Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	S. Ohya	NDS 111,1619 (2010)	20-Jan-2009

Q(β^-)=3.36×10^3 *3*; S(n)=8.18×10^3 *5*; S(p)=9.17×10^3 *3*; Q(α)=−6.08×10^3 *3* 2012Wa38
Note: Current evaluation has used the following Q record 3363 278177 499173 28-6080 31 2009AuZZ.

^{121}In Levels

Cross Reference (XREF) Flags

A ^{121}Cd β^- decay (13.5 s)
B ^{121}Cd β^- decay (8.3 s)
C ^{121}In IT decay (3.88 min)
D ^{122}Sn(d,^{3}He)
E ^{124}Sn(p,α)
F ^{238}U(^{12}C,xγ)

E(level)‡	J$^\pi$	T$_{1/2}$†	XREF	Comments
0.0#	9/2$^+$	23.1 s *6*	ABCDEF	%β^-=100 μ=+5.502 *5*; Q=+0.814 *11*; Configuration=(π 1g$_{9/2}$)$^{-1}$ J$^\pi$: from on-line atomic beam magnetic resonance (1984Be40) and L=4 in (d,^{3}He) and (p,α). T$_{1/2}$: from 1974Gr29. Others: 30 s *3* (1960Yu01), 29 s *8* (1963Wa30), 30.0 s *2* (1974Sc05). μ: from 2005St24; value relative to μ=+5.5408 *2* for ^{115}In. Q: from 2005St24; Sternheimer correction or other correction included.
313.68 *7*	1/2$^-$	3.88 min *10*	A CDE	%β^-=98.8 *2*; %IT=1.2 *2* μ=−0.355 *4*; Configuration=(π 3p$_{1/2}$)$^{-1}$ E(level): from weighted average from decay (13.5 s, 3.88 m). %β^-, %IT from 1976Fo02. J$^\pi$: from on-line atomic beam magnetic resonance (1984Be40) and L=1 in (d,^{3}He), (p,α). T$_{1/2}$: from 1974Gr29. Others: 3.1 min *3* (1960Yu01), 3.3 min *10* (1963Wa30), 3.1 min *4* (1965We04). μ: from 2005St24; value relative to μ=+5.5408 *2* for ^{115}In.
637.90 *7*	3/2$^-$		A DE	Configuration=(π 2p$_{3/2}$)$^{-1}$ J$^\pi$: L=1 in (d,^{3}He); J=3/2 is consistent with angular distribution and cross section in (p,α).
987.17& *10*	(3/2$^+$)	5.5 ns *3*	A	J$^\pi$: log *ft*=6.3 from (3/2$^+$); systematics suggest (3/2$^+$) in odd indium isotopes. T$_{1/2}$: from β γ(t) in ^{121}Cd β^- decay.
987.69& *6*	(9/2)$^+$		AB F	J$^\pi$: γ's from (13/2)$^+$, (5/2)$^+$.
1020.83# *6*	(9/2,11/2,13/2)$^+$		B DEF	J$^\pi$: γ to 9/2$^+$, E2 γ from (13/2)$^+$.
1040.33 *8*	(5/2)$^+$		A	J$^\pi$: γ's to 9/2$^+$, 3/2$^-$; log *ft*≤6.2 from (3/2$^+$).
1078.98 *10*	5/2$^-$		A D	J$^\pi$: L=3 in (p,α); J=5/2 is consistent with angular distribution and cross section in (p,α).
1181.55# *7*	(13/2)$^+$		B EF	Configuration=((120Sν 2$^+$)(π 1g$_{9/2}$)$^{-1}$) J$^\pi$: 13/2$^+$ is consistent with angular distribution and cross section in (p,α); E2 γ to π=+.
1197.34 *12*	(1/2$^+$)	<2 ns	A	J$^\pi$: γ to 3/2$^-$, (3/2$^+$); systematics of odd mass indium suggests 1/2$^+$. T$_{1/2}$: from $\beta\gamma$(t) in ^{121}Cd β^- decay.
1315.22 *7*	(5/2$^+$)		A	J$^\pi$: log *ft*=5.7 from (3/2$^+$); γ's to 3/2$^-$, 9/2$^+$.
1407.99& *8*	(9/2$^+$)		B D F	J$^\pi$: L=(4) in (d,^{3}He); γ from (11/2$^-$).
1460.6 *4*			A	
1483.26 *9*	(5/2$^+$)		A	J$^\pi$: log *ft*=6.0 from (3/2$^+$); γ to 9/2$^+$.
1487.11 *8*	(9/2$^+$)		B E	Configuration=((120Sν 2$^+$)(π 1g$_{9/2}$)$^{-1}$)

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Adopted Levels, Gammas (continued)

^{121}In Levels (continued)

