

Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 113,2391 (2012)	1-Sep-2012

$Q(\beta^-)=497.490$ 10; $S(n)=9039.3$ 9; $S(p)=6810.5$ 4; $Q(\alpha)=-3745.0$ 16 [2012Wa38](#)

Note: Current evaluation has used the following Q record 497.489 109036.8 156807.2 16-3743.3 22 [2011AuZZ](#).

 ^{115}In Levels

Experimental level properties are compared with various model calculations by [1972At01](#), [1975Di12](#), [1976He16](#), [1977He25](#), [1978He08](#), [1983Ko40](#).

E(levels)>2550, except 2815 and 3110 from ($^3\text{He},d$),($d,^3\text{He}$) have not been adopted.

Cross Reference (XREF) Flags

A	Coulomb excitation	F	$^{115}\text{In}(d,d')$	K	$^{118}\text{Sn}(p,\alpha)$
B	$^{114}\text{Cd}(p,p),(p,p')$ IAR	G	$^{115}\text{In}(\gamma,\gamma')$	L	$^{115}\text{In}(p,p')$
C	$^{114}\text{Cd}(^3\text{He},d)$	H	$^{115}\text{In}(n,n'\gamma)$	M	$^{115}\text{In}(\gamma,xn)$
D	$^{115}\text{Cd} \beta^-$ decay (44.56 d)	I	^{115}In IT decay (4.486 h)	N	$^{100}\text{Mo}(^{18}\text{O},p2n)$
E	$^{115}\text{Cd} \beta^-$ decay (53.46 h)	J	$^{116}\text{Sn}(d,^3\text{He})$	O	$^{238}\text{U}(^{12}\text{C},x\gamma)$

E(level) [†]	J ^π #	T _{1/2}	XREF	Comments
0.0 [@]	9/2 ⁺	4.41×10 ¹⁴ y 25	A CDEFGHIJK NO	$\% \beta^- = 100$ $Q = +0.86$ 4 (1978LeZA) $\mu = +5.5408$ 2 (1989Ra17) Q : others: +0.810, 0.79 20, 0.83 10, 0.58 9, all from (1989Ra17). J^π : L=4 ($^3\text{He},d$),($d,^3\text{He}$),(p,α), M4 γ from 1/2 ⁻ . $T_{1/2}$: from measured β spectrum of scin solution spiked with indium salt (1978Pf01 , 1979Pf01). Others: 5.1×10 ¹⁴ y 4 (1962Wa15), 6.9×10 ¹⁴ y 15 (1961Be15), 6×10 ¹⁴ y 2 (1950Ma76), ≈1×10 ¹⁴ y (1951Co19).
336.244 17	1/2 ⁻	4.486 h 4	A CDEF HIJK	$\%IT=95.0$ 7; $\% \beta^- = 5.0$ 7 $\mu = -0.24398$ 5 (1989Ra17) J^π : atomic beam (1961Ki02), L=1 ($^3\text{He},d$),($d,^3\text{He}$),(p,α). $T_{1/2}$: from (1974Ha39), agrees with 4.485 h 4 (1987Ne01). $T_{1/2}$: from $\beta\gamma(t)$, $\gamma\gamma(t)$ (1967Na04). J^π : M1+E2 decay to 1/2 ⁻ state, $\beta\gamma(\theta)$. L=1 ($^3\text{He},d$),($d,^3\text{He}$),(p,α). B(E3)=0.0057 4 Coul. ex.
597.144 18	3/2 ⁻	≤0.25 ns	A CDEF H JK	$Q = -0.60$ 2 (1989Ra17); $\mu = +0.74$ 13 Analog: 660-keV ^{117}In 3/2 ⁺ state; $\mu = +0.938$, $Q = -0.64$. $T_{1/2}$: from 1971Sv01 , $\beta\gamma(t)$ scin-semi. Others: 5.73 ns 7, 6.09 ns 10 via alternate data analyses. J^π : E1 γ to 1/2 ⁻ from 828, M1(+E2) γ to 9/2 ⁺ from 934 and E2 γ connecting 934 and 828 uniquely establish $J^\pi(828)=3/2^+$ and $J^\pi(934)=7/2^+$.
828.588 17	3/2 ⁺	5.78 ns 6	CDE H O	$T_{1/2}$: from 1971Sv01 $\beta\gamma(t)$ scin-semi. J^π : E1 decay to 1/2 ⁻ state, M1+E2 to 3/2 ⁺ state, $\gamma\gamma(\theta)$.
864.139 18	1/2 ⁺ [‡]	0.91 ns 3	C E H	$T_{1/2}$: from 1973Se06 (484 γ)(934 γ)(t) scin. J^π : see 828 level.
933.780 ^a 18	7/2 ⁺	57 ps 5	CD H J O	$T_{1/2}$: from B(E2)=0.00272 18 and adopted branching. J^π : E2 to 9/2 ⁺ , E1 to 3/2 ⁻ .
941.424 7	5/2 ⁺	15.1 ps 14	A DEFGH	

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Adopted Levels, Gammas (continued) ^{115}In Levels (continued)

