Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 105,223 (2005)	22-Jun-2005

Q(β^-)=−5717.8 *20*; S(n)=11522 *4*; S(p)=9114.2 *14*; Q(α)=−5066.3 *7* 2012Wa38
Note: Current evaluation has used the following Q record $ −5720 7 *11521* 4 *9112.9* *24* −5065.422 2003Au03.
Other reactions:
^{79}Br(p,γ) E=1.7, 2.4 MeV: 1983Ra02, prompt γ rays in ^{80}Kr at 617, 640, 820, 1172 and 1257 keV are reported. This suggests population of levels in ^{80}Kr at 617, 1256, 1436 and 1788.
^{76}Ge(^{32}S,^{28}Mg) E=100 MeV: 1974We04 (cross section data through measurement of ^{28}Mg activity).
^{80}Se(π^+,π^-): 1995Hu09 (E=293.2 MeV), 1991Fo02, 1988Mo01, 1987Gi04 (E=100-190 MeV); 1991Wi13 (E=450,500 MeV; cross section for g.s. and double IAS). Other: 1996Fo08.
^{64}Zn(^{16}O,X) GDR study: 1985GuZZ.
Hyperfine structure and isotope-shift data: 1995Ke04, 1992Sc19, 1990Ca26, 1990Sc30, 1989Tr04, 1981Ge06 (also 1979Ge05,1977Ge05). Other: 1996Li25.
Mass measurement: 2002He23 (Penning-trap method), 1986Bu18 (from ^{80}Kr(d,p)); 1978Di09, 1963Ri07.
Isotopic abundance: 1971Me13.
Additional information 1.
In ^{80}Rb ε decay, 1993Gi01 attempted to identify third 0$^+$ state around 2 MeV from ce data. From the absence of any conversion electron line in the range 1900-2100 keV, 1993Gi01 deduced Ice(K)(third 0$^+$ to g.s)/Ice(K)(second 0$^+$ to g.s.)<0.05 (with 95% confidence limit).

^{80}Kr Levels

Cross Reference (XREF) Flags

A	^{80}Br β^- decay (17.68 min)	F	^{79}Br(^{3}He,d)
B	^{80}Rb ε decay (34 s)	G	^{80}Kr(p,p′),(p,p′γ)
C	^{65}Cu(^{18}O,p2nγ),^{65}Cu(^{19}F,2p2nγ)	H	Coulomb excitation
D	^{70}Zn(^{12}C,2nγ)	I	^{82}Kr(p,t)
E	^{78}Se(α,2nγ),^{80}Se(α,4nγ),		

E(level)[#]	J$^{\pi}$[‡]	T$_{1/2}$[†]	XREF	Comments
0.0[@]	0$^+$	stable	ABCDEFGHI	<r^2>$^{1/2}$=4.1976 fm *13* (2004An14).
616.60[@] *10*	2$^+$	8.3 ps *5*	ABCDEFGH	μ=+0.76 *10* (2001Me20) J$^{\pi}$: E2 γ to 0$^+$. T$_{1/2}$: weighted average of 8.3 ps *7*(DSAM,2001Mu25); 7.8 ps *5* (DSAM in Coul. ex.); 8.3 ps *7* (DSAM and RDM,1981Fu03); 8.8 ps *5* (RDM,1975Fr04). Evaluation by 2001Ra27 adopted 8.6 ps *5* from 1981Fu03 and 1975Fr04. μ: transient-field technique in Coul. ex. (2001Me20). β_2(p,p′)=0.28 (1979Sa14). T$_{1/2}$: others: 9.4 ps (from B(E2)(Coul. ex.)=0.34). Δ<r^2>(^{80}Kr−^{86}Kr)=0.088 fm^2 *7* (1990Sc30), 0.0866 fm^2 *9* (1981Ge06,1979Ge06), 0.144 fm^2 *7* (1995Ke04). Uncertainties quoted are statistical only. The total uncertainties including the systematic errors are: 0.068 fm^2 (1990Sc30), 0.044 fm^2 (1995Ke04).
1256.24[&] *12*	2$^+$	7.6 ps *14*	ABCDEFGH	μ=+1.3 *7* (2001Me20) J$^{\pi}$: E2 γ to 2$^+$. μ: transient-field technique in Coul. ex. (2001Me20). β_2(p,p′)=0.059 (1979Sa14).
1320.51 *22*	0$^+$	4.9 ps *21*	AB FGH	J$^{\pi}$: (704γ)(617γ)(θ) in ^{80}Br β^-; E0 transition to 0$^+$. T$_{1/2}$: DSAM in (p,p′γ) (1993Gi01).

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Adopted Levels, Gammas (continued)

^{80}Kr Levels (continued)