E(level)‡	Jπ	$T_{1/2}$†	XREF	Comments
				Jπ: J=9/2 is consistent with angular distribution and cross section in (p,α); γ to 9/2+.
1504.02 *9*			B	
1614 *5*			E	
1759.8 *3*			A	
1792.09 *19*			A	
1961.23 *15*	(1/2+,3/2+)		A	Jπ: log *ft*=5.6 from (3/2+); γ to 1/2−.
1965.83 *14*	(1/2+,3/2+,5/2+)		A	Jπ: log *ft*=5.5 from (3/2+).
1977 *5*			E	
1988.80 *18*			A	
2048.0& *10*	(11/2+,13/2+)		F	Jπ: γ to (9/2+) in ^{238}U(^{12}C,xγ) and probable band assignment.
2059.39 *7*	(11/2−)		B	Jπ: log *ft*=4.9 from (11/2−); γ's to (13/2)+, (9/2+).
2114.84 *10*	(9/2−,11/2−)		B	Jπ: log *ft*=5.9 from (11/2−); γ to 9/2+.
2129 *5*			E	
2134.20@ *11*	(15/2−)		B F	Jπ: systematics of high spin states of odd mass indium.
2136.36 *12*	(3/2+)		A	Jπ: log *ft*=5.2 from (3/2+); γ's to 1/2−, 5/2−.
2160.09 *8*	(11/2−)		B	Jπ: log *ft*=5.0 from (11/2−); γ's to (13/2)+, (9/2+).
2222.04 *13*	(1/2+,3/2+,5/2+)		A	Jπ: log *ft*=5.5 from (3/2+).
2247 *5*			E	
2264.91 *10*	(5/2)+		A	Jπ: log *ft*=5.3 from (3/2+); γ to 9/2+.
2292.00 *7*	(11/2−)		B	Jπ: log *ft*=5.1 from (11/2−); γ's to 9/2+, (13/2)+.
2299.49 *14*	(1/2+,3/2+,5/2+)		A	Jπ: log *ft*=5.6 from (3/2+).
2331.90 *10*	(9/2−,11/2−)		B	Jπ: log *ft*=5.3 from (11/2−); γ to 9/2+.
2336.95 *10*	(1/2+,3/2+)		A	Jπ: log *ft*=5.1 from (3/2+); γ to 1/2−.
2357.59 *16*	(9/2−,11/2−,13/2−)		B	Jπ: log *ft*=5.7 from (11/2−).
2364.87 *8*	(11/2−)		B	Jπ: log *ft*=5.1 from (11/2−); γ's to 9/2+, (13/2)+.
2367 *5*			E	
2369.71 *9*	(9/2−,11/2−)		B	Jπ: log *ft*=5.3 from (11/2−); γ to 9/2+.
2382.12 *22*	(3/2+,5/2+)		A	Jπ: log *ft*=5.6 from (3/2+); γ to 5/2−.
2396.4 *3*			B	
2455.05 *7*	(9/2−,11/2−)		B	Jπ: log *ft*=5.0 from (11/2−); γ to 9/2+.
2472.71 *13*	(1/2+,3/2+,5/2+)		A	Jπ: log *ft*=5.5 from (3/2+).
2477.61 *8*	(11/2−,13/2−)		B	Jπ: log *ft*=5.1 from (11/2−); γ to (13/2)+.
2491.81 *11*	(1/2+,3/2+,5/2+)		A	Jπ: log *ft*=5.4 from (3/2+).
2503.76 *16*			B	
2510.78 *10*	(9/2−,11/2−)		B	Jπ: log *ft*=5.4 from (11/2−); γ to 9/2+.
2523.22 *16*	(3/2+,5/2+)		A	Jπ: log *ft*=5.4 from (3/2+); γ to 5/2−.
2538.82 *22*			A	
2562.36 *10*	(11/2−)		B	Jπ: log *ft*=5.2 from (11/2−); γ's to 9/2+, (13/2)+.
2581.39 *11*	(11/2−,13/2−)		B	Jπ: log *ft*=5.2 from (11/2−); γ to (13/2)+.
2611.73 *21*	(1/2+,3/2+,5/2+)		A	Jπ: log *ft*=5.6 from (3/2+).
2134.20+x@	(17/2−)		F	Additional information 1. Jπ: systematics of high spin states of odd mass indium.
2134.20+y@	(19/2−)		F	Additional information 2. Jπ: systematics of high spin states of odd mass indium.
2303.0+y@ *10*	(21/2−)		F	Jπ: systematics of high spin states of odd mass indium.
2348.0+y# *10*	(21/2+)		F	Jπ: systematics of high spin states of odd mass indium.
2447.0+y# *15*	(25/2+)	350 ns *50*	F	Jπ: systematics of high spin states of odd mass indium. $T_{1/2}$: from γ(t) (2002Lu15).
2664.0+y@ *15*	(23/2−)		F	Jπ: systematics of high spin states of odd mass indium.
2774.0+y@ *18*	(25/2−)		F	Jπ: systematics of high spin states of odd mass indium.
2802.0+y# *15*			F	Jπ: systematics of high spin states of odd mass indium.

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Adopted Levels, Gammas (continued)

^{121}In Levels (continued)

E(level)[‡]	J^π	XREF	Comments
3347.0+y[@] *20*	(27/2$^-$)	F	J^π: systematics of high spin states of odd mass indium.
3890.0+y[@] *20*	(29/2$^-$)	F	J^π: systematics of high spin states of odd mass indium.

† Evaluator considers that 23.1-s and 3.88-min components are not well resolved in the half-life measurements by 1974Sc05, 1960Yu01, 1963Wa30, 1965We04.

‡ E(levels) with γ decay are from least-squares fit to Eγ's.

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

@ Band(B): Three-particle configuration. Configuration= $\pi g_{9/2}^{-1}\nu h_{11/2}^{1}(\nu(d_{5/2}$ and/or $g_{7/2})^1)$.

& Band(C): π1/2[431]. Intruder orbital from $\pi(g_{7/2}$ and/or $d_{5/2})$.

