Adopted Levels, Gammas

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen, John Cameron and Balraj Singh	NDS 112,2715 (2011)	20-Oct-2011

Q(β^-)=−5966.1 *8*; S(n)=12644.77 *5*; S(p)=6370.82 *4*; Q(α)=−6997.91 *4* 2012Wa38
Note: Current evaluation has used the following Q record −5966.1 7 *12644*.80 *7* 6370.82 *5*−6997.90 *4* 2011AuZZ.
S(2n)=24152.9 *4*, S(2p)=17254.1 *11* (2011AuZZ,2003Au03).
Values in 2003Au03: S(n)=12645.08 *18*, s(p)=6370.72 *10* Q(α)=6997.57 *19*.
First isotope identification by F. W. Aston from a mass-spectrum.
Additional information 1.

^{35}Cl Levels

Cross Reference (XREF) Flags

A	^{35}S β^- decay (87.37 d)	I	^{34}S(p,γ)	Q	^{36}Ar(n,d)
B	^{35}Ar ε decay (1.7756 s)	J	^{34}S(p,p),(p,p′γ):resonances	R	^{36}Ar(d,^{3}He)
C	^{36}K εp decay (342 ms)	K	^{2}H(^{34}S,nγ)	S	^{36}Ar(pol d,^{3}He)
D	^{31}P(^{6}Li,d)	L	^{34}S(d,n)	T	^{37}Cl(p,t)
E	^{31}P(α,p),(α,n):resonances	M	^{34}S(^{3}He,d)	U	^{39}K(γ,α)
F	^{32}S(α,p)	N	^{35}Cl(γ,γ')	V	^{40}Ca(μ^-,$\nu\alpha$nγ)
G	^{32}S(α,pγ)	O	^{35}Cl(n,n′γ)	W	Coulomb excitation
H	^{33}S(α,d)	P	^{35}Cl(p,p),(p,p′γ)	X	(HI,xnγ)

E(level)†	J$^\pi$‡#@	T$_{1/2}$[a]	XREF	Comments
0	3/2$^+$	stable	ABCD FG I KLMNOPQRSTUVWX	μ=+0.8218743 *4* (1972Bl07,1989Ra17,2011StZZ) Q=−0.08249 *2* (1972St38,1989Ra17,2011StZZ) μ: using NMR method (1972Bl07). Q: using the method atomic beam magnetic resonance (1972St38). Others: −0.076 *5* (1986El09), −0.817 *8* (1993Su36), 0.0819 *11* (2000Ha64), 0.0850 *11* (2004Al08); also from 2011StZZ. J$^\pi$: spin from microwave spectroscopy and atomic beam methods (1948To10,1949Da14), parity from L(pol d,^{3}He)=2 and L-1/2 from analyzing power. Evaluated rms charge radius=3.365 fm *15* (2004An14 evaluation), 3.365 fm *19* from 2008 update of 2004An14.
1219.29 *11*	1/2$^+$	126 fs *14*	B D FG I KLMNOPQRST VWX	J$^\pi$: L(pol d,^{3}He)=0. T$_{1/2}$: weighted average of 146 fs *62* from (α,pγ), 106 fs *14* from (p,γ), 201 fs *28* from (^{34}S,nγ), 90 fs *21* from (γ,γ), 139 fs *56* from (n,n′γ), 150 fs *35* from (p,p′γ), 150 fs *20* from coulomb excitation.
1763.04 *7*	5/2$^+$	0.39 ps *4*	B D FG I KLM OPQRS UVWX	T=1/2 J$^\pi$: L(d,n)=2; ΔJ=1, M1+E2 γ to 3/2$^+$. T$_{1/2}$: weighted average of 0.38 ps *11* from (α,pγ), 0.35 ps *6* from (p,γ), 0.374 ps *49* from (^{34}S,nγ), 0.43 ps *20* from (p,p′γ), 0.41 ps *4* from coulomb excitation.
2645.74 *8*	7/2$^+$	159 fs *21*	B FG I LM OP T VWX	J$^\pi$: L(p,t)=2; $\gamma\gamma$(DCO) in (HI,xnγ). T$_{1/2}$: weighted average of 208 fs *62* from (α,pγ), 146 fs *21* from (p,γ), 187 fs *62* from (n,n′γ), 165 fs *35* from (p,p′γ) and 180 fs *60* from coulomb excitation.
2693.75 *8*	3/2$^+$	33 fs *6*	B FG I LMNOP RS V	J$^\pi$: L(^{3}He,d)=L(d,^{3}He)=2; p′$\gamma(\theta)$ and γ-polarization in (p,p′γ). T$_{1/2}$: weighted average of 49 fs *21* from (α,pγ), 14 fs *2* from (p,γ), 24 fs *7* from (γ,γ), 43 fs *6* from (n,n′γ) and 44 fs *11* from (p,p′γ).

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Adopted Levels, Gammas (continued)

^{35}Cl Levels (continued)

E(level)[†]	Jπ[‡#@]	$T_{1/2}$[a]	XREF	Comments
3002.30 *13*	5/2$^+$	21 fs *4*	B FG I LMNOP RST X	Jπ: L(pol d, ^{3}He)=2 and L+1/2 from analyzing power. $T_{1/2}$: weighted average of 33 fs *6* from (α,pγ), 13 fs *2* from (p,γ), 17 fs *7* from (γ,γ), 50 fs *9* from (n,n′γ), 18 fs *9* from (p,p′γ).
3162.80 *8*	7/2$^-$	30.8 ps *6*	D FG I LM OP RS X	T=1/2 Jπ: L(pol d, ^{3}He)=3 and L+1/2 from analyzing power. $T_{1/2}$: weighted average of 34 ps *3* from (α,pγ), 25.6 ps *28* from (p,γ), 32 ps *4* from (p,p′γ) and 30.9 ps *6* from (HI,xnγ).
3918.49 *17*	3/2$^+$	4.9 fs *14*	B G I MN P	Jπ: γ(θ) in (p,γ). $T_{1/2}$: from (p,γ) and (γ,γ).
3943.82 *25*	9/2$^+$	205 fs *35*	FG I S X	Jπ: γ(θ) in (α,pγ) and γγ(DCO) in (HI,xnγ). $T_{1/2}$: weighted average of 229 fs *35* in (α,pγ) and 173 fs *41* in (p,γ).
3967.50 *23*	1/2$^+$	10 fs *3*	B G I M	Jπ: L(^{3}He,d)=0. $T_{1/2}$: from (p,γ).
3979.0 *3*	(3/2$^+$,5/2$^+$)	14 fs *3*	I	Jπ: γ transitions to 1/2$^+$,7/2$^+$. E(level),$T_{1/2}$: from (p,γ).
4059.12 *15*	3/2$^-$	14 fs *2*	FG I LM	Jπ: (^{3}He,d)=1 and γ(θ) in (p,γ). $T_{1/2}$: weighted average of 21 fs *9* from (α,pγ) and 14 fs *2* from (p,γ).
4111.98 *24*	7/2$^+$	49 fs *11*	FG I L	Jπ: γ(θ) in (α,pγ) and (p,γ); γ to 3/2$^+$.
4173.44 *17*	5/2$^-$	34 fs *6*	I L	T=1/2 Jπ: γ-feeding in (p,γ). $T_{1/2}$: from (p,γ).
4177.88 *15*	3/2$^-$	25 fs *3*	FG I M	XREF: M(4167). Jπ: L(^{3}He,d)=1; γ(θ) and γ-polarization in (p,γ). $T_{1/2}$: weighted average of 47 fs *17* from (α,pγ) and 24 fs *3* from (p,γ).
4347.82 *15*	9/2$^-$	0.8 ps *3*	FG I X	Jπ: pγ(θ) and γ-polarization in (α,pγ) and γγ(DCO) in (HI,xnγ). $T_{1/2}$: weighted average of 2.0 ps *7* in (α,pγ), 0.229 ps *42* in (p,γ) and 0.91 ps *19* in (HI,xnγ).
4624.35 *23*	(3/2,5/2$^+$)	40 fs *17*	B FG I	XREF: B(?). Jπ: γ(θ) in (α,pγ) and (p,γ); γ-feeding in (p,γ). $T_{1/2}$: from (α,pγ).
4768.82 *18*	7/2	77 fs *20*	FG I	Jπ: γ(θ) and γ-feeding in (p,γ). $T_{1/2}$: from (p,γ).
4839.08 *20*	(1/2$^+$,3/2)	10 fs *3*	I S	Jπ: γ-feeding in (p,γ). $T_{1/2}$: from (p,γ).
4854.4 *4*	(1/2,3/2)	4.9 fs *14*	I	Jπ: γ to 1/2$^+$ and γ-feeding in (p,γ). $T_{1/2}$: from (p,γ).
4881.07 *21*	7/2	5.4 fs *14*	FG I	Jπ: γ(θ) in (α,pγ). $T_{1/2}$: from (p,γ). 194 fs *42* from (α,pγ).
5010.09 *20*	(1/2,3/2)	7.6 fs *21*	G I M	Jπ: γ-feeding in (p,γ). $T_{1/2}$: from (p,γ).
5157 *11*	3/2$^+$,5/2$^+$		M RS	Jπ: L(d,^{3}He)=2.
5163.21 *23*	7/2$^-$		FG I	Jπ: γ(θ) in (p,γ).
5215.79 *18*	(3/2$^+$,5/2)	<5 fs	F I	Jπ: γ to 3/2$^+$ and γ-feeding in (p,γ). $T_{1/2}$: from (p,γ).
5403.5 *3*	1/2$^-$,3/2$^-$	12 fs *3*	FG I M	Jπ: L(^{3}He,d)=1; γ′s to 1/2$^+$ and 3/2$^+$; γ-feeding in (p,γ). $T_{1/2}$: from (p,γ).
5407.2[b] *4*	11/2$^-$	0.28 ps *7*	G M X	Jπ: pγ(θ) and γ-polarization in (α,pγ) and

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Adopted Levels, Gammas (continued)

^{35}Cl Levels (continued)

E(level)[†]	Jπ‡#@	$T_{1/2}$[a]	XREF	Comments
				γγ(DCO) in (HI,xnγ).
				$T_{1/2}$: from (α,pγ).
5520.0 *11*			G I	E(level): from 1976Sp08.
5586.0 *3*	5/2+		F I S	Jπ: L(pol d,^{3}He)=2 and L+1/2 from analyzing power.
5599.69 *23*	3/2+,5/2+	2.1 fs *7*	G I R	Jπ: L(d,^{3}He)=2; γ′s to 3/2+ and 5/2+; γ-feeding in (p,γ).
5633 *3*			F	
5645.0 *3*	(5/2,7/2,9/2+)	2.8 fs *7*	G I	Jπ: γ to 7/2− and γ-feeding in (p,γ).
				$T_{1/2}$: from (p,γ).
5654.48 *22*	3/2+	14 fs *3*	G I M T	T=3/2
				Jπ: L(^{3}He,d)=2; L(p,t)=0+2; γ(θ) in (p,γ).
				Jπ: from (p,γ).
5682.9 *6*	1/2−,3/2−		F I M	Jπ: L(^{3}He,d)=1.
5723.6 *4*	5/2+		I RS	Jπ: L(pol d,^{3}He)=2 and L+1/2 from analyzing power.
5758.0 *4*	(1/2+,3/2)		I M	Jπ: L(^{3}He,d)=(0,1); γ′s to 3/2+ and 3/2−; γ-feeding in (p,γ).
5805.5 *4*	(1/2+,3/2,5/2)	3.5 fs *7*	F I	Jπ: γ′s to 3/2+ and γ-feeding in (p,γ).
				$T_{1/2}$: from (p,γ).
5823.0 *10*	(5/2,9/2)		FG	Jπ: γ(θ) in (α,pγ).
5926.9 *3*	11/2−	<0.28 ps	FG X	Jπ: γ(θ) in (α,pγ) and γγ(DCO) (HI,xnγ).
				$T_{1/2}$: from (HI,xnγ).
6087.4 *4*	13/2−	6.1 ps *6*	FG X	Jπ: pγ(θ) and γ-polarization in (α,pγ) and γγ(DCO) (HI,xnγ).
				$T_{1/2}$: weighted average of 6.4 ps *6* in (α,pγ) and 5.3 ps *10* in (HI,xnγ).
6106.2 *4*	(3/2,5/2+)	8.3 fs *21*	I	Jπ: γ′s to 1/2+,3/2+ and 5/2+; γ-feeding in (p,γ).
				$T_{1/2}$: from (p,γ).
6139 *4*	5/2+		F RS	Jπ: L(pol d,^{3}He)=2 and L+1/2 from analyzing power.
6181.0 *6*	(1/2 to 7/2,9/2−)		I	Jπ: γ to 3/2+.
6200 *10*	(7/2 to 17/2)+		H	Jπ: L(α,d)=6.
6225 *4*			F	
6380.8 *8*			F X	
6402 *4*			FG	
6492.0 *6*	(1/2,3/2,5/2+)		F I	Jπ: γ to 3/2+ and γ-feeding in (p,γ).
6656 *3*			F	
6681 *3*			F	
6746 *12*	3/2+,5/2+		RS	Jπ: L(d,^{3}He)=2.
6783 *3*			F	
6802 *4*			F	
6866.7 *6*			F I	
6894 *3*			F	
6947 *4*	5/2+		F RS	Jπ: L(pol d,^{3}He)=2 and L+1/2 from analyzing power.
6986 *4*			F	
7066.2 *3*	5/2+		I	Jπ: γ′s to 1/2+,3/2+,5/2+,7/2+,7/2−.
7103.3 *3*	3/2		F I	Jπ: γ(θ) in (p,γ).
7121 *4*			F	
7170 *10*	(7/2 to 17/2)+		H	Jπ: L(α,d)=6.
7178.6 *3*	1/2+		F I	T=3/2
				Jπ: γ(θ) in (p,γ); parity from IAS in ^{35}S.
7185.0 *3*	5/2+		I S	Jπ: L(pol d,^{3}He)=2 and L+1/2 from analyzing power.

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Adopted Levels, Gammas (continued)

^{35}Cl Levels (continued)

E(level)[†]	Jπ[‡#@]	$T_{1/2}$[a]	XREF	Comments
7194.5 *3*	1/2⁻	0.027 keV *8*	I	Jπ: γ(θ) in (p,γ) and analysis of resonance in (p,p).
7210 *4*			F	
7225.5 *3*	5/2		F I	Jπ: γ(θ) in (p,γ).
7234.0 *3*	5/2⁺		F I T	Jπ: γ(θ) in (p,γ) and parity from transition strength in (p,γ).
7269.2 *1*			I T	
7272.6 *3*	1/2⁻	0.014 keV *4*	I T	Jπ: γ(θ) in (p,γ) and analysis of resonance in (p,p).
7348 *5*			F	
7362.0 *3*	3/2		I	Jπ: γ(θ) in (p,γ).
7396.0 *3*	7/2⁽⁻⁾		I	Jπ: γ(θ) in (p,γ).
7418 *5*			F	
7451.0 *5*	3/2		I	Jπ: γ(θ) in (p,γ).
7501.1 *5*			I	
7502.9 *3*			F I	
7518.7 *4*	7/2⁽⁻⁾		I	Jπ: γ(θ) in (p,γ).
7548.2 *3*	7/2⁻	<0.7 fs	IJ	T=3/2 Jπ: γ(θ) in (p,γ) and R-Matrix analysis in (p,p). $T_{1/2}$: from (p,γ).
7561.1 *4*	(1/2,3/2)		I	Jπ: γ(θ) in (p,γ).
7568 *4*			F	
7587 *4*			F	
7600.8 *3*	5/2⁺	<14 fs	I	Jπ: γ(θ) in (p,γ); parity from transition strength in (p,γ).
7618.7 *4*	(3/2⁻,5/2)		I	Jπ: γ(θ) in (p,γ).
7650 *4*			F	
7656.5 *4*	(1/2,3/2,5/2⁺)		I	Jπ: γ's to 3/2⁺,3/2⁻,1/2⁺.
7670 *10*	(7/2 to 17/2)⁺		H	Jπ: L(α,d)=6.
7671.9 *3*	(5/2⁻,7/2)		F I	Jπ: γ(θ) in (p,γ).
7684.7 *3*	3/2⁻		IJ	Jπ: γ(θ) in (p,γ) and R-Matrix analysis in (p,p). Γ_p=446 eV *15* in (p,p).
7693.8 *5*	(1/2 to 7/2,9/2⁻)		I	Jπ: γ to 3/2⁺.
7706.4 *3*	5/2⁺		IJ	Jπ: γ(θ) in (p,γ) and R-Matrix analysis in (p,p). Γ_p=4 eV *1* in (p,p).
7744.8 *4*	7/2⁻		F I	Jπ: γ(θ) in (p,γ).
7750 *10*	(7/2 to 17/2)⁺		HI	Jπ: L(α,d)=6.
7777.0 *3*	5/2⁺		F I	Jπ: γ(θ) in (p,γ).
7781.6 *3*	5/2⁻		I	Jπ: γ(θ) in (p,γ).
7796.6 *4*	1/2⁻	0.031 keV *10*	F IJ	
7837.1 *3*	3/2⁻	<3.5 fs	IJ	T=3/2 Jπ: γ(θ) in (p,γ) and R-Matrix analysis in (p,p). $T_{1/2}$: from (p,γ). Γ=3.73 keV *38* from (p,p).
7839.7 *5*	(1/2 to 5/2,7/2⁻)		I	Jπ: γ's to 1/2⁺,3/2⁻.
7868.6 *5*	(3/2,5/2⁺)		F I	Jπ: γ's to 3/2⁺,1/2⁺,5/2⁻.
7873.2[c] *4*	13/2⁺		HI X	Jπ: γγ(DCO) in (HI,xnγ).
7880.6 *3*	3/2⁺,5/2⁺	0.008 keV *4*	IJ	Jπ: γ(θ) in (p,γ) and R-Matrix analysis in (p,p).
7889.0 *15*			I	
7899.1 *3*	(3/2⁻,5/2)		F I	Jπ: γ's to 3/2⁺,3/2⁻,7/2⁻.
7923.3 *3*	(3/2⁺,5/2⁺)		I	Jπ: γ's to 7/2⁺,1/2⁺.