E(level)[#]	J^{π}[‡]	$T_{1/2}$[†]	XREF	Comments
1436.09[@] *16*	4^+	1.07 ps *15*	CDEFGH	μ=+1.8 *6* (2001Me20) B(E4)↑=0.0015 *3* (1978Ma11) J^{π}: γ(θ,pol); E2 γ to 2^+. $T_{1/2}$: DSAM in Coul. ex. (2001Me20). Others: 1.7 ps *2* (1975Fr04), 1.6 ps *4* (1981Fu03). μ: transient-field technique in Coul. ex. (2001Me20). β_4(p,p′)=0.061 (1979Sa14).
1787.99[&] *14*	3^+	7.1 ps *9*	CDE	J^{π}: 532γ(θ), 1171γ(θ,pol); E2+M1 γ to 2^+.
2145.88[&] *16*	4^+	0.76 ps *42*	CDE H	J^{π}: γ(θ,pol); E2 γ to 2^+.
2392.06[@] *18*	6^+	0.56 ps *14*	CDE	J^{π}: γ(θ,pol); E2 γ to 4^+.
2439.21[a] *22*	3^-	1.4 ps *+14−5*	CDE G I	B(E3)↑=0.043 *15* (1978Ma11,2002Ki06) XREF: G(2414)I(2424). J^{π}: L(p,p′)=3.
2659.74[&] *18*	5^+	0.83 ps *28*	CDE	J^{π}: 871γ(θ,pol); E2 γ to 3^+.
2793.05[e] *17*	4^-	2.1 ps *4*	CDE	J^{π}: γ(θ,pol).
2859.53[a] *17*	5^-	2.4 ps *11*	CDE	J^{π}: γ(θ,pol); E1 γ to 4^+.
2969 *15*	3^-		G I	B(E3)↑=0.00038 *6* (1978Ma11) J^{π}: L(p,p′)=L(p,t)=3.
2997.6? *4*			DE	
3039.57 *22*	(5^-)	1.5 ps *4*	CDE	J^{π}: γ(θ,pol).
3041.74[e] *17*	6^-	2.2 ns *2*	CDE	J^{π}: γ (θ,pol); E2 γ to 4^-. $T_{1/2}$: from 1981Fu03. Other: 1.8 ns *2* (γ(t) in (α,2nγ)) (1984Do02).
3110.21[&] *21*	(6^+)	0.83 ps *+62−35*	CDE	J^{π}: γ(θ); (E2) γ to 4^+.
3172.81 *24*	$(5,6,7^-)$		C	J^{π}: γ′s to 6^+ and 5^-. $J^{\pi}=(5^-)$ proposed by 1995Do15.
3345.81[d] *18*	6^-	4.9 ps *21*	CDE	J^{π}: γ(θ,pol).
3409.98[@] *23*	8^+	0.28 ps *+28−14*	CDE	J^{π}: γ(θ,pol); E2 γ to 2^+.
3488.0[a] *3*	(6^-)		CDE	J^{π}: γ′s to 5^- and 4^-. Greater σ(γ) of 628γ and 695γ in (α,4nγ) as compared to those in (α,2nγ) favors J=6 (1981Fu03).
3530.31 *19*	7^-		CDE	J^{π}: γ(θ,pol); E2+M1 γ to 6^-.
3558.66[a] *21*	$(7)^-$		CDE	J^{π}: γ(θ); E2+M1 γ to 6^-; γ from (9^-).
3581.69[c] *19*	7^-	2.7 ps *3*	CDE	J^{π}: γ(θ); E2 γ to 5^-.
3635.3[&] *4*	(7^+)	≥0.7 ps	CDE	J^{π}: γ(θ); γ to 6^+.
3699.75[b] *25*	8^+		CDE	J^{π}: γ(θ,pol); M1 γ to 8^+.
3916.6 *4*	(8^+)	≤0.14 ps	C E	J^{π}: γ to 6^+; possible γ to 8^+.
4126.23[d] *20*	(8^-)	≥1.7 ps	CDE	J^{π}: γ(θ); probable band assignment.
4153.2[b] *11*	(8^+)		E	J^{π}: γ to (6^+); probable band assignment.
4163.2[e] *3*	(8^-)		C E	J^{π}: γ(θ); band assignment.
4377.9[b] *3*	10^+	0.40 ps *+8−7*	CDE	J^{π}: ΔJ=2, E2 γ to 8^+; band member.
4393.70[a] *24*	(9^-)		CDE	J^{π}: γ(θ); band assignment.
4562.47[c] *25*	(9^-)		CDE	J^{π}: γ(θ); band assignment.
4648.9[@] *3*	(10^+)	0.49 ps *21*	CDE	J^{π}: ΔJ=2, (E2) γ to 8^+; (M1) γ to 10^+.
4975.1 *6*	(10^+)		C	J^{π}: ΔJ=(2) γ to 8^+; possible γ to 10^+.
5159.0[d] *4*	(10^-)		C E	J^{π}: γ to (8^-); probable band assignment.
5374.6[e] *5*	(10^-)		C	J^{π}: γ to (8^-).
5397.4[a] *4*	(11^-)		C	J^{π}: ΔJ=2 γ to (9^-).
5437.8[b] *4*	12^+	0.23 ps *+4−5*	CDE	J^{π}: ΔJ=2, E2 γ to 10^+; band member.
5665.5[c] *4*	(11^-)		C	J^{π}: γ to (9^-).
5889.9[@] *5*	(12^+)		C	J^{π}: ΔJ=2 γ to (10^+); γ to (12^+).
6181.2[d] *6*	(12^-)		C	J^{π}: γ to (10^-); band assignment.
6522.2[a] *6*	(13^-)		C	J^{π}: ΔJ=2 γ to (11^-).