Adopted Levels, Gammas (continued)

$\gamma(^{121}In)$

E_i(level)	J_i^π	E_γ[†]	I_γ[#]	E_f	J_f^π	Mult.[@]	α[&]	Comments
313.68	$1/2^-$	313.60 *9*	100	0.0	$9/2^+$	M4	1.481	B(M4)(W.u.)=10.2 *18* α(K)=1.163 *17*; α(L)=0.256 *4*; α(M)=0.0525 *8*; α(N+..)=0.00997 *14* α(N)=0.00942 *14*; α(O)=0.000545 *8*
637.90	$3/2^-$	324.22 *10*	100	313.68	$1/2^-$	M1,E2	0.024 *3*	E_γ: from weighted average from decay (13.5 s, 3.88 m). α(K)=0.0205 *19*; α(L)=0.0028 *5*; α(M)=0.00054 *10*; α(N+..)=0.000104 *18* α(N)=9.8×10^{-5} *17*; α(O)=6.6×10^{-6} *6* α: for δ=1.0, uncertainty chosen to overlap M1, E2 theory values.
987.17	$(3/2^+)$	349.20 *10*	100 *8*	637.90	$3/2^-$	[E1]	0.00548 *8*	B(E1)(W.u.)=9.4×10^{-7} *12* α(K)=0.00477 *7*; α(L)=0.000571 *8*; α(M)=0.0001102 *16*; α(N+..)=2.15×10^{-5} *3* α(N)=2.01×10^{-5} *3*; α(O)=1.435×10^{-6} *21*
		673.6 *2*	26 *6*	313.68	$1/2^-$	[E1]	0.001150 *17*	B(E1)(W.u.)=3.4×10^{-8} *9* α(K)=0.001004 *14*; α(L)=0.0001181 *17*; α(M)=2.28×10^{-5} *4*; α(N+..)=4.47×10^{-6} α(N)=4.17×10^{-6} *6*; α(O)=3.06×10^{-7} *5*
987.69	$(9/2)^+$	987.81 *10*	100	0.0	$9/2^+$			
1020.83	$(9/2,11/2,13/2)^+$	1020.89 *10*	100 *3*	0.0	$9/2^+$			
1040.33	$(5/2)^+$	402.51 *10*	21 *1*	637.90	$3/2^-$			
		1040.26 *15*	100 *6*	0.0	$9/2^+$			
1078.98	$5/2^-$	441.1 *2*	29 *3*	637.90	$3/2^-$			
		765.28 *10*	100 *7*	313.68	$1/2^-$			
1181.55	$(13/2)^+$	160.73 *15*	4.4 *5*	1020.83	$(9/2,11/2,13/2)^+$	E2	0.288	α(K)=0.231 *4*; α(L)=0.0455 *7*; α(M)=0.00903 *13*; α(N+..)=0.001654 *24* α(N)=0.001579 *23*; α(O)=7.59×10^{-5} *11*
		194.6 *3*	2.0 *3*	987.69	$(9/2)^+$	[E2]	0.147	α(K)=0.1208 *18*; α(L)=0.0214 *4*; α(M)=0.00423 *7*; α(N+..)=0.000784 *12* α(N)=0.000745 *12*; α(O)=3.90×10^{-5} *6*
		1181.45 *10*	100 *3*	0.0	$9/2^+$			
1197.34	$(1/2^+)$	210.21 *10*	100 *6*	987.17	$(3/2^+)$	E2	0.113	α(K)=0.0931 *14*; α(L)=0.01591 *23*; α(M)=0.00314 *5*; α(N+..)=0.000584 *9* α(N)=0.000554 *8*; α(O)=2.99×10^{-5} *5* B(E2)(W.u.)>12
		559.34 *15*	46 *5*	637.90	$3/2^-$	[E1]	0.001738 *25*	B(E1)(W.u.)>2.3×10^{-7} α(K)=0.001517 *22*; α(L)=0.000179 *3*; α(M)=3.46×10^{-5} *5*; α(N+..)=6.78×10^{-6} *10* α(N)=6.32×10^{-6} *9*; α(O)=4.61×10^{-7} *7*
1315.22	$(5/2^+)$	236.2 *4*	7.4 *22*	1078.98	$5/2^-$			

$^{121}_{49}In_{72}$-4

Adopted Levels, Gammas (continued)

γ(^{121}In) (continued)