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Adopted Levels, Gammas (continued)

^{35}Cl Levels (continued)

E(level)†	Jπ‡#@	$T_{1/2}$[a]	XREF	Comments
7949			I	
7970.2 *3*	(5/2⁻,7/2⁻)		I	Jπ: γ's to 7/2⁺,7/2⁻ and transition strengths in (p,γ).
7979 *4*			F	
7987.8 *4*	3/2		I	Jπ: γ(θ) in (p,γ).
7995.6 *3*	5/2		I	Jπ: γ's to 1/2⁺,7/2; transition strengths in (p,γ).
8000.4 *3*	7/2⁺		I	Jπ: γ's to 9/2⁺,9/2⁻,5/2⁺,5/2⁻,3/2⁺.
8004.5 *3*	5/2⁺	0.011 keV *5*	IJ RS	Jπ: L(d,^{3}He)=2; γ(θ) in (p,γ).
8010 *10*	(7/2 to 17/2)⁺		H	Jπ: L(α,d)=6.
8019 *4*			F	
8035.0 *4*	(1/2⁻,3/2⁻)	0.026 keV *7*	IJ	Jπ: R-Matrix analysis in (p,p).
8038.5 *3*	1/2⁺	0.30 keV *2*	IJ	Jπ: R-Matrix analysis in (p,p).
8075.9 *3*	(3/2,5/2)		F I	Jπ: γ's to 3/2⁺,3/2⁻,7/2.
8096.5 *3*	5/2		I	Jπ: γ's to 3/2⁺,3/2⁻,7/2⁺,7/2⁻.
8100 *10*	(7/2 to 17/2)⁺		H	Jπ: L(α,d)=6.
8106.4 *3*	3/2		F I	Jπ: γ(θ) in (p,γ).
8113.3 *3*	(3/2,5/2⁺)		I	Jπ: γ's to 1/2⁺,3/2⁺,3/2⁻,5/2⁺,5/2⁻.
8147.6 *4*	1/2⁻	2.66 keV *27*	IJ	Jπ: R-Matrix analysis in (p,p).
8149.5 *5*	3/2⁻	0.56 keV *6*	J	Jπ: R-Matrix analysis in (p,p).
8156.8 *3*	(5/2⁺,7/2⁻)		I	Jπ: γ's to 7/2⁺,7/2⁻,9/2⁺,3/2⁻.
8172 *4*			F	
8179.4 *5*	(3/2⁻,5/2,7/2⁺)		I	Jπ: γ's to 7/2⁻,3/2⁺.
8209.1 *4*	5/2⁺	0.033 keV *10*	IJ RS	T=3/2 Jπ: L(pol d,^{3}He)=2 and L+1/2 from analyzing power.
8210.6 *5*	1/2⁺	0.094 keV *15*	F IJ	Jπ: R-Matrix analysis in (p,p).
8216.3 *4*	5/2⁺	0.014 keV *3*	IJ	Jπ: γ(θ) in (p,γ) and R-Matrix analysis in (p,p).
8242.9 *6*	3/2⁻	0.140 keV *15*	F IJ	Jπ: γ(θ) in (p,γ) and R-Matrix analysis in (p,p).
8251.0 *5*			I	
8269.6 *4*	5/2⁺	0.005 keV *3*	F IJ	Jπ: R-Matrix analysis in (p,p) and transition strength in (p,γ).
8277.2 *3*	5/2⁺	0.006 keV *3*	IJ	Jπ: γ(θ) in (p,γ) and R-Matrix analysis in (p,p).
8282.0 *3*	(3/2⁻,5/2)		I	Jπ: transition strength in (p,γ).
8284.3 *13*			I	
8287.8 *4*	1/2⁻	0.04 keV *1*	IJ	Jπ: γ(θ) in (p,γ) and R-Matrix analysis in (p,p).
8294 *2*			F I	
8297.3 *5*	3/2⁻	0.073 keV *15*	I	Jπ,$T_{1/2}$: for 8297 level or 8299 level.
8299.9 *3*	3/2⁻	0.073 keV *15*	IJ	Jπ: γ(θ) in (p,γ) and R-Matrix analysis in (p,p). Jπ,$T_{1/2}$: for 8297 level or 8299 level.
8318.1 *3*			I	
8319.8[b] *5*	15/2⁻	<0.07 ps	F X	Jπ: ADO ratios in (HI,xnγ). $T_{1/2}$: from (HI,xnγ).
8323.2 *5*			I	
8346 *5*			I	
8381.4 *4*	5/2⁺	0.023 keV *7*	IJ	Jπ: γ(θ) in (p,γ) and R-Matrix analysis in (p,p).
8387.8 *5*			I	
8390.8 *5*			I	
8403.4 *4*	5/2⁻	0.002 keV *1*	F IJ	Jπ: R-Matrix analysis in (p,p) and γ-decay schemes in (p,γ).

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Adopted Levels, Gammas (continued)

^{35}Cl Levels (continued)

E(level)†	Jπ‡#@	$T_{1/2}$[a]	XREF	Comments
8405.0 *5*	(3/2+,5/2,7/2+)	0.001 keV *1*	IJ	Jπ: γ's to 7/2+,3/2+.
8408.4 *7*	1/2−	0.125 keV *15*	IJ	Jπ: R-Matrix analysis in (p,p).
8411.2 *14*			I	
8417.1 *4*	1/2+	0.026 keV *7*	IJ	Jπ: R-Matrix analysis in (p,p).
8430.3 *5*			IJ	
8434.7 *5*	(3/2)+	0.090 keV *15*	IJ	Jπ: R-Matrix analysis in (p,p).
8464.3 *3*	(3/2,5/2+)		I	Jπ: γ's to 1/2+,5/2+,5/2−.
8485.3 *4*	3/2+	0.012 keV *5*	F IJ	Jπ: γ(θ) in (p,γ) and R-Matrix analysis in (p,p).
8486.9 *4*	3/2−	0.150 keV *15*	IJ	Jπ: R-Matrix analysis in (p,p).
8487.4 *6*	15/2−		X	Jπ: ADO ratios in (HI,xnγ).
8506.5 *5*			F I	
8514.8 *4*	1/2−	0.150 keV *15*	IJ	
8533.9 *5*			F I	
8572.6 *3*	(5/2)+	0.08 keV *1*	F IJ	T=(3/2) Jπ: R-Matrix analysis in (p,p).
8581.2 *4*	1/2+	0.75 keV *8*	IJ	Jπ: R-Matrix analysis in (p,p).
8585.8 *5*			I	
8591.8 *4*	5/2+	0.003 keV *2*	IJ S	Jπ: L(pol d, ^{3}He)=2 and L+1/2 from analyzing power.
8612.0 *6*	(3/2+,5/2+)		I R	Jπ: L(d,^{3}He)=2.
8614.7 *4*	5/2+	0.175 keV *20*	IJ	Jπ: R-Matrix analysis in (p,p).
8619.1 *4*	(3/2+,5/2+)	0.002 keV *1*	F IJ	Jπ: R-Matrix analysis in (p,p).
8631.3 *3*	7/2−	0.001 keV *1*	IJ	Jπ: γ(θ) in (p,γ).
8635 *5*	5/2		I	Jπ: γ(θ) in (p,γ).
8642.7 *4*	(3/2+,5/2+)	0.003 keV *2*	IJ	Jπ: R-Matrix analysis in (p,p) and γ(θ) in (p,γ).
8654 *4*			F	
8686.7 *4*	5/2−	0.001 keV *1*	IJ	Jπ: R-Matrix analysis in (p,p) and decay schemes in (p,γ).
8688.8 *5*	1/2+	0.20 keV *2*	IJ	Jπ: R-Matrix analysis in (p,p).
8690.6 *5*	1/2−	6.44 keV *65*	J	Jπ: R-Matrix analysis in (p,p).
8697.4 *6*	3/2−	0.8 keV *1*	F IJ	Jπ: R-Matrix analysis in (p,p).
8700 *10*	(7/2 to 17/2)+		H	Jπ: L(α,d)=6.
8706.3 *5*			I	
8717.7 *5*			F I	
8750.3 *4*	3/2−	0.30 keV *3*	IJ	Jπ: R-Matrix analysis in (p,p).
8767.0 *5*			I	
8773.8 *6*	1/2−	0.571 keV *60*	IJ	Jπ: R-Matrix analysis in (p,p).
8780.3 *4*	3/2−	0.214 keV *25*	IJ	Jπ: R-Matrix analysis in (p,p).
8787.7 *4*	(3/2−,5/2,7/2−)	0.001 keV *1*	F IJ	Jπ: γ's to 7/2−,3/2−.
8788.7[c] *6*	15/2+	<0.28 ps	X	Jπ: γγ(DCO) in (HI,xnγ). $T_{1/2}$: from (HI,xnγ).
8798.7 *5*	(1/2+,3/2,5/2+)	0.001 keV *1*	IJ	Jπ: γ decay schemes in (p,γ).
8820.9 *5*			I	
8824.5 *5*	1/2+	1.70 keV *17*	IJ	Jπ: R-Matrix analysis in (p,p).
8829.0 *4*	1/2−	12.2 keV *12*	IJ	Jπ: R-Matrix analysis in (p,p).
8829.8 *5*	1/2+	0.080 keV *15*	J	Jπ: R-Matrix analysis in (p,p).
8833.0 *3*	5/2		I	Jπ: γ's to 7/2+,7/2−,3/2+,3/2−.
8838.8 *4*	7/2−	0.001 keV *1*	F IJ	Jπ: R-Matrix analysis in (p,p) and γ-decay schemes in (p,γ).
8844.6[c] *4*	17/2+	5.9 ps *11*	H X	Jπ: γγ(DCO) in (HI,xnγ). $T_{1/2}$: from (HI,xnγ).
8856.8 *4*	5/2+	0.010 keV *5*	IJ	Jπ: R-Matrix analysis in (p,p) and γ-decay schemes in (p,γ).

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Adopted Levels, Gammas (continued)

^{35}Cl Levels (continued)

E(level)†	Jπ‡#@	$T_{1/2}$a	XREF	Comments
8869.2 *5*	3/2+,5/2+	0.027 keV *10*	IJ	Jπ: R-Matrix analysis in (p,p) and γ-decay schemes in (p,γ).
8884.1 *5*			I	
8886.1 *3*			F I	
8893.2 *4*	(5/2,7/2)+		I	Jπ: γ(θ) in (p,γ).
8904.8 *4*	(1/2,3/2,5/2+)		I	Jπ: γ's to 3/2+,3/2−,1/2+.
8907.4 *4*	5/2+	0.002 keV *1*	IJ	Jπ: γ(θ) in (p,γ) and R-Matrix analysis in (p,p).
8919.8 *5*	5/2+		I S	Jπ: L(pol d,^{3}He)=2 and L+1/2 from analyzing power.
8933.3 *5*			I	
8955.0 *7*	3/2+	0.075 keV *15*	IJ	Jπ: γ(θ) in (p,γ) and R-Matrix analysis in (p,p).
8958.6 *5*	(1/2−,3/2−)	0.04 keV *1*	F IJ	Jπ: R-Matrix analysis in (p,p).
8982.6 *7*	5/2−,7/2−	0.003 keV *2*	IJ	Jπ: R-Matrix analysis in (p,p).
8984.5 *3*	3/2+,5/2+	0.025 keV *10*	IJ	Jπ: R-Matrix analysis in (p,p).
8988.4 *5*			I	
8992.4 *5*			I	
8997.3 *5*	5/2−,7/2−	0.002 keV *1*	F IJ	Jπ: R-Matrix analysis in (p,p).
9001.0 *5*			I	
9019.3 *5*	3/2−	3.50 keV *35*	IJ	Jπ: R-Matrix analysis in (p,p).
9024.4 *5*			F I	
9030.6 *7*	(5/2)+	0.04 keV *1*	IJ	Jπ: R-Matrix analysis in (p,p).
9033.1 *5*			I	
9039.0 *5*	1/2−	0.292 keV *30*	IJ	Jπ: R-Matrix analysis in (p,p).
9048.2 *5*	5/2−,7/2−	0.001 keV *1*	IJ	Jπ: R-Matrix analysis in (p,p).
9050.1 *5*	(5/2)+	0.095 keV *15*	J	Jπ: R-Matrix analysis in (p,p).
9081.4 *3*	5/2+	0.057 keV *10*	IJ	Jπ: γ(θ) in (p,γ) and R-Matrix analysis in (p,p).
9088.4 *5*			F IJ	
9099.2 *5*			I	
9100.6 *5*	3/2−	0.20 keV *2*	IJ	Jπ: R-Matrix analysis in (p,p).
9107.4 *5*			F IJ	
9110.1 *5*			IJ	
9120 *4*			J	
9124.1 *5*	5/2&		E IJ	
9135.1 *5*			IJ	
9138.3 *5*			I	
9147 *4*			J	
9150 *10*	(7/2 to 17/2)+		H	Jπ: L(α,d)=6.
9155.7 *5*			I	
9157.1 *4*	5/2+		F IJ	Jπ: γ(θ) in (p,γ).
9163.2 *5*			F IJ	
9184.2 *5*			I	
9188.8 *5*			I	
9194.1 *5*			F IJ	
9207 *4*	9/2+		J	Jπ: pγ(θ) in (p,p′γ).
9222 *4*	5/2+		J S	Jπ: L(pol d,^{3}He)=2 and L+1/2 from analyzing power.
9227 *4*	5/2−		J	Jπ: pγ(θ) in (p,p′γ).
9241 *4*	7/2+		J	Jπ: pγ(θ) in (p,p′γ).
9256 *4*	1/2&		EF J	
9271 *4*			J	
9276 *4*			J	
9284 *4*	5/2−		J	Jπ: pγ(θ) in (p,p′γ).

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Adopted Levels, Gammas (continued)

^{35}Cl Levels (continued)

E(level)[†]	Jπ‡#@	$T_{1/2}$[a]	XREF	Comments
9294 *4*			J	
9299 *4*			J	
9316 *4*			F	
9325 *4*	$5/2^+$		J	Jπ: pγ(θ) in (p,p′γ).
9335 *4*	$7/2^+$		F J	Jπ: pγ(θ) in (p,p′γ).
9345 *4*			J	
9349 *4*			J	
9355 *4*			J	
9376 *4*			F	
9400 *9*	1/2&		E	
9450 *10*	(7/2 to 17/2)$^+$		H	Jπ: L(α,d)=6.
9456 *4*	3/2&		E	
9480 *2*	3/2&		EF	
9508 *4*			F	
9514 *20*	$(1/2^-,5/2^+)$		S	Jπ: angular distributions in (pol d,^{3}He).
9551 *6*	5/2&		E	
9673 *6*	1/2&		E	
9713 *3*	1/2&		EF	
9740 *4*			F	
9751 *3*	7/2&		E	
9799 *5*			F	
9814 *3*	$5/2^+$		E S	Jπ: angular distributions in (pol d,^{3}He) and (α,p):resonance.
9836 *5*			F	
9870 *3*	1/2&		EF	
9901 *3*	(1/2,3/2)&		E	
9923 *4*	$3/2^-$&		E	
9951 *5*	3/2&		E	
9969 *5*	(1/2,3/2)&		EF	
10031 *5*	$(1/2^+,3/2^-)$&		E	
10058	3/2&		E	
10075 *5*	(1/2)&		EF	
10089 *5*	$5/2^+$&		EF	
10133 *5*	$3/2^-$&		E	
10166 *5*	$(3/2^-,5/2^-)$&		EF	
10181.1[b] *5*	$19/2^-$	<0.14 ps	F X	Jπ: γγ(DCO) in (HI,xnγ). $T_{1/2}$: from (HI,xnγ).
10218 *5*	3/2&		EF	
10222.4 *11*	$17/2^-$	<0.28 ps	X	Jπ: γγ(DCO) in (HI,xnγ). $T_{1/2}$: from (HI,xnγ).
10235 *5*	$3/2^-$&		E	
10278	1/2&		E	
10295			E	
10319 *5*	$5/2^+$&		E	
10340	(3/2,5/2)&		E	
10359 *5*	3/2&		E	
10385			E	
10397 *5*	$3/2^+$&		EF	

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Adopted Levels, Gammas (continued)

^{35}Cl Levels (continued)

E(level)[†]	Jπ‡#@	$T_{1/2}$[a]	XREF	Comments
10431 *5*	5/2+&		E	
10464 *5*	5/2+&		EF	
10485 *5*	5/2+&		E	
10517 *6*			F	
10536 *5*	1/2+&		E	
10548 *6*			F	
10585 *5*	3/2+&		EF	
10642 *5*	5/2+&		E	
10677 *5*	3/2+&		E	
10698 *5*	7/2−&		E	
10734 *5*	3/2+&		EF	
10761 *5*	(3/2+,7/2−)&		E	
10801 *5*	5/2+&		E	
10817 *5*	3/2−&		E	
10844 *5*	3/2−&		E	
10859.0[c] *8*	19/2+	<0.28 ps	X	Jπ: ADO ratios in (HI,xnγ). $T_{1/2}$: from (HI,xnγ).
10870	(5/2,7/2)&		E	
10886			E	
10910 *5*	(3/2+,5/2−)&		E	
10928	7/2&		E	
10942			E	
10963 *5*	5/2+&		E	
10973			E	
10998 *5*	(3/2+,7/2−)&		E	
11034 *5*	3/2+&		E	
11063 *5*	(1/2+,9/2+)&		E	
11083 *5*	(5/2+,9/2+)&		E	
11105			E	
11123 *5*	3/2&		E	
11142 *5*	5/2+&		E	
11154			E	
11169			E	
11178 *5*	(3/2−,5/2+)&		E	
11185			E	
11195 *5*	3/2&		E	
11230			E	
11244 *5*	3/2&		E	
11262 *5*	3/2−&		E	
11287			E	
11307			E	
11313 *5*	(1/2−,5/2+)&		E	
11328 *5*	(1/2−,5/2+)&		E	
11357			E	
11374			E	
11390			E	
11410			E	

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Adopted Levels, Gammas (continued)

^{35}Cl Levels (continued)

E(level)[†]	Jπ‡#@	XREF		Comments
11421 *5*	3/2⁻[&]	E		
11434		E		
11459.0[c] *6*	21/2⁺	E	X	Jπ: ADO ratios in (HI,xnγ).
11470 *5*	(1/2⁻,5/2⁻)[&]	E		
11492		E		
11504 *5*	(3/2⁻,5/2⁻)[&]	E		
11525		E		
11540		E		
11550 *5*	(3/2⁻,5/2⁺)[&]	E		
11565		E		
11589		E		
11607 *5*	(5/2⁺,7/2⁻)[&]	E		
11629 *5*	(1/2⁺,5/2⁺)[&]	E		
11637		E		
11651		E		
11684 *5*	(1/2⁺,5/2⁺)[&]	E		
11773 *5*	(3/2⁻,7/2⁻)[&]	E		
11783 *5*	3/2⁻[&]	E		
12572.2[b] *6*	23/2⁻		X	Jπ: ADO ratios in (HI,xnγ).
12900		E		T=3/2
13900		E		T=3/2

[†] From Eγ data when measured γ-ray energies are available. In other cases weighted averages are taken of values available from different reactions.

[‡] In particle-transfer reactions, target $J^\pi=1/2^+$ for ^{31}p in (^{6}Li,d) reaction, $J^\pi= 3/2^+$ for ^{33}S in (α,d) reaction, $J^\pi=0^+$ for ^{32}S in (α,p) reaction, $J^\pi=0^+$ for ^{34}S in (d,n) and (^{3}He,d) reactions, $J^\pi=0^+$ for ^{36}Ar in (n,d) and (d,^{3}He) reactions and $J^\pi=3/2^+$ for ^{37}Cl in (p,t) reaction.

[#] From analyzing power measurement or/and the comparison of the DWBA prediction of cross section with experimental data in particle-transfer reactions or/and from angular distribution measurements or γγ(DCO) of γ-rays or/and R-Matrix analysis of resonances.

[@] When assigning J^π to a level based on γ transitions from this level to a level of known J^π, evaluators use the following rules: if Eγ<4 MeV, transitions are only considered to be E1,M1 or E2; if Eγ>4 MeV, M2 and E3 are considered to be possible.

[&] From angular distributions in (α,p):resonance only.

[a] $T_{1/2}$ from measurements using DSAM (Doppler-Shift-Attenuation -Method) and/or RDM (Recoil-Distance-Method) in (α,pγ), (p,γ), (HI,xnγ) and Coulomb excitation, delayed coincidence method in (p,γ) and scattering of photons in (γ,γ). Weighted averages taken when available. Γ are primarily from Γ_p in (p,p) resonances since when Γ_γ is negligible.

[b] Band(A): Band based on $f_{7/2}$ orbital.

[c] Band(B): Band based on $13/2^+$.