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Adopted Levels, Gammas (continued)

^{80}Kr Levels (continued)

E(level)[#]	J^{π}[‡]	$T_{1/2}$[†]	XREF	Comments
6681.4[b] *6*	14$^+$	0.18 ps *+6−5*	C E	J^{π}: ΔJ=2, E2 γ to 12$^+$; band member.
7221.6[@] *9*	(14$^+$)		C	J^{π}: ΔJ=(2) γ to (12$^+$).
7771.0[a] *9*	(15$^-$)		C	J^{π}: ΔJ=(2) γ to (13$^-$).
8087.9[b] *9*	(16$^+$)	0.21 ps *8*	C	J^{π}: ΔJ=2, (E2) γ to (14$^+$).
8564.6?[@] *13*	(16$^+$)		C	J^{π}: ΔJ=(2) γ to (14$^+$).
9195.2[a] *11*	(17$^-$)		C	J^{π}: γ to (15$^-$); band assignment.
9690.6[b] *11*	(18$^+$)	0.12 ps *5*	C	J^{π}: ΔJ=2, (E2) γ to (16$^+$).
10844.3[a] *15*	(19$^-$)		C	J^{π}: γ to (17$^-$); band assignment.
11483.6[b] *23*	(20$^+$)	<0.10 ps	C	J^{π}: ΔJ=2, (E2) γ to (18$^+$).

[†] From recoil-distance method (RDM) and Doppler-shift attenuation methods (DSAM) (2001Mu25,1981Fu03,1975Fr04) in in-beam γ-ray experiments.
[‡] Based primarily on $\gamma(\theta)$, γ(linear polarization), $\gamma\gamma(\theta)$, and ce data in in-beam γ-ray studies. It is assumed that levels of ascending spins are populated in in-beam γ-ray spectroscopy as the excitation energy increases. The γ decay pattern, generally, supports this assumption.
[#] From least-squares fit to Eγ's.
[@] Band(A): g.s. band.
[&] Band(B): γ band.
[a] Band(C): 3$^-$ Octupole band.
[b] Band(D): band based on 8$^+$.
[c] Band(E): γ cascade based on 7$^-$.
[d] Band(F): γ cascade based on 6$^-$.
[e] Band(G): γ cascade based on 4$^-$.

γ(^{80}Kr)

E_i(level)	J^{π}_i	E_{γ}[‡]	I_{γ}[‡]	E_f	J^{π}_f	Mult.[†]	δ[†]	Comments
616.60	2$^+$	616.6 *1*	100	0.0	0$^+$	E2		B(E2)(W.u.)=37.3 *22*
1256.24	2$^+$	639.6 *1*	100 *4*	616.60	2$^+$	E2+M1	+6 *1*	B(E2)(W.u.)= 25 *5*; B(M1)(W.u.)=0.00023 *9*
		1256.3 *3*	32.3 *22*	0.0	0$^+$	E2		B(E2)(W.u.)=0.30 *7*
1320.51	0$^+$	703.9 *2*	100	616.60	2$^+$	E2[#]		
		1320.5		0.0	0$^+$	E0		E_{γ}: ce(K) and ce(L) from 1993Gi01 in ^{80}Rb ε decay. ρ^2(E0: to g.s.)=0.021 *9*; X[(B(E0):E0 to g.s.)/(B(E2):E2 to 617,2$^+$)]=0.022 *2* (1993Gi01).
1436.09	4$^+$	819.5 *2*	100	616.60	2$^+$	E2		B(E2)(W.u.)=70 *10*
1787.99	3$^+$	351.8 *2*	12 *2*	1436.09	4$^+$	E2(+M1)	>6	B(E2)(W.u.)=50 *10*; B(M1)(W.u.)<0.00016
		531.7 *1*	82 *3*	1256.24	2$^+$	E2+M1	+3.0 *4*	B(E2)(W.u.)=34 *5*; B(M1)(W.u.)=0.00086 *24*
		1171.5 *2*	100 *5*	616.60	2$^+$	E2+M1	+1.3 *3*	B(E2)(W.u.)=0.57 *14*; B(M1)(W.u.)=0.00037 *12*
2145.88	4$^+$	709.8 *2*	27 *4*	1436.09	4$^+$	E2+M1	+2.0 *8*	B(E2)(W.u.)=32 *20*; B(M1)(W.u.)=0.003 *2*
		889.7 *2*	100 *4*	1256.24	2$^+$	E2		B(E2)(W.u.)=50 *30*
		1529.5 *3*	7.7 *26*	616.60	2$^+$			If E2, B(E2)(W.u.)=0.26 *18*.
2392.06	6$^+$	956.0 *2*	100	1436.09	4$^+$	E2		B(E2)(W.u.)=62 *16*
2439.21	3$^-$	1822.1 *5*	100	616.60	2$^+$			If E1, B(E1)(W.u.)=4×10^{-5} *2*.
2659.74	5$^+$	871.6 *2*	100 *4*	1787.99	3$^+$	E2		B(E2)(W.u.)=50 *17*
		1223.6 *3*	24 *9*	1436.09	4$^+$	M1+E2	+0.8 *3*	B(E2)(W.u.)=1.2 *7*; B(M1)(W.u.)=0.0022 *10*
2793.05	4$^-$	353.7 *3*	10	2439.21	3$^-$			
		647.2[&] *2*	7[&] *4*	2145.88	4$^+$			If E1, B(E1)(W.u.)=4×10^{-5} *3*.