E(level) [†]	J ^π [#]	T _{1/2}	XREF	Comments
1041.44 23	5/2 ⁻		E H JK	J ^π : L=3 (d, ³ He),(p,α); strong branch to 1/2 ⁻ state.
1078.16 7	5/2 ⁺	0.99 ps 5	A D FGH JK	T _{1/2} : av: 1.12 ps 17 res fluorescence (1981Ca10), 0.86 ps 5 (1976Tu02) from B(E2)=0.0227 and I _γ (1078γ)-branching=83.7%.
1132.576 9	11/2 ⁺	0.065 ps 3	A D FGH K O	J ^π : L=2 (p,α); E2 to 9/2 ⁺ . T _{1/2} : average of 0.064 ps 4 (1977Ca14) and 0.065 ps 3 (1975Bo40) res fluorescence.
1192.491 21	(3/2)		E	J ^π : L=6 (p,α); M1+E2 decay to 9/2 ⁺ g.s. J ^π : deexcites to 1/2, 1/2 ⁺ , 5/2 ⁺ states, log ft=8.6 from 1/2 ⁺ parent.
1287.41 5	1/2, 3/2 ⁻ , 5/2 ⁻		E	J ^π : deexcites to 1/2 ⁻ , 3/2 states, log ft=9.1 from 1/2 ⁺ parent.
1290.592 [@] 10	13/2 ⁺	0.42 ps 4	A D FGH JK NO	T _{1/2} : average of 0.46 ps 4 (1981Ca10) res fluorescence, 0.38 ps 3 from B(E2)=0.0565 and I _γ (1291γ)-branching=97.6%.
1347.5 7	(5/2 ⁻)		H	J ^π : L=6 (p,α). Adopted T _{1/2} inconsistent with measured B(E2) if J=11/2.
1418.249 ^a 10	(11/2 ⁺)		D H O	J ^π : from the fitting of the γ angular distribution in (n,n'γ) by a statistical model. E(level): from band assignment.
1448.787 9	9/2 ⁺	0.35 ps 4	A CD FGH JK	J ^π : γ to 5/2 ⁺ not consistent with 11/2 ⁺ ; (484γ)(934γ)(θ) is consistent with J(initial)=9/2 (1975Bo29). T _{1/2} : from 1981Ca10 res fluorescence.
1463.5 6	7/2 ⁺	0.063 ps 10	A FGH	J ^π : M1 decay to 11/2 ⁺ state, L=4 (³ He,d),(d, ³ He),(p,α). T _{1/2} : average of 0.066 8 (1977Ca14) and 0.059 ps 15 (1973Bo17) res fluorescence.
1470 12	(1/2 ⁻ , 3/2 ⁻)		J	J ^π : M1+E2 decays to 5/2 ⁺ , 9/2 ⁺ states, Coul. ex.
1478.49 17			D	J ^π : L=(1) (d, ³ He).
1486.110 10	9/2 ⁺	0.44 ps 6	A D FGH JK	XREF: J(1480). T _{1/2} : from 1981Ca10. Other: 0.52 ps 22 (1973Bo17) res fluorescence.
1497.2 8	(7/2 ⁺) [‡]	0.17 ps 2	GH	J ^π : L=4 (p,α), M1+E2 decay to 11/2 ⁺ state, Coul. ex.
1602.3 10	(7/2 ⁺) [‡]		H k	T _{1/2} : from 1981Ca10 in (γ,γ').
1608.1 7	(7/2 ⁺) [‡]	0.11 ps 2	FGH k	J ^π : L=1 (d, ³ He),(p,α). L=2 (³ He,d) could be a separate level. It is not adopted since those results are as yet unpublished.
1650 2	(1/2 ⁻ , 3/2 ⁻)		JK	J ^π : L=1 (d, ³ He),(p,α). L=2 (³ He,d) could be a separate level. It is not adopted since those results are as yet unpublished.
1736.9 6	(9/2 ⁺) [‡]		C H K	XREF: C(1745).
1801.0 8	(5/2 ⁺) [‡]		H	
1830.9 8	(5/2 ⁺) [‡]		H	
1864 2			F K	XREF: K(1848).
1872.4 8	(9/2 ⁻) [‡]		C H K	XREF: C(1880)K(1880).
1917.6 10			F H K	
1971.6 7	(9/2 ⁺) [‡]		H K	XREF: K(1960).
1978.3 7	7/2 ⁺ , 9/2 ⁺ [‡]		F H JK	XREF: J(1980)K(1986). J ^π : L=4 (d, ³ He) excitation.
1999.1 6	(7/2 ⁺) [‡]		C F H	XREF: C(2015).
2057.3 10	(5/2 ⁺) [‡]		H	
2071.0 4	7/2, 9/2 ⁻		FGH	J ^π : L=3 (d,d').
2088	(13/2 ⁻)		F	J ^π : L=3 in (d,d').
2107.82 20	7/2, 9/2, 11/2 ⁻		FGH	J ^π : L=3 in (d,d'), J ^π =5/2 ⁺ in (n,n'γ).
2113.7 7	(9/2 ⁺)		H	

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Adopted Levels, Gammas (continued)