E_i(level)	J_i^π	E_γ †	I_γ #	E_f	J_f^π	Mult. @	α &	Comments
1315.22	(5/2$^+$)	274.91 *10*	30 *2*	1040.33	(5/2)$^+$			
		328.0 *2*	27 *7*	987.17	(3/2$^+$)			
		677.21 *10*	52 *4*	637.90	3/2$^-$			
		1315.18 *10*	100 *5*	0.0	9/2$^+$			
1407.99	(9/2$^+$)	420.10 *10*	100 *5*	987.69	(9/2)$^+$	M1,E2	0.0114 *4*	α(K)=0.00985 *21*; α(L)=0.00128 *11*; α(M)=0.000249 *21*; α(N+..)=4.8×10^{-5} *4* α(N)=4.5×10^{-5} *4*; α(O)=3.15×10^{-6} *5* α: for δ=1.0.
		1408.0 *2*	7 *2*	0.0	9/2$^+$			
1460.6		381.6 *3*	100	1078.98	5/2$^-$			
1483.26	(5/2$^+$)	1483.23 *10*	100	0.0	9/2$^+$			
1487.11	(9/2$^+$)	466.15 *10*	57 *3*	1020.83	(9/2,11/2,13/2)$^+$			
		1487.27 *15*	100 *5*	0.0	9/2$^+$			
1504.02		1504.07 *10*	100	0.0	9/2$^+$			
1759.8		1121.9 *3*	100	637.90	3/2$^-$			
1792.09		594.74 *15*	100	1197.34	(1/2$^+$)			
1961.23	(1/2$^+$,3/2$^+$)	1323.6 *3*	30 *6*	637.90	3/2$^-$			
		1647.47 *15*	100 *6*	313.68	1/2$^-$			
1965.83	(1/2$^+$,3/2$^+$,5/2$^+$)	650.6 *3*	100 *17*	1315.22	(5/2$^+$)			
		978.6 *3*	43 *11*	987.17	(3/2$^+$)			
		1327.9 *3*	36 *5*	637.90	3/2$^-$			
1988.80		909.82 *15*	100	1078.98	5/2$^-$			
2048.0	(11/2$^+$,13/2$^+$)	640	100	1407.99	(9/2$^+$)			
2059.39	(11/2$^-$)	572.24 *10*	9.6 *6*	1487.11	(9/2$^+$)			
		651.5 *6*	2.4 *6*	1407.99	(9/2$^+$)			
		878.2 *3*	3.3 *9*	1181.55	(13/2)$^+$			
		1038.5 *8*	7 *2*	1020.83	(9/2,11/2,13/2)$^+$			
		2059.41 *10*	100 *4*	0.0	9/2$^+$			
2114.84	(9/2$^-$,11/2$^-$)	1127.0 *8*	15 *4*	987.69	(9/2)$^+$			
		2114.83 *10*	100 *6*	0.0	9/2$^+$			
2134.20	(15/2$^-$)	952.54 *10*	100	1181.55	(13/2)$^+$			
2136.36	(3/2$^+$)	938.9 *3*	16 *4*	1197.34	(1/2$^+$)			
		1057.5 *2*	15 *2*	1078.98	5/2$^-$			
		1096.04 *15*	100 *5*	1040.33	(5/2)$^+$			
		1149.9 *2*	37 *3*	987.17	(3/2$^+$)			E_γ: The energy fit is poor. Not included in the least-squares fit for E(level). From the E(level) difference one expects Eγ =1148.59 *13*.
		1498.4 *5*	4 *2*	637.90	3/2$^-$			
		1822.6 *2*	26 *2*	313.68	1/2$^-$			
2160.09	(11/2$^-$)	100.75 *10*	56.5 *51*	2059.39	(11/2$^-$)	M1	0.500	α(K)=0.433 *7*; α(L)=0.0547 *8*; α(M)=0.01063 *16*; α(N+..)=0.00209 *3* α(N)=0.00194 *3*; α(O)=0.0001435 *21*

$^{121}_{49}In_{72}$-5

Adopted Levels, Gammas (continued)

γ(^{121}In) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[#]	E_f	J_f^π	Mult.[@]	δ	α[&]	Comments
2160.09	(11/2⁻)	751.73 *15*	21 *2*	1407.99	(9/2⁺)				
		978.8 *8*	19 *5*	1181.55	(13/2)⁺				
		1139.35 *10*	100 *7*	1020.83	(9/2,11/2,13/2)⁺				
2222.04	(1/2⁺,3/2⁺,5/2⁺)	1584.13 *10*	100	637.90	3/2⁻				
2264.91	(5/2)⁺	299.06 *15*	55 *8*	1965.83	(1/2⁺,3/2⁺,5/2⁺)				
		781.62 *10*	71 *8*	1483.26	(5/2⁺)				
		1277.1 *3*	100 *20*	987.69	(9/2)⁺				
		1277.7 *3*	66 *18*	987.17	(3/2⁺)				
		1627.13 *15*	92 *5*	637.90	3/2⁻				
2292.00	(11/2⁻)	884.1 *8*	9.5 *25*	1407.99	(9/2⁺)				
		1110.6 *3*	25 *6*	1181.55	(13/2)⁺				
		1271.30 *10*	100 *5*	1020.83	(9/2,11/2,13/2)⁺				
		2291.83 *10*	60 *4*	0.0	9/2⁺				
2299.49	(1/2⁺,3/2⁺,5/2⁺)	1258.8 *2*	37 *6*	1040.33	(5/2)⁺				
		1312.6 *8*	69 *16*	987.17	(3/2⁺)				
		1661.77 *15*	100 *9*	637.90	3/2⁻				
2331.90	(9/2⁻,11/2⁻)	827.8 *4*	27 *8*	1504.02					
		844.6 *3*	35 *11*	1487.11	(9/2⁺)				
		1311.0 *8*	24 *6*	1020.83	(9/2,11/2,13/2)⁺				
		2331.90 *10*	100 *6*	0.0	9/2⁺				
2336.95	(1/2⁺,3/2⁺)	1296.86 *10*	69 *4*	1040.33	(5/2)⁺				
		1698.85 *10*	100 *4*	637.90	3/2⁻				
		2023.0 *2*	4 *1*	313.68	1/2⁻				
2357.59	(9/2⁻,11/2⁻,13/2⁻)	1336.75 *15*	100	1020.83	(9/2,11/2,13/2)⁺				
2364.87	(11/2⁻)	860.7 *6*	6.8 *21*	1504.02					
		956.9 *8*	4.2 *10*	1407.99	(9/2⁺)				
		1183.4 *2*	16 *5*	1181.55	(13/2)⁺				
		2364.83 *10*	100 *5*	0.0	9/2⁺				
2369.71	(9/2⁻,11/2⁻)	865.7 *4*	18 *5*	1504.02					
		1381.97 *10*	100 *7*	987.69	(9/2)⁺				
		2369.77 *15*	33 *3*	0.0	9/2⁺				
2382.12	(3/2⁺,5/2⁺)	899.0 *3*	74 *11*	1483.26	(5/2⁺)				
		1302.6 *4*	100 *11*	1078.98	5/2⁻				
		1744.5 *4*	44 *7*	637.90	3/2⁻				
2396.4		1214.8 *3*	100	1181.55	(13/2)⁺				
2455.05	(9/2⁻,11/2⁻)	340.4 *4*	8.7 *22*	2114.84	(9/2⁻,11/2⁻)				
		1433.81 *15*	15 *2*	1020.83	(9/2,11/2,13/2)⁺				
		1467.54 *10*	69 *3*	987.69	(9/2)⁺				
		2455.00 *10*	100 *9*	0.0	9/2⁺				
2472.71	(1/2⁺,3/2⁺,5/2⁺)	1834.79 *10*	100	637.90	3/2⁻				
2477.61	(11/2⁻,13/2⁻)	112.74 *10*	52 *4*	2364.87	(11/2⁻)	M1+E2	+0.76 *+55−43*	0.60 *18*	α(K)=0.48 *13*; α(L)=0.10 *5*; α(M)=0.019

