,2pn γ) (2015Ra02). $\alpha=0.000966$ 14; $\alpha(\text{K})=0.000842$ 12; $\alpha(\text{L})=0.0001007$ 15; $\alpha(\text{M})=1.93\times 10^{-5}$ 3; $\alpha(\text{N}+..)=3.63\times 10^{-6}$ $\alpha(\text{N})=3.43\times 10^{-6}$ 5; $\alpha(\text{O})=1.96\times 10^{-7}$ 3 Mult.: $\text{R}_{\text{DCO}}=1.09$ 25 in ⁷⁶ Ge(³⁴ S,5n γ) (1995Je04). $\alpha=0.000801$ 12; $\alpha(\text{K})=0.000695$ 10; $\alpha(\text{L})=8.26\times 10^{-5}$ 12;
5658.2	31/2 ⁻	1058 [#]	100 [#]	4600.2	27/2 ⁻	E2	0.001007 14	
5758.3	(29/2) ⁻	1510.4 ^a	100 ^a	4247.8	(27/2 ⁻)	M1(+E2)	0.00059 3	
6235.1	31/2 ⁻	978 [#]	100 [#]	5257.1	27/2 ⁻	E2	0.001199 17	
6294.4	33/2 ⁺	1107 [#]	100 [#]	5187.4	29/2 ⁺	E2	0.000913 13	
6303.5	(33/2) ⁻	1078.2 ^a	100 ^a	5225.3	(29/2 ⁻)	E2	0.000966 14	
6470.8	(35/2) ⁻	1179.4 ^a	100 ^a	5291.2	(31/2) ⁻	E2	0.000801 12	

Adopted Levels, Gammas (continued)

$\gamma(^{105}\text{Cd})$ (continued)

$E_i(\text{level})$	J_i^π	$E_\gamma^\ddagger$	$I_\gamma^\ddagger$	E_f	J_f^π	Mult.	$\alpha^\ddagger$	Comments
								$\alpha(\text{M})=1.581\times 10^{-5}$ 23; $\alpha(\text{N}+..)=7.76\times 10^{-6}$ $\alpha(\text{N})=2.82\times 10^{-6}$ 4; $\alpha(\text{O})=1.623\times 10^{-7}$ 23; $\alpha(\text{IPF})=4.78\times 10^{-6}$ 7 Mult.: $\text{R}_{\text{DCO}}=1.11$ 23 in $^{76}\text{Ge}(^{34}\text{S},5\text{n}\gamma)$ (1995Je04); Also, $\text{R}_{\text{DCO}}=1.05$ 11 and $\text{Pol}=+0.08$ 5 in $^{92}\text{Mo}(^{16}\text{O},2\text{p}\text{n}\gamma)$ (2015Ra02).
6645.4	(33/2 ⁻)	887 [#] 1354.1 ^a	64 [#] 12 100 ^a	5758.3 (29/2 ⁻) 5291.2 (31/2) ⁻		M1	0.000719 10	$\alpha=0.000719$ 10; $\alpha(\text{K})=0.000601$ 9; $\alpha(\text{L})=7.00\times 10^{-5}$ 10; $\alpha(\text{M})=1.338\times 10^{-5}$ 19; $\alpha(\text{N}+..)=3.45\times 10^{-5}$ 5 $\alpha(\text{N})=2.39\times 10^{-6}$ 4; $\alpha(\text{O})=1.428\times 10^{-7}$ 20; $\alpha(\text{IPF})=3.19\times 10^{-5}$ 5 Mult.: $\text{R}_{\text{DCO}}=0.67$ 9 and $\text{Pol}=-0.07$ 7 in $^{92}\text{Mo}(^{16}\text{O},2\text{p}\text{n}\gamma)$ (2015Ra02);
6703.1	(31/2,33/2,35/2 ⁻)	1412 [#]	100 [#]	5291.2 (31/2) ⁻				
6783.3	(35/2 ⁻)	1125 [#] 1492 [#]	100 [#] 27 <67 [#]	5658.2 31/2 ⁻ 5291.2 (31/2) ⁻				
7297.1	(31/2,33/2,35/2 ⁻)	2006 [#]	100 [#]	5291.2 (31/2) ⁻				
7313.1	35/2 ⁻	1078 [#]	100 [#]	6235.1 31/2 ⁻		E2	0.000966 14	$\alpha=0.000966$ 14; $\alpha(\text{K})=0.000842$ 12; $\alpha(\text{L})=0.0001008$ 15; $\alpha(\text{M})=1.93\times 10^{-5}$ 3; $\alpha(\text{N}+..)=3.63\times 10^{-6}$ $\alpha(\text{N})=3.43\times 10^{-6}$ 5; $\alpha(\text{O})=1.97\times 10^{-7}$ 3 Mult.: $\text{R}_{\text{DCO}}=1.12$ 10 in $^{92}\text{Mo}(^{16}\text{O},2\text{p}\text{n}\gamma)$ (2015Ra02).
7447.1	(31/2,33/2,35/2 ⁻)	2156 [#]	100 [#]	5291.2 (31/2) ⁻				
7506.4	(37/2 ⁺)	1212 [#]	100 [#]	6294.4 33/2 ⁺				
7536.4	(37/2 ⁻)	1232.9 ^a	100 ^a	6303.5 (33/2 ⁻)				
7644.6	(37/2 ⁻)	999 [#]	100 [#] 12	6645.4 (33/2 ⁻)		E2	0.001143 16	$\alpha=0.001143$ 16; $\alpha(\text{K})=0.000996$ 14; $\alpha(\text{L})=0.0001199$ 17; $\alpha(\text{M})=2.30\times 10^{-5}$ 4; $\alpha(\text{N}+..)=4.31\times 10^{-6}$ $\alpha(\text{N})=4.08\times 10^{-6}$ 6; $\alpha(\text{O})=2.32\times 10^{-7}$ 4 Mult.: $\text{R}_{\text{DCO}}=0.92$ 9 in $^{92}\text{Mo}(^{16}\text{O},2\text{p}\text{n}\gamma)$ (2015Ra02).
		1174 [#]	45 [#] 12	6470.8 (35/2) ⁻		(M1)	0.000938 14	$\alpha=0.000938$ 14; $\alpha(\text{K})=0.000817$ 12; $\alpha(\text{L})=9.55\times 10^{-5}$ 14; $\alpha(\text{M})=1.83\times 10^{-5}$ 3; $\alpha(\text{N}+..)=7.07\times 10^{-6}$ 10 $\alpha(\text{N})=3.26\times 10^{-6}$ 5; $\alpha(\text{O})=1.94\times 10^{-7}$ 3; $\alpha(\text{IPF})=3.61\times 10^{-6}$ 5 $\alpha=0.000651$ 10; $\alpha(\text{K})=0.000542$ 8; $\alpha(\text{L})=6.39\times 10^{-5}$ 9; $\alpha(\text{M})=1.223\times 10^{-5}$ 18; $\alpha(\text{N}+..)=3.27\times 10^{-5}$ 5 $\alpha(\text{N})=2.18\times 10^{-6}$ 3; $\alpha(\text{O})=1.267\times 10^{-7}$ 18; $\alpha(\text{IPF})=3.04\times 10^{-5}$ 5 Mult.: $\text{R}_{\text{DCO}}=0.97$ 12 and $\text{Pol}=+0.22$ 9 in $^{92}\text{Mo}(^{16}\text{O},2\text{p}\text{n}\gamma)$ (2015Ra02).
7800.9	(39/2 ⁻)	1330.0 ^a	100 ^a	6470.8 (35/2) ⁻		E2	0.000651 10	
8110.0	(35/2,37/2,39/2 ⁻)	1407 [#] 1639 [#]	100 [#] 58 <83 [#]	6703.1 (31/2,33/2,35/2 ⁻) 6470.8 (35/2) ⁻				