^{115}In Levels (continued)			
E(level) [†]	J ^π #	XREF	Comments
2119.0 ^a 18	(15/2 ⁺)		0
2131 7	1/2 ⁻ , 3/2 ⁻	JK	L=1 (d, ^3He).
2136.79 ^{&} 10	(15/2 ⁻)	F NO	J ^π : L=3 in (d,d');
2170.7 10	(5/2 ⁺) [‡]	F H	
2208 2	1/2 ⁺	C F	XREF: C(2195).
2230 20	5/2 ⁻ , 7/2 ⁻	JK	J ^π : L=0 (^3He ,d) excitation. XREF: K(2219). J ^π : L=3 (d, ^3He).
2234.0 10	(5/2 ⁺) [‡]	H	
2254.2 12	(17/2 ⁺)	K 0	
2264.0 8	(7/2 ⁺)	H Jk	XREF: J(2230).
2282.99 ^{&} 15	(17/2 ⁻)		NO
2283.4 7	(7/2 ⁺ , 9/2 ⁺) [‡]	GH k	
2309.5 [@]	(17/2 ⁺)		NO
2318 10		K	
2384.6 3	7/2 ⁻ , 9/2 ⁻ , 11/2 ⁻	FGH K	XREF: K(2369).
2434 2	(15/2 ⁻)	F	J ^π : negative parity of the level from L=3 in (d,d').
2443.13 20	7/2, 9/2, 11/2 ⁻	C FGH K	J ^π : negative parity of the level from L=3 in (d,d'). XREF: C(2445).
2450 25	1/2 ⁻ , 3/2 ⁻	C J	J ^π : negative parity of the level from L=3 in (d,d'). XREF: C(2445).
2451 2	(13/2 ⁻)	F	L=1 (d, ^3He).
2479.7 3	7/2 ⁻ , 9/2 ⁻ , 11/2 ⁻	FG	J ^π : negative parity of the level from L=3 in (d,d').
2489 7	5/2 ⁻ , 7/2 ⁻	JK	J ^π : negative parity of the level from L=3 in (d,d'). XREF: J(2520).
2539.09 ^{&} 18	(19/2 ⁻)		NO
2540.73 20	7/2 ⁺ , 9/2 ⁻ , 11/2 ⁻	FG K	J ^π : negative parity of the level from L=3 in (d,d').
2580.0 3		G	
2646.0 13			0
2739.94 20		G	
2746.7 4		G	
2815	1/2 ⁺	C	J ^π : L=0 (^3He ,d).
2827.5 3		G	
2831.4 ^{&} 18	(21/2 ⁻)		0
2852.2 4		G	
2860 10	1/2 ⁻ , 3/2 ⁻	J	L=1 (d, ^3He).
2878.4 [@] 13	(21/2 ⁺)		0
2896.7 4		G	
2947.0 ^a 20	(19/2 ⁺)		0
2960.4 [@] 17	(23/2 ⁺)		0
2994.4 6		G	
3037.4 ^{&} 19	(23/2 ⁻)		0
3042.9 5		G	
3096.4 [@] 19	(25/2 ⁺)		0
3110	3/2 ⁺ , 5/2 ⁺	C	J ^π : L=2 (^3He ,d).
3158.2 7		G	
3183.4 ^{&} 23	(25/2 ⁻)		0
3220.7 6		G	
3231.5 3		G	
3272.0 3		G	

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Adopted Levels, Gammas (continued) ^{115}In Levels (continued)

E(level) [†]	J ^π [#]	XREF	E(level) [†]	J ^π [#]	XREF
3289.0 4		G	3701.1 5		G
3386.6 4		G	3847.7 & 24	(27/2 ⁻)	0
3395.1 5		G	4041.4 @ 24	(29/2 ⁺)	0
3472.4 @ 22	(27/2 ⁺)	0	4583.1 & 24	(29/2 ⁻)	0
3684.7 9		G			

[†] From least-squares fit to γ energies.

[‡] From the fitting of the γ angular distribution in (n,n' γ) by a statistical model.

[#] J^π based on γ properties derived from DCO ratios.

@ Band(A): $\pi g_{9/2}^{-1} \nu h_{11/2}^2$.

& Band(B): $\pi g_{9/2}^{-1} \nu h_{11/2}^1 (\nu(d_{5/2} \text{ and/or } g_{7/2})^1)$.

^a Band(C): $\pi 1/2[431]$ from $\pi(g_{7/2} \text{ and/or } d_{5/2})$.

Adopted Levels, Gammas (continued)

