Adopted Levels, Gammas

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Alexandru Negret, Balraj Singh	NDS 114, 841 (2013)	30-Jun-2013

Q(β^-)=−7105 *8*; S(n)=10063 *8*; S(p)=6324 *10*; Q(α)=−3602 *9* 2012Wa38
S(2n)=23915 *10*, S(2p)=10674 *11*, Q(εp)=601 *8* (2012Wa38).
^{75}Kr produced and identified by 1960Bu22 in bombardment of LiBr with 280 MeV protons followed by measurement of half-life. Later studies of ^{75}Kr decay: 1974Ro12, 1974Ho35.
Note that in many ΔJ=1, M1+E2 transitions in the 3/2[301] and 5/2[422] bands, where the mixing ratios seem well measured, the deduced B(E2) values are much higher than the currently RUL(E2)=300 W.u. 1990Sk06 and 1998Sk01 were aware of these anomalous B(E2) values and suggested more precise measurements.
Mass measurements using ^{78}Kr(^{3}He,^{6}He) reaction (1987Mo06).
Nuclear structure calculations: 1992Ta01, 1987Me09, 1985Ah05, 1985Na02, 2010Ya13.
Additional information 1.

^{75}Kr Levels

Cross Reference (XREF) Flags

A	^{75}Rb ε decay (19.0 s)	F	^{46}Ti(^{32}S,2pnγ)
B	^{76}Sr εp decay (7.89 s)	G	^{50}Cr(^{28}Si,2pnγ),
C	^{24}Mg(^{54}Fe,2pnγ)	H	^{54}Fe(^{24}Mg,2pnγ),
D	^{40}Ca(^{39}K,3pnγ)	I	^{74}Se(^{3}He,2nγ)
E	^{40}Ca(^{40}Ca,4pnγ)		

E(level)†	Jπ‡	$T_{1/2}$#	XREF	Comments
0.0@	$5/2^+$	4.60 min *7*	ABCDEFGHI	%ε+%β^+=100 μ=−0.531 *4* (1995Ke04,2011StZZ) Q=+1.12 *12* (1995Ke04,2011StZZ) Jπ: spin from hyperfine structure (1995Ke04). Parity from log *ft*=5.6 to positive parity states (132 and 154) in ^{75}Br. Probable *ν*5/2[422] orbital with β_2=0.4 (1995Ke04). RMS charge radius $<r^2>^{1/2}$=4.2097 fm *41* (2004An14 evaluation; and 2008 update available at http://cdfe.sinp.msu.ru). Δ$<r^2>$(^{86}Kr−^{75}Kr)=0.22 fm^2 *8* (1995Ke04). μ,Q: from hyperfine-structure measurement using collinear fast-beam LASER spectroscopy (1995Ke04). $T_{1/2}$: from 1995BeZS. Others: 4.5 min *3* (1974Ro12), 4.2 min *2* (1974Ho35), 5.5 min *4* (1960Bu22).
178.99b *4*	$(3/2)^-$	2.08 ns *35*	A CDEFGHI	Jπ: ΔJ=1, E1 γ to $5/2^+$; bandhead.
187.16& *6*	$(7/2)^+$	36 ps *4*	A CDEFGH	Jπ: ΔJ=1, M1+E2 γ to $5/2^+$ and band assignment.
358.13a *5*	$(5/2)^-$	43 ps *10*	A CDEFGHI	Jπ: ΔJ=1, M1+E2 γ to $(3/2)^-$; γ to $5/2^+$.
377.86@ *6*	$(9/2)^+$	13.9 ps *11*	CDEFGH	Jπ: ΔJ=1, M1+E2 γ to $(7/2^+)$; ΔJ=2, E2 γ to $5/2^+$ and band assignment.
611.49b *6*	$(7/2)^-$	5.84 ps *24*	A CDEFGHI	Jπ: ΔJ=1, M1+E2 γ to $(5/2)^-$; ΔJ=2, E2 γ to $(3/2)^-$ and band assignment.
629.12 *10*	$(1/2^+,3/2,5/2)$		A	Jπ: γ's to $5/2^+$ and $(3/2)^-$; probable ε feeding from $(3/2^-)$.
671.85l *6*	$(3/2^-,5/2^-)$		A E	Jπ: γ's to $5/2^+$, $(5/2)^-$ and $(3/2)^-$; probable allowed ε feeding from $(3/2^-)$.
726.49g *21*	$(9/2^+)$		E H	
770.04& *7*	$(11/2)^+$	1.73 ps *11*	CDEFGH	Jπ: ΔJ=1, M1+E2 γ to $(9/2)^+$; ΔJ=2, E2 γ to $(7/2)^+$ and band assignment.
786.65c *21*	$(5/2^-)$		E H	

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Adopted Levels, Gammas (continued)

^{75}Kr Levels (continued)

E(level)[†]	Jπ[‡]	$T_{1/2}$[#]	XREF	Comments
833.27 *8*	(1/2⁻,3/2,5/2)		A	Jπ: γ rays to (5/2)⁻ and (3/2)⁻; possible ε feeding from (3/2⁻).
880.76 *10*	(1/2⁻,3/2,5/2)		A	Jπ: γ rays to (5/2)⁻ and (3/2)⁻; possible ε feeding from (3/2⁻).
904.96[a] *6*	(9/2)⁻	2.0 ps *4*	CDEFGHI	Jπ: ΔJ=1, M1+E2 γ to (7/2)⁻; ΔJ=2, E2 γ to (5/2)⁻ and band assignment.
1026.5 *3*	(1/2⁺,3/2,5/2)		A	Jπ: γ′s to 5/2⁺ and (3/2)⁻; possible ε feeding from (3/2⁻).
1042.23 *9*	(3/2⁺,5/2)		A	Jπ: γ rays to 5/2⁺, (3/2)⁻ and (7/2)⁺; possible ε feeding from (3/2⁻).
1067.50[@] *8*	(13/2)⁺	1.32 ps *7*	CDEFGH	Jπ: ΔJ=1, M1+E2 γ to (11/2)⁺; ΔJ=2, E2 γ to (9/2)⁺ and band assignment.
1099.4[l] *3*	(7/2⁻)		E H	
1265.51[b] *7*	(11/2)⁻	0.76 ps *21*	CDEFGH	Jπ: ΔJ=1, M1+E2 γ to (9/2)⁻ and band assignment.
1363.79[c] *21*	(9/2⁻)		E H	
1528.2[g] *3*	(13/2⁺)		E H	
1593.96[&] *11*	(15/2⁺)	0.304 ps *+15–16*	CDEFGH	Jπ: ΔJ=1, (M1+E2) γ to (13/2)⁺; ΔJ=2 γ to (11/2)⁺ and band assignment.
1646.40[a] *9*	(13/2⁻)	0.69 ps *21*	CDEFGH	Jπ: ΔJ=1, (M1+E2) γ to (11/2)⁻; ΔJ=2 γ to (9/2)⁻ and band assignment.
1755.37 *22*	(11/2⁺)		H	
1756.6[k] *4*	(13/2⁺)		E	
1758.87[l] *19*	(11/2⁻)		E GH	XREF: E(1760.7).
1964.06[@] *11*	(17/2⁺)	0.252 ps *+10–24*	CDEFGH	Jπ: ΔJ=1, M1+E2 γ to (15/2⁺); ΔJ=2 γ to (13/2)⁺ and band assignment.
2109.40[b] *9*	(15/2⁻)	0.352 ps *+34–28*	C EFGH	Jπ: ΔJ=1, (M1+E2) γ to (13/2⁻); ΔJ=2 γ to (11/2)⁻ and band assignment.
2113.34[c] *20*	(13/2⁻)		E H	XREF: E(2115.4).
2262.3? *6*			G	
2305.9? *5*	(17/2)		G	
2318.7 *6*			E	
2562.61[a] *12*	(17/2⁻)	0.239 ps *+26–24*	C EFGH	Jπ: ΔJ=1, M1+E2 γ to (15/2⁻); ΔJ=2, E2 γ to (13/2⁻) and band assignment.
2579.1[g] *3*	(17/2⁺)		E H	
2610.8[l] *3*	(15/2⁻)		E H	
2628.31[&] *24*	(19/2⁺)	0.095 ps *12*	C EFGH	Jπ: ΔJ=1, M1+E2 γ to (17/2⁺); ΔJ=2, E2 γ to (15/2⁺) and band assignment.
2655.0[d] *3*	(15/2⁻)		E	
2688.6? *20*			G	
2708.7 *3*	(15/2⁺)		H	
2818.6[k] *9*	(17/2⁺)		E	
2818.8[f] *5*	(15/2⁻)		E	
2859.8 *13*			G	
2918.4? *5*			G	
2957.52[c] *21*	(17/2⁻)		E H	
3040.2[e] *4*	(17/2⁻)		E H	
3049.30[@] *22*	(21/2⁺)	0.110 ps *+4–13*	C EFGH	
3110.53[b] *18*	(19/2⁻)	0.163 ps *+17–23*	C EFGH	Jπ: ΔJ=2 γ to (15/2⁻) and band assignment.
3189.4? *20*			G	
3342.61[d] *20*	(19/2⁻)		E H	
3437.0 *14*			G	
3464.8[m] *17*			H	
3513.7[f] *4*	(19/2⁻)		E	
3588.1[g] *8*	(21/2⁺)		E	

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Adopted Levels, Gammas (continued)

^{75}Kr Levels (continued)

E(level)[†]	Jπ[‡]	$T_{1/2}$[#]	XREF	Comments
3623.58[a] 20	(21/2⁻)	<0.143 ps	C EFGH	XREF: E(3626.8).
3644.7?[l] 9			E	
3766.37[c] 20	(21/2⁻)		E H	XREF: E(3769.3).
3778.4[h] 8	(21/2⁺)		E	
3803.5 5			H	
3823.7[&] 3	(23/2⁺)	0.091 ps +17−14	C EFGH	XREF: E(3828.0).
3943.3[e] 5	(21/2⁻)		E	
4031.0[k] 13	(21/2⁺)		E	
4045.0 16			G	
4129.66[d] 21	(23/2⁻)		EFGH	XREF: E(4132.9).
4276.7[@] 3	(25/2⁺)	0.076 ps +7−6	C EFGH	XREF: E(4281.6).
4290.54[b] 25	(23/2⁻)	0.096 ps +26−32	C E GH	XREF: E(4293.9).
4429.4[f] 6	(23/2⁻)		E	
4647.6[m] 17			H	
4683.0[g] 11	(25/2⁺)		E	
4722.8[h] 7	(25/2⁺)		E	
4726.7 12			E	
4737.9[a] 5	(25/2⁻)		E H	XREF: E(4741.2).
4777.7?[l] 14			E	
4818.2[c] 3	(25/2⁻)		C E H	XREF: E(4821.4).
4959.3[e] 6	(25/2⁻)		E	
5025.7[&] 4	(27/2⁺)	<0.065 ps	E GH	XREF: E(5031.2).
5159.7[d] 5	(27/2⁻)		EF H	XREF: E(5163.0).
5464.2[b] 5	(27/2⁻)	<0.15 ps	C E GH	
5537.5[f] 7	27/2⁻		E	
5557.5[@] 4	(29/2⁺)	0.067 ps +9−12	C EFGH	XREF: E(5563.1).
5796.8[g] 13	(29/2⁺)		E	
5920.6[a] 6	(29/2⁻)		E H	XREF: E(5923.9).
5938.5[h] 7	(29/2⁺)		E	
5972?[m] 3			H	
6043.9[c] 6	(29/2⁻)		E H	
6137.5[e] 8	(29/2⁻)		E	
6310.2[&] 5	(31/2⁺)		E H	
6356.1[d] 7	(31/2⁻)		E H	
6685.7[b] 6	(31/2⁻)		C E H	
6828.3[f] 10	(31/2⁻)		E	
6890.6[@] 5	(33/2⁺)	<0.072 ps	C E GH	XREF: E(6897.3).
7034.8[g] 16	(33/2⁺)		E	
7242.2[a] 9	(33/2⁻)		E H	XREF: E(7245.6).
7363.8[c] 8	(33/2⁻)		E	
7433.9[h] 8	(33/2⁺)		E	
7497.5[e] 13	(33/2⁻)		E	
7508?[m] 4			H	
7593 3			E	
7724.9[d] 10	(35/2⁻)		E H	
7841.7[&] 7	(35/2⁺)		E H	XREF: E(7848.7).
8036.8[b] 9	(35/2⁻)		E H	
8301.3[f] 14	(35/2⁻)		E	