Adopted Levels, Gammas (continued)

$\gamma(^{35}Cl)$

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[@]	δ[@]	Comments
1219.29	$1/2^+$	1219.3 *2*	100	0	$3/2^+$	M1+E2	+0.106 *7*	B(M1)(W.u.)=0.095 *11*; B(E2)(W.u.)=2.7 *5* Mult.,δ: from coulomb excitation.
1763.04	$5/2^+$	543.8	<0.2	1219.29	$1/2^+$			
		1763.13 *10*	100	0	$3/2^+$	M1+E2	−2.93 *10*	B(M1)(W.u.)=0.00107 *13*; B(E2)(W.u.)=11.2 *12* δ: weighted average of −3.0 *1* from (α,pγ), −2.87 *12* from (p,p′γ), −2.88 *45* from coulomb excitation, −2.6 *4* from (HI,xnγ).
2645.74	$7/2^+$	882.84 *10*	9.9 *11*	1763.04	$5/2^+$	M1+E2	−0.23 *5*	B(M1)(W.u.)=0.017 *3*; B(E2)(W.u.)=4.4 *20* δ: weighted average of −0.25 *5* from (α,pγ) and −0.21 *5* from (p,p′γ).
		1426.3	<1.1	1219.29	$1/2^+$			
		2645.7 *3*	100.0 *11*	0	$3/2^+$	E2		B(E2)(W.u.)=3.7 *5* E_γ: from (HI,xnγ). Mult.: from (p,p′γ).
2693.75	$3/2^+$	930.9 *2*	16.3 *13*	1763.04	$5/2^+$	M1+E2	−0.09 *3*	B(M1)(W.u.)=0.106 *22*; B(E2)(W.u.)=4 *3* δ: from (p,p′γ).
		1474.8 *3*	9.5 *10*	1219.29	$1/2^+$	M1+E2	+0.63 *21*	B(M1)(W.u.)=0.011 *4*; B(E2)(W.u.)=8 *4* δ: from (p,p′γ).
		2693.6 *1*	100.0 *16*	0	$3/2^+$	M1+E2	−0.25 *2*	B(M1)(W.u.)=0.026 *5*; B(E2)(W.u.)=0.83 *20* δ: weighted average of −0.17 *8* from (α,pγ) and −0.25 *2* form (p,p′γ).
3002.30	$5/2^+$	308.6	<5.4	2693.75	$3/2^+$			
		356.6	<1.1	2645.74	$7/2^+$			
		1239.2	2.2 *11*	1763.04	$5/2^+$	E2		If M1, B(M1)(W.u.)=0.011 *6*; if E2, B(E2)(W.u.)=27 *15*.
		1782.9	3.4 *11*	1219.29	$1/2^+$	E2		B(E2)(W.u.)=7 *3* Mult.: from (p,p′γ).
		3002.4 *4*	100 *2*	0	$3/2^+$	M1+E2	−0.08 *2*	B(M1)(W.u.)=0.035 *7*; B(E2)(W.u.)=0.09 *5* δ: weighted average of −0.09 *3* from (α,pγ) and −0.08 *2* from (p,p′γ).
3162.80	$7/2^-$	161 *1*	1.7 *4*	3002.30	$5/2^+$	[E1]		B(E1)(W.u.)=7.5×10^{-5} *18* E_γ: from (HI,xnγ).
		469.1	<0.6	2693.75	$3/2^+$			
		517.2 *1*	9.8 *5*	2645.74	$7/2^+$	E1		B(E1)(W.u.)=1.30×10^{-5} *8* Mult.: from (p,p′γ) and (HI,xnγ).
		1399.9 *7*	0.33 *5*	1763.04	$5/2^+$	E1+M2	+0.44 *12*	B(E1)(W.u.)=1.8×10^{-8} *4*; B(M2)(W.u.)=0.008 *4* E_γ: from (HI,xnγ).
		1943.4	<0.2	1219.29	$1/2^+$			
		3162.5 *1*	100.0 *7*	0	$3/2^+$	M2+E3	+0.16 *2*	B(M2)(W.u.)=0.258 *6*; B(E3)(W.u.)=3.8 *10* δ: weighted average of +0.14 *2* from (α,pγ), +0.26 *4* from (p,γ), +0.17 *3* from (p,p′γ) and +0.16 *1* from (HI,xnγ).
3918.49	$3/2^+$	1272.7	<3.7	2645.74	$7/2^+$			
		2155.1 *15*	22.0 *12*	1763.04	$5/2^+$	[M1,E2]		If M1, B(M1)(W.u.)=0.080 *24*; if E2, B(E2)(W.u.)=65 *19*. E_γ: from β^+ decay.
		2699.0	<0.6	1219.29	$1/2^+$			
		3918.4 *6*	100.0 *12*	0	$3/2^+$	M1+E2	−0.21 *2*	B(M1)(W.u.)=0.058 *17*; B(E2)(W.u.)=0.63 *22* E_γ: from (γ,γ).

$^{35}_{17}Cl_{18}$-11

Adopted Levels, Gammas (continued)

γ(^{35}Cl) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[@]	δ[@]	Comments
3943.82	9/2$^+$	1297.4 *15*	8.0 *22*	2645.74	7/2$^+$	M1+E2	−3.0 *1*	B(M1)(W.u.)=0.00034 *12*; B(E2)(W.u.)=6.9 *23* E_γ: from (α,pγ). δ: from (α,pγ).
		2180 *1*	100.0 *22*	1763.04	5/2$^+$	[E2]		B(E2)(W.u.)=7.1 *13* E_γ: from (HI,xnγ).
		2724.4	<6	1219.29	1/2$^+$			
		3943.7	<10	0	3/2$^+$			
3967.50	1/2$^+$	965.1		3002.30	5/2$^+$			
		1273.7	7 *4*	2693.75	3/2$^+$			
		2204.3	<1.4	1763.04	5/2$^+$			
		2748.5 *6*	100 *6*	1219.29	1/2$^+$	[M1]		B(M1)(W.u.)=0.079 *25* E_γ: from β^+ decay.
		3967.2	26 *4*	0	3/2$^+$	[M1,E2]		If M1, B(M1)(W.u.)=0.0069 *24*; if E2, B(E2)(W.u.)=1.6 *6*.
3979.0	(3/2$^+$,5/2$^+$)	1285.3	2.4 *6*	2693.75	3/2$^+$			
		1333.2	<2.4	2645.74	7/2$^+$			
		2215.8	<2.5	1763.04	5/2$^+$			
		2759.5	100 *6*	1219.29	1/2$^+$			
		3978.8	18 *6*	0	3/2$^+$			
4059.12	3/2$^-$	896.3	<6	3162.80	7/2$^-$			
		1056.8	<3	3002.30	5/2$^+$			
		1365.4	1.3 *4*	2693.75	3/2$^+$	[E1]		B(E1)(W.u.)=0.00021 *7*
		1413.4	<1	2645.74	7/2$^+$			
		2296 *7*	4.4 *16*	1763.04	5/2$^+$	[E1]		B(E1)(W.u.)=0.00015 *6* E_γ: from (p,γ).
		2838 *7*	100 *2*	1219.29	1/2$^+$	[E1]		B(E1)(W.u.)=0.0018 *3* E_γ: from (p,γ).
		4058 *7*	<2	0	3/2$^+$			E_γ: from (p,γ).
4111.98	7/2$^+$	2348.8	90 *6*	1763.04	5/2$^+$	M1+E2	−0.16 *2*	B(M1)(W.u.)=0.015 *4*; B(E2)(W.u.)=0.27 *10*
		2892.5	<19	1219.29	1/2$^+$			
		4111.7	100 *6*	0	3/2$^+$	E2		B(E2)(W.u.)=0.72 *18* Mult.,δ: from (p,γ). δ(O/Q)=0.0 *1*.
4173.44	5/2$^-$	1479.7	45 *14*	2693.75	3/2$^+$	[E1]		B(E1)(W.u.)=0.0014 *6*
		1527.7	<17	2645.74	7/2$^+$			
		2410.2	28 *9*	1763.04	5/2$^+$	[E1]		B(E1)(W.u.)=0.00020 *8*
		2954.0	≤5	1219.29	1/2$^+$			
		4173.2	100 *17*	0	3/2$^+$	[E1]		B(E1)(W.u.)=0.00014 *4*
4177.88	3/2$^-$	1175.6	<0.8	3002.30	5/2$^+$			
		1484.2	13 *3*	2693.75	3/2$^+$	[E1]		B(E1)(W.u.)=0.00061 *17*
		1532.1	<0.8	2645.74	7/2$^+$			
		2414.7	<1.6	1763.04	5/2$^+$			
		2958.4	51 *8*	1219.29	1/2$^+$	E1+M2	+0.11 *4*	B(E1)(W.u.)=0.00030 *7*; B(M2)(W.u.)=1.9 *15*
		4177.6	100 *8*	0	3/2$^+$	E1+M2	+0.06 *3*	B(E1)(W.u.)=0.00021 *4*; B(M2)(W.u.)=0.20 *20*

$^{35}_{17}Cl_{18}$-12

Adopted Levels, Gammas (continued)

γ(^{35}Cl) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[@]	δ[@]	Comments
4347.82	9/2$^-$	1185.0 *2*	100 *3*	3162.80	7/2$^-$	M1+E2	−0.38 *3*	B(M1)(W.u.)=0.009 *4*; B(E2)(W.u.)=3.5 *15* δ: weighted average of −0.38 *3* in (α,pγ) and −0.34 *11* in (HI,xnγ).
		1345.5	<6	3002.30	5/2$^+$			
		1654.1	<6	2693.75	3/2$^+$			
		1702.0 *3*	47 *2*	2645.74	7/2$^+$	E1+M2	−0.018 *12*	B(E1)(W.u.)=4.7×10^{-5} *18*; B(M2)(W.u.)=0.024 *+34−24*
		2584.6	<4	1763.04	5/2$^+$			
		3128.3	<7	1219.29	1/2$^+$			
		4347.8 *8*	<4	0	3/2$^+$			E_γ: from (HI,xnγ).
4624.35	(3/2,5/2$^+$)	1930.6		2693.75	3/2$^+$			
		2861.1		1763.04	5/2$^+$			
		4624.0	100	0	3/2$^+$			δ: −0.08 *14* for J=3/2; +0.36 *15* for J=5/2 in (α,pγ).
4768.82	7/2	1606.0	100 *13*	3162.80	7/2$^-$			
		1766.5	54 *15*	3002.30	5/2$^+$			
		2075.1	<15	2693.75	3/2$^+$			
		3005.6		1763.04	5/2$^+$			
		3549.3	<15	1219.29	1/2$^+$			
		4768.5	<15	0	3/2$^+$			
4839.08	(1/2$^+$,3/2)	1836.7	<12	3002.30	5/2$^+$			
		2145.3	<7	2693.75	3/2$^+$			
		2193.3	<5	2645.74	7/2$^+$			
		3075.8	100 *7*	1763.04	5/2$^+$			
		3619.5	<12	1219.29	1/2$^+$			
		4838.7	69 *7*	0	3/2$^+$			
4854.4	(1/2,3/2)	3634.8	100 *7*	1219.29	1/2$^+$			
		4854.0	33 *7*	0	3/2$^+$			
4881.07	7/2	1878.7	15 *5*	3002.30	5/2$^+$			
		2187.3	<16	2693.75	3/2$^+$			
		2235.3	47 *8*	2645.74	7/2$^+$			
		3117.4 *20*	100 *8*	1763.04	5/2$^+$	D(+Q)	0.0 *4*	E_γ,δ: from (α,pγ).
		3661.5	<6	1219.29	1/2$^+$			
		4880.7	<6	0	3/2$^+$			
5010.09	(1/2,3/2)	836.6	<25	4173.44	5/2$^-$			
		951.0	<10	4059.12	3/2$^-$			
		1847.3	<50	3162.80	7/2$^-$			
		2007.7	<20	3002.30	5/2$^+$			
		2316.3	<25	2693.75	3/2$^+$			
		2364.3	<5	2645.74	7/2$^+$			
		3246.8	<10	1763.04	5/2$^+$			
		3790.5	<7	1219.29	1/2$^+$			
		5009.7	100	0	3/2$^+$			
5163.21	7/2$^-$	2000.4	93 *47*	3162.80	7/2$^-$	M1+E2	+0.44 *20*	
		2160.9	23 *9*	3002.30	5/2$^+$			

$^{35}_{17}Cl_{18}$-13

Adopted Levels, Gammas (continued)

$\gamma(^{35}Cl)$ (continued)

E_i(level)	J_i^π	E_γ [†]	I_γ [‡]	E_f	J_f^π	Mult. [@]	δ [@]	Comments
5163.21	$7/2^-$	3399.9	100 *12*	1763.04	$5/2^+$	D(+Q)	0.00 *3*	
		3943.6	<23	1219.29	$1/2^+$			
		5162.8	<23	0	$3/2^+$			
5215.79	$(3/2^+,5/2)$	205.7	<23	5010.09	(1/2,3/2)			
		1042.3	<60	4173.44	$5/2^-$			
		1156.6	<10	4059.12	$3/2^-$			
		2053.0	<15	3162.80	$7/2^-$			
		2213.4	<25	3002.30	$5/2^+$			
		2522.0	<15	2693.75	$3/2^+$			
		2570.0	<15	2645.74	$7/2^+$			
		3452.5	<6	1763.04	$5/2^+$			
		3996.2	<4	1219.29	$1/2^+$			
		5215.4	100	0	$3/2^+$			
5403.5	$1/2^-,3/2^-$	2709.7	45 *9*	2693.75	$3/2^+$			
		3640.2	<18	1763.04	$5/2^+$			
		4183.9	100 *18*	1219.29	$1/2^+$			
		5403.1	<13	0	$3/2^+$			I_γ: additional 36% decay to other levels.
5407.2	$11/2^-$	1059.3 *10*	19.1 *6*	4347.82	$9/2^-$	M1+E2	+0.14 *3*	B(M1)(W.u.)=0.011 *3*; B(E2)(W.u.)=0.7 *4* δ: weighted average of +0.25 *8* in (α,pγ) and +0.13 *3* in (HI,xnγ).
		2244 *3*	100.0 *9*	3162.80	$7/2^-$	E2		B(E2)(W.u.)=4.4 *11* δ: from (HI,xnγ), δ(O/Q)=0.000 *1*.
5586.0	$5/2^+$	2940.1	67 *33*	2645.74	$7/2^+$			
		3822.7	100 *17*	1763.04	$5/2^+$			
		4366.3	<17	1219.29	$1/2^+$			
		5585.5	<17	0	$3/2^+$			
5599.69	$3/2^+,5/2^+$	3836.4	37 *14*	1763.04	$5/2^+$			
		5599.2	100 *14*	0	$3/2^+$			
5645.0	$(5/2,7/2,9/2^+)$	2482.1	100	3162.80	$7/2^-$			
		2642.6		3002.30	$5/2^+$			
		3881.6		1763.04	$5/2^+$			
		5644.5	<8	0	$3/2^+$			
5654.48	$3/2^+$	2652.1	100 *6*	3002.30	$5/2^+$	[M1,E2]		If M1, B(M1)(W.u.)=0.076 *18*; if E2, B(E2)(W.u.)=41 *10*.
		3891.1	7.5 *25*	1763.04	$5/2^+$	[M1,E2]		If M1, B(M1)(W.u.)=0.0018 *8*; if E2, B(E2)(W.u.)=0.45 *18*.
		4434.8	<7.5	1219.29	$1/2^+$			I_γ: additional 18% for decay to other levels.
5682.9	$1/2^-,3/2^-$	1505.0	100 *17*	4177.88	$3/2^-$			I_γ: additional 67% for decay to other levels.
5723.6	$5/2^+$	3029.8	63 *8*	2693.75	$3/2^+$			
		3960.2	100 *11*	1763.04	$5/2^+$			I_γ: additional 100% for decay to others levels (1976Sp08).
5758.0	$(1/2^+,3/2)$	1580.1	67 *22*	4177.88	$3/2^-$			
		4538.3	<13	1219.29	$1/2^+$			
		5757.5	100 *22*	0	$3/2^+$			I_γ: additional 56% for decay to other levels.
5805.5	$(1/2^+,3/2,5/2)$	5805.0	100	0	$3/2^+$			
5823.0	(5/2,9/2)	2660.1	100	3162.80	$7/2^-$			δ: −0.28 *4* for J=9/2; +2.2 *5* or +0.6 *1* for J=5/2 in (α,pγ).

$^{35}_{17}Cl_{18}$-14

Adopted Levels, Gammas (continued)

γ(^{35}Cl) (continued)

E_i(level)	J_i^π	E_γ †	I_γ ‡	E_f	J_f^π	Mult.@	δ@	Comments
5926.9	11/2$^-$	1579.1 *3*	100 *11*	4347.82	9/2$^-$	D+Q	−0.24 *10*	δ: weighted average of −0.8 *4* in (α,pγ) and −0.2 *1* in (HI,xnγ).
		1982.9	11 *3*	3943.82	9/2$^+$			
6087.4	13/2$^-$	680.3 *1*	100.0 *11*	5407.2	11/2$^-$	M1+E2	+0.02 *1*	B(M1)(W.u.)=0.0107 *11*; B(E2)(W.u.)=0.03 *+4−3* Mult.: weighted average of +0.02 *1* in (α,pγ) and +0.1 *1* in (HI,xnγ).
		1739.4 *4*	7.5 *11*	4347.82	9/2$^-$	[E2]		B(E2)(W.u.)=0.060 *11*
6106.2	(3/2,5/2$^+$)	4342.8	10 *4*	1763.04	5/2$^+$			
		4886.5	62 *17*	1219.29	1/2$^+$			
		6105.6	100 *17*	0	3/2$^+$			
6181.0	(1/2 to 7/2,9/2$^-$)	6180.4	100 *22*	0	3/2$^+$			I_γ: additional 122% for decay to other levels.
6380.8		296 *1*		6087.4	13/2$^-$			
		971 *1*		5407.2	11/2$^-$			
6492.0	(1/2,3/2,5/2$^+$)	6491.4	100	0	3/2$^+$			
7066.2	5/2$^+$	1902.9	<1.9	5163.21	7/2$^-$			
		2888.2	<1.0	4177.88	3/2$^-$			
		2954.1	<1.3	4111.98	7/2$^+$			
		3006.9	2.1 *11*	4059.12	3/2$^-$			
		3903.2	12.5 *13*	3162.80	7/2$^-$			
		4063.6	4.2 *21*	3002.30	5/2$^+$			
		4372.2	12.5 *13*	2693.75	3/2$^+$			
		4420.2	6 *3*	2645.74	7/2$^+$			
		5302.6	33 *4*	1763.04	5/2$^+$			
		5846.3	38 *4*	1219.29	1/2$^+$			
		7065.4	100 *10*	0	3/2$^+$			
7103.3	3/2	1887.4	<1.5	5215.79	(3/2$^+$,5/2)			
		2093.1	<1.5	5010.09	(1/2,3/2)			
		2925.3	<2.2	4177.88	3/2$^-$			
		3184.6	3.0 *15*	3918.49	3/2$^+$			
		3940.3	<0.3	3162.80	7/2$^-$			
		4100.7	4.5 *23*	3002.30	5/2$^+$			
		4409.3	19.4 *15*	2693.75	3/2$^+$	D(+Q)	0.00 *3*	
		4457.3	<7.5	2645.74	7/2$^+$			
		5339.7	9 *3*	1763.04	5/2$^+$			
		5883.4	100 *10*	1219.29	1/2$^+$	D(+Q)	0.00 *3*	
		7102.5	16.4 *15*	0	3/2$^+$			
7178.6	1/2$^+$	1072.4	10 *5*	6106.2	(3/2,5/2$^+$)			
		1775.1	<4.3	5403.5	1/2$^-$,3/2$^-$			
		2339.4	<3.8	4839.08	(1/2$^+$,3/2)			
		3005.0	<2.5	4173.44	5/2$^-$			
		3119.3	60 *8*	4059.12	3/2$^-$			
		3199.4	<23	3979.0	(3/2$^+$,5/2$^+$)			
		3211.0	25 *3*	3967.50	1/2$^+$			

$^{35}_{17}Cl_{18}$-15

Adopted Levels, Gammas (continued)