$E_i(\text{level})$	J_i^π	$\gamma(^{115}\text{In})$		E_f	J_f^π	Mult. [‡]	δ	$\alpha^@$	Comments
		$E_\gamma^\dagger$	$I_\gamma^\#$						
336.244	1/2 ⁻	336.241 25	100	0.0	9/2 ⁺	M4		1.081	$\alpha(\text{K})=0.856$ 12; $\alpha(\text{L})=0.181$ 3; $\alpha(\text{M})=0.0369$ 6; $\alpha(\text{N}+..)=0.00704$ 10 $\alpha(\text{N})=0.00664$ 10; $\alpha(\text{O})=0.000392$ 6 $\text{B}(\text{M4})(\text{W.u.})=8.27$ 14 Mult.: from ^{115}In IT decay.
597.144	3/2 ⁻	260.896 3	100	336.244	1/2 ⁻	M1+E2	-0.09 6	0.0376	$\alpha(\text{K})=0.0326$ 5; $\alpha(\text{L})=0.00404$ 8; $\alpha(\text{M})=0.000783$ 14; $\alpha(\text{N}+..)=0.000154$ 3 $\alpha(\text{N})=0.0001434$ 25; $\alpha(\text{O})=1.065\times 10^{-5}$ 16 $\text{B}(\text{M1})(\text{W.u.})\geq 0.0047$
828.588	3/2 ⁺	231.443 3	9.22 12	597.144	3/2 ⁻	E1		0.01639	$\alpha(\text{K})=0.01427$ 20; $\alpha(\text{L})=0.001726$ 25; $\alpha(\text{M})=0.000333$ 5; $\alpha(\text{N}+..)=6.46\times 10^{-5}$ 9 $\alpha(\text{N})=6.04\times 10^{-5}$ 9; $\alpha(\text{O})=4.22\times 10^{-6}$ 6 $\text{B}(\text{E1})(\text{W.u.})=3.78\times 10^{-7}$ 6 $\text{B}(\text{E1})(\text{W.u.})=3.4\times 10^{-7}$ 1
864.139	1/2 ⁺	492.351 4 35.57 6	100 2 1.534 11	336.244 1/2 ⁻ 828.588 3/2 ⁺	E1 M1+E2		-0.173 16	11.8 4	$\alpha(\text{K})=9.04$ 15; $\alpha(\text{L})=2.20$ 21; $\alpha(\text{M})=0.44$ 5; $\alpha(\text{N}+..)=0.080$ 7 $\alpha(\text{N})=0.077$ 7; $\alpha(\text{O})=0.00357$ 13 $\text{B}(\text{E2})(\text{W.u.})=121$ 23; $\text{B}(\text{M1})(\text{W.u.})=0.0066$ 5
		266.985 10	0.335 11	597.144	3/2 ⁻	E1		0.01112	$\alpha(\text{K})=0.00968$ 14; $\alpha(\text{L})=0.001166$ 17; $\alpha(\text{M})=0.000225$ 4; $\alpha(\text{N}+..)=4.38\times 10^{-5}$ 7 $\alpha(\text{N})=4.09\times 10^{-5}$ 6; $\alpha(\text{O})=2.88\times 10^{-6}$ 4 $\text{B}(\text{E1})(\text{W.u.})=4.5\times 10^{-8}$ 7 $\text{B}(\text{E1})(\text{W.u.})=1.7\times 10^{-6}$ 2
933.780	7/2 ⁺	527.901 7 105.200 25	100 2 0.221 9	336.244 1/2 ⁻ 828.588 3/2 ⁺	E1 E2			1.290	$\alpha(\text{K})=0.965$ 14; $\alpha(\text{L})=0.263$ 4; $\alpha(\text{M})=0.0529$ 8; $\alpha(\text{N}+..)=0.00943$ 14 $\alpha(\text{N})=0.00909$ 13; $\alpha(\text{O})=0.000345$ 5 $\text{B}(\text{E2})(\text{W.u.})=4.8\times 10^1$ 4 $\text{B}(\text{M1})(\text{W.u.})=4.7\times 10^{-4}$ 4 $\text{B}(\text{E1})(\text{W.u.})=51$ 5 $\text{B}(\text{E2})(\text{W.u.})=1.32$ 12
941.424	5/2 ⁺	933.808 34 344.6 1 941.420 11	100 2 11.4 7 100	0.0 9/2 ⁺ 597.144 3/2 ⁻ 0.0 9/2 ⁺	M1(+E2) E1 E2		+0.02 5		
1041.44	5/2 ⁻	444.3 10 705.18 25	14 100	597.144 3/2 ⁻ 336.244 1/2 ⁻					
1078.16	5/2 ⁺	136.3 480.5	1.2 2 18.7 3	941.424 5/2 ⁺ 597.144 3/2 ⁻	[M1] E1			0.22	$\text{B}(\text{M1})(\text{W.u.})=0.10$ 2 $\text{B}(\text{E1})(\text{W.u.})=4.6\times 10^{-4}$ 3 $\text{B}(\text{E2})(\text{W.u.})=1.11\times 10^1$ 6
1132.576	11/2 ⁺	1132.573 11	100	0.0 9/2 ⁺	E2				$\text{B}(\text{E2})(\text{W.u.})=29$ 4; $\text{B}(\text{M1})(\text{W.u.})=0.185$ 11
1192.491	(3/2)	252.0 10 328.38 10 363.95 10 595.375 24 856.245 13	1.5 11 54 8 100 10 28 3 36.1 16	941.424 5/2 ⁺ 864.139 1/2 ⁺ 828.588 3/2 ⁺ 597.144 3/2 ⁻ 336.244 1/2 ⁻					

Adopted Levels, Gammas (continued)

$\gamma(^{115}\text{In})$ (continued)