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Adopted Levels, Gammas (continued)

$\gamma(^{80}Kr)$ (continued)

E_i(level)	J^π_i	E_γ‡	I_γ‡	E_f	J^π_f	Mult.†	δ†	α@	Comments
2793.05	4⁻	1005.0 *2*	100 *9*	1787.99	3⁺	(E1)			B(E1)(W.u.)=1.6×10⁻⁴ *4*
		1357.1 *4*	20 *10*	1436.09	4⁺				
2859.53	5⁻	420.3& *2*	4.9& *16*	2439.21	3⁻				If E2, B(E2)(W.u.)=40 *30*.
		1423.6 *3*	100 *11*	1436.09	4⁺	E1			B(E1)(W.u.)=5.0×10⁻⁵ *25*
2997.6?		605.5a *3*	100	2392.06	6⁺				
3039.57	(5⁻)	647.4& *2*	47& *18*	2392.06	6⁺				If E1, B(E1)(W.u.)=0.00029 *14*.
		893.8 *3*	100 *12*	2145.88	4⁺	(E1)			B(E1)(W.u.)=0.00023 *8*
3041.74	6⁻	182.3 *1*	59 *6*	2859.53	5⁻	M1+E2	+0.07 *3*	0.026	B(E2)(W.u.)=0.11 *+16−6*; B(M1)(W.u.)=0.00056 *9* Iγ: from (α,2nγ),(α,4nγ). Values from heavy-ion reactions relative to Iγ for 248.6γ are too high.
		248.6 *1*	100 *6*	2793.05	4⁻	E2		0.034	B(E2)(W.u.)=7.6 *10*
		382.1 *2*	10.1 *15*	2659.74	5⁺				If E1, B(E1)(W.u.)=1.7×10⁻⁷ *4*.
		649.6 *3*	20	2392.06	6⁺				
3110.21	(6⁺)	718.2 *4*	11 *5*	2392.06	6⁺				If E2, B(E2)(W.u.)=17 *15*. If M1, B(M1)(W.u.)=0.007 *6*.
		964.4 *2*	100 *7*	2145.88	4⁺	(E2)			B(E2)(W.u.)=33 *17*
		1674a	<9	1436.09	4⁺	[E2]			B(E2)(W.u.)<0.23
3172.81	(5,6,7⁻)	313.3 *2*	100	2859.53	5⁻				
		780.7 *3*	100	2392.06	6⁺				
3345.81	6⁻	486.1 *2*	23 *7*	2859.53	5⁻				If E2, B(E2)(W.u.)=50 *30*. If M1, B(M1)(W.u.)=0.009 *5*.
		553.6 *3*	19 *6*	2793.05	4⁻				If E2, B(E2)(W.u.)=21 *11*.
		686.0 *1*	100 *16*	2659.74	5⁺	(E1)			B(E1)(W.u.)=0.00023 *11*
		954 *1*	≈32	2392.06	6⁺				Iγ: not resolved from 955.8γ. If E1, B(E1)(W.u.)≈1.6×10⁻⁵.
3409.98	8⁺	1017.9 *2*	100	2392.06	6⁺	E2			B(E2)(W.u.)=90 *+90−45*
3488.0	(6⁻)	628.5 *3*	53 *13*	2859.53	5⁻	D+Q	−1.0 *7*		
		694.9 *3*	100 *27*	2793.05	4⁻				
		1096.1 *5*	<100	2392.06	6⁺				
3530.31	7⁻	420.2& *2*	17& *6*	3110.21	(6⁺)				
		488.6 *2*	100 *9*	3041.74	6⁻	E2+M1	−1.6 *4*		
		490.5 *4*	<17	3039.57	(5⁻)				
		1138.2 *3*	34 *6*	2392.06	6⁺	D			
3558.66	(7)⁻	516.9 *2*	100 *14*	3041.74	6⁻	E2+M1	−1.2 *5*		
		699.2 *3*	29 *14*	2859.53	5⁻				Iγ: other: 67 *17* in (α,2nγ),(α,4nγ).
		1166.6 *3*	14	2392.06	6⁺				Iγ: other: 61 *11* in (α,2nγ),(α,4nγ).
3581.69	7⁻	539.8a *2*	22 *6*	3041.74	6⁻				If E2, B(E2)(W.u.)=24 *8*. If M1, B(M1)(W.u.)=0.0056 *17*.
		722.1 *1*	83 *8*	2859.53	5⁻	E2			B(E2)(W.u.)=21 *4*
		1189.7 *2*	100 *8*	2392.06	6⁺	D			If E1, B(E1)(W.u.)=3.9×10⁻⁵ *6*.
3635.3	(7⁺)	975.5 *3*	100 *14*	2659.74	5⁺				If E2, B(E2)(W.u.)≤45.
		1242a *1*	≈24	2392.06	6⁺				If E2, B(E2)(W.u.)≤2.6. If M1, B(M1)(W.u.)≤0.0032.
3699.75	8⁺	289.8 *1*	100 *5*	3409.98	8⁺	M1			δ(E2/M1)=+0.3 in (^{12}C,2nγ).
		1308.2 *5*	21 *5*	2392.06	6⁺				
3916.6	(8⁺)	216.8a *4*	100	3699.75	8⁺				
		507a *1*	<100	3409.98	8⁺				
		1524.6 *8*	100	2392.06	6⁺				If E2, B(E2)(W.u.)≥24.
4126.23	(8⁻)	490.5a *2*	39 *12*	3635.3	(7⁺)				If E1, B(E1)(W.u.)≤0.00044.