γ(^{35}Cl) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π
7178.6	$1/2^+$	3259.9	5 *3*	3918.49	$3/2^+$
		4484.6	10 *5*	2693.75	$3/2^+$
		5415.0		1763.04	$5/2^+$
		5958.7	40 *5*	1219.29	$1/2^+$
		7177.8	100 *10*	0	$3/2^+$
7185.0	$5/2^+$	1969.1	<1.1	5215.79	$(3/2^+,5/2)$
		2174.8	<1.1	5010.09	(1/2,3/2)
		3011.4	<11	4173.44	$5/2^-$
		3125.7	57 *13*	4059.12	$3/2^-$
		4022.0	<6.5	3162.80	$7/2^-$
		4182.4	<6.5	3002.30	$5/2^+$
		4491.0	4.3 *21*	2693.75	$3/2^+$
		4538.9	13 *4*	2645.74	$7/2^+$
		5421.4	9 *7*	1763.04	$5/2^+$
		5965.1	35 *15*	1219.29	$1/2^+$
		7184.2	100 *22*	0	$3/2^+$
7194.5	$1/2^-$	1978.6	<7	5215.79	$(3/2^+,5/2)$
		2184.3	1.4 *7*	5010.09	(1/2,3/2)
		2340.0	2.8 *14*	4854.4	(1/2,3/2)
		2355.3	<2.5	4839.08	$(1/2^+,3/2)$
		3020.9	21 *3*	4173.44	$5/2^-$
		3135.2	4 *2*	4059.12	$3/2^-$
		3215.3	<2.5	3979.0	$(3/2^+,5/2^+)$
		3226.9	2.8 *14*	3967.50	$1/2^+$
		3275.8	7 *4*	3918.49	$3/2^+$
		4031.5	<0.8	3162.80	$7/2^-$
		4500.5	<5.6	2693.75	$3/2^+$
		4548.4	<8	2645.74	$7/2^+$
		5430.9	<7	1763.04	$5/2^+$
		5974.6	100 *10*	1219.29	$1/2^+$
		7193.7	<7	0	$3/2^+$
7225.5	5/2	1119.3	5 *3*	6106.2	$(3/2,5/2^+)$
		1420.0	1.7 *9*	5805.5	$(1/2^+,3/2,5/2)$
		1542.6	3.4 *17*	5682.9	$1/2^-,3/2^-$
		1625.8	<1.4	5599.69	$3/2^+,5/2^+$
		1821.9	1.7 *9*	5403.5	$1/2^-,3/2^-$
		2009.6	10 *1*	5215.79	$(3/2^+,5/2)$
		2215.3	<2.6	5010.09	(1/2,3/2)
		3047.5	<3.4	4177.88	$3/2^-$
		3051.9	12 *1*	4173.44	$5/2^-$
		3166.2	<3.4	4059.12	$3/2^-$
		3306.8	1.7 *9*	3918.49	$3/2^+$

$^{35}_{17}Cl_{18}$-16

Adopted Levels, Gammas (continued)

γ(^{35}Cl) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[@]	δ[@]
7225.5	5/2	4062.5	<3.4	3162.80	7/2⁻		
		4222.9	5 *3*	3002.30	5/2⁺		
		4531.5	17 *2*	2693.75	3/2⁺	D+Q	+0.36 *4*
		5461.9	14 *2*	1763.04	5/2⁺	D+Q	−0.36 *7*
		6005.6	<3.4	1219.29	1/2⁺		
		7224.7	100 *11*	0	3/2⁺	D+Q	+0.36 *4*
7234.0	5/2⁺	1634.3	<0.2	5599.69	3/2⁺,5/2⁺		
		2018.1	<1.5	5215.79	(3/2⁺,5/2)		
		2223.8	<1.6	5010.09	(1/2,3/2)		
		3056.0	1.1 *6*	4177.88	3/2⁻		
		3174.7	<0.6	4059.12	3/2⁻		
		4071.0	<0.6	3162.80	7/2⁻		
		4231.4	<0.6	3002.30	5/2⁺		
		4540.0	2.2 *11*	2693.75	3/2⁺		
		4587.9	2.2 *11*	2645.74	7/2⁺		
		5470.4	1.1 *6*	1763.04	5/2⁺		
		6014.1	2.2 *11*	1219.29	1/2⁺		
		7233.2	100 *10*	0	3/2⁺	D+Q	−0.1
7272.6	1/2⁻	1514.6	2.2 *12*	5758.0	(1/2⁺,3/2)		
		1869.0	0.7 *5*	5403.5	1/2⁻,3/2⁻		
		2056.7	<0.7	5215.79	(3/2⁺,5/2)		
		2262.4	2.2 *12*	5010.09	(1/2,3/2)		
		2433.4	1.4 *7*	4839.08	(1/2⁺,3/2)		
		3094.6	0.7 *5*	4177.88	3/2⁻		
		3213.3	1.4 *7*	4059.12	3/2⁻		
		3305.0	1.4 *7*	3967.50	1/2⁺		
		4109.6	<0.3	3162.80	7/2⁻		
		4270.0	<1.4	3002.30	5/2⁺		
		4578.6	1.4 *7*	2693.75	3/2⁺		
		5509.0	<1.4	1763.04	5/2⁺		
		6052.7	33 *3*	1219.29	1/2⁺		
		7271.8	100 *10*	0	3/2⁺		
7362.0	3/2	1707.5	0.7 *4*	5654.48	3/2⁺		
		1762.3	<0.4	5599.69	3/2⁺,5/2⁺		
		2146.1	<3	5215.79	(3/2⁺,5/2)		
		2351.8	0.7 *4*	5010.09	(1/2,3/2)		
		2522.8	1.4 *7*	4839.08	(1/2⁺,3/2)		
		3183.9	1.4 *7*	4177.88	3/2⁻		
		3302.7	4.3 *21*	4059.12	3/2⁻		
		3394.4	4.3 *21*	3967.50	1/2⁺		
		3443.3	0.7 *4*	3918.49	3/2⁺		
		4198.9	<1.4	3162.80	7/2⁻		

$^{35}_{17}Cl_{18}$-17

Adopted Levels, Gammas (continued)

$\gamma(^{35}Cl)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[@]	δ[@]	Comments
7362.0	3/2	4359.4	0.7 *4*	3002.30	$5/2^+$			
		4668.0	<3	2693.75	$3/2^+$			
		4715.9	<3	2645.74	$7/2^+$			
		5598.4	14 *2*	1763.04	$5/2^+$	(D+Q)	−0.01 *10*	δ: or δ>+2.5 in (p,γ).
		6142.1	100 *10*	1219.29	$1/2^+$	(D+Q)	−0.05 *3*	δ: +2.5 *3* in (p,γ).
		7361.2	14 *2*	0	$3/2^+$			δ: −0.16<δ(Q/D)<−0.12 or +7.5<δ(Q/D)<+10 in (p,γ).
7396.0	$7/2^{(-)}$	2180.1	<24	5215.79	$(3/2^+,5/2)$			
		2385.8	<16	5010.09	(1/2,3/2)			
		3048.0	20 *2*	4347.82	$9/2^-$			
		3217.9	<30	4177.88	$3/2^-$			
		3283.8	18 *2*	4111.98	$7/2^+$			
		3336.7	<16	4059.12	$3/2^-$			
		3451.9	16 *2*	3943.82	$9/2^+$			
		4232.9	100 *10*	3162.80	$7/2^-$	D+Q	+0.28 *25*	
		4393.4	18 *4*	3002.30	$5/2^+$	D(+Q)	+0.011 *18*	
		4702.0	<10	2693.75	$3/2^+$			
		4749.9	20 *2*	2645.74	$7/2^+$			
		5632.4	<14	1763.04	$5/2^+$			
		6176.1	<30	1219.29	$1/2^+$			
		7395.2	<20	0	$3/2^+$			
7451.0	3/2	3532.3	7 *4*	3918.49	$3/2^+$			
		4448.4	13.7 *14*	3002.30	$5/2^+$			
		4757.0	11 *1*	2693.75	$3/2^+$			
		5687.4	6 *3*	1763.04	$5/2^+$			
		6231.0	100 *10*	1219.29	$1/2^+$			
7501.1		3557.0	45 *6*	3943.82	$9/2^+$			
		4498.5	24 *3*	3002.30	$5/2^+$			
		4855.0	100 *11*	2645.74	$7/2^+$			
		5737.5	13 *2*	1763.04	$5/2^+$			
7502.9		1396.7	14 *2*	6106.2	$(3/2,5/2^+)$			
		1903.1	<3	5599.69	$3/2^+,5/2^+$			
		2492.7	<3	5010.09	(1/2,3/2)			
		3324.8	<4	4177.88	$3/2^-$			
		3443.6	100 *10*	4059.12	$3/2^-$			
		3558.8	<3	3943.82	$9/2^+$			
		4339.8	<6	3162.80	$7/2^-$			
		4500.3	<6	3002.30	$5/2^+$			
		4856.8	<10	2645.74	$7/2^+$			
		5739.3	<1	1763.04	$5/2^+$			
		6282.9	29 *3*	1219.29	$1/2^+$			
		7502.0	<0.4	0	$3/2^+$			
7518.7	$7/2^{(-)}$	1918.9	2.9 *15*	5599.69	$3/2^+,5/2^+$			

$^{35}_{17}Cl_{18}$-18

Adopted Levels, Gammas (continued)

γ(^{35}Cl) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[@]	δ[@]	Comments
7518.7	$7/2^{(-)}$	1932.6	4.4 *22*	5586.0	$5/2^+$			
		3170.7	2.9 *15*	4347.82	$9/2^-$			
		3574.6	2.9 *15*	3943.82	$9/2^+$			
		4355.6	100 *10*	3162.80	$7/2^-$	D(+Q)	+0.1 *2*	B(M1)(W.u.)=0.01 (p,γ).
		4872.6	4.4 *22*	2645.74	$7/2^+$			
		5755.1	29 *3*	1763.04	$5/2^+$	D+Q	+0.098 *22*	
7548.2	$7/2^-$	1893.6	<1	5654.48	$3/2^+$			
		1903.1	0.59 *7*	5645.0	$(5/2,7/2,9/2^+)$			
		1962.1	<0.2	5586.0	$5/2^+$			
		2332.3	<2.1	5215.79	$(3/2^+,5/2)$			
		2538.0	<3.2	5010.09	(1/2,3/2)			
		2779.3	1.5 *1*	4768.82	7/2			
		3370.1	<1	4177.88	$3/2^-$			
		3488.9	<5.3	4059.12	$3/2^-$			
		4385.1	100.0 *11*	3162.80	$7/2^-$	D+Q	−0.07 *2*	
		4545.6	2.1 *1*	3002.30	$5/2^+$	D+Q	+0.6 *4*	
		4854.1	<1	2693.75	$3/2^+$			
		4902.1	0.72 *8*	2645.74	$7/2^+$			
		5784.6	0.35 *4*	1763.04	$5/2^+$			
		6328.2	<0.5	1219.29	$1/2^+$			
		7547.3	0.29 *3*	0	$3/2^+$	Q(+O)	+0.1 *2*	
7561.1	(1/2,3/2)	3383.0	2.8 *14*	4177.88	$3/2^-$			
		3501.8	14 *8*	4059.12	$3/2^-$			
		3581.9	<1.4	3979.0	$(3/2^+,5/2^+)$			
		3642.4	2.8 *14*	3918.49	$3/2^+$			
		4867.0	58 *6*	2693.75	$3/2^+$			
		6341.1	100 *11*	1219.29	$1/2^+$			
		7560.2	100 *11*	0	$3/2^+$			
7600.8	$5/2^+$	2437.5	6 *3*	5163.21	$7/2^-$			
		2719.6	6 *3*	4881.07	7/2			
		2761.6	6 *3*	4839.08	$(1/2^+,3/2)$			
		2831.9	3.2 *16*	4768.82	7/2			
		2976.3	6 *3*	4624.35	$(3/2,5/2^+)$			
		3422.7	6 *3*	4177.88	$3/2^-$			
		3427.2	6 *3*	4173.44	$5/2^-$			
		3541.5	5 *3*	4059.12	$3/2^-$			
		3682.1	13 *7*	3918.49	$3/2^+$			
		4437.7	<26	3162.80	$7/2^-$	(D+Q)	−0.25 *15*	
		4598.2	30 *3*	3002.30	$5/2^+$	D+Q	+0.58 *22*	
		4906.7	61 *7*	2693.75	$3/2^+$	(D+Q)	−5.3 *9*	δ: or +0.01 *5* (p,γ).
		4954.7	5 *3*	2645.74	$7/2^+$			
		5837.2	65 *7*	1763.04	$5/2^+$	D+Q	+0.31 *7*	

$^{35}_{17}Cl_{18}$-19

Adopted Levels, Gammas (continued)

γ(^{35}Cl) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[@]	δ[@]	Comments
7600.8	$5/2^+$	6380.8	3.2 *16*	1219.29	$1/2^+$			
		7599.9	100 *10*	0	$3/2^+$	D+Q	+0.18 *3*	
7618.7	$(3/2^-,5/2)$	1437.7	<1	6181.0	$(1/2$ to $7/2,9/2^-)$			
		2402.8	4 *2*	5215.79	$(3/2^+,5/2)$			
		2455.4	<1	5163.21	$7/2^-$			
		2779.5	<1	4839.08	$(1/2^+,3/2)$			
		3440.6	4 *2*	4177.88	$3/2^-$			
		3559.4	1.3 *7*	4059.12	$3/2^-$			
		4455.6	4 *2*	3162.80	$7/2^-$			
		5855.1	13 *2*	1763.04	$5/2^+$	(D+Q)	+0.48 *11*	
		7617.8	100 *10*	0	$3/2^+$	(D+Q)	+2.2 *3*	
7656.5	$(1/2,3/2,5/2^+)$	1550.3	5 *3*	6106.2	$(3/2,5/2^+)$			
		1973.5	2 *1*	5682.9	$1/2^-,3/2^-$			
		2001.9	2 *1*	5654.48	$3/2^+$			
		2817.3	5 *3*	4839.08	$(1/2^+,3/2)$			
		3478.4	2 *1*	4177.88	$3/2^-$			
		3597.2	56 *5*	4059.12	$3/2^-$			
		3688.8	4 *2*	3967.50	$1/2^+$			
		7655.6	100 *11*	0	$3/2^+$			
7671.9	$(5/2^-,7/2)$	2072.1	<2	5599.69	$3/2^+,5/2^+$			
		2508.6	7 *4*	5163.21	$7/2^-$			
		2790.7	2 *1*	4881.07	7/2			
		2903.0	<2	4768.82	7/2			
		3323.9	11 *1*	4347.82	$9/2^-$			
		3498.3	7 *4*	4173.44	$5/2^-$			
		4508.8	7 *4*	3162.80	$7/2^-$			
		4669.3	14 *2*	3002.30	$5/2^+$	(D+Q)	−1.4 *5*	
		5025.8	25 *3*	2645.74	$7/2^+$	D(+Q)	+0.3 *22*	
		5908.2	100 *11*	1763.04	$5/2^+$	(D+Q)	+0.86 *14*	
		7671.0	4 *2*	0	$3/2^+$			
7684.7	$3/2^-$	1926.6	0.7 *4*	5758.0	$(1/2^+,3/2)$			
		2084.9	2.8 *14*	5599.69	$3/2^+,5/2^+$			
		2281.1	2.8 *14*	5403.5	$1/2^-,3/2^-$			
		2468.8	0.7 *4*	5215.79	$(3/2^+,5/2)$			
		2674.5	<0.8	5010.09	(1/2,3/2)			
		3506.6	2.8 *14*	4177.88	$3/2^-$			
		3511.1	7 *4*	4173.44	$5/2^-$			
		3625.4	8 *1*	4059.12	$3/2^-$			
		4682.1	13 *2*	3002.30	$5/2^+$	(D+Q)	−2.4 *12*	δ: or −0.01 *5*, +0.01 *7* from (p,γ).
		5921.0	<1	1763.04	$5/2^+$			
		6464.7	1.4 *7*	1219.29	$1/2^+$			
		7683.8	100 *10*	0	$3/2^+$	(D+Q)	+6.0 *7*	

$^{35}_{17}Cl_{18}$-20

Adopted Levels, Gammas (continued)

γ(^{35}Cl) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[@]	δ[@]	Comments
7693.8	(1/2 to 7/2,9/2$^-$)	2094.0	1.0 *5*	5599.69	3/2$^+$,5/2$^+$			
		3634.5	1.0 *5*	4059.12	3/2$^-$			
		4691.2	2 *1*	3002.30	5/2$^+$			
		7692.9	100 *11*	0	3/2$^+$			
7706.4	5/2$^+$	2051.8	5 *2*	5654.48	3/2$^+$	(D+Q)	<−2	δ: or ≥13.
		2825.2	<0.5	4881.07	7/2			
		2867.2	1.1 *6*	4839.08	(1/2$^+$,3/2)			
		3081.9	<0.9	4624.35	(3/2,5/2$^+$)			
		3528.3	<2.3	4177.88	3/2$^-$			
		3594.2	1.1 *6*	4111.98	7/2$^+$			
		3787.7	<0.7	3918.49	3/2$^+$			
		4703.8	1.1 *6*	3002.30	5/2$^+$			
		5060.3	5 *2*	2645.74	7/2$^+$	(D+Q)	−1.01 *10*	δ: or ≥13.
		5942.7	<0.5	1763.04	5/2$^+$			
		6486.4	1.1 *6*	1219.29	1/2$^+$			
		7705.5	100 *10*	0	3/2$^+$	D(+Q)	+0.1 *1*	δ: +0.1 *1* (p,γ).
7744.8	7/2$^-$	2863.6	44 *5*	4881.07	7/2			
		2975.8	2.3 *12*	4768.82	7/2			
		3632.6	12 *6*	4111.98	7/2$^+$			
		3800.7	18 *3*	3943.82	9/2$^+$	D(+Q)	−0.16 *17*	B(E1)(W.u.)=5×10^{-4} (p,γ).
		4581.7	42 *4*	3162.80	7/2$^-$	D+Q	+0.18 *8*	Mult.,δ: from (p,γ). B(M1)(W.u.)=0.014, B(M2)(W.u.)=0.081 (p,γ).
		5098.7	100 *10*	2645.74	7/2$^+$	D(+Q)	+0.1 *30*	Mult.,δ: from (p,γ). B(E1)(W.u.)=7×10^{-4} (p,γ).
		5981.1	5 *3*	1763.04	5/2$^+$			
		6524.8	<1.4	1219.29	1/2$^+$			
7777.0	5/2$^+$	2190.9	<1.1	5586.0	5/2$^+$			
		2613.7	<2.4	5163.21	7/2$^-$			
		2937.8	4 *2*	4839.08	(1/2$^+$,3/2)			
		3008.0	4 *2*	4768.82	7/2			
		3598.9	15 *2*	4177.88	3/2$^-$			
		3717.7	2.2 *11*	4059.12	3/2$^-$			
		4613.9	<4	3162.80	7/2$^-$			
		4774.4	8 *4*	3002.30	5/2$^+$			
		5082.9	15 *2*	2693.75	3/2$^+$			
		5130.9	4 *2*	2645.74	7/2$^+$			
		6013.3	100 *10*	1763.04	5/2$^+$			
		6557.0	28 *3*	1219.29	1/2$^+$			
		7776.1	35 *4*	0	3/2$^+$			
7781.6	5/2$^-$	1675.4	<3.5	6106.2	(3/2,5/2$^+$)			
		2195.5	2.5 *13*	5586.0	5/2$^+$			
		2378.0	2.5 *13*	5403.5	1/2$^-$,3/2$^-$			

$^{35}_{17}Cl_{18}$-21

Adopted Levels, Gammas (continued)