$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\#$	E_f	J_f^π	Mult. [‡]	δ	$\alpha^@$	Comments
1287.41	1/2,3/2 ⁻ ,5/2 ⁻	690.23 4	100 10	597.144	3/2 ⁻				
		951.19 6	46 5	336.244	1/2 ⁻				
1290.592	13/2 ⁺	158.027 20	1.91 2	1132.576	11/2 ⁺	M1+E2	+0.02 1	0.144	B(E2)(W.u.)=3.3 +42-29; B(M1)(W.u.)=0.27 3
		1290.585 11	100 2	0.0	9/2 ⁺	E2			B(E2)(W.u.)=11.1 12
1347.5	(5/2 ⁻)	518.9 10	100	828.588	3/2 ⁺				
		750.3 10	56	597.144	3/2 ⁻				
1418.249	(11/2 ⁺)	476.67 20	0.034 7	941.424	5/2 ⁺				
		484.471 15	100 6	933.780	7/2 ⁺	M1+E2	+4.0 2		Mult.: (E2) from ΔJ^π .
		1418.243 11	0.63 3	0.0	9/2 ⁺				
1448.787	9/2 ⁺	316.201 17	15.5 5	1132.576	11/2 ⁺	M1		0.023	Mult.: $\delta=0.00$ 4.
		370.61 7	0.047 24	1078.16	5/2 ⁺				
		507.36 6	1.53 12	941.424	5/2 ⁺				
		515.05 7	0.59 24	933.780	7/2 ⁺				
		1448.776 6	100 6	0.0	9/2 ⁺	M1+E2	≈ -8		B(E2)(W.u.) ≈ 4.5 ; B(M1)(W.u.) ≈ 0.00019
1463.5	7/2 ⁺	385.8 10	6.2 5	1078.16	5/2 ⁺	M1+E2	≈ -0.05	0.014	B(E2)(W.u.) ≈ 39 ; B(M1)(W.u.) ≈ 3.0
		1463.3 7	100	0.0	9/2 ⁺	M1+E2	-0.31 7		B(E2)(W.u.)=1.7 8; B(M1)(W.u.)=0.050 9
1478.49		544.70 20	100 15	933.780	7/2 ⁺				
		1478.5 3	17 10	0.0	9/2 ⁺				
1486.110	9/2 ⁺	353.3 6	20.6 9	1132.576	11/2 ⁺	M1+E2	+0.8 6	0.018 1	B(E2)(W.u.)=460 +300-410; B(M1)(W.u.)=0.11 7
		544.70 20	4.7 8	941.424	5/2 ⁺	E2			
		1486.100 10	100 7	0.0	9/2 ⁺	M1+E2	≈ -0.95		B(E2)(W.u.) ≈ 2.0 ; B(M1)(W.u.) ≈ 0.0064
1497.2	(7/2 ⁺)	455.7	28	1041.44	5/2 ⁻				
		1497.2	100	0.0	9/2 ⁺				
1602.3	(7/2 ⁺)	1602.3	100	0.0	9/2 ⁺				
1608.1	(7/2 ⁺)	530.2	45	1078.16	5/2 ⁺				
		1607.8	100	0.0	9/2 ⁺				
1736.9	(9/2 ⁺)	318.8	62	1418.249	(11/2 ⁺)				
		604.3	100	1132.576	11/2 ⁺				
		1736.9	95	0.0	9/2 ⁺				
1801.0	(5/2 ⁺)	867.2 8	100	933.780	7/2 ⁺				
1830.9	(5/2 ⁺)	897.1 8	100	933.780	7/2 ⁺				
1872.4	(9/2 ⁻)	830.9	49	1041.44	5/2 ⁻				
		938.6	100	933.780	7/2 ⁺				
1917.6		627.0	100	1290.592	13/2 ⁺				
1971.6	(9/2 ⁺)	523.0	33	1448.787	9/2 ⁺				
		1971.4	100	0.0	9/2 ⁺				
1978.3	7/2 ⁺ ,9/2 ⁺	845.7	100	1132.576	11/2 ⁺				
		1978.3	12	0.0	9/2 ⁺				
1999.1	(7/2 ⁺)	550.6	49	1448.787	9/2 ⁺				
		957.5	100	1041.44	5/2 ⁻				
		1999.0	64	0.0	9/2 ⁺				
2057.3	(5/2 ⁺)	2057.3	100	0.0	9/2 ⁺				

Adopted Levels, Gammas (continued)