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Adopted Levels, Gammas (continued)

^{75}Kr Levels (continued)

E(level)[†]	Jπ[‡]	XREF	Comments
8388.8[@] 7	(37/2+)	C E H	XREF: E(8395.9).
8401.9[g] 19	(37/2+)	E	
8695.9[a] 11	(37/2−)	E H	XREF: E(8699.3).
8838.5[c] 12	(37/2−)	E	
8920.8 21		H	
9069.5[e] 16	(37/2−)	E	
9134.0[h] 13	(37/2+)	E	
9276.7[d] 16	(39/2−)	E H	XREF: H(9277.9).
9526.7[b] 11	(39/2−)	E H	XREF: E(9528.9).
9642.7[&] 12	(39/2+)	E	
9903.2[g] 21	(41/2+)	E	
9971.0[@] 21	(41/2+)	E	
9971.3[f] 17	(39/2−)	E	
10194.2[i] 21	41/2(+)	E	
10279.6[a] 14	(41/2−)	E	
10491 3		H	
10500.6[c] 16	(41/2−)	E	
10855.5[e] 19	(41/2−)	E	
11027.9[d] 15	(43/2−)	E	
11147.7[b] 13	(43/2−)	E	
11421.8 24		E	
11545.2[g] 24	(45/2+)	E	
11678.8[&] 16	(43/2+)	E	
11785.2[@] 23	(45/2+)	E	
11832.3[f] 20	(43/2−)	E	
12020.2[a] 17	(45/2−)	E	
12086.2[j] 24	(45/2+)	E	
12139.8[i] 23	(45/2+)	E	
12378.6[c] 19	(45/2−)	E	
12862[e] 3	(45/2−)	E	
12991.0[b] 17	(47/2−)	E	
13017.8[d] 15	(47/2−)	E	
13365[g] 3	(49/2+)	E	
13996.2[@] 25	(49/2+)	E	
14012.3[a] 20	(49/2−)	E	
14173[j] 3	(49/2+)	E	
14330[i] 3	(49/2+)	E	
14405[c] 3	(49/2−)	E	
15018[e] 4	(49/2−)	E	
15216.7[d] 18	(51/2−)	E	
15359[g] 3	(53/2+)	E	
16352.3[a] 22	(53/2−)	E	
16667[@] 4	(53/2+)	E	
17602[g] 3	(57/2+)	E	
17643[d] 4	(55/2−)	E	
19135[a] 3	(57/2−)	E	

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Adopted Levels, Gammas (continued)

^{75}Kr Levels (continued)

† The level structure agrees well among datasets, except for the region above 9 MeV where the structure from ^{40}Ca(^{40}Ca,4pnγ) (2012St19) was adopted as this is the most complete dataset.
‡ From $\gamma(\theta)$ in (HI,xnγ) and probable band assignment (1998Sk01,1989Ch36,1987He01,1984Ga27,2012St19), unless otherwise stated.
# From recoil-distance method (1998Sk01,1990Ca27) or from Doppler shift attenuation method (2009Tr07), unless stated otherwise.
@ Band(A): Ground-state band,α=+1/2. While 5/2[422] is the main configuration, admixture of competing 1qp is likely. Higher members of the band are likely to be of 3qp configuration. For details, see 1998Sk01 and 2009Tr07. From measured lifetimes (2009Tr07), Q(transition) varies from 3.5 to 2.6 b as J^π ascends from $15/2^+$ to $31/2^+$.
& Band(a): Ground-state band,α=−1/2. See comment for α=+1/2 signature partner.
[a] Band(B): Band based on $3/2^-$,α=+1/2.
[b] Band(b): Band based on $3/2^-$,α=−1/2. While 3/2[301] is the main configuration, admixture of competing 1qp is likely. Higher members of the band are likely to be of 3qp configuration. For details, see 1998Sk01 and 2009Tr07. From measured lifetimes (2009Tr07), Q(transition) varies from 3.3 to 2.6 b as J^π ascends from $13/2^-$ to $25/2^-$.
[c] Band(C): Band based on $5/2^-$,α=+1/2.
[d] Band(c): Band based on $5/2^-$,α=−1/2.
[e] Band(D): Band based on $15/2^-$,α=+1/2.
[f] Band(d): Band based on $15/2^-$,α=−1/2.
[g] Band(E): Band based on $9/2^+$,α=+1/2.
[h] Band(F): Band based on $21/2^{(+)}$,α=+1/2.
[i] Band(G): Band based on $41/2^{(+)}$,α=+1/2.
[j] Band(H): Band based on $45/2^{(+)}$,α=+1/2.
[k] Band(I): Band based on $13/2^+$,α=+1/2.
[l] Band(J): Band based on 672-keV level.
[m] Band(K): Band based on 3465-keV level.

Adopted Levels, Gammas (continued)

γ(^{75}Kr)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult. ‡	δ #	α a	Comments
178.99	(3/2)$^-$	178.99 *4*	100	0.0	5/2$^+$	E1		0.01614	B(E1)(W.u.)=3.1×10^{-5} *6* α(K)=0.01433 *20*; α(L)=0.001535 *22*; α(M)=0.000247 *4*; α(N)=2.46×10^{-5} *4*
187.16	(7/2)$^+$	187.20 *7*	100	0.0	5/2$^+$	M1+E2	−0.55& *6*	0.040 *3*	B(M1)(W.u.)=0.069 *9*; B(E2)(W.u.)=8.1×10^2 *17* α(K)=0.0349 *24*; α(L)=0.0041 *3*; α(M)=0.00066 *5*; α(N)=6.5×10^{-5} *5* δ: from ce and angular correlation data (1998Sk01). Other: −2.06 *+7−23* from (^{32}S,2pnγ) (1987He01). B(E2)(W.u.): anomalous B(E2)(W.u.) value, exceeds RUL(IS)=300 by2 to 3 sigma.
358.13	(5/2)$^-$	171.23 *16*	0.31 *3*	187.16	(7/2)$^+$				
		179.16 *6*	100 *8*	178.99	(3/2)$^-$	M1+E2	0.6& *2*	0.048 *11*	α(K)=0.042 *9*; α(L)=0.0050 *12*; α(M)=0.00081 *19*; α(N)=7.9×10^{-5} *18* B(M1)(W.u.)=0.056 *18*; B(E2)(W.u.)=9.E+2 *5* B(E2)(W.u.): anomalous B(E2)(W.u.) value, exceeds RUL(IS)=300 by1 to 2 sigma.
		358.10 *8*	12 *4*	0.0	5/2$^+$				I_γ: from (^{24}Mg,2pnγ). Iγ=17 *4* in ^{75}Rb ε.
377.86	(9/2)$^+$	190.75 *6*	100 *1*	187.16	(7/2)$^+$	M1+E2	−0.56& *7*	0.038 *3*	α(K)=0.033 *3*; α(L)=0.0039 *4*; α(M)=0.00063 *6*; α(N)=6.2×10^{-5} *5* B(M1)(W.u.)=0.119 *12*; B(E2)(W.u.)=1.4×10^3 *3* δ: from ce and angular correlation data (1998Sk01). Others: −1.2 *+3−2*, −0.29 *1*, −2.4 *+7−38* from γ(θ). B(E2)(W.u.): anomalous B(E2)(W.u.) value, exceeds RUL(IS)=300 bymore than 3 sigma.
		377.88 *8*	42 *2*	0.0	5/2$^+$	E2		0.00778 *11*	α=0.00778 *11*; α(K)=0.00687 *10*; α(L)=0.000776 *11*; α(M)=0.0001254 *18*; α(N)=1.236×10^{-5} B(E2)(W.u.)=81 *8*
611.49	(7/2)$^-$	234.1 *3*	0.78 *11*	377.86	(9/2)$^+$	[E1]		0.00742 *11*	α=0.00742 *11*; α(K)=0.00659 *10*; α(L)=0.000704 *11*; α(M)=0.0001136 *17*; α(N)=1.134×10^{-5} B(E1)(W.u.)=2.9×10^{-5} *5*
		253.38 *6*	100 *1*	358.13	(5/2)$^-$	M1+E2	−1.2& *2*	0.0227 *18*	α(K)=0.0200 *16*; α(L)=0.00232 *20*; α(M)=0.00037 *4*; α(N)=3.7×10^{-5} *3* B(M1)(W.u.)=0.069 *14*; B(E2)(W.u.)=2.1×10^3 *3* δ: weighted average of −1.18 *+11−23* (1987He01) and −1.1 *+3−2* (1990Sk06 data reanalyzed by 1998Sk01). Others: −0.27 *1* (1998Sk01, reanalyzed data of 1990Sk06 with constrained attenuation parameter), −2.5 *7* or −0.27 (DCO data of 1998Sk01). B(E2)(W.u.): anomalous B(E2)(W.u.) value, exceeds RUL(IS)=300 bymore than 3 sigma.
		432.31 *9*	34 *3*	178.99	(3/2)$^-$	E2			B(E2)(W.u.)=85 *9*

$^{75}_{36}Kr_{39}$-6

Adopted Levels, Gammas (continued)

γ(^{75}Kr) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult.‡	δ#	α[a]	Comments
629.12	(1/2$^+$,3/2,5/2)	450.2 *1*	100 *20*	178.99	(3/2)$^-$				
		628.8 *2*	15 *4*	0.0	5/2$^+$				
671.85	(3/2$^-$,5/2$^-$)	313.63 *9*	40 *9*	358.13	(5/2)$^-$				I_γ: from ^{75}Rb ε decay.
		493.0 *1*	84 *17*	178.99	(3/2)$^-$				I_γ: from ^{75}Rb ε decay.
		671.8 *1*	100 *20*	0.0	5/2$^+$				
726.49	(9/2$^+$)	348.6 *3*	93 *19*	377.86	(9/2)$^+$				
		539.2 *4*	100 *6*	187.16	(7/2)$^+$	D			
770.04	(11/2)$^+$	392.26 *6*	100 *2*	377.86	(9/2)$^+$	M1+E2	−1.0[&] *1*	0.00534 *18*	α=0.00534 *18*; α(K)=0.00472 *16*; α(L)=0.000523 *19*; α(M)=8.5×10^{-5} *3*; α(N)=8.4×10^{-6} *3* B(M1)(W.u.)=0.064 *8*; B(E2)(W.u.)=5.6×10^2 *7* δ: weighted average of −1.04 *13* (1990Sk06), −1.0 *2* (1990Sk06 data reanalyzed by 1998Sk01). Others: −1.9 *+6−18* (1987He01), −0.43 *2* (1998Sk01, reanalyzed data of 1990Sk06 with constrained attenuation parameter), −2.6 *7* or −0.32 *11* (DCO data of 1998Sk01). B(E2)(W.u.): anomalous B(E2)(W.u.) value, exceeds RUL(IS)=300 by more than 3 sigma.
		582.85 *6*	66 *4*	187.16	(7/2)$^+$	E2		0.00203 *3*	α=0.00203 *3*; α(K)=0.00179 *3*; α(L)=0.000197 *3*; α(M)=3.18×10^{-5} *5*; α(N)=3.17×10^{-6} *5* B(E2)(W.u.)=103 *10*
786.65	(5/2$^-$)	428.4 *3*	24 *6*	358.13	(5/2)$^-$				
		607.6 *4*	100 *29*	178.99	(3/2)$^-$	(M1+E2)	−1.4 *8*		
833.27	(1/2$^-$,3/2,5/2)	475.2 *1*	40 *8*	358.13	(5/2)$^-$				
		654.2 *1*	100 *20*	178.99	(3/2)$^-$				
880.76	(1/2$^-$,3/2,5/2)	522.5 *2*	56 *11*	358.13	(5/2)$^-$				
		701.8 *1*	100 *22*	178.99	(3/2)$^-$				
904.96	(9/2)$^-$	293.50 *5*	100 *2*	611.49	(7/2)$^-$	M1+E2	−1.31[&] *19*	0.0144 *9*	α(K)=0.0127 *8*; α(L)=0.00145 *9*; α(M)=0.000235 *15*; α(N)=2.31×10^{-5} *14* B(M1)(W.u.)=0.081 *23*; B(E2)(W.u.)=2.2×10^3 *5* δ: from 1990Sk06. Other: −2.9 *7* or −0.26 *9* (DCO data, 1998Sk01). B(E2)(W.u.): anomalous B(E2)(W.u.) value, exceeds RUL(IS)=300 by more than 3 sigma.
		546.85 *5*	96 *3*	358.13	(5/2)$^-$	E2			B(E2)(W.u.)=1.5×10^2 *3*
1026.5	(1/2$^+$,3/2,5/2)	848.2		178.99	(3/2)$^-$				
		1026.4 *3*	100 *20*	0.0	5/2$^+$				
1042.23	(3/2$^+$,5/2)	854.9 *2*	48 *10*	187.16	(7/2)$^+$				
		863.2 *1*	100 *19*	178.99	(3/2)$^-$				
		1042.9 *3*	38 *10*	0.0	5/2$^+$				
1067.50	(13/2)$^+$	297.50 *8*	39.7 *18*	770.04	(11/2)$^+$	M1+E2	−1.4[&] *+3−2*	0.0141 *12*	α(K)=0.0124 *11*; α(L)=0.00142 *13*; α(M)=0.000230 *20*; α(N)=2.26×10^{-5} *19*