Adopted Levels, Gammas (continued)

$\gamma(^{105}\text{Cd})$ (continued)								
$E_i(\text{level})$	J_i^π	$E_\gamma^\ddagger$	$I_\gamma^\ddagger$	E_f	J_f^π	Mult.	$\alpha^\dagger$	Comments
8434.0	(35/2,37/2,39/2 ⁻)	987 [#]	[#]	7447.1	(31/2,33/2,35/2 ⁻)			
		1963 [#]	[#]	6470.8	(35/2) ⁻			
8546.1	39/2 ⁻	1233 [#]	100 [#]	7313.1	35/2 ⁻	E2	0.000737 11	$\alpha=0.000737$ 11; $\alpha(\text{K})=0.000633$ 9; $\alpha(\text{L})=7.51\times 10^{-5}$ 11; $\alpha(\text{M})=1.436\times 10^{-5}$ 21; $\alpha(\text{N}+..)=1.451\times 10^{-5}$ $\alpha(\text{N})=2.56\times 10^{-6}$ 4; $\alpha(\text{O})=1.479\times 10^{-7}$ 21; $\alpha(\text{IPF})=1.181\times 10^{-5}$ 17 Mult.: $R_{\text{DCO}}=0.95$ 11 in ⁹² Mo(¹⁶ O,2pn γ) (2015Ra02).
8638.0	(35/2,37/2,39/2 ⁻)	1341 [#]	[#]	7297.1	(31/2,33/2,35/2 ⁻)			
		2167 [#]	[#]	6470.8	(35/2) ⁻			
8758.7	(41/2 ⁻)	1114 [#]	100 [#]	7644.6	(37/2 ⁻)	E2	0.000901 13	$\alpha=0.000901$ 13; $\alpha(\text{K})=0.000785$ 11; $\alpha(\text{L})=9.37\times 10^{-5}$ 14; $\alpha(\text{M})=1.79\times 10^{-5}$ 3; $\alpha(\text{N}+..)=4.20\times 10^{-6}$ 6 $\alpha(\text{N})=3.19\times 10^{-6}$ 5; $\alpha(\text{O})=1.83\times 10^{-7}$ 3; $\alpha(\text{IPF})=8.23\times 10^{-7}$ 12 Mult.: $R_{\text{DCO}}=1.15$ 11 in ⁹² Mo(¹⁶ O,2pn γ) (2015Ra02).
8979.7	(41/2 ⁻)	1443.3 ^a	100 ^a	7536.4	(37/2 ⁻)			
9266.8	(43/2 ⁻)	1465.9 ^a	100 ^a	7800.9	(39/2 ⁻)	E2	0.000580 9	$\alpha=0.000580$ 9; $\alpha(\text{K})=0.000446$ 7; $\alpha(\text{L})=5.23\times 10^{-5}$ 8; $\alpha(\text{M})=1.000\times 10^{-5}$ 14; $\alpha(\text{N}+..)=7.17\times 10^{-5}$ 10 $\alpha(\text{N})=1.784\times 10^{-6}$ 25; $\alpha(\text{O})=1.043\times 10^{-7}$ 15; $\alpha(\text{IPF})=6.99\times 10^{-5}$ 10 Mult.: $R_{\text{DCO}}=1.12$ 13 in ⁹² Mo(¹⁶ O,2pn γ) (2015Ra02).
9976.1	(43/2 ⁻)	1430 [#]	100 [#]	8546.1	39/2 ⁻			
10072.7	(45/2 ⁻)	1314 [#]	100 [#]	8758.7	(41/2 ⁻)			
10850.8	(47/2 ⁻)	1584.0 ^a	100 ^a	9266.8	(43/2 ⁻)			

[†] Additional information 1.

[‡] From ¹⁰⁵In ε decay (5.07 min), unless otherwise noted.