$\gamma(^{115}\text{In})$ (continued)							
$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\#$	E_f	J_f^π	Mult. ‡	Comments
2071.0	7/2,9/2 ⁻	652.8		1418.249	(11/2 ⁺)		
		2071.0 4		0.0	9/2 ⁺	(E1)	
2107.82	7/2,9/2,11/2 ⁻	2107.8 2	100	0.0	9/2 ⁺	(E1)	
2113.7	(9/2 ⁺)	981.1		1132.576	11/2 ⁺		
		2113.7		0.0	9/2 ⁺		
2119.0	(15/2 ⁺)	701		1418.249	(11/2 ⁺)		
2136.79	(15/2 ⁻)	846.2 1	100	1290.592	13/2 ⁺	(E1)	
2170.7	(5/2 ⁺)	2170.7	100	0.0	9/2 ⁺		
2234.0	(5/2 ⁺)	2234.0 3	100	0.0	9/2 ⁺		
2254.2	(17/2 ⁺)	964		1290.592	13/2 ⁺		
2264.0	(7/2 ⁺)	916.5 3		1347.5	(5/2 ⁻)		
		2264.0 3		0.0	9/2 ⁺		
2282.99	(17/2 ⁻)	146.2 1	100	2136.79	(15/2 ⁻)	(M1,E2)	
2283.4	(7/2 ⁺ ,9/2 ⁺)	797.7	100	1486.110	9/2 ⁺		
		2283.0	80	0.0	9/2 ⁺		
2309.5	(17/2 ⁺)	1019.1 3	100	1290.592	13/2 ⁺		
2384.6	7/2 ⁻ ,9/2 ⁻ ,11/2 ⁻	2384.6 3	100	0.0	9/2 ⁺	(E1)	
2443.13	7/2,9/2,11/2 ⁻	2443.1 2	100	0.0	9/2 ⁺	(E1)	
2479.7	7/2 ⁻ ,9/2 ⁻ ,11/2 ⁻	2479.7 3	100	0.0	9/2 ⁺	(E1)	
2539.09	(19/2 ⁻)	256.1 1	100	2282.99	(17/2 ⁻)	(M1,E2)	
2540.73	7/2 ⁻ ,9/2 ⁻ ,11/2 ⁻	2540.7 2	100	0.0	9/2 ⁺	(E1)	
2580.0		2580.0 3	100	0.0	9/2 ⁺		
2646.0		336 1		2309.5	(17/2 ⁺)		
		392 1		2254.2	(17/2 ⁺)		
2739.94		2739.9 2	100	0.0	9/2 ⁺		
2746.7		2746.7 4	100	0.0	9/2 ⁺		
2827.5		2827.5 3	100	0.0	9/2 ⁺		
2831.4	(21/2 ⁻)	292 1	100	2539.09	(19/2 ⁻)		
2852.2		2852.2 4	100	0.0	9/2 ⁺		
2878.4	(21/2 ⁺)	(10 1)		2878.4	(21/2 ⁺)		E $_\gamma$: required by $\gamma\gamma$ coin data.
		339 1		2540.73	7/2 ⁻ ,9/2 ⁻ ,11/2 ⁻		
		569 1		2309.5	(17/2 ⁺)		
2896.7		2896.7 4	100	0.0	9/2 ⁺		
2947.0	(19/2 ⁺)	828 1	100	2119.0	(15/2 ⁺)		
2960.4	(23/2 ⁺)	82 1	100	2878.4	(21/2 ⁺)		
2994.4		2994.4 6	100	0.0	9/2 ⁺		
3037.4	(23/2 ⁻)	206 1	100	2831.4	(21/2 ⁻)		
3042.9		3042.9 5	100	0.0	9/2 ⁺		
3096.4	(25/2 ⁺)	136 1	100	2960.4	(23/2 ⁺)		
3158.2		3158.2 7	100	0.0	9/2 ⁺		
3183.4	(25/2 ⁻)	146 1	100	3037.4	(23/2 ⁻)		
3220.7		3220.7 6	100	0.0	9/2 ⁺		

Adopted Levels, Gammas (continued)

γ(¹¹⁵In) (continued)

E _i (level)	J ^π _i	E _γ [†]	I _γ [#]	E _f	J ^π _f	E _i (level)	J ^π _i	E _γ [†]	I _γ [#]	E _f	J ^π _f
3231.5		3231.5 3	100	0.0	9/2 ⁺	3684.7		3684.6 9	100	0.0	9/2 ⁺
3272.0		3271.9 3	100	0.0	9/2 ⁺	3701.1		3701.0 5	100	0.0	9/2 ⁺
3289.0		3288.9 4	100	0.0	9/2 ⁺	3847.7	(27/2 ⁻)	664 1	100	3183.4	(25/2 ⁻)
3386.6		3386.5 5	100	0.0	9/2 ⁺	4041.4	(29/2 ⁺)	569 1	100	3472.4	(27/2 ⁺)
3395.1		3395.0 5	100	0.0	9/2 ⁺	4583.1	(29/2 ⁻)	735 1		3847.7	(27/2 ⁻)
3472.4	(27/2 ⁺)	376 1	100	3096.4	(25/2 ⁺)			1400 1		3183.4	(25/2 ⁻)