Adopted Levels, Gammas (continued)

γ(^{75}Kr) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	δ[#]	α[a]	Comments
									B(M1)(W.u.)=0.061 *18*; B(E2)(W.u.)=1.8×10^3 *3* δ: from 1990Sk06 data reanalyzed by 1998Sk01. Others: −2.70 *13* (1990Sk06), −1.8 *+10−15* (1987He01), −0.25 *1* (1998Sk01, reanalyzed data of 1990Sk06 with constrained attenuation parameter). B(E2)(W.u.): anomalous B(E2)(W.u.) value, exceeds RUL(IS)=300 by more than 3 sigma.
1067.50	(13/2)$^+$	689.56 *9*	100.0 *16*	377.86	(9/2)$^+$	E2			B(E2)(W.u.)=104 *6*
1099.4	(7/2$^-$)	427.9 *3*	29 *6*	671.85	(3/2$^-$,5/2$^-$)				
		741.8 *4*	100 *33*	358.13	(5/2)$^-$	D			
1265.51	(11/2)$^-$	360.63 *6*	62.6 *13*	904.96	(9/2)$^-$	M1+E2	−2.46[&] *21*	0.00846 *16*	α=0.00846 *16*; α(K)=0.00746 *14*; α(L)=0.000843 *16*; α(M)=0.000136 *3*; α(N)=1.34×10^{-5} *3* B(M1)(W.u.)=0.034 *11*; B(E2)(W.u.)=2.1×10^3 *6* δ: weighted average of −1.7 *+5−8* (1987He01) and −2.52 *19* (1990Sk06). B(E2)(W.u.): anomalous B(E2)(W.u.) value, exceeds RUL(IS)=300 by 2 to 3 sigma.
		653.97 *4*	100 *4*	611.49	(7/2)$^-$	E2		0.001462 *21*	α=0.001462 *21*; α(K)=0.001296 *19*; α(L)=0.0001411 *20*; α(M)=2.28×10^{-5} *4*; α(N)=2.28×10^{-6} B(E2)(W.u.)=2.0×10^2 *6*
1363.79	(9/2$^-$)	577.0 *3*	80 *8*	786.65	(5/2$^-$)	Q			
		752.3 *3*	100 *7*	611.49	(7/2)$^-$	D			
1528.2	(13/2$^+$)	801.7 *3*	33 *5*	726.49	(9/2$^+$)				I_γ: from ^{40}Ca(^{40}Ca,4pnγ). In ^{54}Fe(^{24}Mg,2pnγ) Iγ<7.1.
		1150.3 *5*	100 *11*	377.86	(9/2)$^+$	Q			
1593.96	(15/2$^+$)	526.68 *15*	78 *4*	1067.50	(13/2)$^+$	M1+E2	−1.85[&] *13*	0.00254 *5*	α=0.00254 *5*; α(K)=0.00225 *4*; α(L)=0.000247 *5*; α(M)=3.99×10^{-5} *7*; α(N)=3.99×10^{-6} *7* B(M1)(W.u.)=0.049 *7*; B(E2)(W.u.)=8.3×10^2 *+8−7* δ: from γ(θ) (1990Sk06). Others: −0.23 *10* or −5.6 *16* from DCO (1998Sk01). B(E2)(W.u.): anomalous B(E2)(W.u.) value, exceeds RUL(IS)=300 by more than 3 sigma.
		823.98 *12*	100 *4*	770.04	(11/2)$^+$	(E2)			B(E2)(W.u.)=147 *11*
1646.40	(13/2$^-$)	380.92 *14*	35 *3*	1265.51	(11/2)$^-$	M1+E2	−1.3[&] *2*	0.0063 *3*	α=0.0063 *3*; α(K)=0.0055 *3*; α(L)=0.00062 *3*; α(M)=0.000100 *5*; α(N)=9.9×10^{-6} *5* B(M1)(W.u.)=0.056 *21*; B(E2)(W.u.)=9.E+2 *3* δ: weighted average of −1.09 *21* (1990Sk06) and −1.6 *+3−2* (1990Sk06 data reanalyzed by 1998Sk01). Other: −0.04 *7* or −6.8 *7* from DCO (1998Sk01). B(E2)(W.u.): anomalous B(E2)(W.u.) value, exceeds RUL(IS)=300 by more 1 to 2 sigma.
		741.39 *12*	100 *3*	904.96	(9/2)$^-$	(E2)			B(E2)(W.u.)=1.4×10^2 *5*

Adopted Levels, Gammas (continued)

γ(^{75}Kr) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	δ[#]	α[a]	Comments
1755.37	(11/2$^+$)	985.4 *3*	<50	770.04	(11/2)$^+$				
		1568.1 *3*	100 *50*	187.16	(7/2)$^+$				
1756.6	(13/2$^+$)	689.2 *5*	82 *24*	1067.50	(13/2)$^+$				
		987.0 *7*	66 *20*	770.04	(11/2)$^+$				
		1029.5 *7*	100 *39*	726.49	(9/2$^+$)				
1758.87	(11/2$^-$)	660.0 *4*	100 *14*	1099.4	(7/2$^-$)	Q			
		853.9 *2*	86 *21*	904.96	(9/2)$^-$	Q			
1964.06	(17/2$^+$)	370.14 *6*	17.5 *12*	1593.96	(15/2$^+$)	M1+E2	−1.4[&] *2*	0.0070 *3*	α=0.0070 *3*; α(K)=0.0062 *3*; α(L)=0.00069 *4*; α(M)=0.000112 *5*; α(N)=1.11×10^{-5} *5* B(M1)(W.u.)=0.087 *+20−18*; B(E2)(W.u.)=1.70×10^3 *+27−22* δ: weighted average of −1.24 *30* and −1.44 *19* (1990Sk06). B(E2)(W.u.): anomalous B(E2)(W.u.) value, exceeds RUL(IS)=300 by more than 3 sigma.
		896.36 *12*	100 *3*	1067.50	(13/2)$^+$	(E2)		0.000643 *9*	α=0.000643 *9*; α(K)=0.000571 *8*; α(L)=6.13×10^{-5} *9*; α(M)=9.92×10^{-6} *14*; α(N)=9.98×10^{-7} *14* B(E2)(W.u.)=176 *+19−10*
2109.40	(15/2$^-$)	463.03 *8*	27 *3*	1646.40	(13/2$^-$)	(M1+E2)	−5.0[&] *25*	0.00399 *16*	α=0.00399 *16*; α(K)=0.00353 *14*; α(L)=0.000392 *17*; α(M)=6.3×10^{-5} *3*; α(N)=6.3×10^{-6} *3* B(M1)(W.u.)=(0.005 *5*); B(E2)(W.u.)=(8.2×10^2 *13*) δ: from 1990Sk06. B(E2)(W.u.): anomalous B(E2)(W.u.) value, exceeds RUL(IS)=300 by more than 3 sigma.
		843.88 *8*	100 *4*	1265.51	(11/2)$^-$	(E2)		0.000747 *11*	α=0.000747 *11*; α(K)=0.000663 *10*; α(L)=7.13×10^{-5} *10*; α(M)=1.154×10^{-5} *17*; α(N)=1.160×10^{-6} B(E2)(W.u.)=157 *+16−18*
2113.34	(13/2$^-$)	749.4 *3*	100 *15*	1363.79	(9/2$^-$)	Q			
		847.8 *3*	63 *15*	1265.51	(11/2)$^-$	D			
2262.3?		1194.8[b] *6*	100	1067.50	(13/2)$^+$				
2305.9?	(17/2)	659.6[b] *4*	100	1646.40	(13/2$^-$)				
2318.7		1251.7 *7*	100	1067.50	(13/2)$^+$				
2562.61	(17/2$^-$)	453.28 *10*	17 *3*	2109.40	(15/2$^-$)	M1+E2	−1.4[&] *4*		B(M1)(W.u.)=0.049 *21*; B(E2)(W.u.)=6.3×10^2 *+18−19* δ: from 1990Sk06. B(E2)(W.u.): anomalous B(E2)(W.u.) value, exceeds RUL(IS)=300 by 1 to 2 sigma.
		916.05 *15*	100 *5*	1646.40	(13/2$^-$)	E2		0.000610 *9*	α=0.000610 *9*; α(K)=0.000542 *8*; α(L)=5.81×10^{-5} *9*; α(M)=9.40×10^{-6} *14*; α(N)=9.46×10^{-7} *14* B(E2)(W.u.)=167 *+21−22*
2579.1	(17/2$^+$)	1050.9 *3*	100 *14*	1528.2	(13/2$^+$)	Q			
		1511.6 *3*	50 *14*	1067.50	(13/2)$^+$				
2610.8	(15/2$^-$)	852.0 *3*	100	1758.87	(11/2$^-$)	Q			
2628.31	(19/2$^+$)	664.3 *4*	37.6 *17*	1964.06	(17/2$^+$)	M1+E2	−1.3[&] *3*	0.00130 *4*	α=0.00130 *4*; α(K)=0.00115 *4*; α(L)=0.000124 *4*;

Adopted Levels, Gammas (continued)