[#] From ⁹²Mo(¹⁶O,2pn γ) (2015Ra02).

[@] From ¹⁰²Pd(α ,n γ) (1978Ge05).

[&] From ⁷⁶Ge(³⁴S,5n γ) (1995Je04).

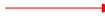
^a From ¹⁰⁶Cd(³He,2p2n γ) (1995Je04).

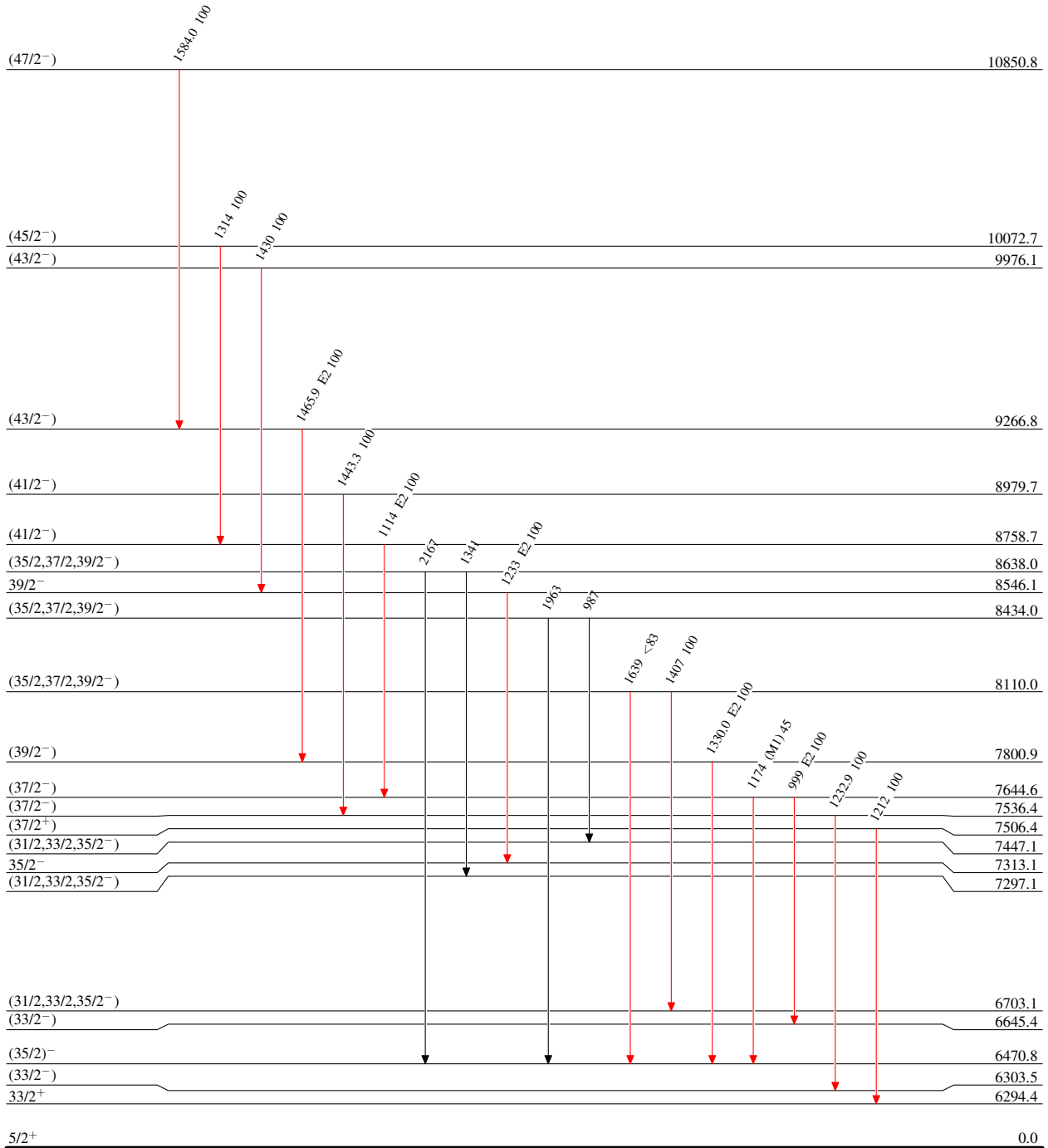
^b Placement of transition in the level scheme is uncertain.