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Adopted Levels, Gammas (continued)

$\gamma(^{80}Kr)$ (continued)

E_i(level)	J^π_i	E_γ[‡]	I_γ[‡]	E_f	J^π_f	Mult.[†]	Comments
4126.23	(8⁻)	596.0 *3*	21 *9*	3530.31	7⁻		If E2, B(E2)(W.u.)≤28. If M1, B(M1)(W.u.)≤0.008.
		780.4 *1*	100 *6*	3345.81	6⁻		If E2, B(E2)(W.u.)≤35. If M1, B(M1)(W.u.)≤0.017.
4153.2	(8⁺)	1043 *1*	100	3110.21	(6⁺)		I_γ: complex line.
4163.2	(8⁻)	582 *1*	33	3581.69	7⁻		
		632.7 *3*	33	3530.31	7⁻		
		1121.6 *3*	100 *33*	3041.74	6⁻	(Q)	
4377.9	10⁺	678.3 *3*	2.5	3699.75	8⁺		
		967.8 *2*	100 *5*	3409.98	8⁺	E2	B(E2)(W.u.)=47 *24*
4393.70	(9⁻)	811.8 *3*	57 *14*	3581.69	7⁻	Q	
		835.1 *3*	100 *14*	3558.66	(7)⁻	Q	
		863.3 *3*	70 *10*	3530.31	7⁻	(Q)	
		984.1 *4*	14	3409.98	8⁺		
4562.47	(9⁻)	436.1[a] *4*	<25	4126.23	(8⁻)		
		980.6 *3*	100 *11*	3581.69	7⁻		
		1032.7[&a] *4*	39[&] *11*	3530.31	7⁻		
		1152.4 *4*	25	3409.98	8⁺		
4648.9	(10⁺)	271.0 *2*	56 *14*	4377.9	10⁺	(M1)	B(M1)(W.u.)=0.8 *4*
		949.4 *3*	67 *33*	3699.75	8⁺		If E2, B(E2)(W.u.)≤20. If M1, B(M1)(W.u.)<0.015.
		1238.6 *3*	100 *10*	3409.98	8⁺	(E2)	B(E2)(W.u.)=10 *5*
4975.1	(10⁺)	326[a] *1*	<50	4648.9	(10⁺)		
		597[a] *1*	<50	4377.9	10⁺		
		1565.4 *8*	100 *50*	3409.98	8⁺	(Q)	
5159.0	(10⁻)	1032.8[&] *3*	100[&]	4126.23	(8⁻)		
5374.6	(10⁻)	1211.4 *4*	100	4163.2	(8⁻)		
5397.4	(11⁻)	1003.7 *3*	100	4393.70	(9⁻)	Q	
5437.8	12⁺	1059.9 *3*	100	4377.9	10⁺	E2	B(E2)(W.u.)=90 *50*
5665.5	(11⁻)	1103.0 *3*	100	4562.47	(9⁻)		
5889.9	(12⁺)	452.0 *5*	33 *17*	5437.8	12⁺		
		1241.1 *4*	100 *33*	4648.9	(10⁺)	Q	
6181.2	(12⁻)	1022.2 *4*	100	5159.0	(10⁻)		
6522.2	(13⁻)	1124.8 *4*	100	5397.4	(11⁻)	Q	
6681.4	14⁺	1243.6 *4*	100	5437.8	12⁺	E2	B(E2)(W.u.)>13
7221.6	(14⁺)	1331.7 *7*	100	5889.9	(12⁺)	(Q)	
7771.0	(15⁻)	1248.8 *6*	100	6522.2	(13⁻)	(Q)	
8087.9	(16⁺)	1406.5 *6*	100	6681.4	14⁺	(E2)	
8564.6?	(16⁺)	1343[a] *1*	100	7221.6	(14⁺)	(Q)	
9195.2	(17⁻)	1424.2 *7*	100	7771.0	(15⁻)		
9690.6	(18⁺)	1602.6 *7*	100	8087.9	(16⁺)	(E2)	
10844.3	(19⁻)	1649 *1*	100	9195.2	(17⁻)		
11483.6	(20⁺)	1793 *2*	100	9690.6	(18⁺)	(E2)	

† From $\gamma(\theta$,pol), ce, $\gamma\gamma(\theta)$ measurements in in-beam γ-ray studies. For levels of known $T_{1/2}$, RUL (for E2 and M2 transitions) is also used in the assignment of multipolarity.

‡ Weighted averages taken when data of comparable precision available from more than one dataset. Most data are from in-beam γ-ray studies.

\# From ^{80}Br β^- decay.

@ 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.