Adopted Levels, Gammas (continued)

γ(^{121}In) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[#]	E_f	J_f^π	Mult.[@]	α[&]	Comments
								9; α(N+..)=0.0035 *15* α(N)=0.0034 *15*; α(O)=0.00016 *5*
2477.61	(11/2$^-$,13/2$^-$)	185.6 *3*	15 *5*	2292.00	(11/2$^-$)			
		317.4 *4*	21 *5*	2160.09	(11/2$^-$)			
		418.2 *8*	11 *3*	2059.39	(11/2$^-$)			
		1069.49 *10*	100 *5*	1407.99	(9/2$^+$)			
		1296.2 *8*	27 *6*	1181.55	(13/2)$^+$			
		1456.90 *10*	88 *5*	1020.83	(9/2,11/2,13/2)$^+$			
2491.81	(1/2$^+$,3/2$^+$,5/2$^+$)	1451.20 *15*	42 *4*	1040.33	(5/2)$^+$			
		1504.6 *8*	14 *4*	987.17	(3/2$^+$)			
		1854.02 *10*	100 *9*	637.90	3/2$^-$			
2503.76		1000.0 *2*	100 *14*	1504.02				
		1515.8 *2*	90 *13*	987.69	(9/2)$^+$			
2510.78	(9/2$^-$,11/2$^-$)	1102.9 *6*	11 *4*	1407.99	(9/2$^+$)			
		2510.75 *10*	100 *7*	0.0	9/2$^+$			
2523.22	(3/2$^+$,5/2$^+$)	1039.9 *8*	35 *12*	1483.26	(5/2$^+$)			
		1325.9 *5*	30 *7*	1197.34	(1/2$^+$)			
		1444.2 *5*	19 *5*	1078.98	5/2$^-$			
		1885.30 *15*	100 *7*	637.90	3/2$^-$			
2538.82		1900.9 *2*	100 *18*	637.90	3/2$^-$			
2562.36	(11/2$^-$)	502.9 *6*	17 *6*	2059.39	(11/2$^-$)			
		1380.9 *8*	10 *3*	1181.55	(13/2)$^+$			
		2562.33 *10*	100 *6*	0.0	9/2$^+$			
2581.39	(11/2$^-$,13/2$^-$)	289.43 *15*	15 *2*	2292.00	(11/2$^-$)			
		447.08 *10*	100 *6*	2134.20	(15/2$^-$)			
		1174.1 *3*	20 *3*	1407.99	(9/2$^+$)			
		1399.9 *2*	14 *2*	1181.55	(13/2)$^+$			
2611.73	(1/2$^+$,3/2$^+$,5/2$^+$)	1128.6 *8*	100 *35*	1483.26	(5/2$^+$)			
		1973.8 *2*	95 *10*	637.90	3/2$^-$			
2134.20+x	(17/2$^-$)	x[‡]		2134.20	(15/2$^-$)			E_γ: x <60.
2134.20+y	(19/2$^-$)	y[‡]		2134.20	(15/2$^-$)			E_γ: y <60.
2303.0+y	(21/2$^-$)	169[‡]		2134.20+y	(19/2$^-$)			
2348.0+y	(21/2$^+$)	214[‡]		2134.20+y	(19/2$^-$)			
2447.0+y	(25/2$^+$)	99[‡]		2348.0+y	(21/2$^+$)	[E2]	1.601	B(E2)(W.u.)=1.8 *3* α(K)=1.179 *17*; α(L)=0.341 *5*; α(M)=0.0687 *10*; α(N+..)=0.01222 *18* α(N)=0.01179 *17*; α(O)=0.000431 *6*
2664.0+y	(23/2$^-$)	361[‡]		2303.0+y	(21/2$^-$)			
2774.0+y	(25/2$^-$)	110[‡]		2664.0+y	(23/2$^-$)			
2802.0+y		454[‡]		2348.0+y	(21/2$^+$)			

$^{121}_{49}In_{72}$-7

Adopted Levels, Gammas (continued)

$\gamma(^{121}In)$ (continued)

E_i(level)	J_i^π	E_γ[†]	E_f	J_f^π
3347.0+y	(27/2$^-$)	573[‡]	2774.0+y	(25/2$^-$)
3890.0+y	(29/2$^-$)	543[‡]	3347.0+y	(27/2$^-$)
		1116[‡]	2774.0+y	(25/2$^-$)