γ(^{75}Kr) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	α[a]	Comments
								α(M)=2.01×10^{-5} *7*; α(N)=2.02×10^{-6} *7* B(M1)(W.u.)=0.08 *3*; B(E2)(W.u.)=4.2×10^{2} *10* δ: from γ(θ) (1990Sk06). B(E2)(W.u.): anomalous B(E2)(W.u.) value, exceeds RUL(IS)=300 by 1 to 2 sigma.
2628.31	(19/2$^+$)	1034.7 *4*	100 *5*	1593.96	(15/2$^+$)	E2	0.000458 *7*	α=0.000458 *7*; α(K)=0.000407 *6*; α(L)=4.34×10^{-5} *6*; α(M)=7.02×10^{-6} *10*; α(N)=7.07×10^{-7} *10* B(E2)(W.u.)=1.9×10^{2} *3* E_γ: 1034.07 *22* in (^{54}Fe,2pnγ).
2655.0	(15/2$^-$)	897.2 *7*	100	1758.87	(11/2$^-$)			
2688.6?		1094.7[b] *20*	100	1593.96	(15/2$^+$)			
2708.7	(15/2$^+$)	953 *2*	<8	1755.37	(11/2$^+$)			
		1114.8 *3*	100 *15*	1593.96	(15/2$^+$)			
		1938 *2*	<8	770.04	(11/2)$^+$			
2818.6	(17/2$^+$)	1062.0 *8*	100	1756.6	(13/2$^+$)			
2818.8	(15/2$^-$)	500.6 *7*	43 *10*	2318.7				
		854.9 *8*	100 *18*	1964.06	(17/2$^+$)			
		1554 *1*	71 *30*	1265.51	(11/2)$^-$			
2859.8		750.4 *13*	100	2109.40	(15/2$^-$)			
2918.4?		809.1[b] *5*	100	2109.40	(15/2$^-$)			
2957.52	(17/2$^-$)	302.7 *3*	15 *4*	2655.0	(15/2$^-$)			
		844.18 *24*	100 *30*	2113.34	(13/2$^-$)	Q		
3040.2	(17/2$^-$)	926.7 *3*	100	2113.34	(13/2$^-$)			
3049.30	(21/2$^+$)	420.9 *3*	6.5 *16*	2628.31	(19/2$^+$)	(M1)	0.00321 *5*	α=0.00321 *5*; α(K)=0.00285 *4*; α(L)=0.000306 *5*; α(M)=4.96×10^{-5} *7*; α(N)=5.01×10^{-6} *7* B(M1)(W.u.)=0.16 *5* E_γ: 421.01 *11* in (^{54}Fe,2pnγ).
		1085.02[@] *22*	100 *8*	1964.06	(17/2$^+$)	E2	0.000411 *6*	α=0.000411 *6*; α(K)=0.000365 *6*; α(L)=3.89×10^{-5} *6*; α(M)=6.29×10^{-6} *9*; α(N)=6.34×10^{-7} *9* B(E2)(W.u.)=171 *+28−20* E_γ: 1085.5 *3* in (^{24}Mg,2pnγ).
3110.53	(19/2$^-$)	547.8 *4*	21.4 *18*	2562.61	(17/2$^-$)	[M1]	0.001735 *25*	α=0.001735 *25*; α(K)=0.001540 *22*; α(L)=0.0001647 *24*; α(M)=2.67×10^{-5} *4*; α(N)=2.70×10^{-6} B(M1)(W.u.)=0.145 *+25−21* E_γ: 547.18 *19* in (^{54}Fe,2pnγ).
		1001.06[@] *20*	100 *5*	2109.40	(15/2$^-$)	E2	0.000494 *7*	α=0.000494 *7*; α(K)=0.000439 *7*; α(L)=4.69×10^{-5} *7*; α(M)=7.59×10^{-6} *11*; α(N)=7.64×10^{-7} *11* B(E2)(W.u.)=151 *+24−19*
3189.4?		1225.4[b] *20*	100	1964.06	(17/2$^+$)			
3342.61	(19/2$^-$)	385.10 *21*	89 *11*	2957.52	(17/2$^-$)			I_γ: from ^{40}Ca(^{40}Ca,4pnγ); ^{54}Fe(^{24}Mg,2pnγ) gives Iγ<20.
		687.5 *4*	89 *11*	2655.0	(15/2$^-$)			

$^{75}_{36}Kr_{39}$-10

Adopted Levels, Gammas (continued)

γ(^{75}Kr) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult. ‡	α [a]	Comments
3342.61	(19/2⁻)	732.7 *8*	59 *10*	2610.8	(15/2⁻)			
		1233.0 *3*	100 *11*	2109.40	(15/2⁻)			
3437.0		577.2 *4*	100	2859.8				
3464.8		1501 *2*	100	1964.06	(17/2⁺)			
3513.7	(19/2⁻)	473.2 *6*	14 *4*	3040.2	(17/2⁻)			
		695.5 *5*	100 *26*	2818.8	(15/2⁻)			
		859 *1*		2655.0	(15/2⁻)			E_γ: from level-energy difference.
		902.9 *7*	55 *21*	2610.8	(15/2⁻)			
3588.1	(21/2⁺)	1009.0 *7*	100	2579.1	(17/2⁺)			
3623.58	(21/2⁻)	513.3 *5*	13.7 *14*	3110.53	(19/2⁻)			
		1061.16 *24*	100 *6*	2562.61	(17/2⁻)	E2	0.000432 *6*	α=0.000432 *6*; α(K)=0.000384 *6*; α(L)=4.09×10^{-5} *6*; α(M)=6.62×10^{-6} *10*; α(N)=6.67×10^{-7} *10* B(E2)(W.u.)>1.4×10^{2}
3644.7?		1033.9 *8*	100	2610.8	(15/2⁻)			
3766.37	(21/2⁻)	423.7 *2*	35 *11*	3342.61	(19/2⁻)			
		808.98 *24*	100 *11*	2957.52	(17/2⁻)	Q		
		1202.6 *7*	33 *5*	2562.61	(17/2⁻)			
3778.4	(21/2⁺)	1816 *1*	100	1964.06	(17/2⁺)			
3803.5		1094.7 *3*	100	2708.7	(15/2⁺)			
3823.7	(23/2⁺)	775.2 *4*	25.5 *15*	3049.30	(21/2⁺)	[M1]	0.000798 *12*	α=0.000798 *12*; α(K)=0.000710 *10*; α(L)=7.53×10^{-5} *11*; α(M)=1.220×10^{-5} *18*; α(N)=1.235×10^{-6} B(M1)(W.u.)=0.106 *+19−17*
		1195.7 *3*	100 *6*	2628.31	(19/2⁺)	[E2]	0.000339 *5*	α=0.000339 *5*; α(K)=0.000294 *5*; α(L)=3.12×10^{-5} *5*; α(M)=5.05×10^{-6} *7* α(N)=5.10×10^{-7} *8*; α(IPF)=7.64×10^{-6} *12* B(E2)(W.u.)=108 *+20−17* E_γ: 1195.99 *18* in (^{54}Fe,2pnγ).
3943.3	(21/2⁻)	429.8 *5*	60 *25*	3513.7	(19/2⁻)			
		902.8 *5*	100 *47*	3040.2	(17/2⁻)			
4031.0	(21/2⁺)	1212.4 *9*	100	2818.6	(17/2⁺)			
4045.0		608.0 *7*	100	3437.0				
4129.66	(23/2⁻)	363.30 *21*	12 *3*	3766.37	(21/2⁻)			
		506.0 *3*	17 *2*	3623.58	(21/2⁻)			
		787.1 *4*	15 *12*	3342.61	(19/2⁻)			
		1019.1 *3*	100 *6*	3110.53	(19/2⁻)	Q		
4276.7	(25/2⁺)	453.7 *3*	9.0 *23*	3823.7	(23/2⁺)	[M1]	0.00269 *4*	α=0.00269 *4*; α(K)=0.00238 *4*; α(L)=0.000256 *4*; α(M)=4.15×10^{-5} *6*; α(N)=4.19×10^{-6} *6* B(M1)(W.u.)=0.26 *2*
		1226.85 [@] *24*	100 *6*	3049.30	(21/2⁺)	[E2]	0.000326 *5*	α=0.000326 *5*; α(K)=0.000278 *4*; α(L)=2.95×10^{-5} *5*; α(M)=4.78×10^{-6} *7* α(N)=4.82×10^{-7} *7*; α(IPF)=1.254×10^{-5} *18* B(E2)(W.u.)=131 *11*

$^{75}_{36}Kr_{39}$-11

Adopted Levels, Gammas (continued)

γ(^{75}Kr) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult. ‡	α [a]	Comments
4290.54	(23/2⁻)	523.9 *5*	7.6 *12*	3766.37	(21/2⁻)			
		667.5 *4*	11 *1*	3623.58	(21/2⁻)			
		1179.7 *3*	100 *8*	3110.53	(19/2⁻)	[E2]	0.000347 *5*	α=0.000347 *5*; α(K)=0.000303 *5*; α(L)=3.22×10^{-5} *5*; α(M)=5.21×10^{-6} *8* α(N)=5.26×10^{-7} *8*; α(IPF)=5.64×10^{-6} *9* B(E2)(W.u.)=1.2×10^{2} *4*
4429.4	(23/2⁻)	486.3 *4*	19 *7*	3943.3	(21/2⁻)			
		916 *1*	100 *27*	3513.7	(19/2⁻)			
4647.6		1183 *2*	100 *50*	3464.8				
		1598 *2*	20 *10*	3049.30	(21/2⁺)			
4683.0	(25/2⁺)	1094.9 *8*	100	3588.1	(21/2⁺)			
4722.8	(25/2⁺)	946 *1*	35 *8*	3778.4	(21/2⁺)			
		1673 *1*	100 *19*	3049.30	(21/2⁺)			
4726.7		1138.6 *9*	100	3588.1	(21/2⁺)			
4737.9	(25/2⁻)	608 *2*	50 *6*	4129.66	(23/2⁻)			
		971 *2*	82 *11*	3766.37	(21/2⁻)			
		1114.6 *6*	100 *15*	3623.58	(21/2⁻)			
4777.7?		1133 *1*	100	3644.7?				
4818.2	(25/2⁻)	527.4 *4*	22 *3*	4290.54	(23/2⁻)			
		1051.7 *5*	41 *5*	3766.37	(21/2⁻)			
		1194.9[@] *5*	100 *10*	3623.58	(21/2⁻)			
4959.3	(25/2⁻)	529.9 *3*	49 *13*	4429.4	(23/2⁻)			
		1015.6 *5*	100 *20*	3943.3	(21/2⁻)			
5025.7	(27/2⁺)	750.0 *5*	54 *4*	4276.7	(25/2⁺)	[M1]	0.000858 *12*	B(M1)(W.u.)>0.28 α=0.000858 *12*; α(K)=0.000763 *11*; α(L)=8.10×10^{-5} *12*; α(M)=1.312×10^{-5} *19*; α(N)=1.328×10^{-6}
		1203 *1*	100 *18*	3823.7	(23/2⁺)	[E2]	0.000335 *5*	B(E2)(W.u.)>1.2×10^{2} α=0.000335 *5*; α(K)=0.000290 *4*; α(L)=3.08×10^{-5} *5*; α(M)=4.99×10^{-6} *7* α(N)=5.03×10^{-7} *8*; α(IPF)=8.68×10^{-6} *19*
5159.7	(27/2⁻)	421.9 *5*	9.5 *14*	4737.9	(25/2⁻)			
		1029.9 *5*	100 *8*	4129.66	(23/2⁻)	E2	0.000463 *7*	α=0.000463 *7*; α(K)=0.000411 *6*; α(L)=4.39×10^{-5} *7*; α(M)=7.10×10^{-6} *10*; α(N)=7.15×10^{-7} *10*
5464.2	(27/2⁻)	646.1 *5*	22.2 *22*	4818.2	(25/2⁻)			
		1173.8[@] *5*	100 *11*	4290.54	(23/2⁻)	[E2]	0.000350 *5*	α=0.000350 *5*; α(K)=0.000306 *5*; α(L)=3.26×10^{-5} *5*; α(M)=5.26×10^{-6} *8* α(N)=5.31×10^{-7} *8*; α(IPF)=5.00×10^{-6} *9* B(E2)(W.u.)>74
5537.5	27/2⁻	578.1 *4*	11 *4*	4959.3	(25/2⁻)			
		1108.2 *6*	100 *30*	4429.4	(23/2⁻)			
5557.5	(29/2⁺)	532.5 *4*	23.9 *14*	5025.7	(27/2⁺)			
		1280.68[@] *15*	100 *7*	4276.7	(25/2⁺)	[E2]	0.000309 *5*	α=0.000309 *5*; α(K)=0.000254 *4*; α(L)=2.69×10^{-5} *4*;