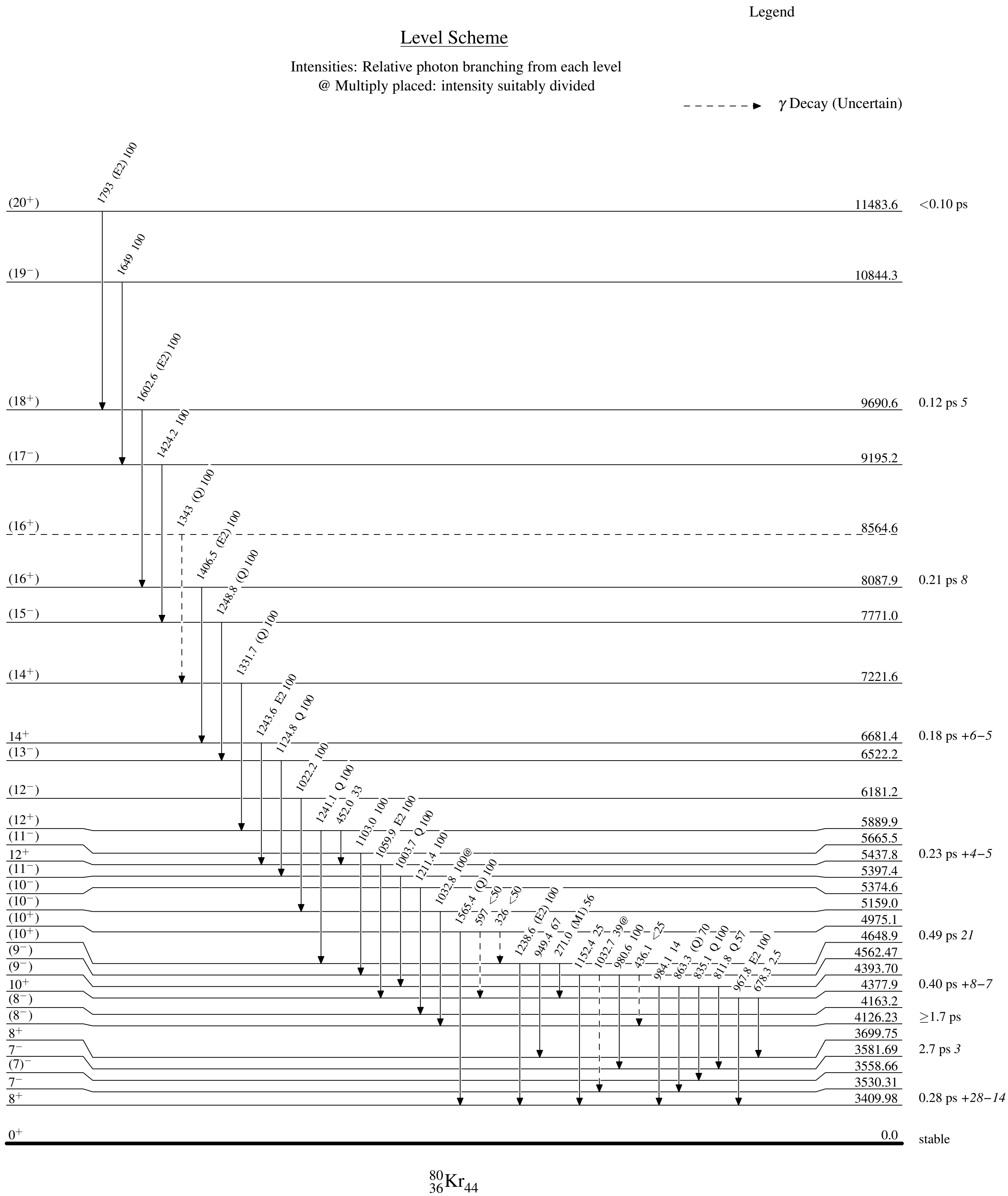
& Multiply placed with intensity suitably divided.

a Placement of transition in the level scheme is uncertain.

Adopted Levels, Gammas

Level Scheme

Intensities: Relative photon branching from each level
@ Multiply placed: intensity suitably divided