Adopted Levels, Gammas**Level Scheme**

Intensities: Type not specified

Legend

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



55.5 min 4

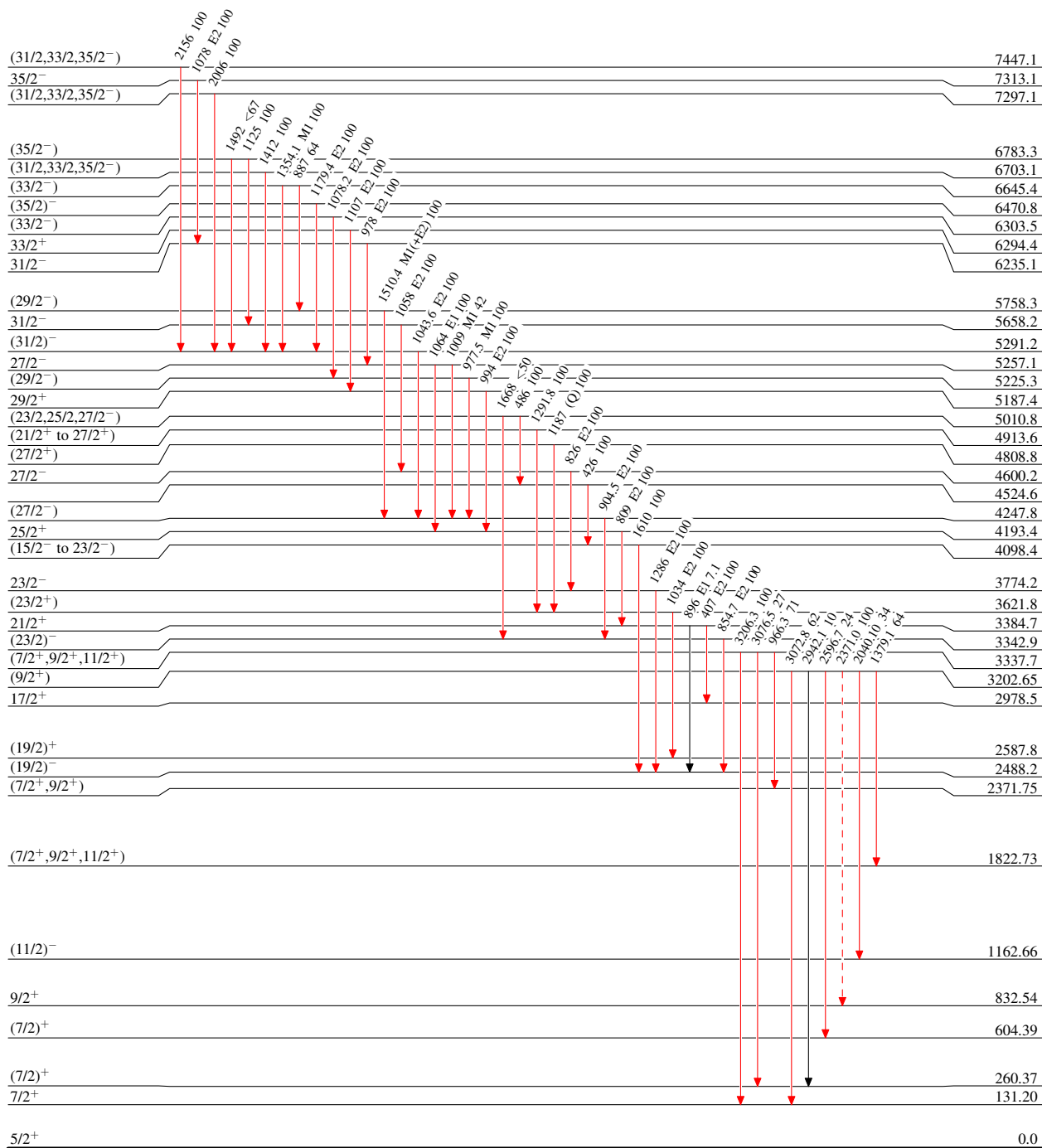
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Type not specified

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



1.75 ns 11

55.5 min 4

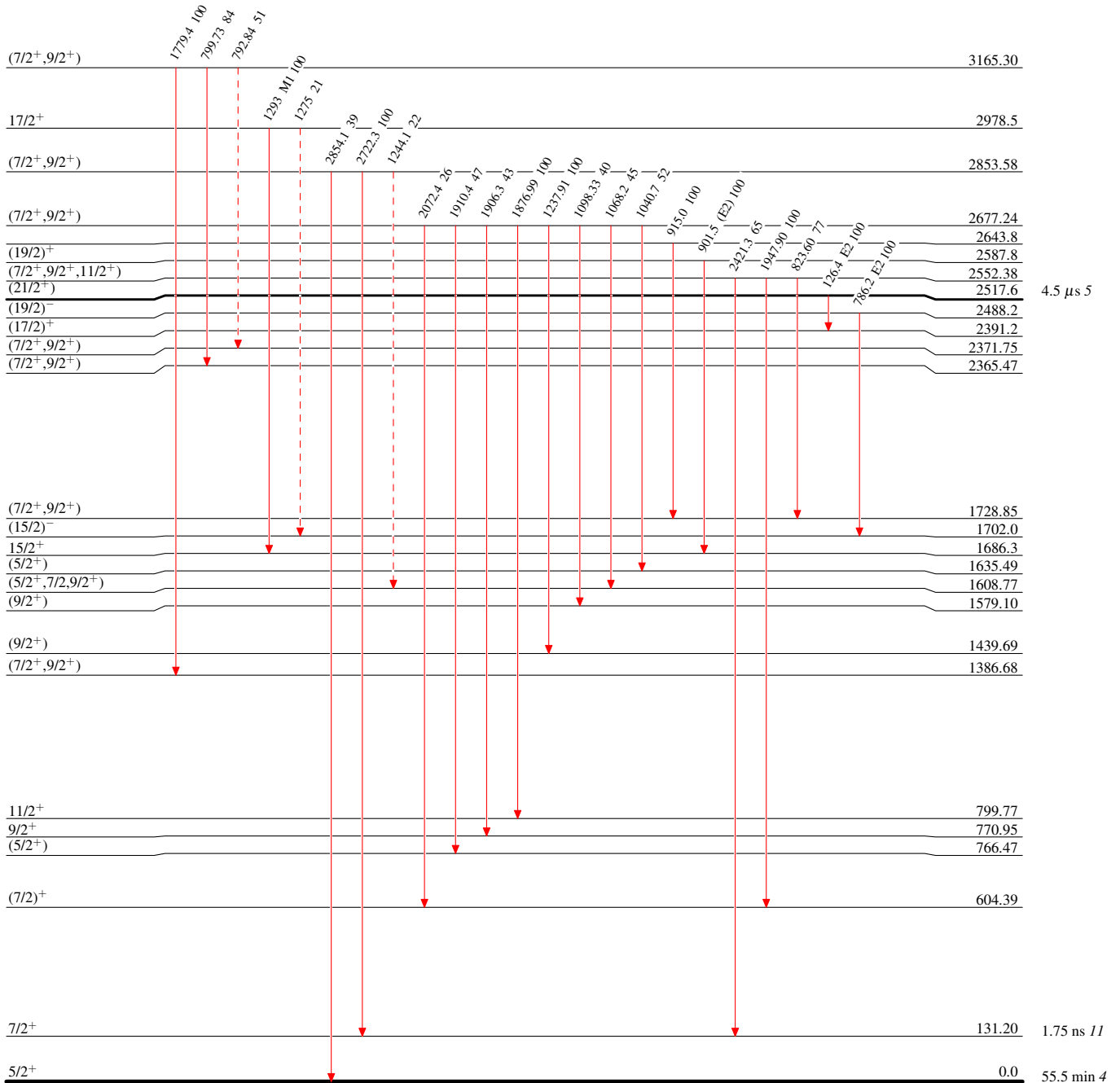
Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