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Adopted Levels, Gammas (continued)

γ(^{75}Kr) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	α[a]	Comments
								α(M)=4.35×10^{-6} *6* α(N)=4.40×10^{-7} *7*; α(IPF)=2.33×10^{-5} *4* B(E2)(W.u.)=105 *+22−17*
5796.8	(29/2$^+$)	1113.8 *6*	100	4683.0	(25/2$^+$)			
5920.6	(29/2$^-$)	760.9 *6*	25 *3*	5159.7	(27/2$^-$)			
		1182.7 *6*	100 *11*	4737.9	(25/2$^-$)			
5938.5	(29/2$^+$)	1216.2 *7*	71 *28*	4722.8	(25/2$^+$)			
		1660 *1*	100 *50*	4276.7	(25/2$^+$)			
5972?		1324 *2*	100	4647.6				
6043.9	(29/2$^-$)	579.7 *7*	19 *3*	5464.2	(27/2$^-$)			
		1225.2 *7*	100 *10*	4818.2	(25/2$^-$)			
6137.5	(29/2$^-$)	600.0 *7*	17 *10*	5537.5	27/2$^-$			
		1178.2 *7*	100 *24*	4959.3	(25/2$^-$)			
6310.2	(31/2$^+$)	754.3 *6*	50 *30*	5557.5	(29/2$^+$)			
		1284.6 *6*	100 *15*	5025.7	(27/2$^+$)			
6356.1	(31/2$^-$)	435.7 *7*	5.5 *10*	5920.6	(29/2$^-$)			
		1196.3 *6*	100 *9*	5159.7	(27/2$^-$)			
6685.7	(31/2$^-$)	641.5 *6*	15 *3*	6043.9	(29/2$^-$)			
		1221.7[@] *5*	100 *15*	5464.2	(27/2$^-$)			
6828.3	(31/2$^-$)	1290.8 *7*	100	5537.5	27/2$^-$			
6890.6	(33/2$^+$)	580.7 *3*	24 *4*	6310.2	(31/2$^+$)			
		1331.9[@] *5*	100 *8*	5557.5	(29/2$^+$)	[E2]	0.000298 *5*	α=0.000298 *5*; α(K)=0.000234 *4*; α(L)=2.47×10^{-5} *4*; α(M)=4.00×10^{-6} *6* α(N)=4.04×10^{-7} *6*; α(IPF)=3.51×10^{-5} *5* B(E2)(W.u.)>80
7034.8	(33/2$^+$)	1238 *1*	100	5796.8	(29/2$^+$)			
7242.2	(33/2$^-$)	1321.6 *6*	100	5920.6	(29/2$^-$)			
7363.8	(33/2$^-$)	678 *1*	14 *3*	6685.7	(31/2$^-$)			
		1320.0 *7*	100 *20*	6043.9	(29/2$^-$)			
7433.9	(33/2$^+$)	1495.1 *8*	100 *37*	5938.5	(29/2$^+$)			
		1877 *1*	39 *11*	5557.5	(29/2$^+$)			
7497.5	(33/2$^-$)	1360 *1*	100	6137.5	(29/2$^-$)			
7508?		1536 *2*	100	5972?				
7593		1655 *3*	100	5938.5	(29/2$^+$)			
7724.9	(35/2$^-$)	1368.8 *8*	100	6356.1	(31/2$^-$)			
7841.7	(35/2$^+$)	951.7 *9*	17 *7*	6890.6	(33/2$^+$)			
		1532.0 *7*	100 *19*	6310.2	(31/2$^+$)			
8036.8	(35/2$^-$)	1351.1 *7*	100	6685.7	(31/2$^-$)			
8301.3	(35/2$^-$)	1473 *1*	100	6828.3	(31/2$^-$)			
8388.8	(37/2$^+$)	547.2 *3*	17 *5*	7841.7	(35/2$^+$)			
		1497.5[@] *6*	100 *12*	6890.6	(33/2$^+$)			
8401.9	(37/2$^+$)	1367 *1*	100	7034.8	(33/2$^+$)			
8695.9	(37/2$^-$)	1453.7 *7*	100	7242.2	(33/2$^-$)			

$^{75}_{36}Kr_{39}$-13

Adopted Levels, Gammas (continued)

γ(^{75}Kr) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π
8838.5	(37/2$^-$)	1474.7 *9*	100	7363.8	(33/2$^-$)	12086.2	(45/2$^+$)	1892 *1*	100	10194.2	41/2$^{(+)}$
8920.8		532 *2*	100	8388.8	(37/2$^+$)	12139.8	(45/2$^+$)	1945.6 *9*	100	10194.2	41/2$^{(+)}$
9069.5	(37/2$^-$)	1572 *1*	100	7497.5	(33/2$^-$)	12378.6	(45/2$^-$)	1878 *1*	100	10500.6	(41/2$^-$)
9134.0	(37/2$^+$)	1700 *1*	100	7433.9	(33/2$^+$)	12862	(45/2$^-$)	2006 *2*	100	10855.5	(41/2$^-$)
9276.7	(39/2$^-$)	1552 *2*	100	7724.9	(35/2$^-$)	12991.0	(47/2$^-$)	1843 *3*	25 *12*	11147.7	(43/2$^-$)
9526.7	(39/2$^-$)	1489.8 *7*	100	8036.8	(35/2$^-$)			1963 *1*	100 *18*	11027.9	(43/2$^-$)
9642.7	(39/2$^+$)	1801 *1*	100	7841.7	(35/2$^+$)	13017.8	(47/2$^-$)	1870 *1*	38 *27*	11147.7	(43/2$^-$)
9903.2	(41/2$^+$)	1501.3 *9*	100	8401.9	(37/2$^+$)			1990 *1*	100 *35*	11027.9	(43/2$^-$)
9971.0	(41/2$^+$)	1569.1 *8*	100	8388.8	(37/2$^+$)	13365	(49/2$^+$)	1820 *1*	100	11545.2	(45/2$^+$)
9971.3	(39/2$^-$)	1670.0 *9*	100	8301.3	(35/2$^-$)	13996.2	(49/2$^+$)	2211 *1*	100	11785.2	(45/2$^+$)
10194.2	41/2$^{(+)}$	1792.3 *9*	100	8401.9	(37/2$^+$)	14012.3	(49/2$^-$)	1992 *1*	100	12020.2	(45/2$^-$)
10279.6	(41/2$^-$)	1583.7 *9*	100	8695.9	(37/2$^-$)	14173	(49/2$^+$)	2087 *1*	100	12086.2	(45/2$^+$)
10491		1570 *2*	100	8920.8		14330	(49/2$^+$)	2190 *2*	100	12139.8	(45/2$^+$)
10500.6	(41/2$^-$)	1662 *1*	100	8838.5	(37/2$^-$)	14405	(49/2$^-$)	2026 *2*	100	12378.6	(45/2$^-$)
10855.5	(41/2$^-$)	1786 *1*	100	9069.5	(37/2$^-$)	15018	(49/2$^-$)	2156 *3*	100	12862	(45/2$^-$)
11027.9	(43/2$^-$)	1751.2 *9*	100	9276.7	(39/2$^-$)	15216.7	(51/2$^-$)	2199 *1*	100 *25*	13017.8	(47/2$^-$)
11147.7	(43/2$^-$)	1621.0 *8*	100	9526.7	(39/2$^-$)			2224 *4*	20 *14*	12991.0	(47/2$^-$)
11421.8		1779 *2*	100	9642.7	(39/2$^+$)	15359	(53/2$^+$)	1994 *1*	100	13365	(49/2$^+$)
11545.2	(45/2$^+$)	1642 *1*	100	9903.2	(41/2$^+$)	16352.3	(53/2$^-$)	2340 *1*	100	14012.3	(49/2$^-$)
11678.8	(43/2$^+$)	2036 *1*	100	9642.7	(39/2$^+$)	16667	(53/2$^+$)	2671 *2*	100	13996.2	(49/2$^+$)
11785.2	(45/2$^+$)	1814.2 *9*	100	9971.0	(41/2$^+$)	17602	(57/2$^+$)	2243 *1*	100	15359	(53/2$^+$)
11832.3	(43/2$^-$)	1861 *1*	100	9971.3	(39/2$^-$)	17643	(55/2$^-$)	2426 *3*	100	15216.7	(51/2$^-$)
12020.2	(45/2$^-$)	1740.6 *9*	100	10279.6	(41/2$^-$)	19135	(57/2$^-$)	2783 *2*	100	16352.3	(53/2$^-$)

† Weighted average of available values when populated in different studies. The average includes the values from ^{40}Ca(^{40}Ca,4pnγ) which is the most complete dataset but seems to have slightly higher E values (by about 0.5 MeV). Above 2628 level, the values are generally from (^{24}Mg,2pnγ), ^{58}Ni(^{20}Ne,2pnγ) (1998Sk01) and ^{40}Ca(^{40}Ca,4pnγ) (2012St19).

‡ From γ(θ) in heavy-ion reactions (1987He01,1990Sk06,1998Sk01).

From 1998Sk01, unless otherwise stated.

@ From (^{54}Fe,2pnγ). Value given in (^{24}Mg,2pnγ) is in agreement but less precise.

& Note that B(E2)(W.u.) value deduced for this mixing ratio exceeds the currently accepted RUL(E2)=300.

a Additional information 2.

b Placement of transition in the level scheme is uncertain.

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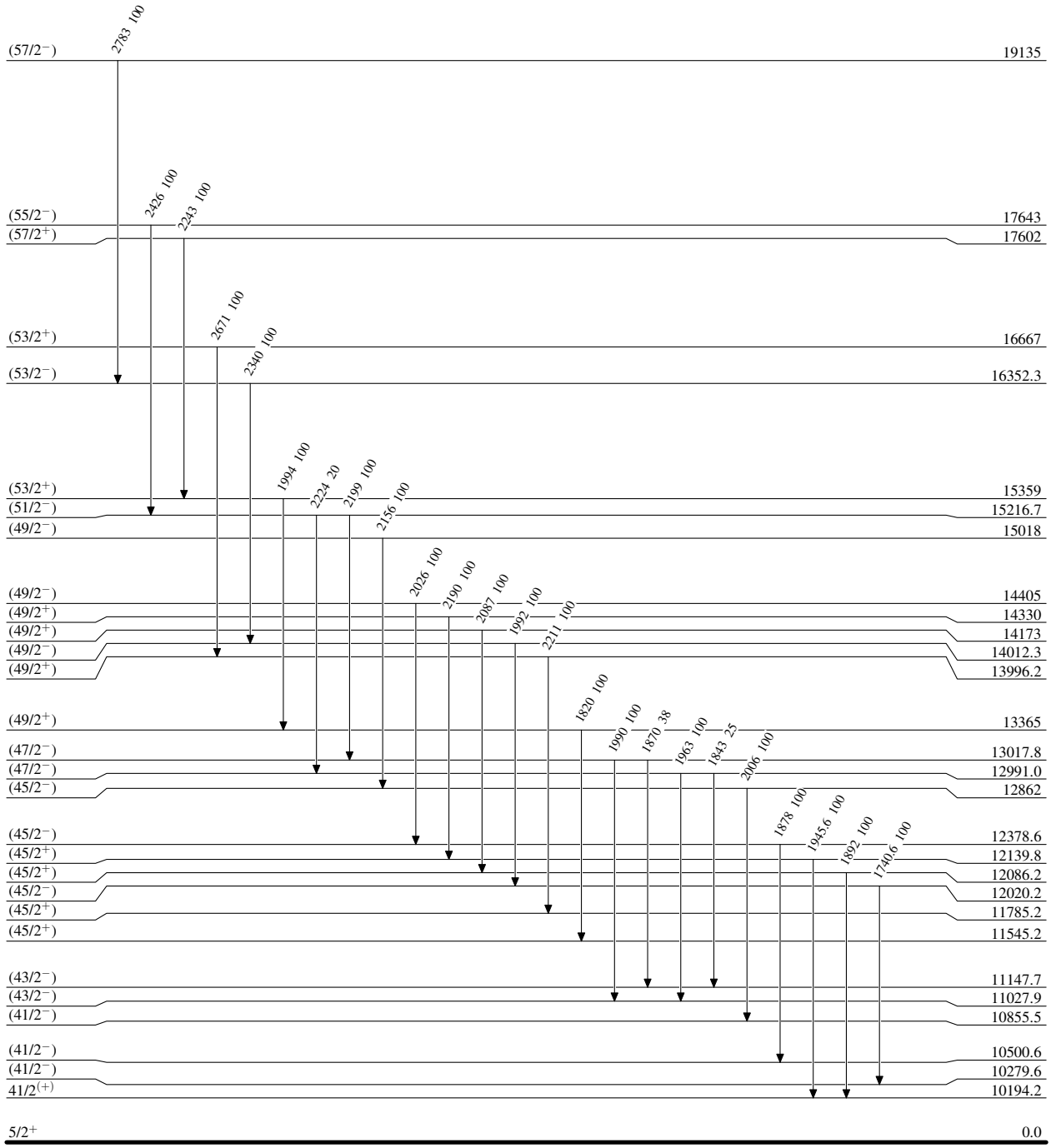
Adopted Levels, Gammas