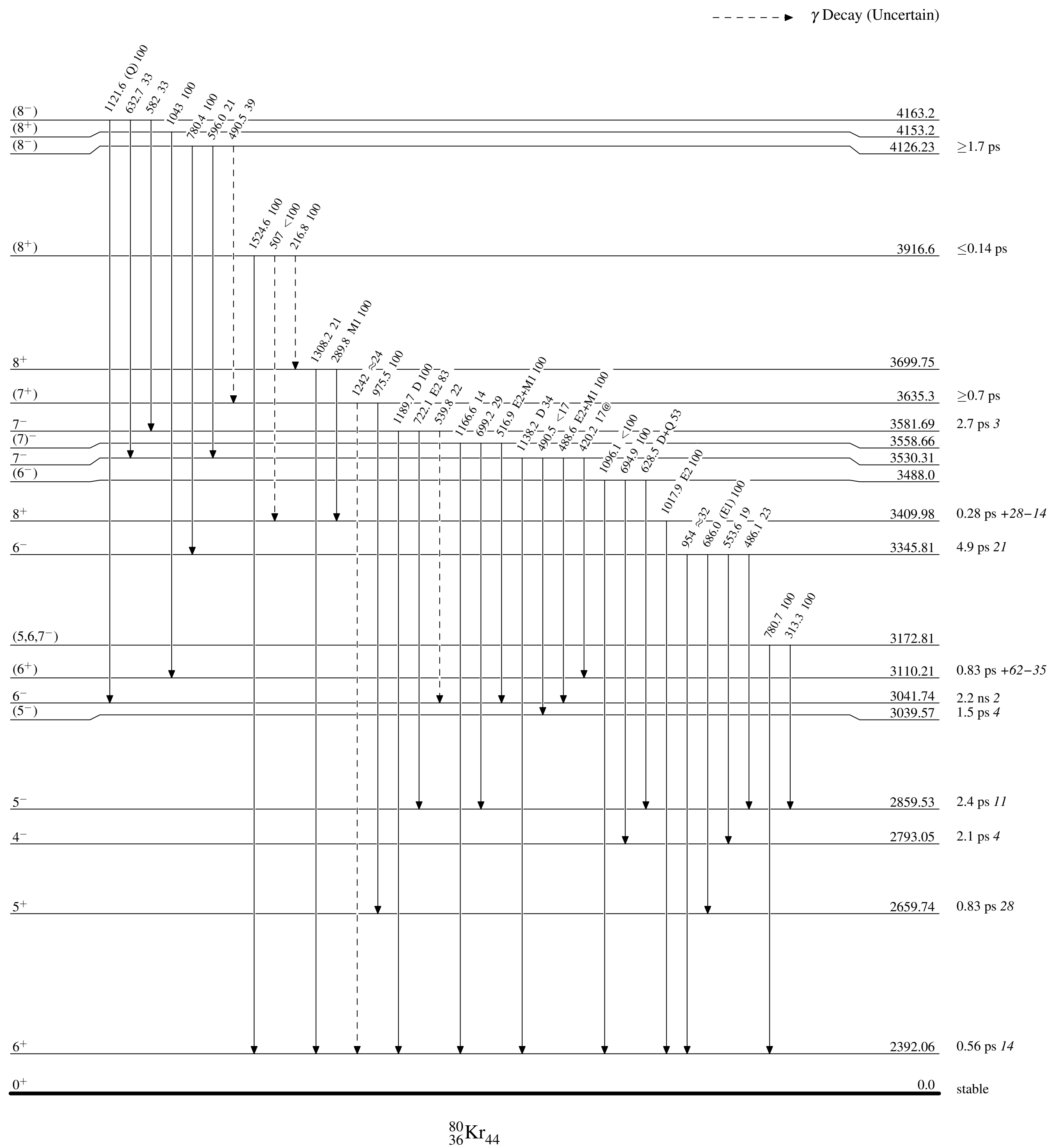


Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

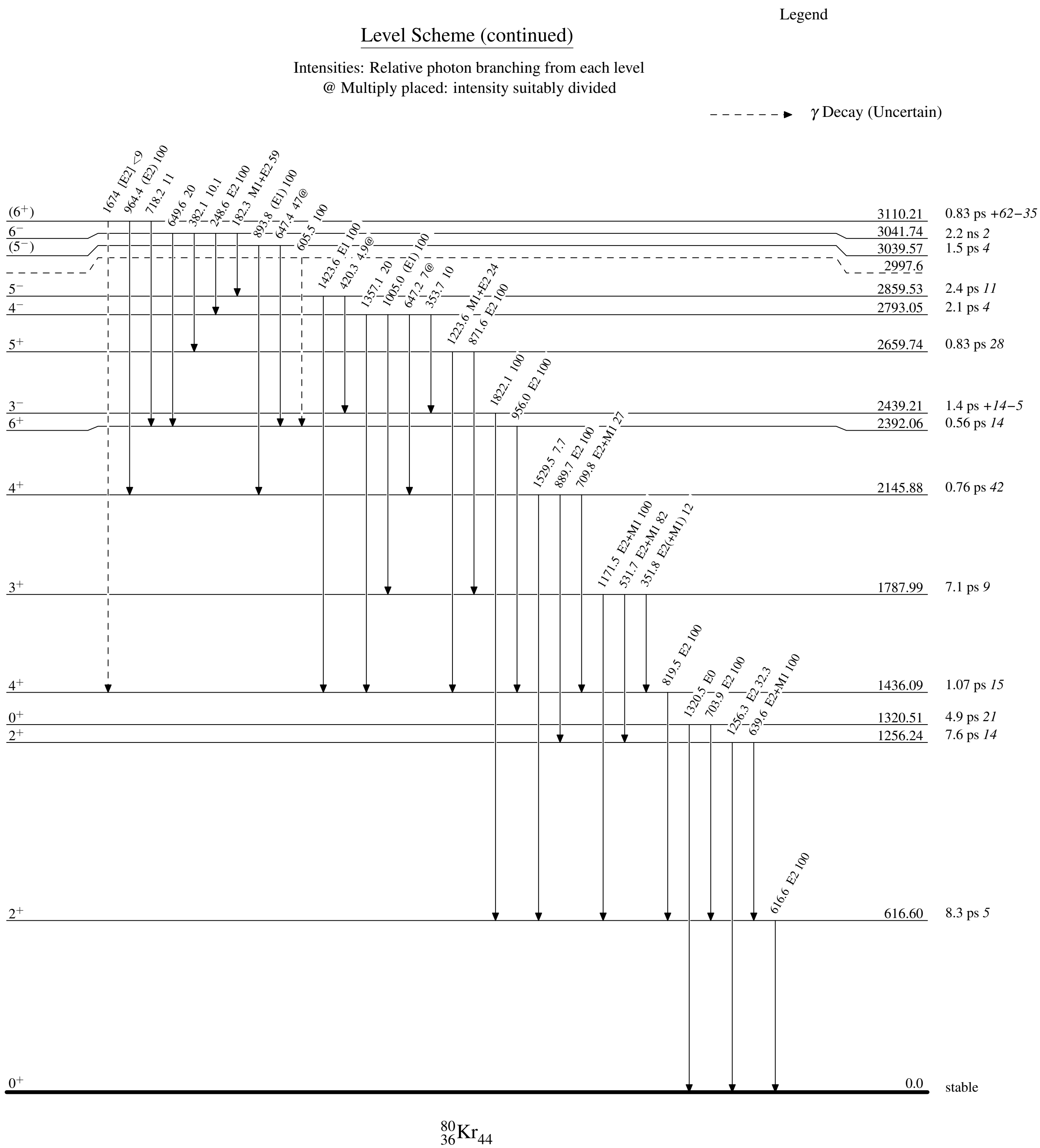
@ Multiply placed: intensity suitably divided