$\gamma(^{35}Cl)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[@]	δ[@]
7781.6	$5/2^-$	2565.7	2.5 *13*	5215.79	$(3/2^+,5/2)$		
		3012.6	18 *2*	4768.82	$7/2$		
		3433.6	5 *3*	4347.82	$9/2^-$		
		3607.9	100 *10*	4173.44	$5/2^-$		
		3669.4	8 *4*	4111.98	$7/2^+$		
		3722.3	2.5 *13*	4059.12	$3/2^-$		
		3862.9	25 *3*	3918.49	$3/2^+$		
		4618.5	13 *6*	3162.80	$7/2^-$		
		5135.5	23 *2*	2645.74	$7/2^+$		
		6017.9	50 *5*	1763.04	$5/2^+$		
		6561.6	<3	1219.29	$1/2^+$		
		7780.7	<4	0	$3/2^+$		
7796.6	$1/2^-$	2038.5	0.6 *3*	5758.0	$(1/2^+,3/2)$		
		2142.0	1.2 *6*	5654.48	$3/2^+$		
		2393.0	2.4 *12*	5403.5	$1/2^-,3/2^-$		
		2786.4	2.4 *12*	5010.09	(1/2,3/2)		
		2942.1	0.6 *3*	4854.4	(1/2,3/2)		
		2957.4	<1.3	4839.08	$(1/2^+,3/2)$		
		3737.3	<0.4	4059.12	$3/2^-$		
		6576.6	11 *1*	1219.29	$1/2^+$		
		7795.7	100 *10*	0	$3/2^+$		
7837.1	$3/2^-$	1656.1	<1.4	6181.0	(1/2 to 7/2,$9/2^-$)		
		1730.9	3 *15*	6106.2	$(3/2,5/2^+)$		
		2237.3	<1.4	5599.69	$3/2^+,5/2^+$		
		2621.2	3.0 *15*	5215.79	$(3/2^+,5/2)$		
		2955.9	<11	4881.07	$7/2$		
		3659.0	100 *10*	4177.88	$3/2^-$	D+Q	−0.05 *3*
		3663.4	9 *4*	4173.44	$5/2^-$		
		3777.8	6 *3*	4059.12	$3/2^-$		
		3893.0	<1.4	3943.82	$9/2^+$		
		3918.4	<0.6	3918.49	$3/2^+$		
		4834.4	11 *6*	3002.30	$5/2^+$		
		5190.9	<6	2645.74	$7/2^+$		
		6073.4	<5	1763.04	$5/2^+$		
		6617.1	77 *9*	1219.29	$1/2^+$	D+Q	+0.06 *3*
		7836.2	77 *9*	0	$3/2^+$	D+Q	+0.02 *3*
7839.7	(1/2 to 5/2,$7/2^-$)	3661.6	97	4177.88	$3/2^-$		
		3666.0	9	4173.44	$5/2^-$		
		3780.4	9	4059.12	$3/2^-$		
		4837.0	6	3002.30	$5/2^+$		
		6619.7	100	1219.29	$1/2^+$		
		7838.8	74	0	$3/2^+$		

$^{35}_{17}Cl_{18}$-22

Adopted Levels, Gammas (continued)

γ(^{35}Cl) (continued)

E_i(level)	J_i^π	E_γ †	I_γ ‡	E_f	J_f^π	Mult. @	δ @	Comments
7868.6	(3/2,5/2$^+$)	2652.7	<2	5215.79	(3/2$^+$,5/2)			
		2858.4	6 *3*	5010.09	(1/2,3/2)			
		3694.9	6 *3*	4173.44	5/2$^-$			
		6104.9	29 *3*	1763.04	5/2$^+$			
		6648.6	19 *2*	1219.29	1/2$^+$			
		7867.6	100 *10*	0	3/2$^+$			
7873.2	13/2$^+$	1786 *5*	9.7 *5*	6087.4	13/2$^-$	D(+Q)	−0.6 *6*	δ: all δ from (HI,xnγ).
		1946.4 *3*	47 *3*	5926.9	11/2$^-$	E1+M2	+0.2 *1*	
		2465.9 *3*	100 *2*	5407.2	11/2$^-$	E1+M2	−0.25 *10*	
7880.6	3/2$^+$,5/2$^+$	2226.0	29 *3*	5654.48	3/2$^+$			
		3041.4	10 *5*	4839.08	(1/2$^+$,3/2)			
		3256.1	3 *2*	4624.35	(3/2,5/2$^+$)			
		3702.5	<16	4177.88	3/2$^-$			
		3706.9	<10	4173.44	5/2$^-$			
		3768.4	13 *7*	4111.98	7/2$^+$			
		3821.2	3 *2*	4059.12	3/2$^-$			
		3961.9	6 *3*	3918.49	3/2$^+$			
		4877.9	32 *3*	3002.30	5/2$^+$			
		5186.5	97 *10*	2693.75	3/2$^+$			
		6116.9	100 *10*	1763.04	5/2$^+$			
		7879.6	29 *3*	0	3/2$^+$			
7899.1	(3/2$^-$,5/2)	2254.0	<2	5645.0	(5/2,7/2,9/2$^+$)			
		2735.8	<1.2	5163.21	7/2$^-$			
		3017.9	<1	4881.07	7/2			
		3274.6	<0.6	4624.35	(3/2,5/2$^+$)			
		3721.0	10 *1*	4177.88	3/2$^-$			
		3725.4	8 *1*	4173.44	5/2$^-$			
		3839.7	3 *2*	4059.12	3/2$^-$			
		4736.0	5 *3*	3162.80	7/2$^-$			
		5205.0	<1.7	2693.75	3/2$^+$			
		6135.4	100 *10*	1763.04	5/2$^+$			
		7898.1	4 *2*	0	3/2$^+$			
7923.3	(3/2$^+$,5/2$^+$)	3084.1	<3	4839.08	(1/2$^+$,3/2)			
		3154.3	<4	4768.82	7/2			
		3298.8	<4	4624.35	(3/2,5/2$^+$)			
		3745.2	4 *2*	4177.88	3/2$^-$			
		3749.6	12 *1*	4173.44	5/2$^-$			
		3863.9	2 *1*	4059.12	3/2$^-$			
		3944.1	<3	3979.0	(3/2$^+$,5/2$^+$)			
		3955.6	2 *1*	3967.50	1/2$^+$			
		4004.6	2 *1*	3918.49	3/2$^+$			
		4920.6	<2	3002.30	5/2$^+$			

$^{35}_{17}Cl_{18}$-23

Adopted Levels, Gammas (continued)

γ(^{35}Cl) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[@]	δ[@]	Comments
7923.3	(3/2$^+$,5/2$^+$)	5229.2	24 *3*	2693.75	3/2$^+$			
		5277.1	<2	2645.74	7/2$^+$			
		6159.6	2 *1*	1763.04	5/2$^+$			
		6703.3	56 *6*	1219.29	1/2$^+$			
		7922.3	100 *10*	0	3/2$^+$			
7970.2	(5/2$^-$,7/2$^-$)	2325.1	14 *7*	5645.0	(5/2,7/2,9/2$^+$)			
		2384.1	9 *5*	5586.0	5/2$^+$			
		2754.3	14 *7*	5215.79	(3/2$^+$,5/2)			
		3089.0	41 *4*	4881.07	7/2			
		3201.2	27 *3*	4768.82	7/2			
		3622.2	36 *4*	4347.82	9/2$^-$			
		3792.1	<27	4177.88	3/2$^-$			
		3796.5	27 *3*	4173.44	5/2$^-$			
		3858.0	9 *5*	4111.98	7/2$^+$			
		4807.1	59 *6*	3162.80	7/2$^-$			
		4967.5	23 *2*	3002.30	5/2$^+$			
		5324.0	100 *10*	2645.74	7/2$^+$			
		6206.5	95 *10*	1763.04	5/2$^+$			
		6750.1	<5	1219.29	1/2$^+$			
7987.8	3/2	1881.5	1.6 *8*	6106.2	(3/2,5/2$^+$)			
		2333.2	<3	5654.48	3/2$^+$			
		2342.7	1.6 *8*	5645.0	(5/2,7/2,9/2$^+$)			
		3809.7	<1.3	4177.88	3/2$^-$			
		3928.4	<2	4059.12	3/2$^-$			
		6767.7	100 *10*	1219.29	1/2$^+$	(D+Q)	+0.21 *4*	δ: or −3.1 *4*.
		7986.8	58 *6*	0	3/2$^+$	(D+Q)	−0.36 *2*	δ: or −11 *3*.
7995.6	5/2	2190.0	<0.7	5805.5	(1/2$^+$,3/2,5/2)			
		2395.8	<1.3	5599.69	3/2$^+$,5/2$^+$			
		2592.0	3.4 *17*	5403.5	1/2$^-$,3/2$^-$			
		2832.2	<1.7	5163.21	7/2$^-$			
		3817.5	3.4 *17*	4177.88	3/2$^-$			
		3936.2	<1.3	4059.12	3/2$^-$			
		4832.5	6.9 *7*	3162.80	7/2$^-$			
		4992.9	<2.3	3002.30	5/2$^+$			
		5301.5	<0.2	2693.75	3/2$^+$			
		5349.4	<0.7	2645.74	7/2$^+$			
		6231.9	1.3 *6*	1763.04	5/2$^+$			
		7994.6	100 *10*	0	3/2$^+$			
8000.4	7/2$^+$	2355.3	4 *2*	5645.0	(5/2,7/2,9/2$^+$)			
		2784.5	<1.3	5215.79	(3/2$^+$,5/2)			
		3119.2	<0.9	4881.07	7/2			
		3231.4	11 *1*	4768.82	7/2			

$^{35}_{17}Cl_{18}$-24

Adopted Levels, Gammas (continued)

γ(^{35}Cl) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[@]	δ[@]	Comments
8000.4	7/2$^+$	3652.4	<2.5	4347.82	9/2$^-$			
		3826.7	11 *1*	4173.44	5/2$^-$			
		4056.2	2.6 *13*	3943.82	9/2$^+$			
		4837.3	<1.1	3162.80	7/2$^-$			
		5354.2	2.6 *13*	2645.74	7/2$^+$			
		6236.7	100 *10*	1763.04	5/2$^+$			
		7999.4	1.3 *7*	0	3/2$^+$			
8004.5	5/2$^+$	2349.9	<3	5654.48	3/2$^+$			
		3123.3	<1	4881.07	7/2			
		3165.2	<5	4839.08	(1/2$^+$,3/2)			
		3830.8	<2	4173.44	5/2$^-$			I_γ: for decays to 4173 and/or 4178 levels.
		4841.4	28 *3*	3162.80	7/2$^-$			
		5001.8	5 *3*	3002.30	5/2$^+$			
		5310.4	<3	2693.75	3/2$^+$			
		5358.3	<7	2645.74	7/2$^+$			
		6240.8	33 *3*	1763.04	5/2$^+$			
		6784.4	<1	1219.29	1/2$^+$			
		8003.5	100 *10*	0	3/2$^+$			
8035.0	(1/2$^-$,3/2$^-$)	2229.4	11 *1*	5805.5	(1/2$^+$,3/2,5/2)			
		3856.9	27 *3*	4177.88	3/2$^-$			
		3975.6	20 *2*	4059.12	3/2$^-$			
		5340.9	9 *5*	2693.75	3/2$^+$			
		6271.3	9 *5*	1763.04	5/2$^+$			
		6814.9	100 *10*	1219.29	1/2$^+$			
		8034.0	4 *2*	0	3/2$^+$			
8038.5	1/2$^+$	3183.9	<1	4854.4	(1/2,3/2)			
		3199.2	<2.6	4839.08	(1/2$^+$,3/2)			
		3414.0	<5	4624.35	(3/2,5/2$^+$)			
		3860.4	<2.6	4177.88	3/2$^-$			
		3979.1	7 *3*	4059.12	3/2$^-$			
		4059.2	<1.3	3979.0	(3/2$^+$,5/2$^+$)			
		4119.7	<2.3	3918.49	3/2$^+$			
		5035.8	5 *3*	3002.30	5/2$^+$			
		5344.4	100 *10*	2693.75	3/2$^+$	(D+Q)	−0.20 *2*	δ: or +19 *8*.
		6274.8	28 *3*	1763.04	5/2$^+$			
		6818.4	10 *1*	1219.29	1/2$^+$			
		8037.5	15 *2*	0	3/2$^+$	(D+Q)	−0.13 *4*	δ: or +8.1 *26*.
8075.9	(3/2,5/2)	2430.8	19 *2*	5645.0	(5/2,7/2,9/2$^+$)			
		2489.8	21 *2*	5586.0	5/2$^+$			
		2860.0	13 *1*	5215.79	(3/2$^+$,5/2)			
		2912.5	2 *1*	5163.21	7/2$^-$			
		3194.6	4 *2*	4881.07	7/2			

$^{35}_{17}Cl_{18}$-25

Adopted Levels, Gammas (continued)

γ(^{35}Cl) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[@]	δ[@]	Comments
8075.9	(3/2,5/2)	3306.9	8 *4*	4768.82	7/2			
		3897.8	<15	4177.88	$3/2^-$			
		3902.2	13 *1*	4173.44	$5/2^-$			
		3963.7	4 *2*	4111.98	$7/2^+$			
		5073.2	4 *2*	3002.30	$5/2^+$			
		6312.2	100 *10*	1763.04	$5/2^+$			
		8074.9	2 *1*	0	$3/2^+$			
8096.5	5/2	2290.9	2.5 *13*	5805.5	$(1/2^+,3/2,5/2)$			
		2451.4	13 *8*	5645.0	$(5/2,7/2,9/2^+)$			
		2496.7	15.0 *15*	5599.69	$3/2^+,5/2^+$			
		2880.6	2.5 *13*	5215.79	$(3/2^+,5/2)$			
		2933.1	5.0 *25*	5163.21	$7/2^-$			
		3257.2	8 *4*	4839.08	$(1/2^+,3/2)$			
		3327.5	2.5 *13*	4768.82	7/2			
		3918.4	<5	4177.88	$3/2^-$			
		4037.1	5.0 *25*	4059.12	$3/2^-$			
		4177.7	8 *4*	3918.49	$3/2^+$			
		4933.3	13 *8*	3162.80	$7/2^-$			
		5402.4	13 *8*	2693.75	$3/2^+$			
		5450.3	43 *5*	2645.74	$7/2^+$			
		6332.8	22.5 *25*	1763.04	$5/2^+$			
		8095.5	100 *10*	0	$3/2^+$			
8106.4	3/2	2506.6	1.3 *8*	5599.69	$3/2^+,5/2^+$			
		3251.8	1.3 *8*	4854.4	(1/2,3/2)			
		3267.1	1.3 *8*	4839.08	$(1/2^+,3/2)$			
		3928.3	2.5 *13*	4177.88	$3/2^-$			
		4047.0	1.3 *8*	4059.12	$3/2^-$			
		4127.1	<8	3979.0	$(3/2^+,5/2^+)$			
		4138.7	8 *4*	3967.50	$1/2^+$			
		5103.7	20 *2*	3002.30	$5/2^+$			
		5412.3	20 *2*	2693.75	$3/2^+$	(D+Q)	+4.9 *10*	δ: or −0.05 *4*.
		6342.7	8 *4*	1763.04	$5/2^+$			
		6886.3	88 *10*	1219.29	$1/2^+$			
		8105.4	100 *10*	0	$3/2^+$	(D+Q)	+1.2 *1*	δ: or −0.46 *4*.
8113.3	$(3/2,5/2^+)$	1621.3	18.8 *19*	6492.0	$(1/2,3/2,5/2^+)$			
		2007.0	<19	6106.2	$(3/2,5/2^+)$			
		2307.7	<3.4	5805.5	$(1/2^+,3/2,5/2)$			
		2458.7	<2.8	5654.48	$3/2^+$			
		2513.5	9 *5*	5599.69	$3/2^+,5/2^+$			
		2897.4	<6	5215.79	$(3/2^+,5/2)$			
		3939.6	16 *9*	4173.44	$5/2^-$			
		4053.9	<4	4059.12	$3/2^-$			

$^{35}_{17}Cl_{18}$-26

Adopted Levels, Gammas (continued)

γ(^{35}Cl) (continued)

E_i(level)	J_i^π	E_γ [†]	I_γ [‡]	E_f	J_f^π
8113.3	(3/2,5/2$^+$)	4134.0	<16	3979.0	(3/2$^+$,5/2$^+$)
		4145.6	16 *9*	3967.50	1/2$^+$
		5110.6	<6	3002.30	5/2$^+$
		5419.1	53 *6*	2693.75	3/2$^+$
		6349.6	18.8 *19*	1763.04	5/2$^+$
		6893.2	100 *9*	1219.29	1/2$^+$
		8112.3	81 *9*	0	3/2$^+$
8147.6	1/2$^-$	2464.6	1.6 *8*	5682.9	1/2$^-$,3/2$^-$
		3137.3	3.2 *16*	5010.09	(1/2,3/2)
		3969.5	14.3 *16*	4177.88	3/2$^-$
		4088.2	4.8 *24*	4059.12	3/2$^-$
		4168.3	<3.2	3979.0	(3/2$^+$,5/2$^+$)
		4179.9	1.6 *8*	3967.50	1/2$^+$
		4228.8	4.8 *24*	3918.49	3/2$^+$
		5453.4	4.8 *24*	2693.75	3/2$^+$
		6927.5	23.8 *24*	1219.29	1/2$^+$
		8146.6	100 *10*	0	3/2$^+$
8156.8	(5/2$^+$,7/2$^-$)	2511.7	6 *3*	5645.0	(5/2,7/2,9/2$^+$)
		2570.7	14.0 *14*	5586.0	5/2$^+$
		2940.9	16.0 *16*	5215.79	(3/2$^+$,5/2)
		3387.8	<2.0	4768.82	7/2
		3978.7	<10	4177.88	3/2$^-$
		3983.1	16.0 *16*	4173.44	5/2$^-$
		4044.5	14.0 *14*	4111.98	7/2$^+$
		4097.4	<2.0	4059.12	3/2$^-$
		4212.6	<4	3943.82	9/2$^+$
		4993.6	18 *2*	3162.80	7/2$^-$
		5154.1	8 *4*	3002.30	5/2$^+$
		5510.6	100 *10*	2645.74	7/2$^+$
		6393.1	<2.0	1763.04	5/2$^+$
		8155.8	8 *4*	0	3/2$^+$
8179.4	(3/2$^-$,5/2,7/2$^+$)	3554.9	13.2 *15*	4624.35	(3/2,5/2$^+$)
		5016.2	11.8 *12*	3162.80	7/2$^-$
		5176.7	5.9 *30*	3002.30	5/2$^+$
		5485.2	4.4 *22*	2693.75	3/2$^+$
		6415.6	100 *10*	1763.04	5/2$^+$
		8178.4	11.8 *12*	0	3/2$^+$
8209.1	5/2$^+$	2554.5	<0.92	5654.48	3/2$^+$
		3327.8	<1.1	4881.07	7/2
		3369.8	<0.53	4839.08	(1/2$^+$,3/2)
		4149.7	2.6 *13*	4059.12	3/2$^-$
		4290.3	1.3 *7*	3918.49	3/2$^+$

$^{35}_{17}Cl_{18}$-27

Adopted Levels, Gammas (continued)