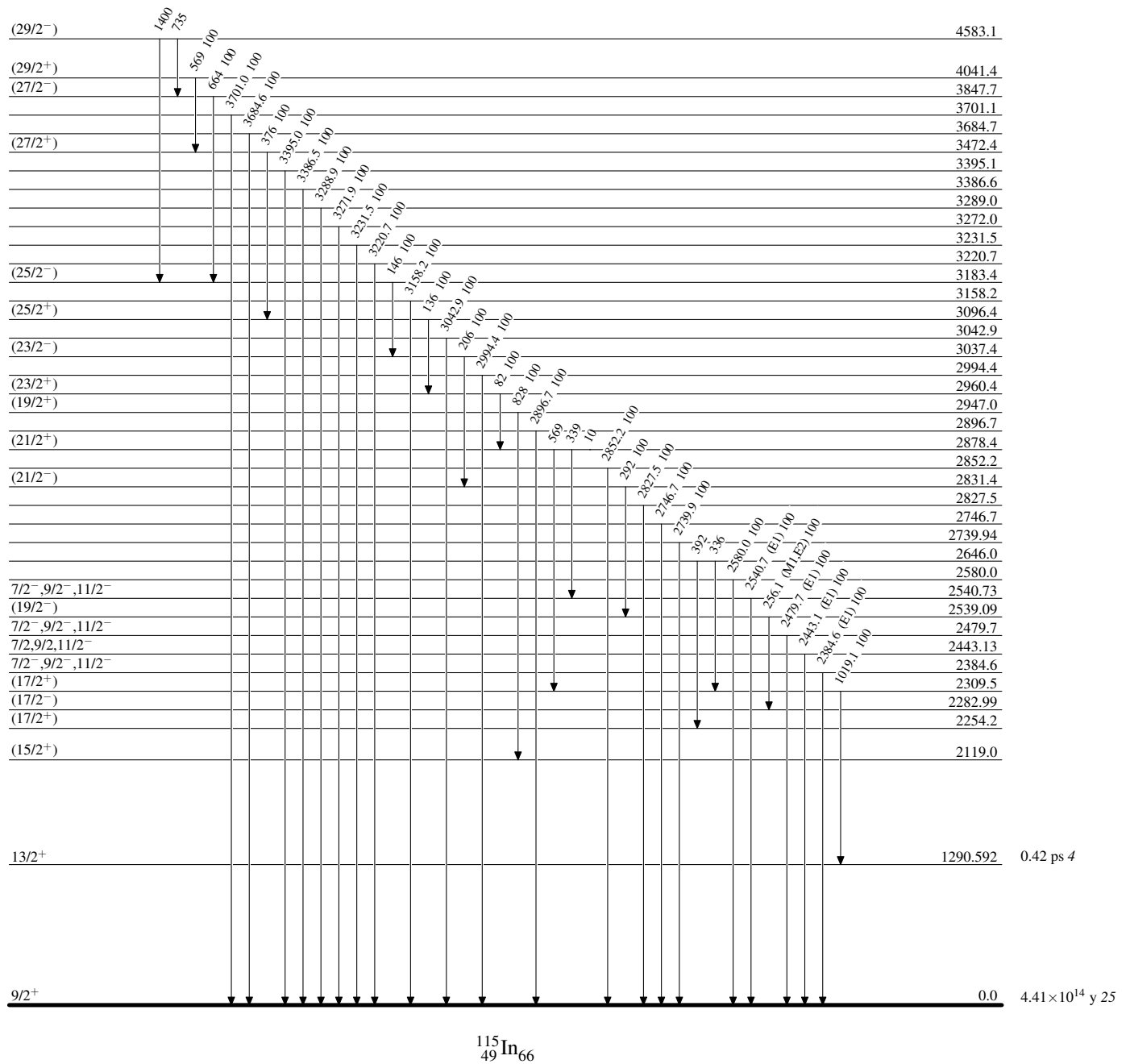
[†] From ¹¹⁵Cd decay if available.
[‡] From ¹¹⁵Cd decay derived from ce data, and from (HI,xnγ) based on DCO ratios.
[#] Relative photon branching from each level.
[@] Total theoretical internal conversion coefficients, calculated using the BrIcc code ([2008Ki07](#)) with Frozen orbital approximation based on γ-ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.