Level Scheme

Intensities: Relative photon branching from each level

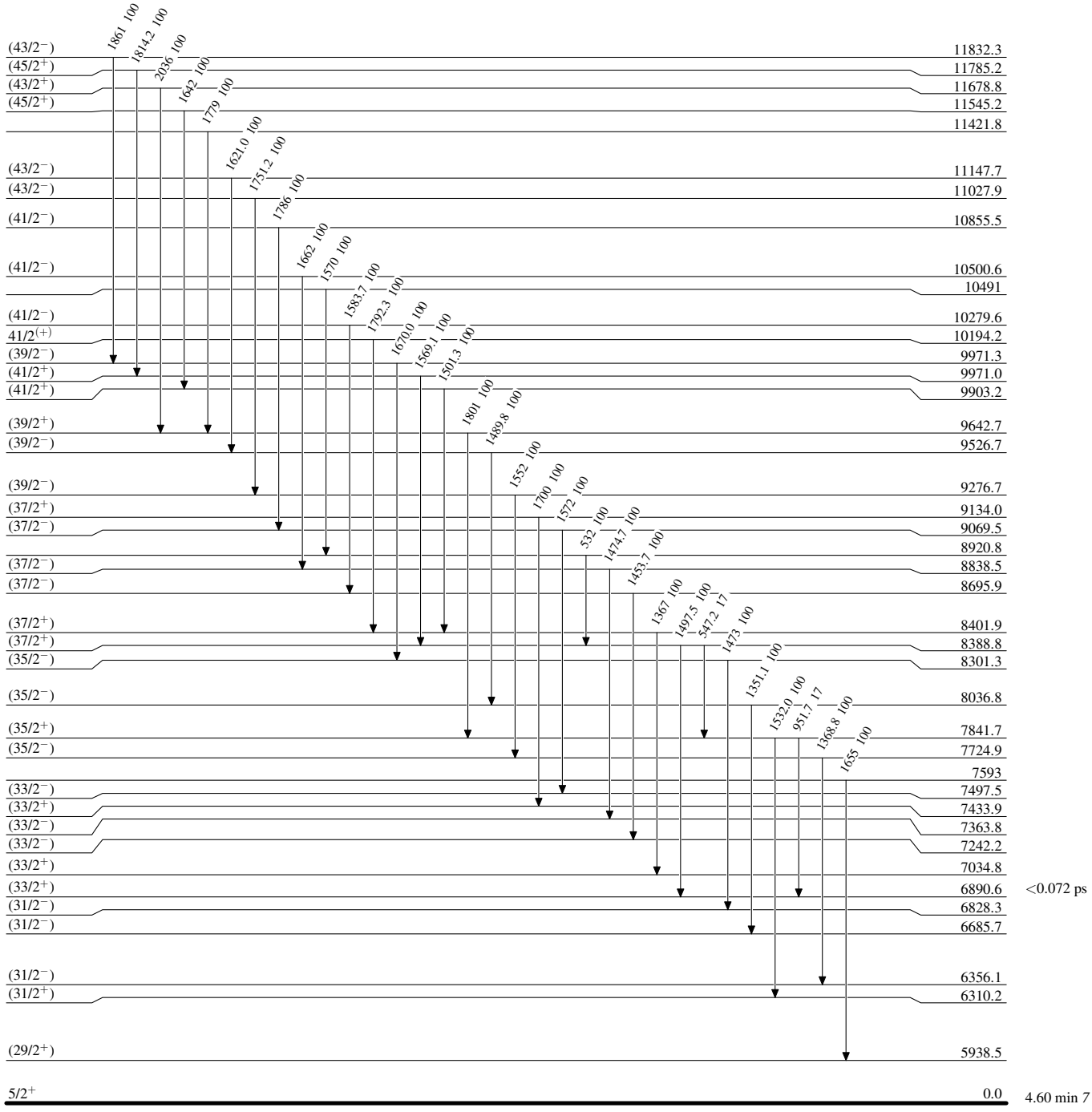


$^{75}_{36}Kr_{39}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

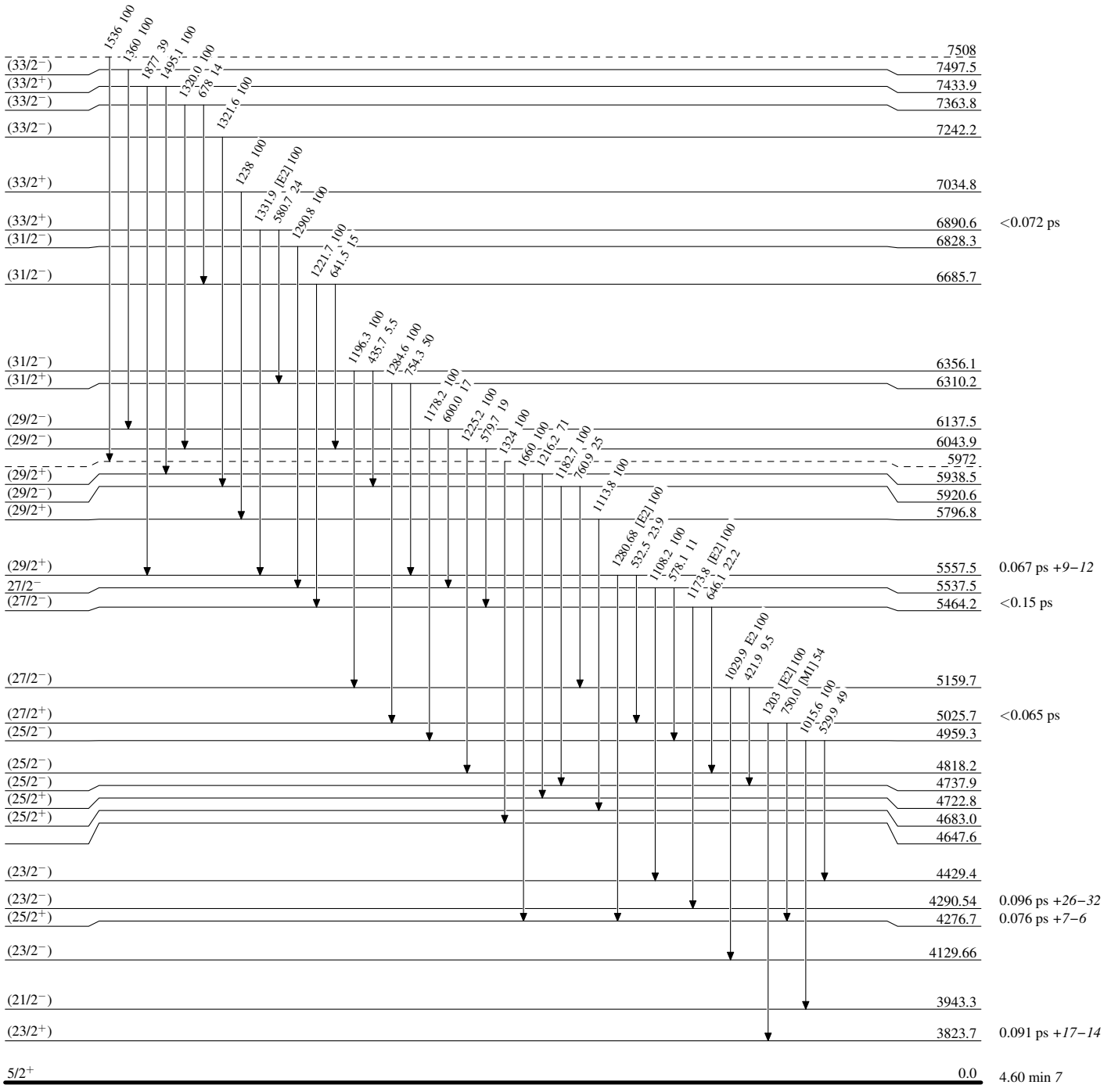


$^{75}_{36}Kr_{39}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

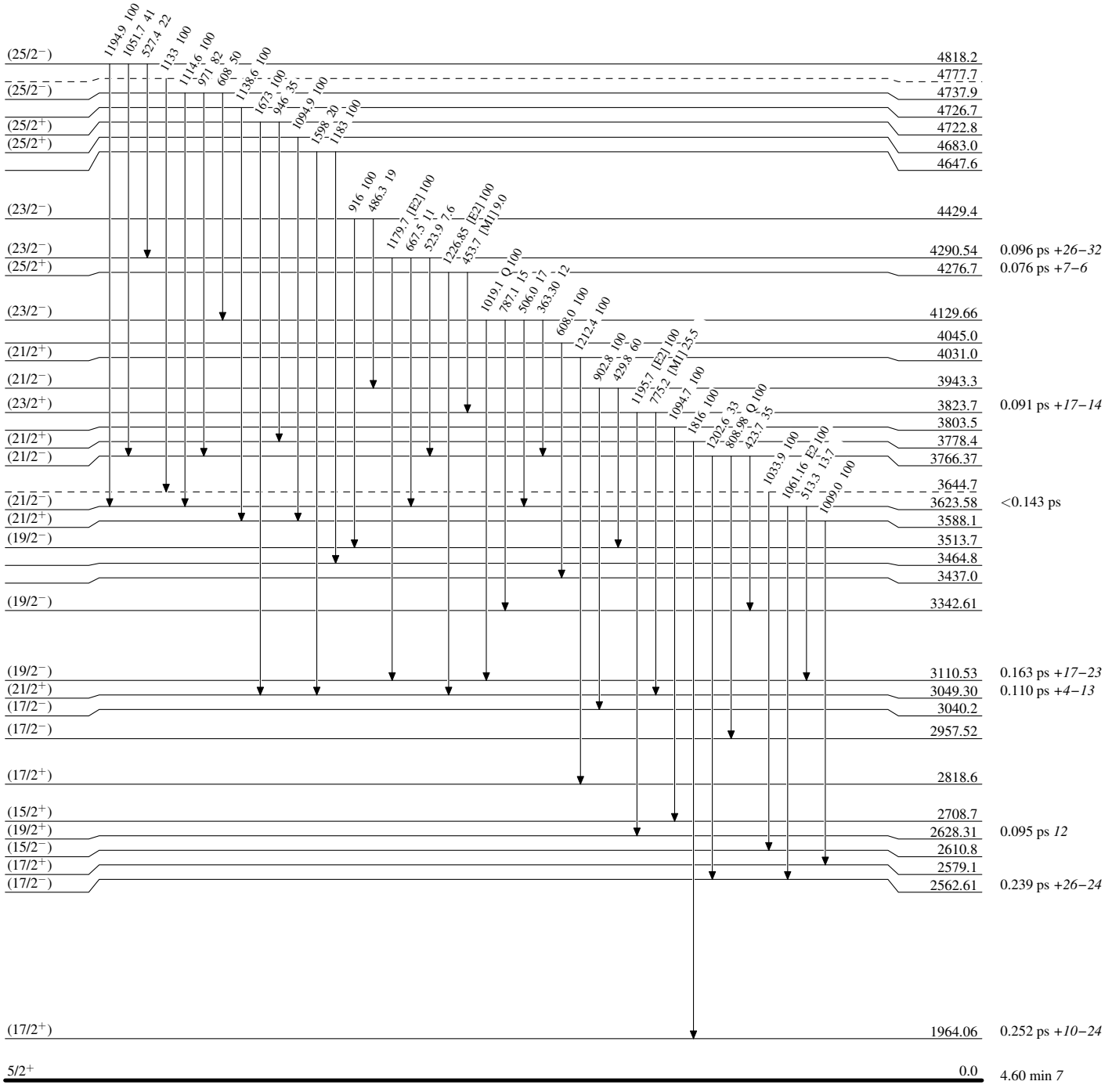