$\gamma(^{35}Cl)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[@]	δ[@]	Comments
8209.1	$5/2^+$	5206.4	1.3 *7*	3002.30	$5/2^+$			
		5514.9	1.3 *7*	2693.75	$3/2^+$			
		6445.3	21.1 *26*	1763.04	$5/2^+$	D+Q	+0.33 *4*	
		6989.0	3.9 *20*	1219.29	$1/2^+$			
		8208.1	100 *11*	0	$3/2^+$	D+Q	−0.36 *4*	
8216.3	$5/2^+$	2561.7	<1.7	5654.48	$3/2^+$			
		3447.3	<1.7	4768.82	7/2			
		4038.1	<6	4177.88	$3/2^-$			
		5053.1	94 *11*	3162.80	$7/2^-$	D+Q	+0.11 *2*	
		5213.6	11 *6*	3002.30	$5/2^+$			
		5522.1	9 *4*	2693.75	$3/2^+$			
		6452.5	<3.0	1763.04	$5/2^+$			
		8215.3	100 *11*	0	$3/2^+$	D+Q	+0.06 *3*	
8242.9	$3/2^-$	4069.2	8	4173.44	$5/2^-$			
		5240.2	2.2	3002.30	$5/2^+$			
		7022.8	100	1219.29	$1/2^+$			
8251.0		4138.7	5	4111.98	$7/2^+$			
		5248.3	7	3002.30	$5/2^+$			
		7030.9	100	1219.29	$1/2^+$			
		8250.0	10	0	$3/2^+$			
8269.6	$5/2^+$	3500.6	4.9 *24*	4768.82	7/2			I_γ: from 1976Sp08.
		3645.0	4.4 *22*	4624.35	$(3/2,5/2^+)$			
		4091.4	39 *10*	4177.88	$3/2^-$			
		4350.8	7 *4*	3918.49	$3/2^+$			
		5106.4	13 *7*	3162.80	$7/2^-$			
		5266.9	34 *9*	3002.30	$5/2^+$			
		5575.4	14 *7*	2693.75	$3/2^+$			
		5623.4	8 *4*	2645.74	$7/2^+$			
		6505.8	19 *10*	1763.04	$5/2^+$			
		8268.5	100 *24*	0	$3/2^+$			
8277.2	$5/2^+$	2622.6	7 *4*	5654.48	$3/2^+$			
		2691.1	6 *3*	5586.0	$5/2^+$			
		3113.8	10 *5*	5163.21	$7/2^-$			
		3395.9	13 *7*	4881.07	7/2			
		3437.9	28 *13*	4839.08	$(1/2^+,3/2)$			
		3508.2	3.3 *17*	4768.82	7/2			
		3652.6	10 *5*	4624.35	$(3/2,5/2^+)$			
		3929.1	<7	4347.82	$9/2^-$			
		4099.0	3.3 *17*	4177.88	$3/2^-$			
		4103.5	5.0 *27*	4173.44	$5/2^-$			
		4217.8	4.7 *23*	4059.12	$3/2^-$			
		4358.4	12 *6*	3918.49	$3/2^+$			

$^{35}_{17}Cl_{18}$-28

Adopted Levels, Gammas (continued)

γ(^{35}Cl) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[@]	δ[@]	Comments
8277.2	5/2$^+$	5274.5	31 *16*	3002.30	5/2$^+$			
		5583.0	9 *5*	2693.75	3/2$^+$			
		5631.0	15 *8*	2645.74	7/2$^+$			
		6513.4	77 *20*	1763.04	5/2$^+$			
		8276.1	100 *27*	0	3/2$^+$			
8282.0	(3/2$^-$,5/2)	2523.9	1.7 *9*	5758.0	(1/2$^+$,3/2)			
		2695.9	20 *10*	5586.0	5/2$^+$			
		3066.1	8 *4*	5215.79	(3/2$^+$,5/2)			
		3118.6	<9	5163.21	7/2$^-$			
		3400.7	57 *14*	4881.07	7/2			
		4103.8	4.9 *26*	4177.88	3/2$^-$			
		4108.3	7 *4*	4173.44	5/2$^-$			
		4222.6	7 *4*	4059.12	3/2$^-$			
		5118.8	31 *9*	3162.80	7/2$^-$			
		5587.8	1.7 *9*	2693.75	3/2$^+$			
		5635.8	1.4 *9*	2645.74	7/2$^+$			
		6518.2	100 *26*	1763.04	5/2$^+$			
		8280.9	46 *12*	0	3/2$^+$			
8287.8	1/2$^-$	2633.2	4.4 *23*	5654.48	3/2$^+$			
		3277.5	5.2 *27*	5010.09	(1/2,3/2)			
		4109.6	16 *8*	4177.88	3/2$^-$			
		4228.4	5.8 *29*	4059.12	3/2$^-$			
		4308.5	<6	3979.0	(3/2$^+$,5/2$^+$)			
		4320.1	6 *3*	3967.50	1/2$^+$			
		4369.0	2.1 *11*	3918.49	3/2$^+$			
		5593.6	42 *11*	2693.75	3/2$^+$			
		7067.7	100 *25*	1219.29	1/2$^+$	(D)		δ: δ(Q/D)=+0.21 *2* or −3.2 *2* in (p,γ).
		8286.7	27 *6*	0	3/2$^+$	(D+Q)	−0.35 *4*	δ: or −11 *3*.
8299.9	3/2$^-$	3289.6	13	5010.09	(1/2,3/2)			
		3418.6	17	4881.07	7/2			
		3445.3	21	4854.4	(1/2,3/2)			
		4126.2	25	4173.44	5/2$^-$			
		4240.5	42	4059.12	3/2$^-$			
		5136.7	4	3162.80	7/2$^-$			
		5297.2	42	3002.30	5/2$^+$			
		5605.7	42	2693.75	3/2$^+$			
		5653.7	25	2645.74	7/2$^+$			
		6536.1	33	1763.04	5/2$^+$			
		7079.8	100	1219.29	1/2$^+$	(D+Q)	−1.7 *1*	δ: or −0.02 *2*.
		8298.8	54	0	3/2$^+$	(D+Q)	−0.15 *4*	δ: or +9.5 *36*.
8318.1		2512.5	0.90	5805.5	(1/2$^+$,3/2,5/2)			
		2673.0	0.90	5645.0	(5/2,7/2,9/2$^+$)			

$^{35}_{17}Cl_{18}$-29

Adopted Levels, Gammas (continued)

$\gamma(^{35}Cl)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[@]	δ[@]
8318.1		2718.3	1.9	5599.69	$3/2^+,5/2^+$		
		3549.1	0.38	4768.82	7/2		
		3693.5	2.3	4624.35	$(3/2,5/2^+)$		
		4139.9	3.8	4177.88	$3/2^-$		
		4144.4	2.6	4173.44	$5/2^-$		
		4258.7	1.5	4059.12	$3/2^-$		
		4338.8	3.8	3979.0	$(3/2^+,5/2^+)$		
		4350.4	5	3967.50	$1/2^+$		
		5154.9	0.64	3162.80	$7/2^-$		
		5315.4	3.8	3002.30	$5/2^+$		
		5623.9	2.1	2693.75	$3/2^+$		
		5671.9	1.2	2645.74	$7/2^+$		
		6554.3	2.3	1763.04	$5/2^+$		
		7098.0	2.6	1219.29	$1/2^+$		
		8317.0	100	0	$3/2^+$		
8319.8	$15/2^-$	2232.7 *6*	57.2 *28*	6087.4	$13/2^-$		
		2911.9 *8*	100 *5*	5407.2	$11/2^-$		
8323.2		4210.9	1.2	4111.98	$7/2^+$		
		5320.5	3.7	3002.30	$5/2^+$		
		5677.0	5	2645.74	$7/2^+$		
		6559.4	<2.4	1763.04	$5/2^+$		
		7103.1	10	1219.29	$1/2^+$		
		8322.1	100	0	$3/2^+$		
8381.4	$5/2^+$	3612.4	<2.9	4768.82	7/2		
		3756.8	<2.9	4624.35	$(3/2,5/2^+)$		
		4269.1	23.5 *24*	4111.98	$7/2^+$		
		4437.2	23.5 *24*	3943.82	$9/2^+$		
		4462.6	71 *9*	3918.49	$3/2^+$	D+Q	+0.15 *3*
		5378.7	74 *9*	3002.30	$5/2^+$	D+Q	+0.02 *3*
		5687.2	2.9 *15*	2693.75	$3/2^+$		
		5735.2	15 *9*	2645.74	$7/2^+$		
		6617.6	100 *12*	1763.04	$5/2^+$	D+Q	+0.06 *3*
		8380.3	9 *5*	0	$3/2^+$	D+Q	1.65
8403.4	$5/2^-$	3634.4	15 *8*	4768.82	7/2		
		4225.2	29 *16*	4177.88	$3/2^-$		
		4344.0	74 *19*	4059.12	$3/2^-$		
		5709.2	32 *16*	2693.75	$3/2^+$		
		5757.2	24 *12*	2645.74	$7/2^+$		
		6639.6	48 *13*	1763.04	$5/2^+$		
		8402.3	100 *26*	0	$3/2^+$		
8405.0	$(3/2^+,5/2,7/2^+)$	3523.7	35 *9*	4881.07	7/2		
		4231.3	3.7 *19*	4173.44	$5/2^-$		

$^{35}_{17}Cl_{18}$-30

Adopted Levels, Gammas (continued)

γ(^{35}Cl) (continued)

E_i(level)	J_i^π	E_γ †	I_γ ‡	E_f	J_f^π
8405.0	(3/2$^+$,5/2,7/2$^+$)	4292.7	3.3 *16*	4111.98	7/2$^+$
		5402.3	35 *9*	3002.30	5/2$^+$
		6641.2	100 *26*	1763.04	5/2$^+$
		8403.9	56 *14*	0	3/2$^+$
8417.1	1/2$^+$	3406.8	14	5010.09	(1/2,3/2)
		4243.4	31	4173.44	5/2$^-$
		4472.9	9	3943.82	9/2$^+$
		5414.3	20	3002.30	5/2$^+$
		5722.9		2693.75	3/2$^+$
		5770.8	23	2645.74	7/2$^+$
		6653.3	63	1763.04	5/2$^+$
		7196.9	26	1219.29	1/2$^+$
		8416.0	100	0	3/2$^+$
8464.3	(3/2,5/2$^+$)	2809.7	48 *24*	5654.48	3/2$^+$
		3248.3	34 *17*	5215.79	(3/2$^+$,5/2)
		3454.0	47 *24*	5010.09	(1/2,3/2)
		3609.7	19 *10*	4854.4	(1/2,3/2)
		3839.7	25 *13*	4624.35	(3/2,5/2$^+$)
		4286.1	31 *15*	4177.88	3/2$^-$
		4290.6	32 *17*	4173.44	5/2$^-$
		4496.5	31 *15*	3967.50	1/2$^+$
		4545.5	15 *8*	3918.49	3/2$^+$
		5461.5	100 *24*	3002.30	5/2$^+$
		5770.1	94 *24*	2693.75	3/2$^+$
		7244.1	50 *25*	1219.29	1/2$^+$
		8463.2	59 *18*	0	3/2$^+$
8485.3	3/2$^+$	2830.7	12 *6*	5654.48	3/2$^+$
		3604.0	15 *8*	4881.07	7/2
		3860.7	2.2 *11*	4624.35	(3/2,5/2$^+$)
		4517.5	2.6 *13*	3967.50	1/2$^+$
		4566.5	11 *6*	3918.49	3/2$^+$
		5482.5	16 *8*	3002.30	5/2$^+$
		5791.1	43 *11*	2693.75	3/2$^+$
		5839.0	6 *3*	2645.74	7/2$^+$
		6721.5	100 *26*	1763.04	5/2$^+$
		8484.2	9 *4*	0	3/2$^+$
8486.9	3/2$^-$	2728.8	2.4 *13*	5758.0	(1/2$^+$,3/2)
		3862.3	3.9 *20*	4624.35	(3/2,5/2$^+$)
		4308.7	10# *5*	4177.88	3/2$^-$
		4427.5	4.1 *22*	4059.12	3/2$^-$
		4519.1	15 *8*	3967.50	1/2$^+$
8486.9	3/2$^-$	5484.1	18 *9*	3002.30	5/2$^+$
		5792.7	41 *11*	2693.75	3/2$^+$
		6723.1	8 *4*	1763.04	5/2$^+$
		7266.7	14 *7*	1219.29	1/2$^+$
		8485.8	100 *26*	0	3/2$^+$
8487.4	15/2$^-$	2399.8 *8*	100 *4*	6087.4	13/2$^-$
		3080.0 *7*	31.8 *20*	5407.2	11/2$^-$
8514.8	1/2$^-$	3660.2	16 *8*	4854.4	(1/2,3/2)
		4336.6	7 *4*	4177.88	3/2$^-$
		4455.4	100 *26*	4059.12	3/2$^-$
		4547.0	85 *22*	3967.50	1/2$^+$
		4596.0	24 *12*	3918.49	3/2$^+$
		7294.6	37 *11*	1219.29	1/2$^+$
		8513.7	100 *26*	0	3/2$^+$
8572.6	(5/2)$^+$	2848.9	3.1 *16*	5723.6	5/2$^+$
		2918.0	1.9 *10*	5654.48	3/2$^+$
		2972.8	1.0 *6*	5599.69	3/2$^+$,5/2$^+$
		3409.2	2.6 *13*	5163.21	7/2$^-$
		3691.3	1.3 *7*	4881.07	7/2
		4398.9	1.0 *6*	4173.44	5/2$^-$
		4460.3	1.6 *9*	4111.98	7/2$^+$
		4653.8	1.6 *9*	3918.49	3/2$^+$
		5409.4	2.3 *12*	3162.80	7/2$^-$
		5569.8	6 *3*	3002.30	5/2$^+$
		5878.4	0.9 *4*	2693.75	3/2$^+$
		5926.3	11 *6*	2645.74	7/2$^+$
		7352.4	8 *4*	1219.29	1/2$^+$
		8571.5	100 *10*	0	3/2$^+$
8581.2	1/2$^+$	2089.1	8 *4*	6492.0	(1/2,3/2,5/2$^+$)
		3741.9	2.4 *13*	4839.08	(1/2$^+$,3/2)
		4403.0	8 *4*	4177.88	3/2$^-$
		4521.8	3.7 *19*	4059.12	3/2$^-$
		4662.4	4.3 *22*	3918.49	3/2$^+$
		5887.0	10 *5*	2693.75	3/2$^+$
		7361.0	100 *11*	1219.29	1/2$^+$
		8580.1	48 *13*	0	3/2$^+$
8591.8	5/2$^+$	2833.7	22 *11*	5758.0	(1/2$^+$,3/2)
		2937.2	17 *9*	5654.48	3/2$^+$
		3822.8	73 *18*	4768.82	7/2
		4418.0	59 *14*	4173.44	5/2$^-$
		4479.5	16 *8*	4111.98	7/2$^+$

$^{35}_{17}Cl_{18}$-31

Adopted Levels, Gammas (continued)

$\gamma(^{35}Cl)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[@]	δ[@]
8591.8	$5/2^+$	5428.6	35 *18*	3162.80	$7/2^-$		
		5589.0	100 *27*	3002.30	$5/2^+$		
		5945.5	25 *13*	2645.74	$7/2^+$		
		6828.0	64 *18*	1763.04	$5/2^+$		
		8590.7	45 *14*	0	$3/2^+$		
8612.0	$(3/2^+,5/2^+)$	6848.2	100 *10*	1763.04	$5/2^+$		
		7391.8	34 *8*	1219.29	$1/2^+$		
		8610.9	66 *16*	0	$3/2^+$		
8614.7	$5/2^+$	3733.4	2.9 *14*	4881.07	7/2		
		4555.3	10 *5*	4059.12	$3/2^-$		
		4670.5	<7	3943.82	$9/2^+$		
		4695.9	13 *7*	3918.49	$3/2^+$		
		5611.9	4.5 *23*	3002.30	$5/2^+$		
		5920.5	8 *4*	2693.75	$3/2^+$		
		5968.4	41 *11*	2645.74	$7/2^+$		
		6850.9	<16	1763.04	$5/2^+$		
		7394.5	<3.6	1219.29	$1/2^+$		
		8613.6	100 *11*	0	$3/2^+$		
8619.1	$(3/2^+,5/2^+)$	2895.4	6 *3*	5723.6	$5/2^+$		
		2964.5	5.2 *27*	5654.48	$3/2^+$		
		3764.5	4.2 *21*	4854.4	(1/2,3/2)		
		3994.5	4.5 *24*	4624.35	$(3/2,5/2^+)$		
		4651.3	9 *5*	3967.50	$1/2^+$		
		4700.3	7 *4*	3918.49	$3/2^+$		
		5616.3	48 *12*	3002.30	$5/2^+$		
		5924.9	42 *12*	2693.75	$3/2^+$		
		5972.8	5.2 *27*	2645.74	$7/2^+$		
		6855.3	70 *18*	1763.04	$5/2^+$		
		8618.0	100 *24*	0	$3/2^+$		
8631.3	$7/2^-$	2907.6	0.6 *4*	5723.6	$5/2^+$		
		3467.9	18 *9*	5163.21	$7/2^-$	D+Q	+0.6 *1*
		3862.3	3.0 *15*	4768.82	7/2		
		4283.2	26 *6*	4347.82	$9/2^-$	D+Q	−0.184 *14*
		4457.5	8 *4*	4173.44	$5/2^-$		
		4519.0	21 *11*	4111.98	$7/2^+$	D+Q	−0.06 *2*
		4687.1	20 *10*	3943.82	$9/2^+$		
		5468.1	7 *4*	3162.80	$7/2^-$		
		5628.5	3.0 *15*	3002.30	$5/2^+$		
		5937.1	<32	2693.75	$3/2^+$		
		5985.0	5.5 *28*	2645.74	$7/2^+$		
		6867.5	100 *26*	1763.04	$5/2^+$	D+Q	−0.011 *3*
		7411.1	<11	1219.29	$1/2^+$		

$^{35}_{17}Cl_{18}$-32

Adopted Levels, Gammas (continued)

γ(^{35}Cl) (continued)

E_i(level)	J_i^π	E_γ †	I_γ ‡	E_f	J_f^π	Comments
8631.3	7/2⁻	8630.2	1.1 *6*	0	3/2⁺	
8635	5/2	4689 *7*	61	3943.82	9/2⁺	
		5473 *8*	53	3162.80	7/2⁻	
		5630 *9*	16	3002.30	5/2⁺	
		5941 *10*	34	2693.75	3/2⁺	
		6874 *11*	100	1763.04	5/2⁺	
8642.7	(3/2⁺,5/2⁺)	2988.1	10 *5*	5654.48	3/2⁺	
		3056.6	9 *5*	5586.0	5/2⁺	
		3239.0	17 *9*	5403.5	1/2⁻,3/2⁻	
		3803.4	9 *5*	4839.08	(1/2⁺,3/2)	
		3873.6	86 *22*	4768.82	7/2	
		4018.1	7 *4*	4624.35	(3/2,5/2⁺)	
		4464.5	50 *14*	4177.88	3/2⁻	I_γ: transitions to 4177 and 4173 not resolved (1976Sp08).
		4583.2	31 *16*	4059.12	3/2⁻	
		4723.9	21 *11*	3918.49	3/2⁺	
		5948.5	19 *9*	2693.75	3/2⁺	
		8641.6	100 *25*	0	3/2⁺	
8686.7	5/2⁻	3100.6	2.8 *15*	5586.0	5/2⁺	
		3283.0	4.1 *21*	5403.5	1/2⁻,3/2⁻	
		4508.5	2.6 *13*	4177.88	3/2⁻	
		4627.2	4.6 *24*	4059.12	3/2⁻	
		5523.5	4.9 *25*	3162.80	7/2⁻	
		5992.4	3.7 *19*	2693.75	3/2⁺	
		6922.8	6 *3*	1763.04	5/2⁺	
		7466.5	2.5 *13*	1219.29	1/2⁺	
		8685.5	100 *11*	0	3/2⁺	
8697.4	3/2⁻	2891.8	3.6 *19*	5805.5	(1/2⁺,3/2,5/2)	
		3097.6	6 *3*	5599.69	3/2⁺,5/2⁺	
		7477.2	15 *4*	1219.29	1/2⁺	
		8696.2	100 *10*	0	3/2⁺	
8750.3	3/2⁻	2944.7	4.2 *21*	5805.5	(1/2⁺,3/2,5/2)	
		3346.6	9 *5*	5403.5	1/2⁻,3/2⁻	
		3534.3	4.5 *23*	5215.79	(3/2⁺,5/2)	
		4572.1	4 *2*	4177.88	3/2⁻	
		4576.5	4.3 *23*	4173.44	5/2⁻	
		6056.0	5.7 *28*	2693.75	3/2⁺	
		6986.4	57 *15*	1763.04	5/2⁺	
		7530.1	<3.8	1219.29	1/2⁺	
		8749.1	100 *10*	0	3/2⁺	
8780.3	3/2⁻	3180.4	16 *8*	5599.69	3/2⁺,5/2⁺	
		3564.3	24 *12*	5215.79	(3/2⁺,5/2)	