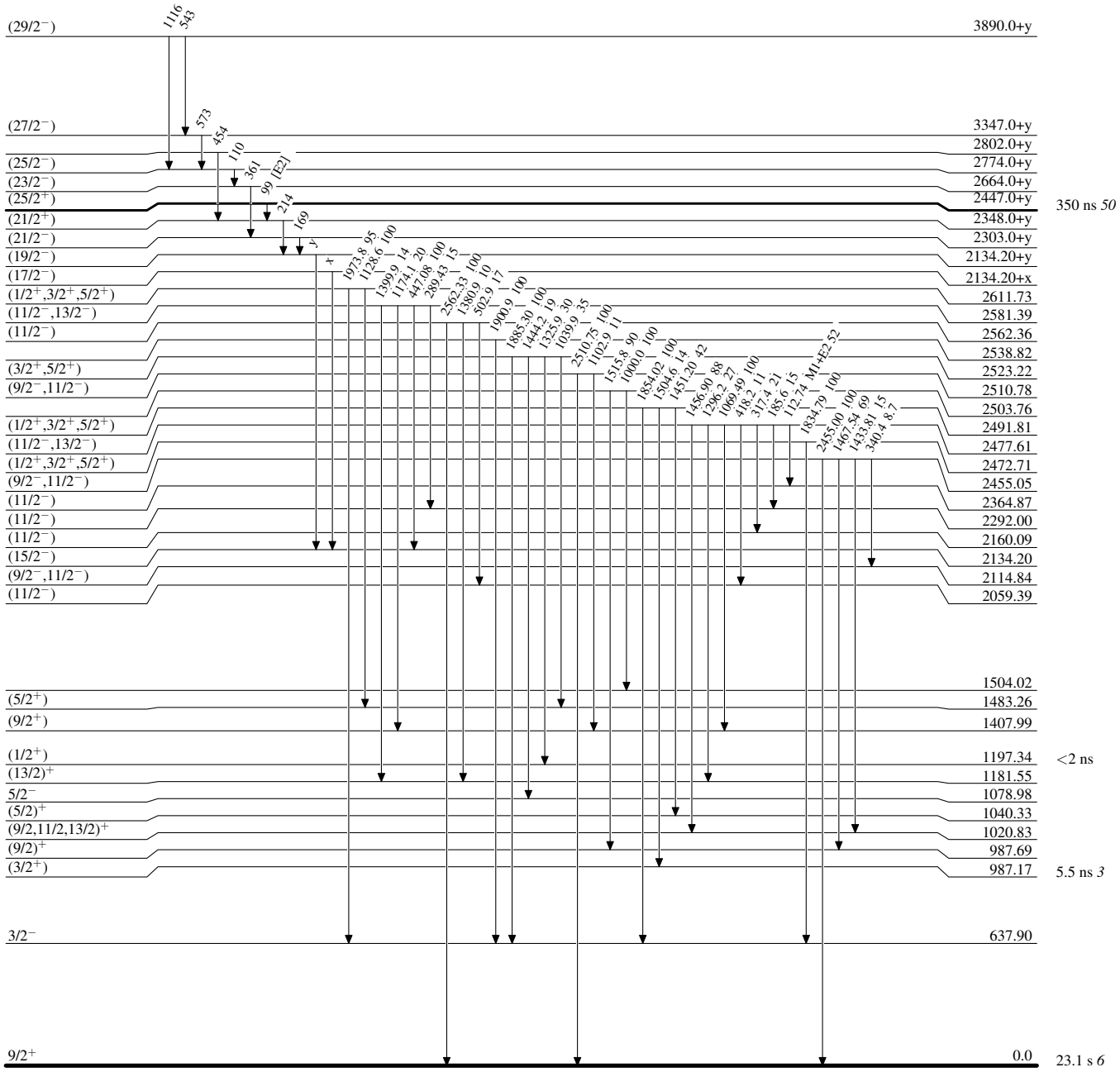
[†] From ^{121}Cd β^- decay (13.5 s, 8.3 s), except as noted.
[‡] From ^{238}U(^{12}C,Xγ).
[#] From ^{121}Cd β^- decay (13.5 s, 8.3 s); multiply placed γ's are divided based on coincidence measurements.
[@] From α(K)exp in ^{121}Cd β^- decay (13.5 s, 8.3 s).
[&] Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ-ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.