Adopted Levels, Gammas

Legend

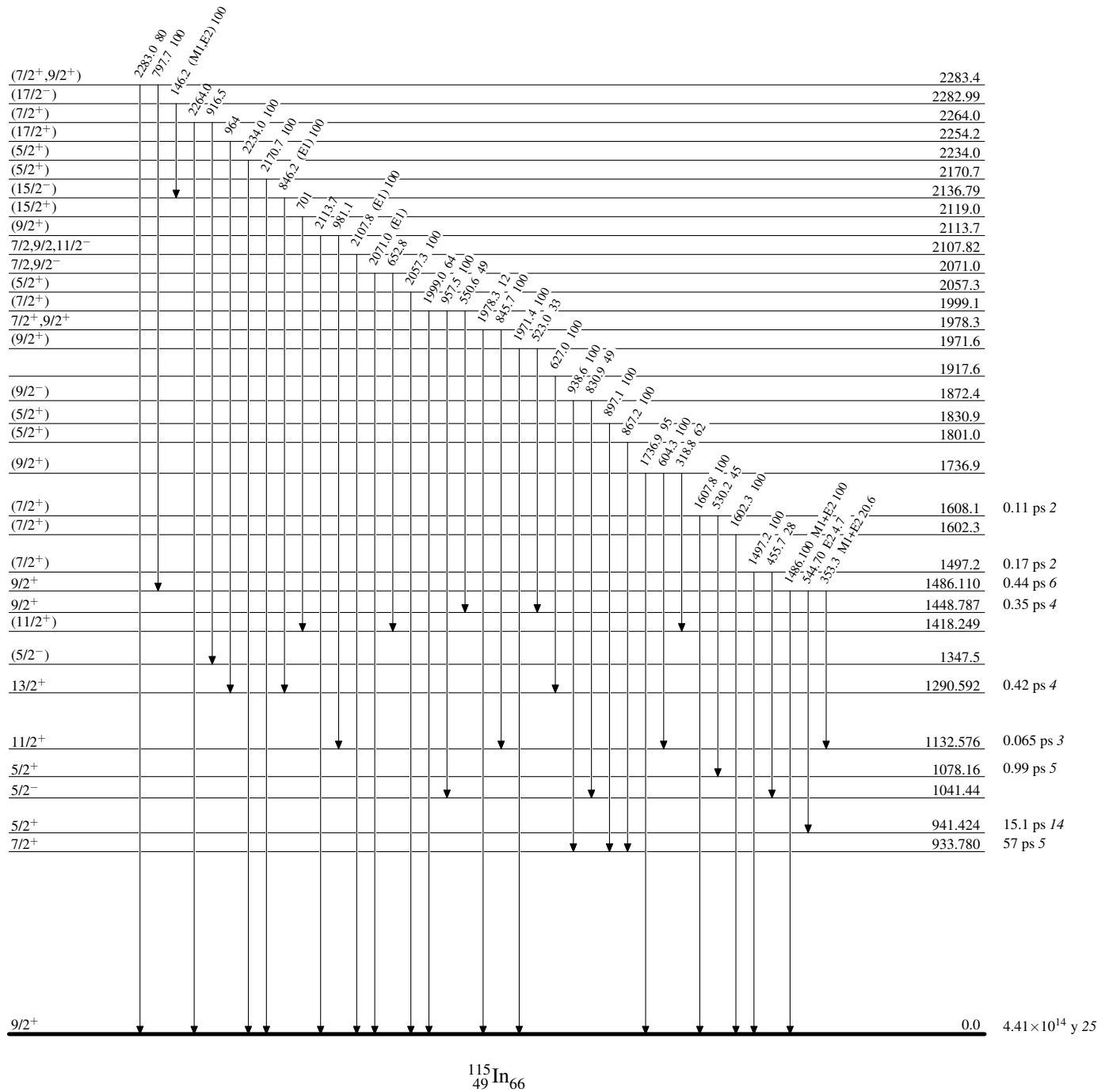
Level Scheme

Intensities: Relative photon branching from each level

-----► γ Decay (Uncertain)

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

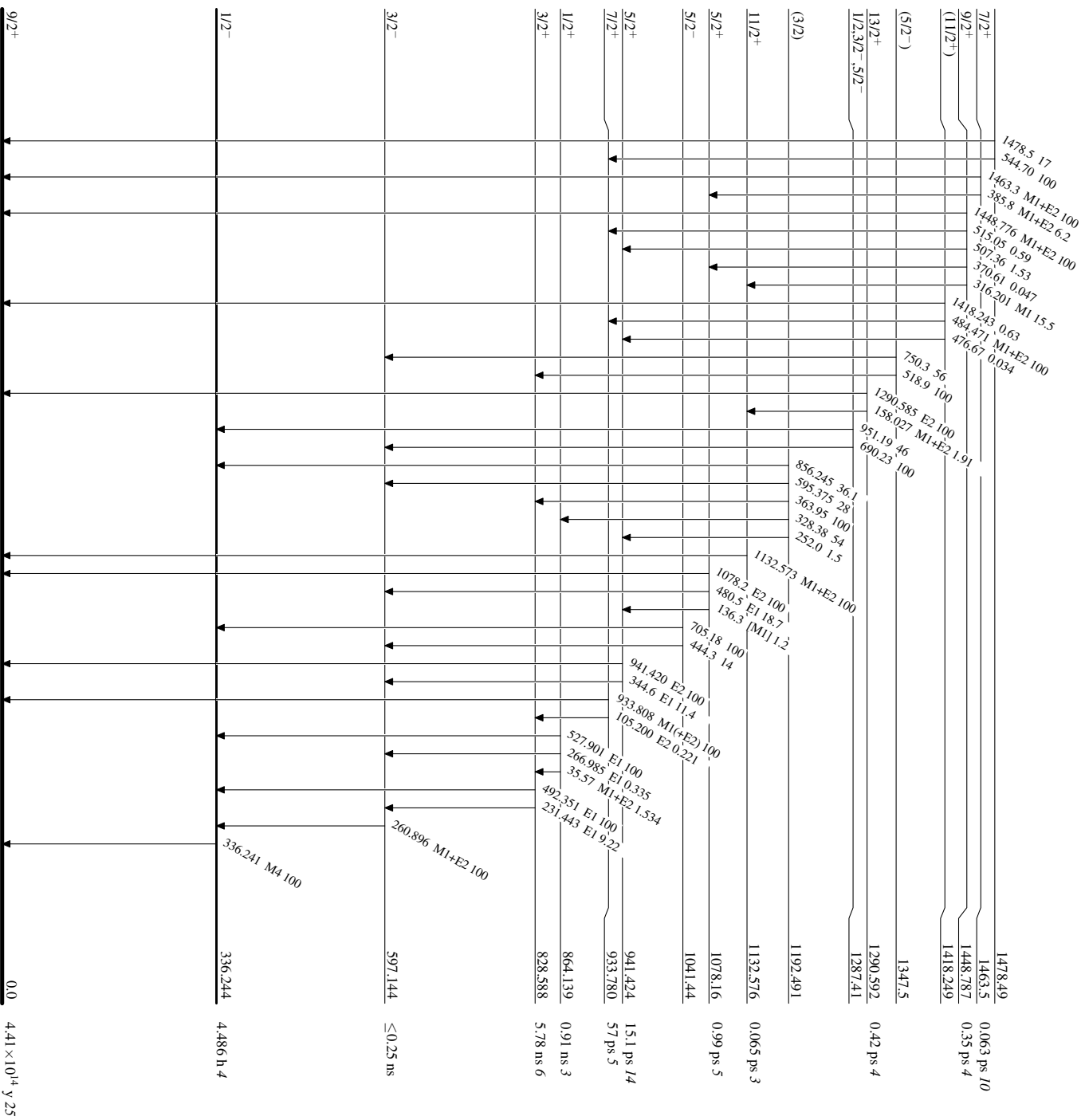
Intensities: Relative photon branching from each level



Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



Adopted Levels, Gammas