$^{35}_{17}Cl_{18}$-33

Adopted Levels, Gammas (continued)

γ(^{35}Cl) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[@]	δ[@]
8780.3	3/2⁻	4602.1	56[#] *15*	4177.88	3/2⁻		
		4861.4	16 *8*	3918.49	3/2⁺		
		5777.5	100 *26*	3002.30	5/2⁺		
		6086.0	44 *11*	2693.75	3/2⁺		
		6134.0	48 *11*	2645.74	7/2⁺		
		7016.4	25 *13*	1763.04	5/2⁺		
		8779.1	41 *11*	0	3/2⁺		
8787.7	(3/2⁻,5/2,7/2⁻)	3064.0	27 *14*	5723.6	5/2⁺		
		3624.3	76 *20*	5163.21	7/2⁻		
		4018.6	27 *14*	4768.82	7/2		
		4609.5	36 *19*	4177.88	3/2⁻		
		5624.4	23 *12*	3162.80	7/2⁻		
		5784.9	80 *20*	3002.30	5/2⁺		
		7023.8	100 *24*	1763.04	5/2⁺		
		8786.5	30 *15*	0	3/2⁺		
8788.7	15/2⁺	915.4 *4*	100	7873.2	13/2⁺	D(+Q)	−0.2 *2*
8798.7	(1/2⁺,3/2,5/2⁺)	4739.2	13 *7*	4059.12	3/2⁻		
		5795.9	26 *7*	3002.30	5/2⁺		
		7034.8	11 *6*	1763.04	5/2⁺		
		7578.5	11 *6*	1219.29	1/2⁺		
		8797.5	100 *10*	0	3/2⁺		
8820.9		5818.1	17 *9*	3002.30	5/2⁺		
		6126.6	35 *10*	2693.75	3/2⁺		
		7057.0	40 *10*	1763.04	5/2⁺		
		8819.7	100 *10*	0	3/2⁺		
8824.5	1/2⁺	5821.7	100 *24*	3002.30	5/2⁺		
		6130.2	16.2 *8*	2693.75	3/2⁺		
		7060.6	43 *11*	1763.04	5/2⁺		
		7604.3	59 *16*	1219.29	1/2⁺		
		8823.3	51 *14*	0	3/2⁺		
8829.0	1/2⁻	3174.3	29 *15*	5654.48	3/2⁺		
		3989.7	3.9 *21*	4839.08	(1/2⁺,3/2)		
		4059.9	4.5 *24*	4768.82	7/2		
		4910.1	14 *7*	3918.49	3/2⁺		
		5826.2	67 *18*	3002.30	5/2⁺		
		6134.7	39 *9*	2693.75	3/2⁺		
		6182.7	100 *24*	2645.74	7/2⁺		
		7065.1	28 *14*	1763.04	5/2⁺		
		7608.8	8 *4*	1219.29	1/2⁺		
		8827.8	12 *6*	0	3/2⁺		
8833.0	5/2	3617.0	30 *15*	5215.79	(3/2⁺,5/2)		

$^{35}_{17}Cl_{18}$-34

Adopted Levels, Gammas (continued)

$\gamma(^{35}Cl)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[@]
8833.0	5/2	4063.9	11 *6*	4768.82	7/2	
		4659.2	61 *17*	4173.44	$5/2^-$	
		4720.7	20 *11*	4111.98	$7/2^+$	
		4773.5	48 *13*	4059.12	$3/2^-$	
		4914.1	48 *13*	3918.49	$3/2^+$	
		5669.7	16 *8*	3162.80	$7/2^-$	
		5830.2	29 *15*	3002.30	$5/2^+$	
		6138.7	20 *10*	2693.75	$3/2^+$	
		6186.7	100 *26*	2645.74	$7/2^+$	
		7069.1	39 *20*	1763.04	$5/2^+$	
		8831.8	13 *7*	0	$3/2^+$	
8838.8	$7/2^-$	3675.4		5163.21	$7/2^-$	
		3957.5		4881.07	7/2	
		4069.7	13 *6*	4768.82	7/2	
		4490.7		4347.82	$9/2^-$	
		4779.3		4059.12	$3/2^-$	
		5675.5	46 *11*	3162.80	$7/2^-$	
		7074.9	100 *10*	1763.04	$5/2^+$	
8844.6	$17/2^+$	971.4 *2*	100	7873.2	$13/2^+$	Q
8856.8	$5/2^+$	3975.5	7 *3*	4881.07	7/2	
		4232.2	10 *5*	4624.35	$(3/2,5/2^+)$	
		4678.6	7 *4*	4177.88	$3/2^-$	
		4937.9	22 *6*	3918.49	$3/2^+$	
		5693.5	100 *10*	3162.80	$7/2^-$	
		6162.5	5.5 *28*	2693.75	$3/2^+$	
		6210.5		2645.74	$7/2^+$	
		7092.9	14 *7*	1763.04	$5/2^+$	
		8855.6	31 *8*	0	$3/2^+$	
8869.2	$3/2^+,5/2^+$	4691.0	5.3 *27*	4177.88	$3/2^-$	
		5866.4	33 *8*	3002.30	$5/2^+$	
		6174.9	24 *6*	2693.75	$3/2^+$	
		7105.3	9 *5*	1763.04	$5/2^+$	
		7648.9	33 *8*	1219.29	$1/2^+$	
		8868.0	100 *25*	0	$3/2^+$	
8886.1		3231.4	23 *12*	5654.48	$3/2^+$	
		3286.2	25 *13*	5599.69	$3/2^+,5/2^+$	
		3670.1	8 *4*	5215.79	$(3/2^+,5/2)$	
		3722.7	33 *17*	5163.21	$7/2^-$	
		4117.0	17 *9*	4768.82	7/2	
		4707.9	31 *15*	4177.88	$3/2^-$	
		4967.2	16 *8*	3918.49	$3/2^+$	
		5883.3	31 *15*	3002.30	$5/2^+$	

$^{35}_{17}Cl_{18}$-35

Adopted Levels, Gammas (continued)

γ(^{35}Cl) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[@]	δ[@]	Comments
8886.1		6239.8	100 *27*	2645.74	$7/2^+$			
		7122.2	46 *12*	1763.04	$5/2^+$			
		8884.9	54 *15*	0	$3/2^+$			
8893.2	$(5/2,7/2)^+$	3293.3	<2.7	5599.69	$3/2^+,5/2^+$			
		3307.0	4.3 *22*	5586.0	$5/2^+$			
		4780.8	23 *12*	4111.98	$7/2^+$			
		4948.9	11 *6*	3943.82	$9/2^+$			
		5729.9	78 *19*	3162.80	$7/2^-$			
		6198.9	100 *24*	2693.75	$3/2^+$			
		7129.3	51 *14*	1763.04	$5/2^+$			
		8892.0	2.7 *14*	0	$3/2^+$			
8904.8	$(1/2,3/2,5/2^+)$	2723.7	15 *8*	6181.0	$(1/2 \text{ to } 7/2,9/2^-)$			
		3250.1	12 *6*	5654.48	$3/2^+$			
		3894.5	13 *7*	5010.09	(1/2,3/2)			
		4050.1	21 *11*	4854.4	(1/2,3/2)			
		4065.4	16 *8*	4839.08	$(1/2^+,3/2)$			
		4726.6	62 *17*	4177.88	$3/2^-$			
		4845.3	20 *10*	4059.12	$3/2^-$			
		6210.5	52 *14*	2693.75	$3/2^+$			
		7684.5	34 *10*	1219.29	$1/2^+$			
		8903.6	100 *24*	0	$3/2^+$			
8907.4	$5/2^+$	3252.7	<6	5654.48	$3/2^+$			
		3262.2	5.4 *28*	5645.0	$(5/2,7/2,9/2^+)$			
		3307.5	3.2 *16*	5599.69	$3/2^+,5/2^+$			
		3321.2	6	5586.0	$5/2^+$			
		3387.2	3.6 *19*	5520.0				
		3691.4	6 *3*	5215.79	$(3/2^+,5/2)$			
		4138.3	8 *4*	4768.82	7/2			
		4963.1	19 *4*	3943.82	$9/2^+$			
		7143.5	100 *10*	1763.04	$5/2^+$			
8919.8	$5/2^+$	3274.6	10 *5*	5645.0	$(5/2,7/2,9/2^+)$			
		4571.6	14 *7*	4347.82	$9/2^-$			
		5756.5	100 *11*	3162.80	$7/2^-$			
		6273.5	46 *12*	2645.74	$7/2^+$			
		7155.9	7 *4*	1763.04	$5/2^+$			
8955.0	$3/2^+$	7734.7		1219.29	$1/2^+$	(D+Q)	−0.34 *2*	δ: or +5.0 *4*.
		8953.8		0	$3/2^+$	(D+Q)	−0.39 *5*	δ: +8.2 *7*.
8984.5	$3/2^+,5/2^+$	3260.7	1.3 *7*	5723.6	$5/2^+$			
		4145.1	2 *1*	4839.08	$(1/2^+,3/2)$			
		4215.4	0.8 *5*	4768.82	7/2			
		4359.9	0.8 *5*	4624.35	$(3/2,5/2^+)$			
		4806.2	2.5 *13*	4177.88	$3/2^-$			

$^{35}_{17}Cl_{18}$-36

Adopted Levels, Gammas (continued)

γ(^{35}Cl) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[‡]	E_f	J_f^π	Mult.[@]	δ[@]
8984.5	3/2$^+$,5/2$^+$	4810.7	2.5 *13*	4173.44	5/2$^-$		
		5065.6	15 *8*	3918.49	3/2$^+$		
		5821.2	10 *5*	3162.80	7/2$^-$		
		6290.2	3.0 *15*	2693.75	3/2$^+$		
		6338.1	2 *1*	2645.74	7/2$^+$		
		7220.6	27 *7*	1763.04	5/2$^+$		
		8983.3	100 *10*	0	3/2$^+$		
9081.4	5/2$^+$	3357.6	1.7	5723.6	5/2$^+$		
		4200.0	1.7	4881.07	7/2		
		4242.0		4839.08	(1/2$^+$,3/2)		
		4312.3		4768.82	7/2		
		4456.7		4624.35	(3/2,5/2$^+$)		
		4903.1	3.3	4177.88	3/2$^-$		
		4907.6	3.3	4173.44	5/2$^-$		
		5162.5	15	3918.49	3/2$^+$	D(+Q)	−0.002 *9*
		5918.1	10	3162.80	7/2$^-$		
		6387.1	3.3	2693.75	3/2$^+$		
		6435.0	1.7	2645.74	7/2$^+$		
		7317.5	27	1763.04	5/2$^+$	(D+Q)	+0.11 *2*
		9080.1	100	0	3/2$^+$	(D+Q)	+0.089 *9*
9157.1	5/2$^+$	3941.1	17	5215.79	(3/2$^+$,5/2)		
		4388.0	16	4768.82	7/2		
		4978.8	30[#]	4177.88	3/2$^-$		
		5993.8	22	3162.80	7/2$^-$		
		6154.2	20	3002.30	5/2$^+$		
		6462.8	3.0	2693.75	3/2$^+$		
		6510.7	7	2645.74	7/2$^+$		
		7393.1	17	1763.04	5/2$^+$		
		9155.8	100	0	3/2$^+$	M1+E2	0.47 *50*
10181.1	19/2$^-$	1336.3 *5*	100 *4*	8844.6	17/2$^+$		
		1693.5 *5*	34 *9*	8487.4	15/2$^-$		
		1861.3 *5*	83 *6*	8319.8	15/2$^-$		
10222.4	17/2$^-$	1377.8 *10*	100	8844.6	17/2$^+$		
10859.0	19/2$^+$	2014.7 *9*	100 *5*	8844.6	17/2$^+$		
		2069.8 *10*	33 *3*	8788.7	15/2$^+$		
11459.0	21/2$^+$	2614.5 *5*	100	8844.6	17/2$^+$		
12572.2	23/2$^-$	1113.3 *5*	24 *2*	11459.0	21/2$^+$		
		2390.8 *5*	100 *4*	10181.1	19/2$^-$		

[†] Values with ΔE are primarily from ε decay, (α,pγ) and (HI,xnγ). Weighted average taken when available. Others are deduced from level-energy differences.

$^{35}_{17}Cl_{18}$-37

Adopted Levels, Gammas (continued)

$\gamma(^{35}Cl)$ (continued)

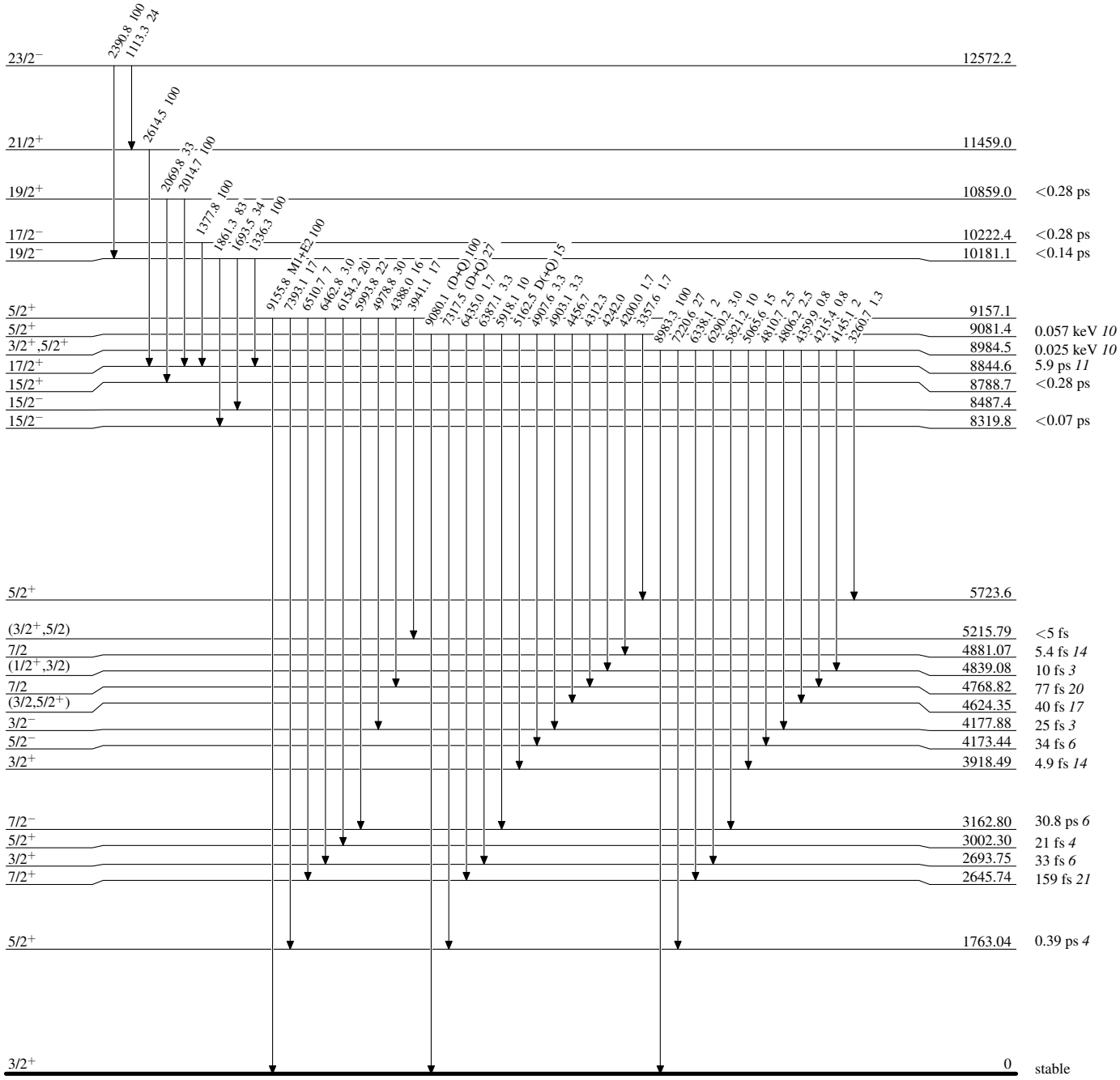
‡ Primarily from (p,γ), (α,pγ) and (HI,xnγ). Weighted average taken when available, unless otherwise noted.
# Transitions to 4177 and 4173 not resolved (1976Sp08).
@ Primarily from $\gamma(\theta)$ and/or $\gamma\gamma(\theta)$ in (p,γ), also from (α,pγ), (p,p$'\gamma$), Coulomb excitation and (HI,xnγ). If $T_{1/2}$ is unknown and parity is determined not by polarization measurements, evaluators use D and Q, instead of M1 and E2, or, E1 and M2.