Legend

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

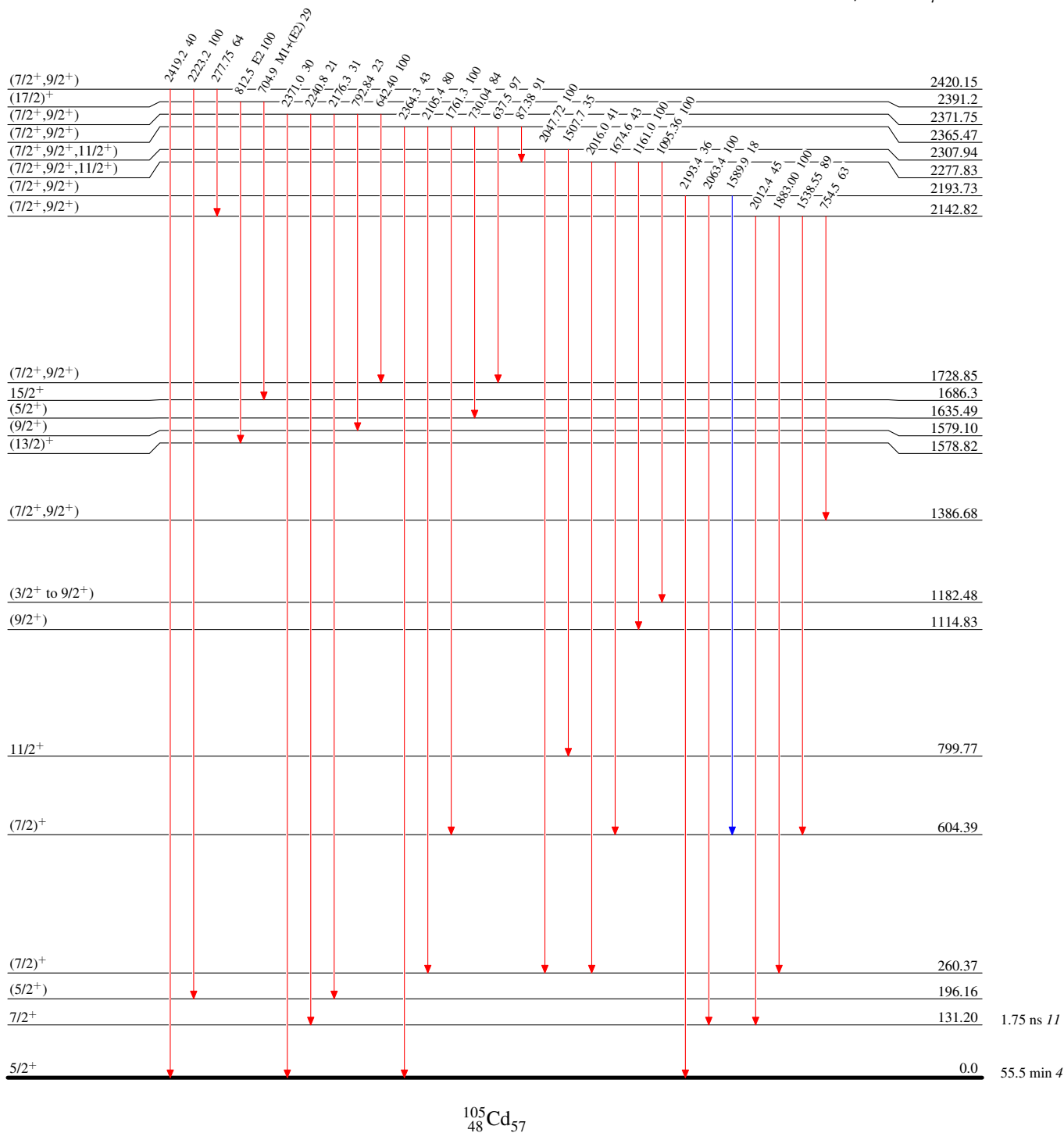


Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Type not specified

Legend

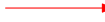
- $\longrightarrow$ $I_\gamma < 2\% \times I_\gamma^{\max}$
 $\longrightarrow$ $I_\gamma < 10\% \times I_\gamma^{\max}$
 $\longrightarrow$ $I_\gamma > 10\% \times I_\gamma^{\max}$