$^{121}_{49}In_{72}$-8

Adopted Levels, Gammas

Level Scheme

Intensities: Relative photon branching from each level

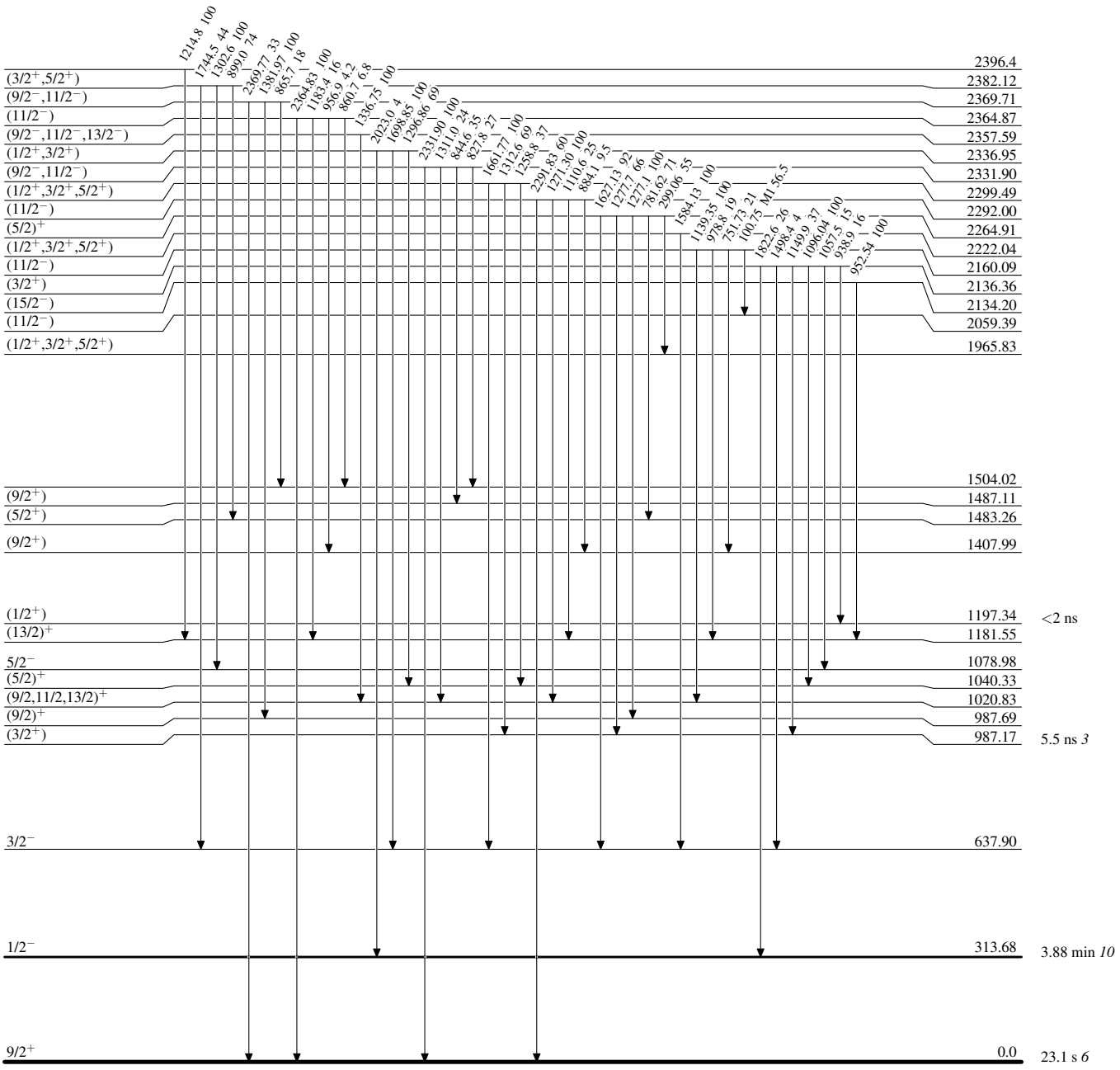


$^{121}_{49}In_{72}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

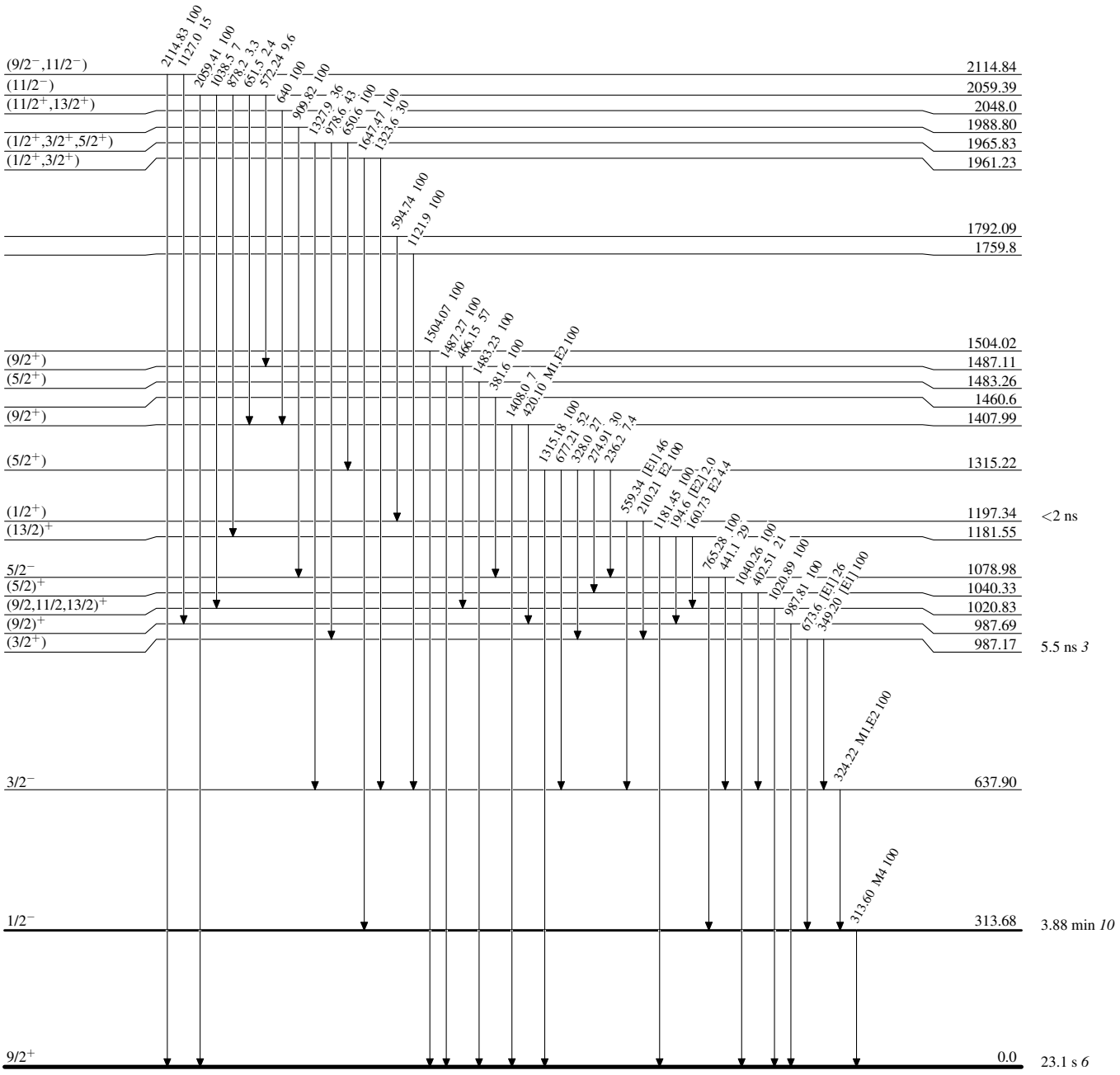