$^{75}_{36}Kr_{39}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



$^{75}_{36}Kr_{39}$

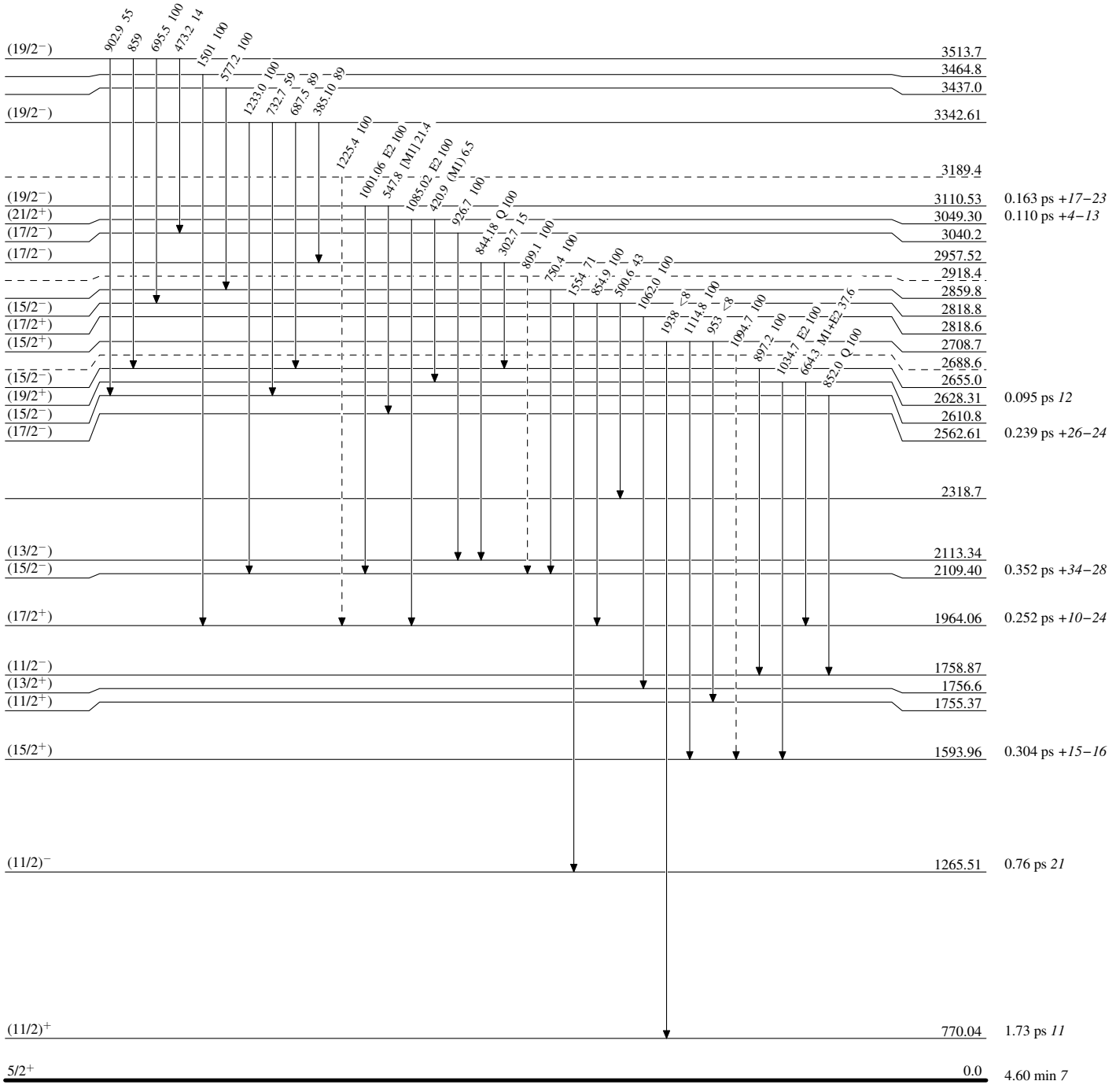
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{75}_{36}Kr_{39}$

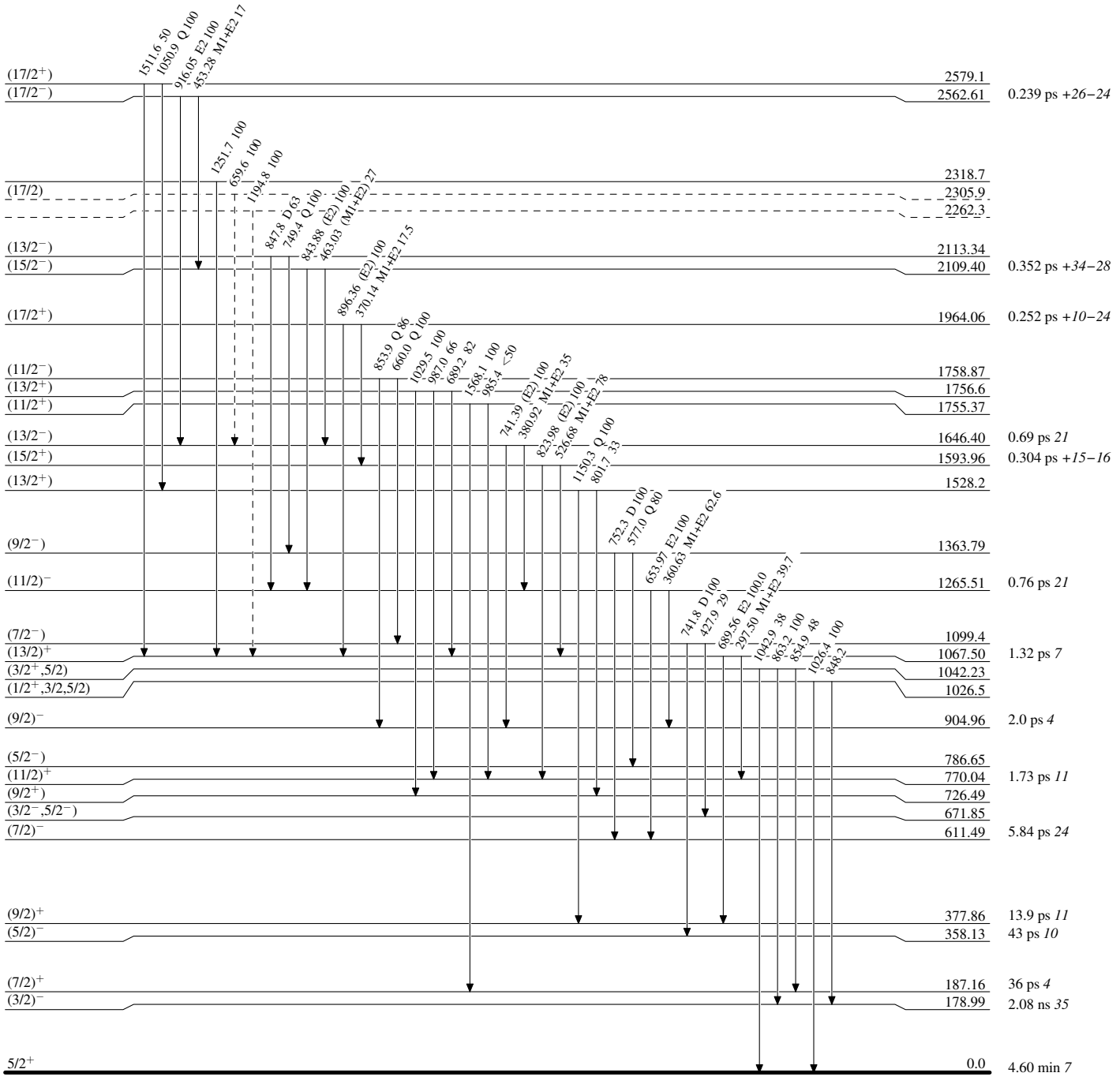
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)