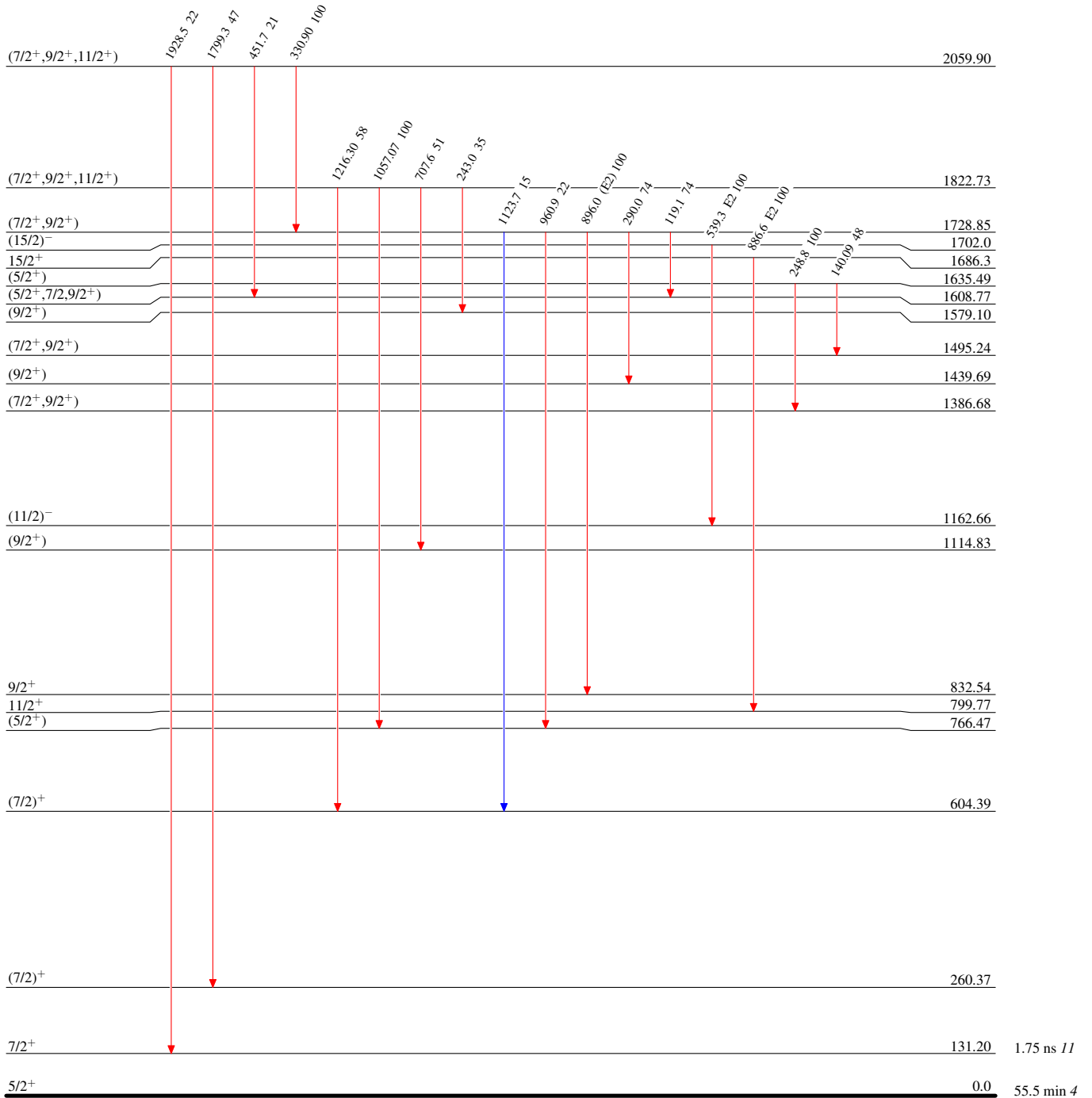


Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Type not specified

Legend

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

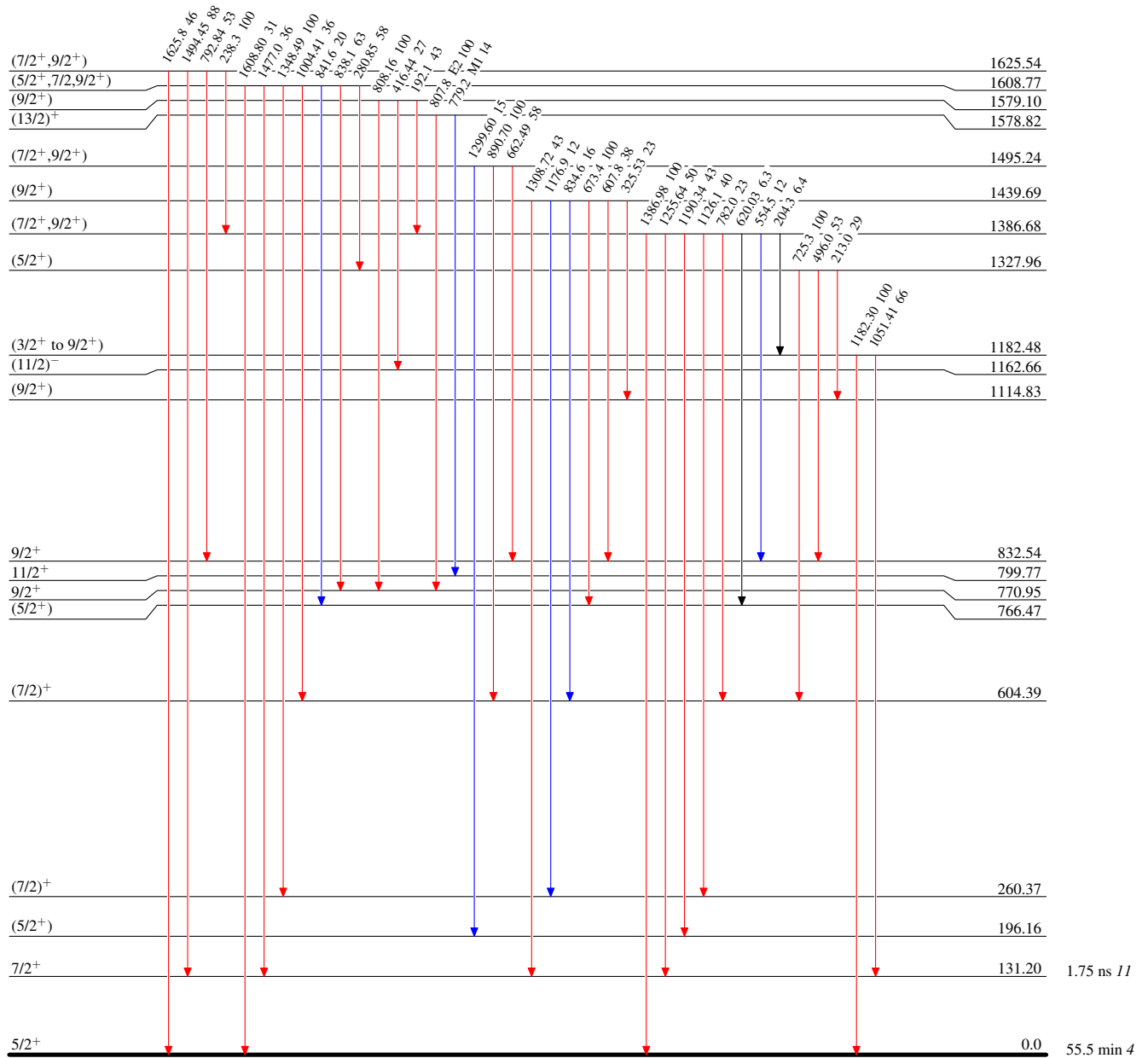


Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Type not specified

Legend

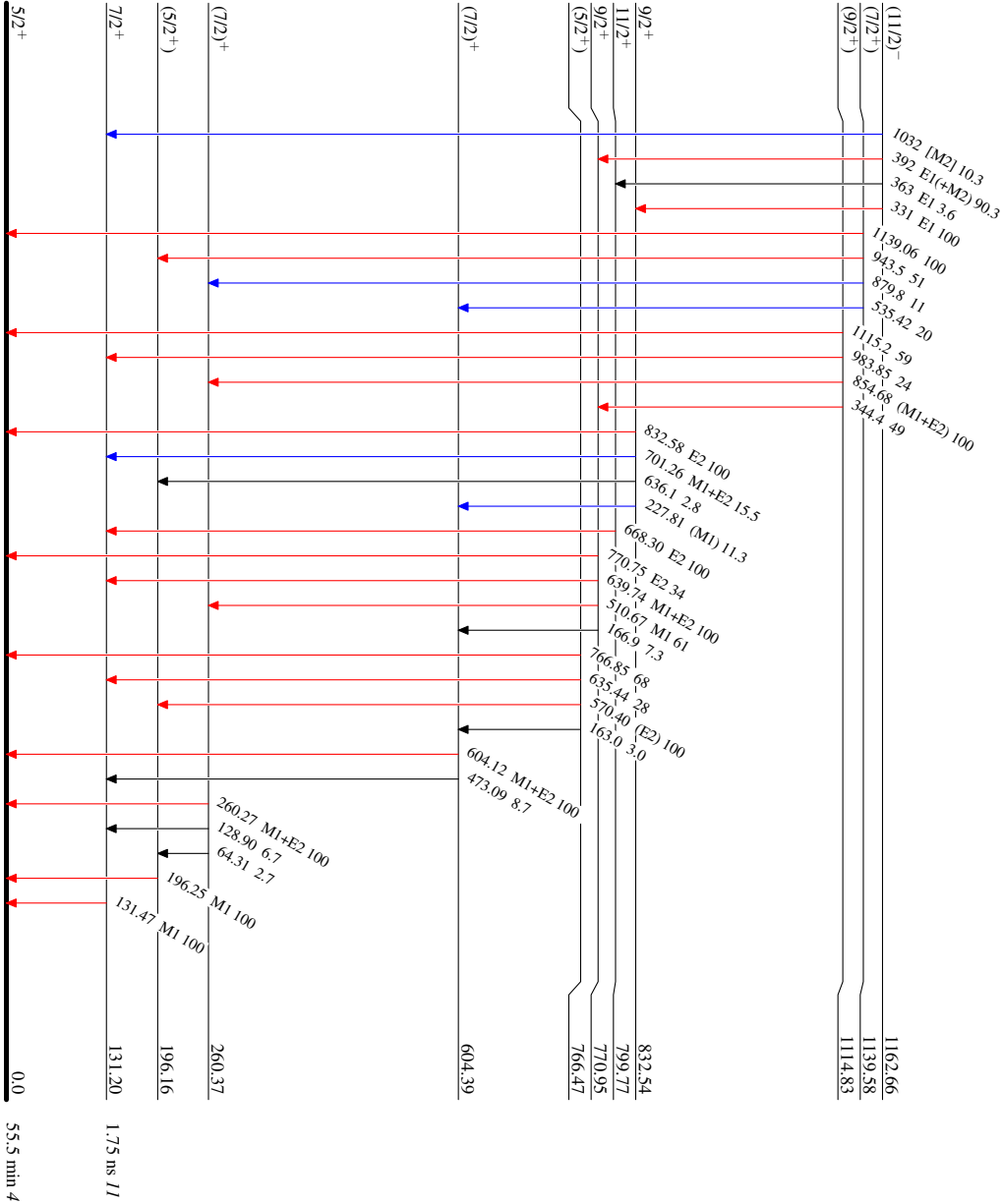
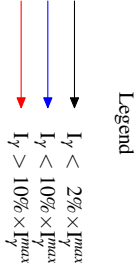
-  $I_\gamma < 2\% \times I_\gamma^{\max}$
 $I_\gamma < 10\% \times I_\gamma^{\max}$
 $I_\gamma > 10\% \times I_\gamma^{\max}$