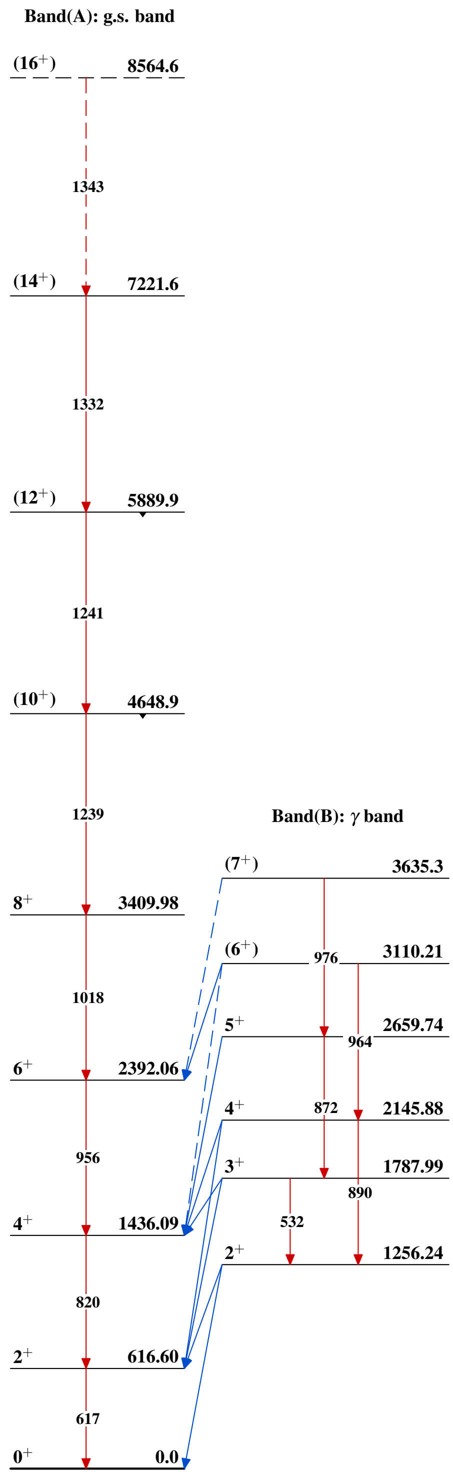
Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level
@ Multiply placed: intensity suitably divided

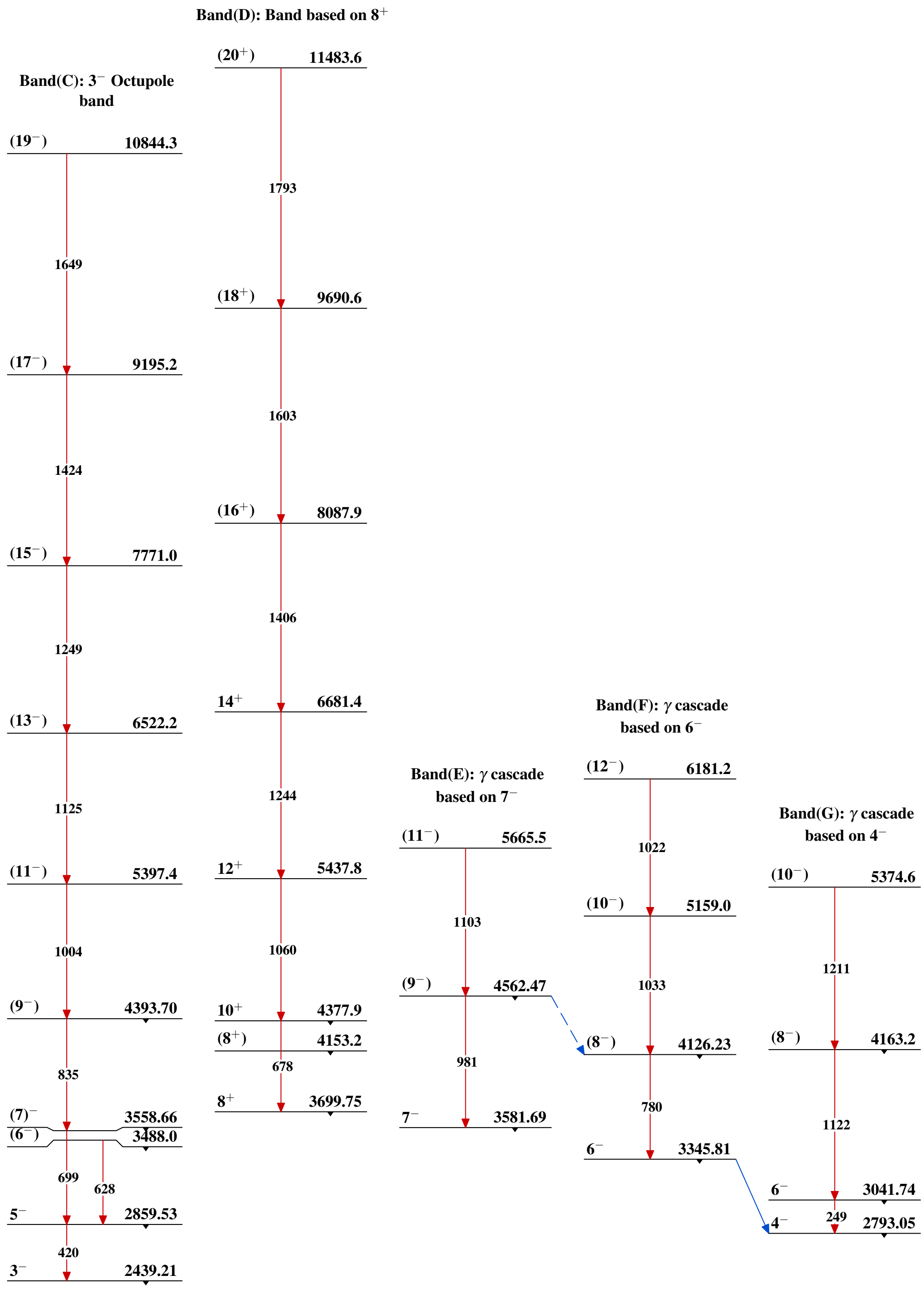


Adopted Levels, Gammas



$^{80}_{36}Kr_{44}$

Adopted Levels, Gammas (continued)



$^{80}_{36}Kr_{44}$