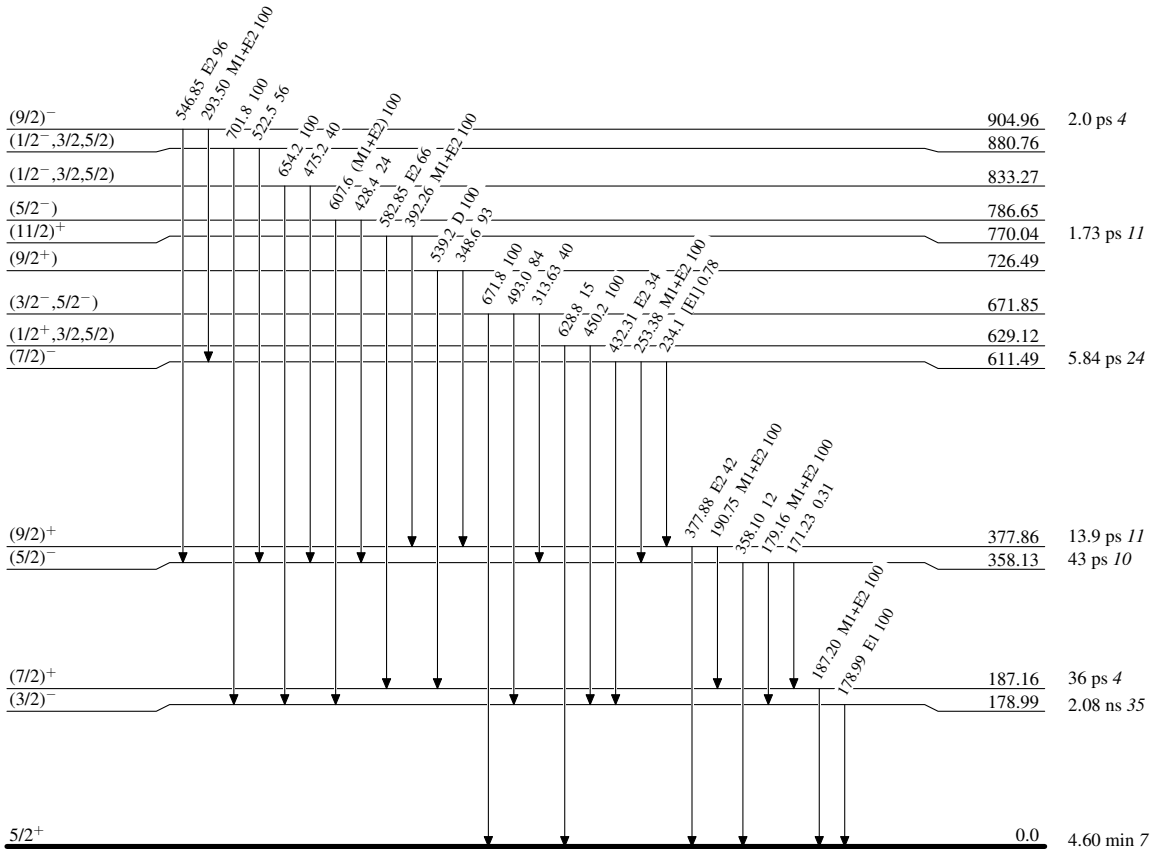


$^{75}_{36}Kr_{39}$

Adopted Levels, Gammas

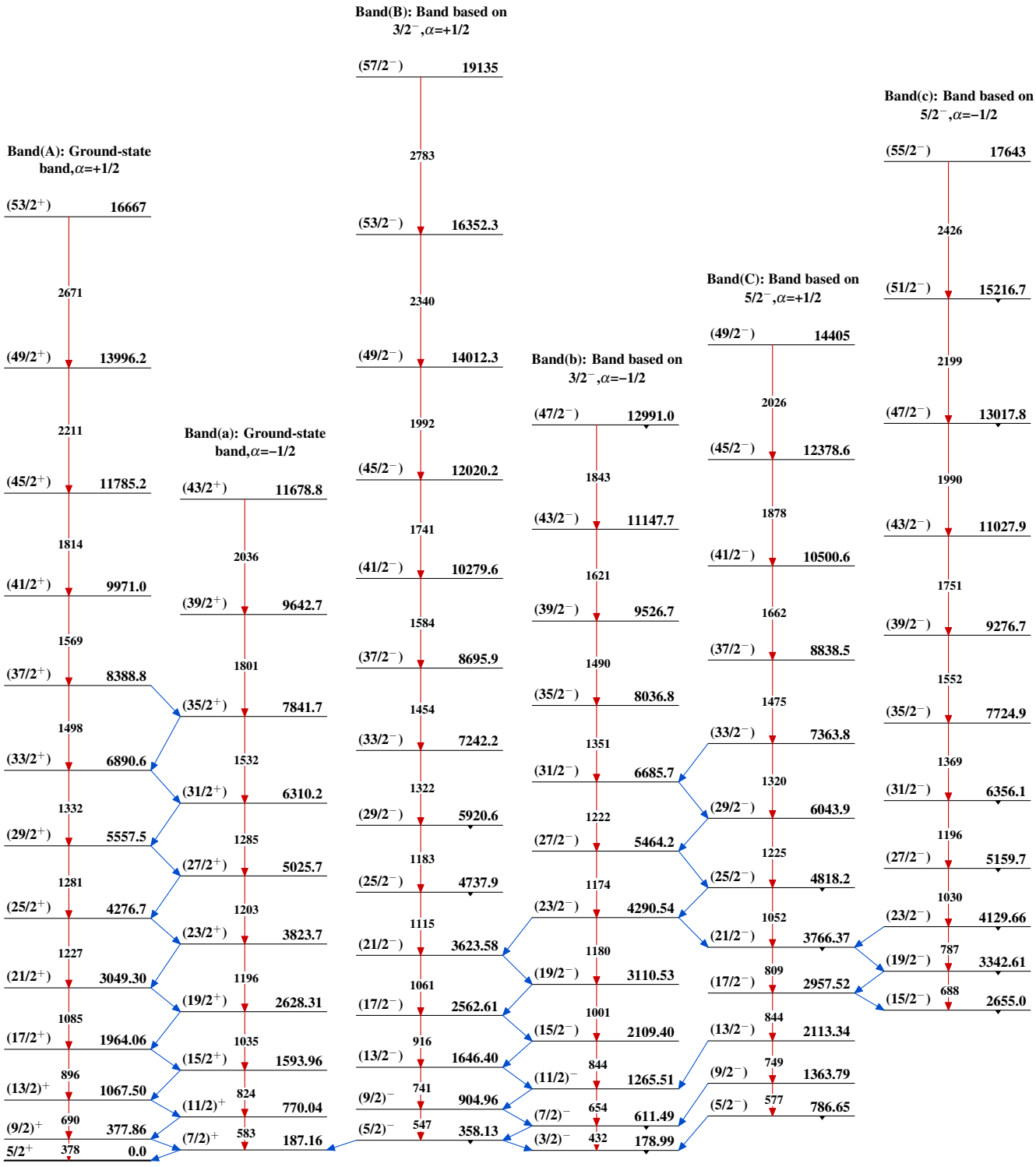
Level Scheme (continued)

Intensities: Relative photon branching from each level



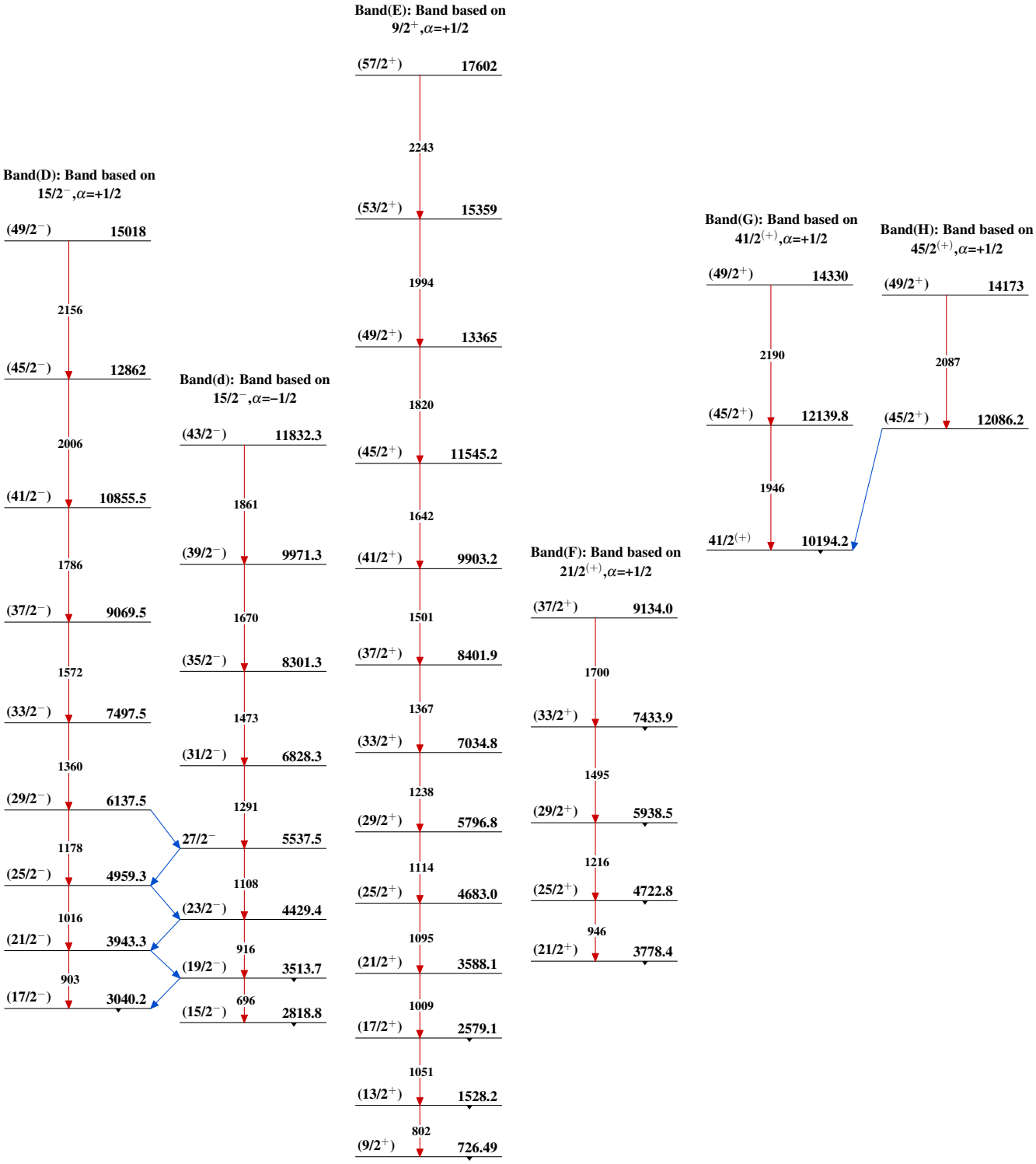
$^{75}_{36}Kr_{39}$

Adopted Levels, Gammas



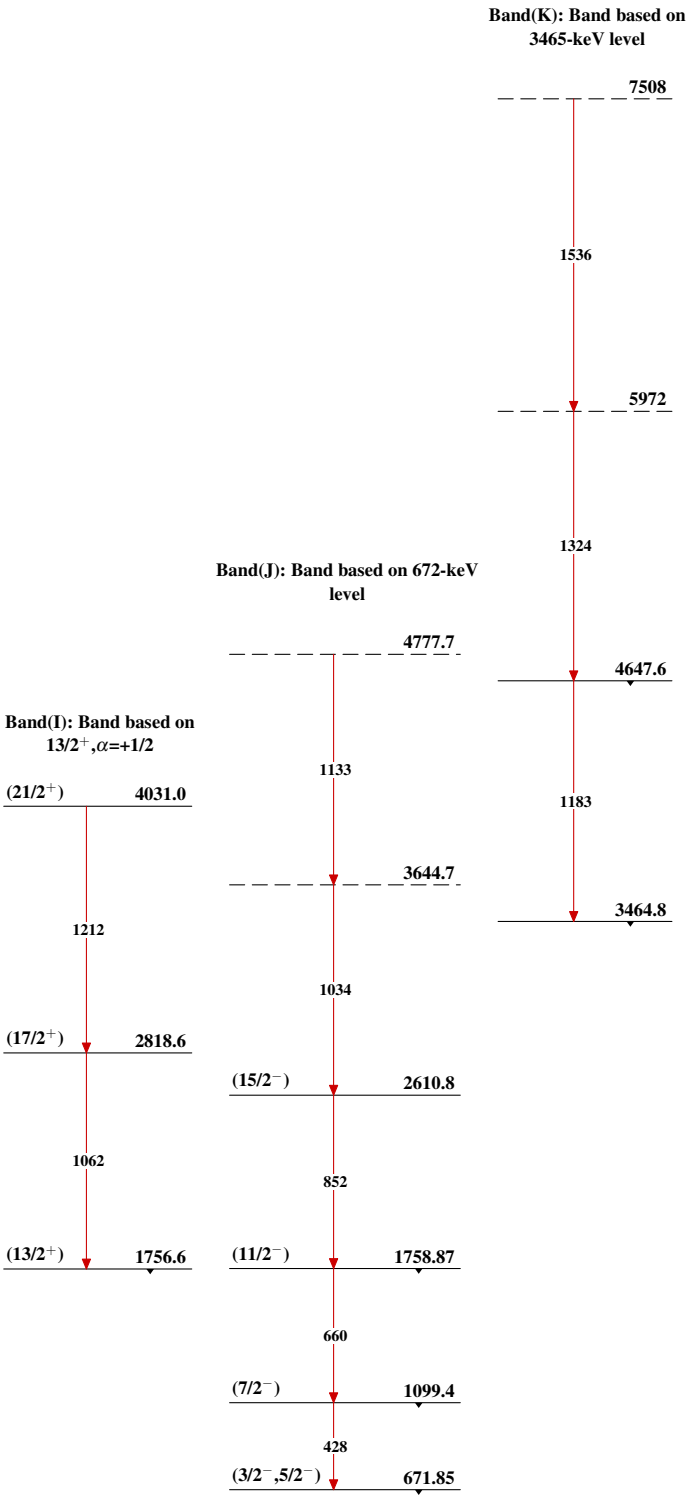
$^{75}_{36}Kr_{39}$

Adopted Levels, Gammas (continued)



$^{75}_{36}Kr_{39}$

Adopted Levels, Gammas (continued)



$^{75}_{36}Kr_{39}$