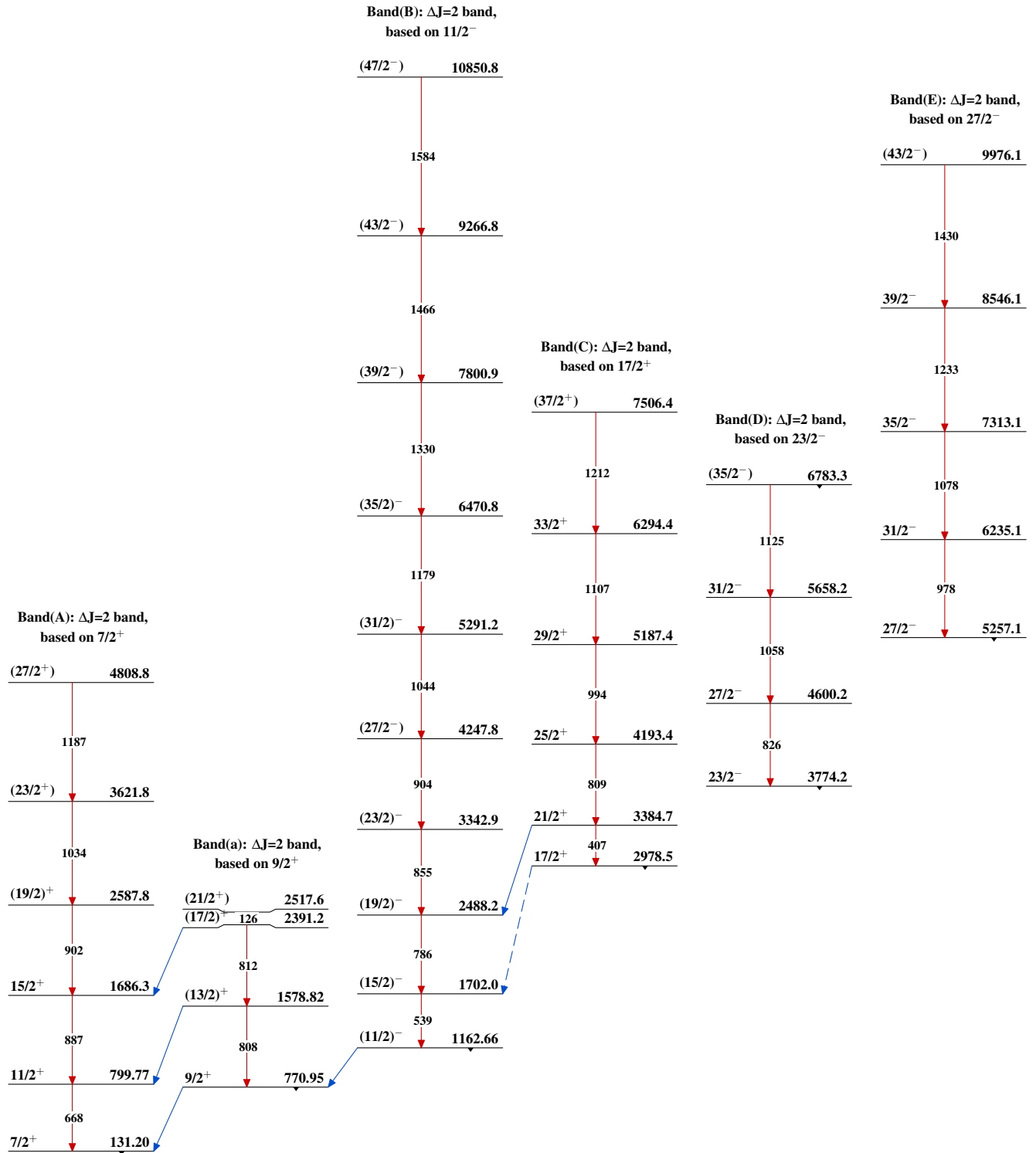


Adopted Levels, Gammas

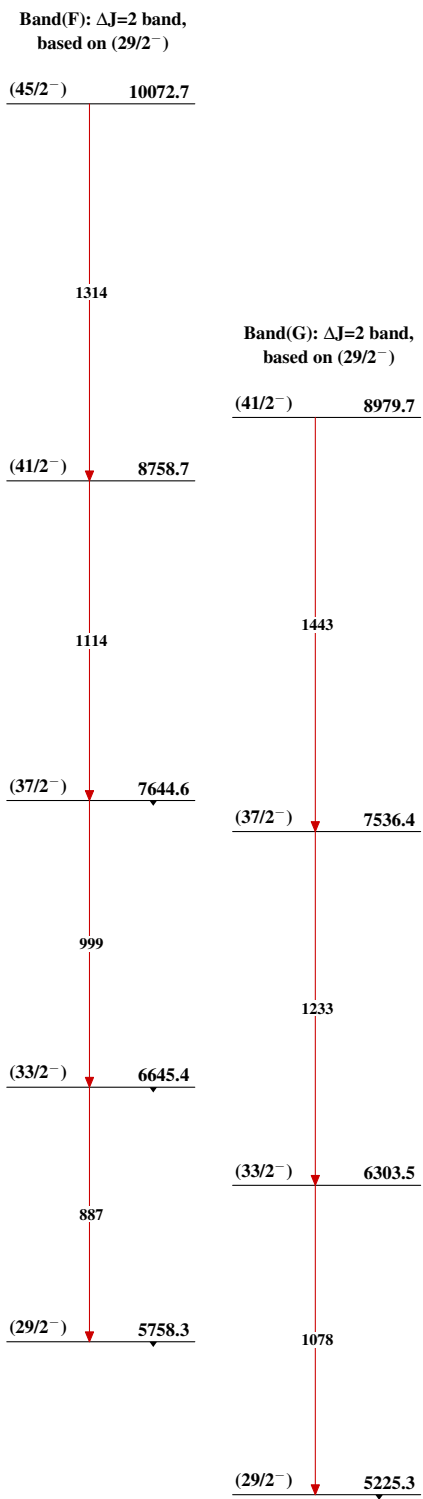
Level Scheme (continued)

Intensities: Type not specified



Adopted Levels, Gammas

Adopted Levels, Gammas (continued)


 $^{105}_{48}\text{Cd}_{57}$