$^{121}_{49}In_{72}$

Adopted Levels, Gammas

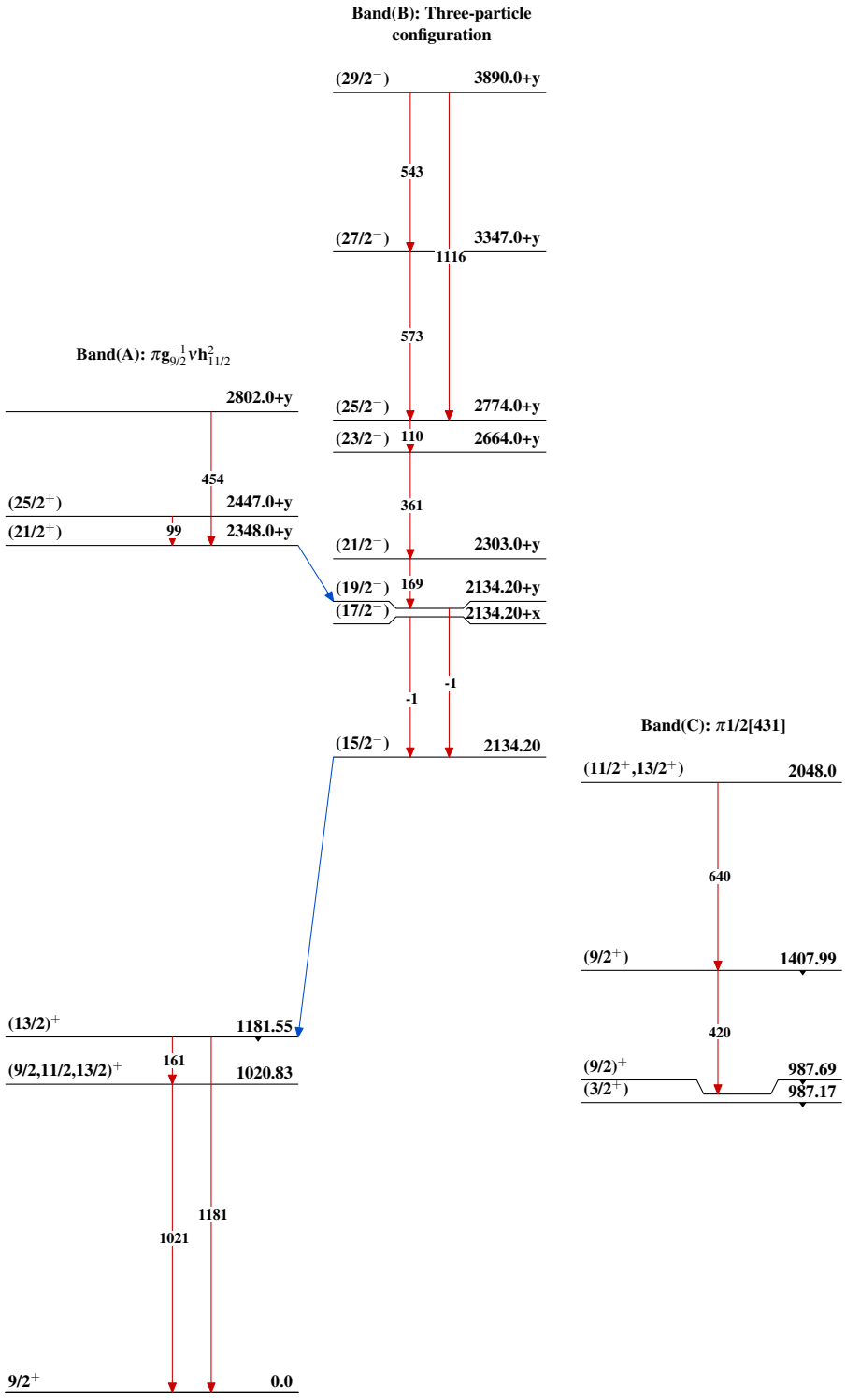
Level Scheme (continued)

Intensities: Relative photon branching from each level



$^{121}_{49}In_{72}$

Adopted Levels, Gammas



$^{121}_{49}In_{72}$