$^{35}_{17}Cl_{18}$-38

Adopted Levels, Gammas

Level Scheme

Intensities: Relative photon branching from each level

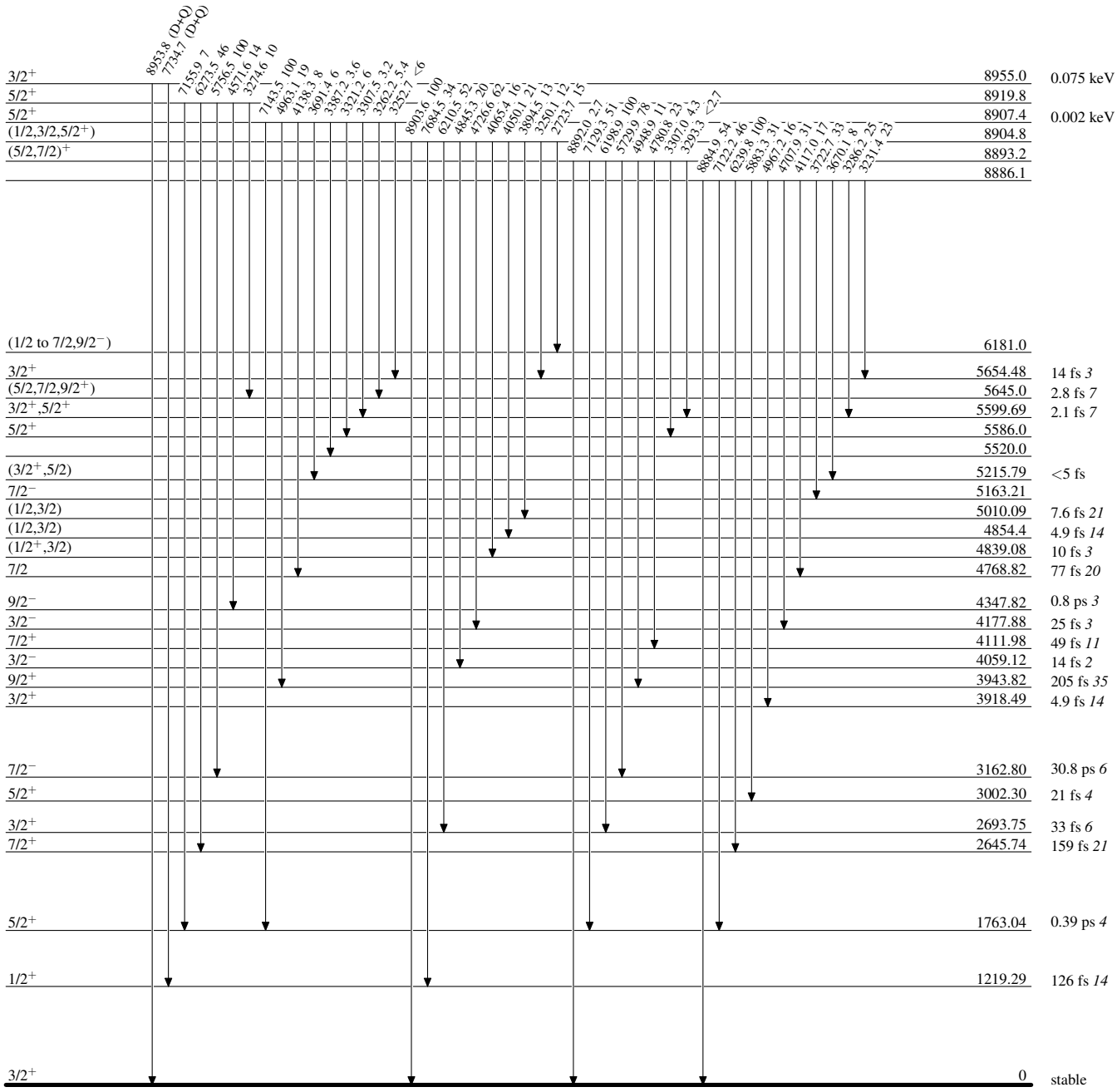


$^{35}_{17}Cl_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

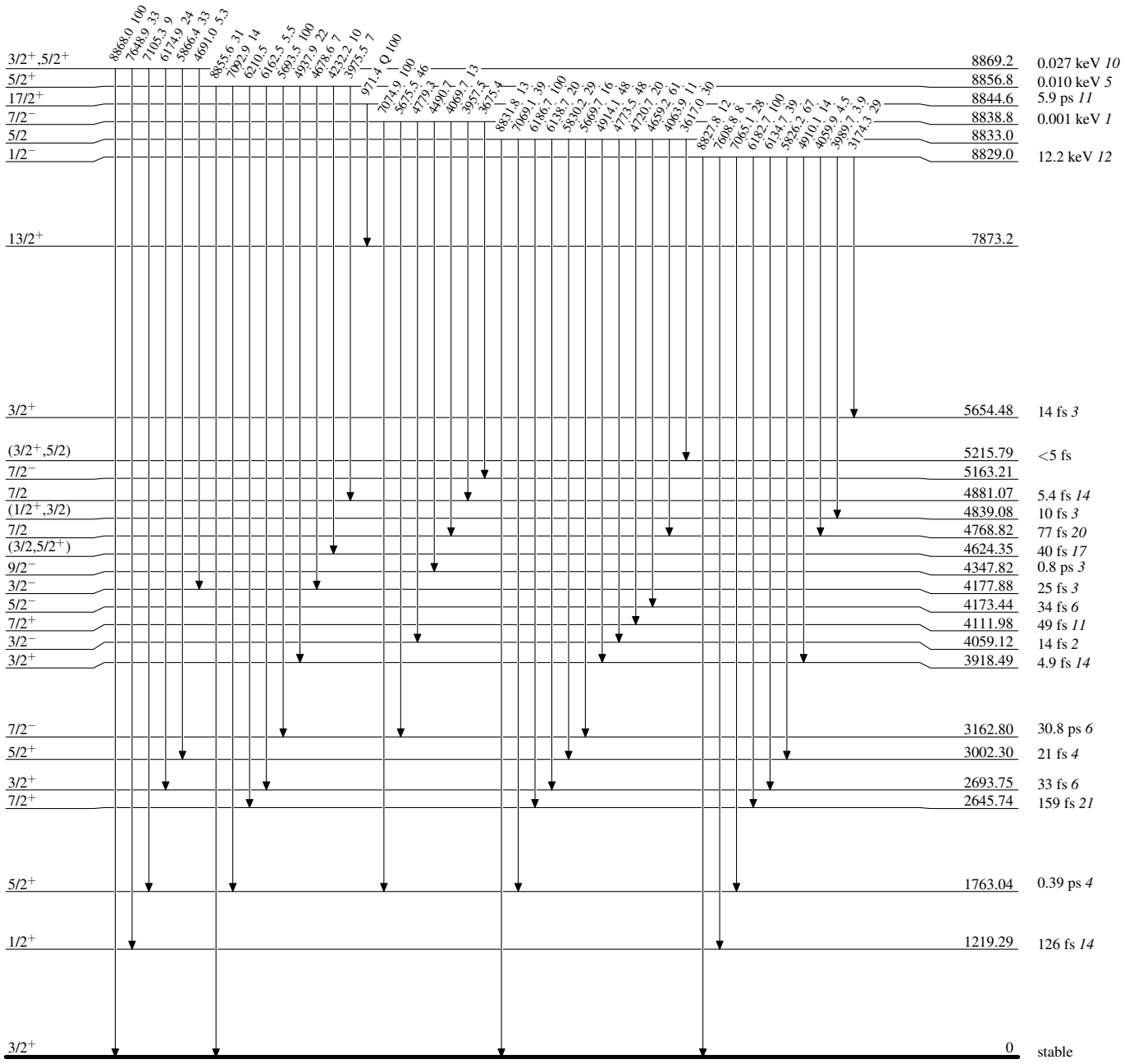


$^{35}_{17}Cl_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

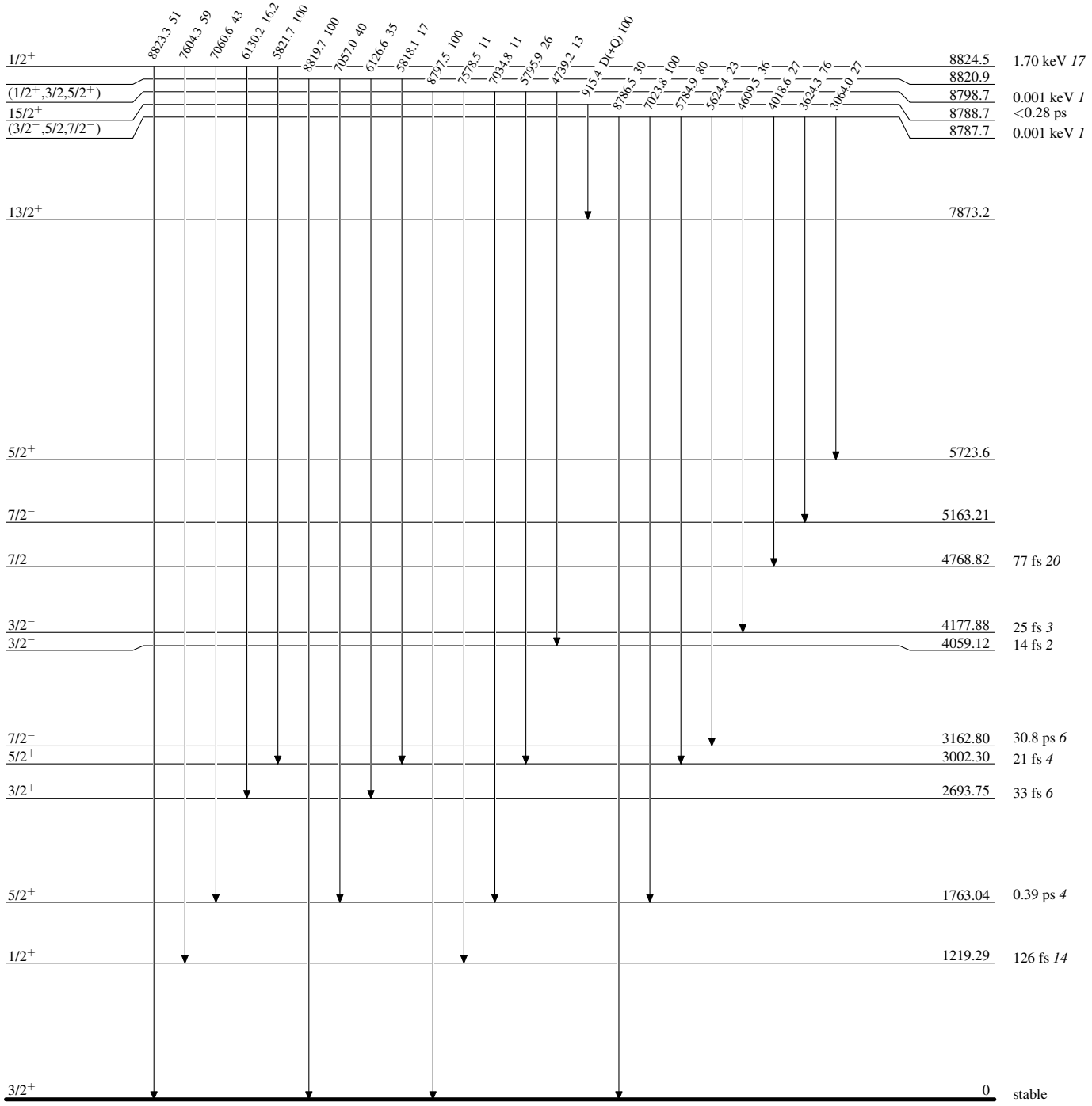


$^{35}_{17}Cl_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

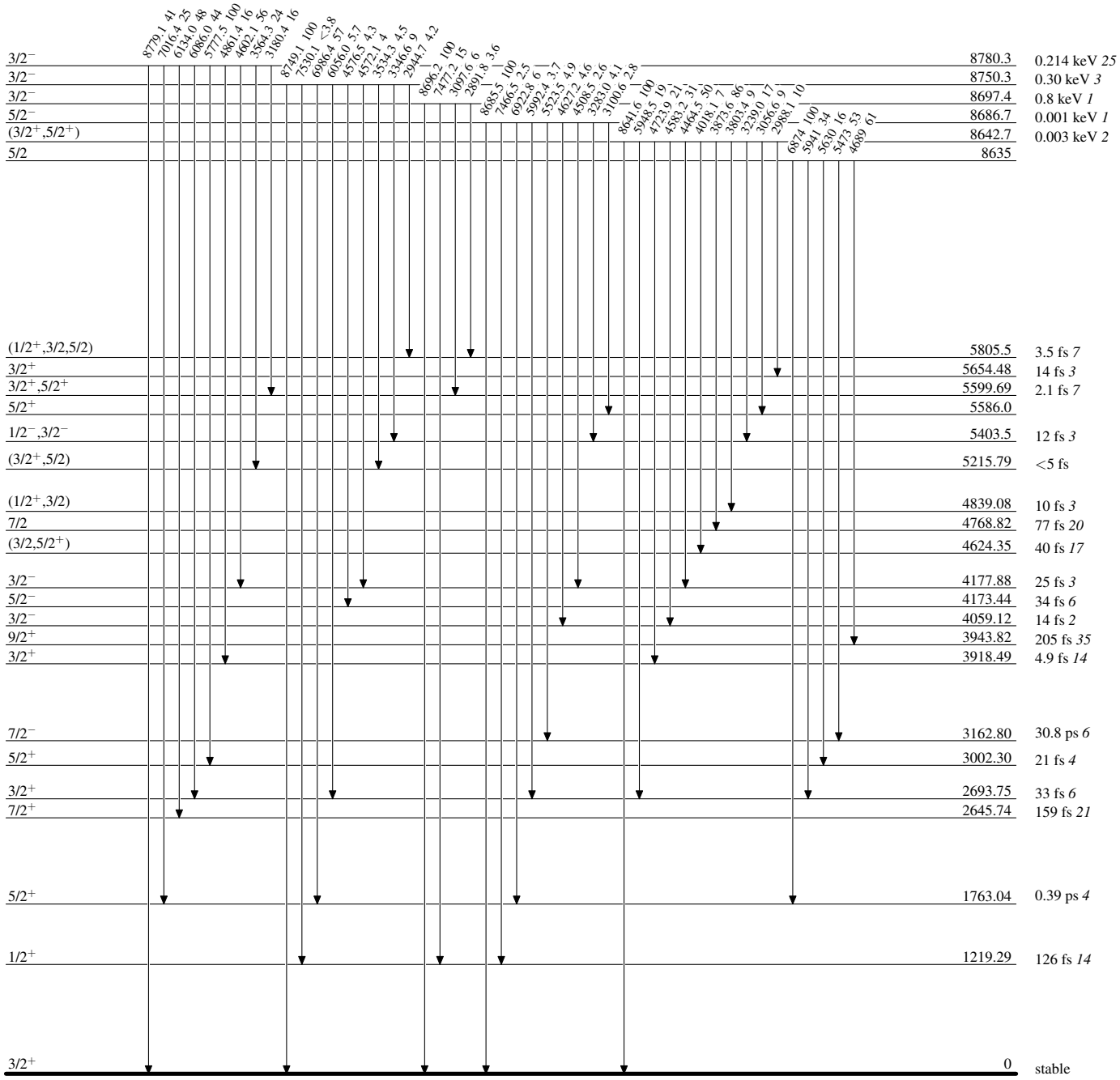


$^{35}_{17}Cl_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

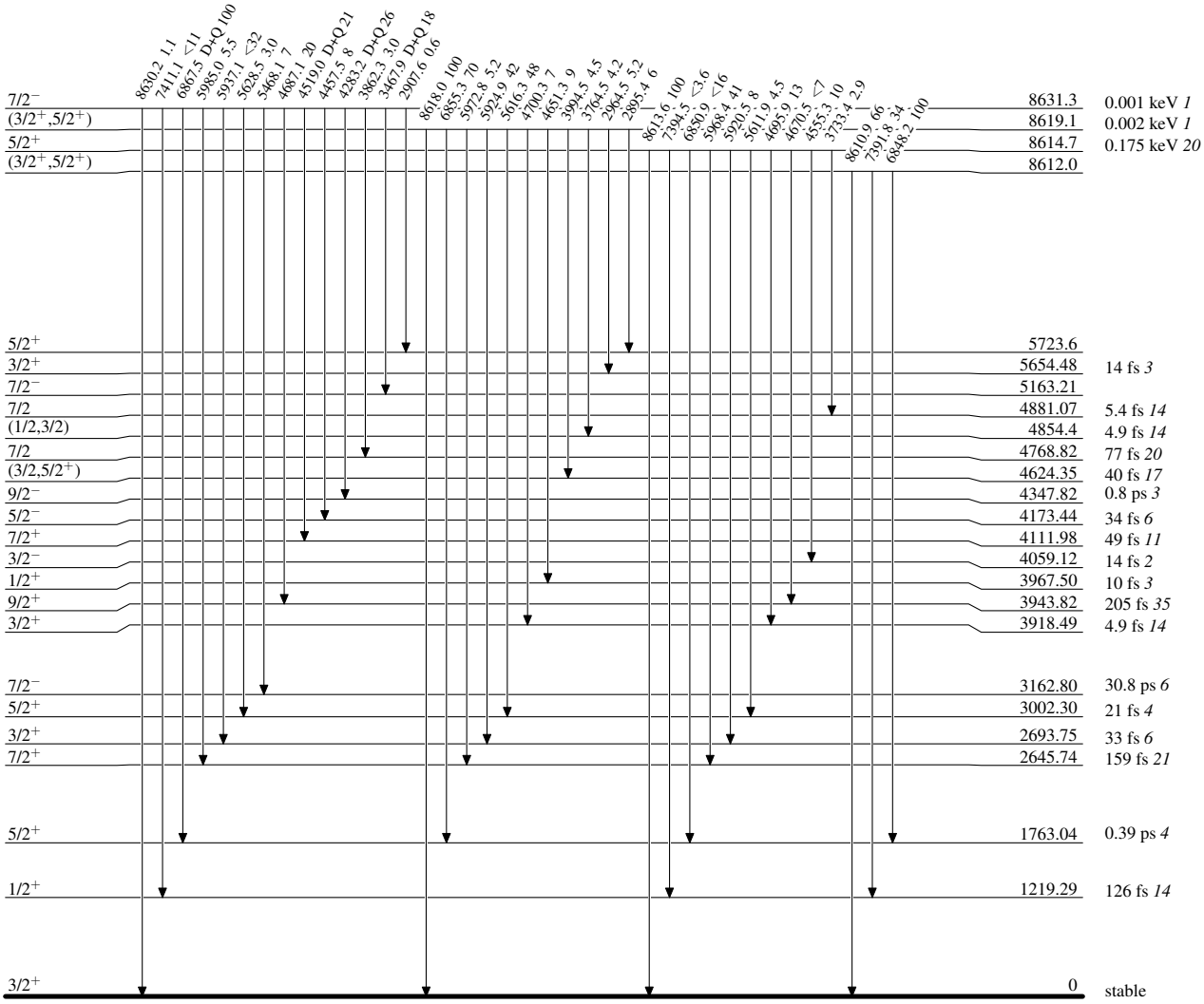


$^{35}_{17}Cl_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

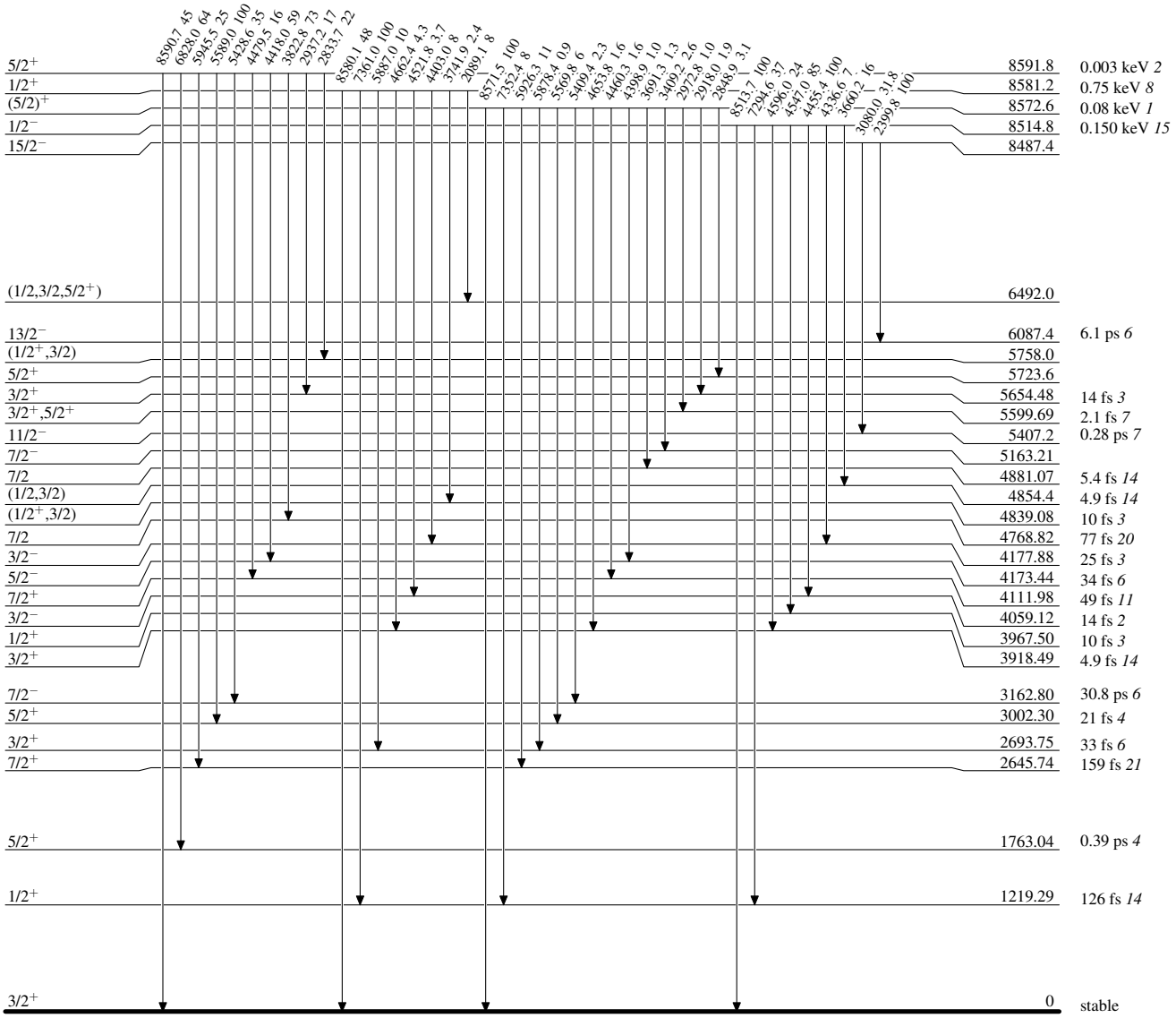


$^{35}_{17}Cl_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

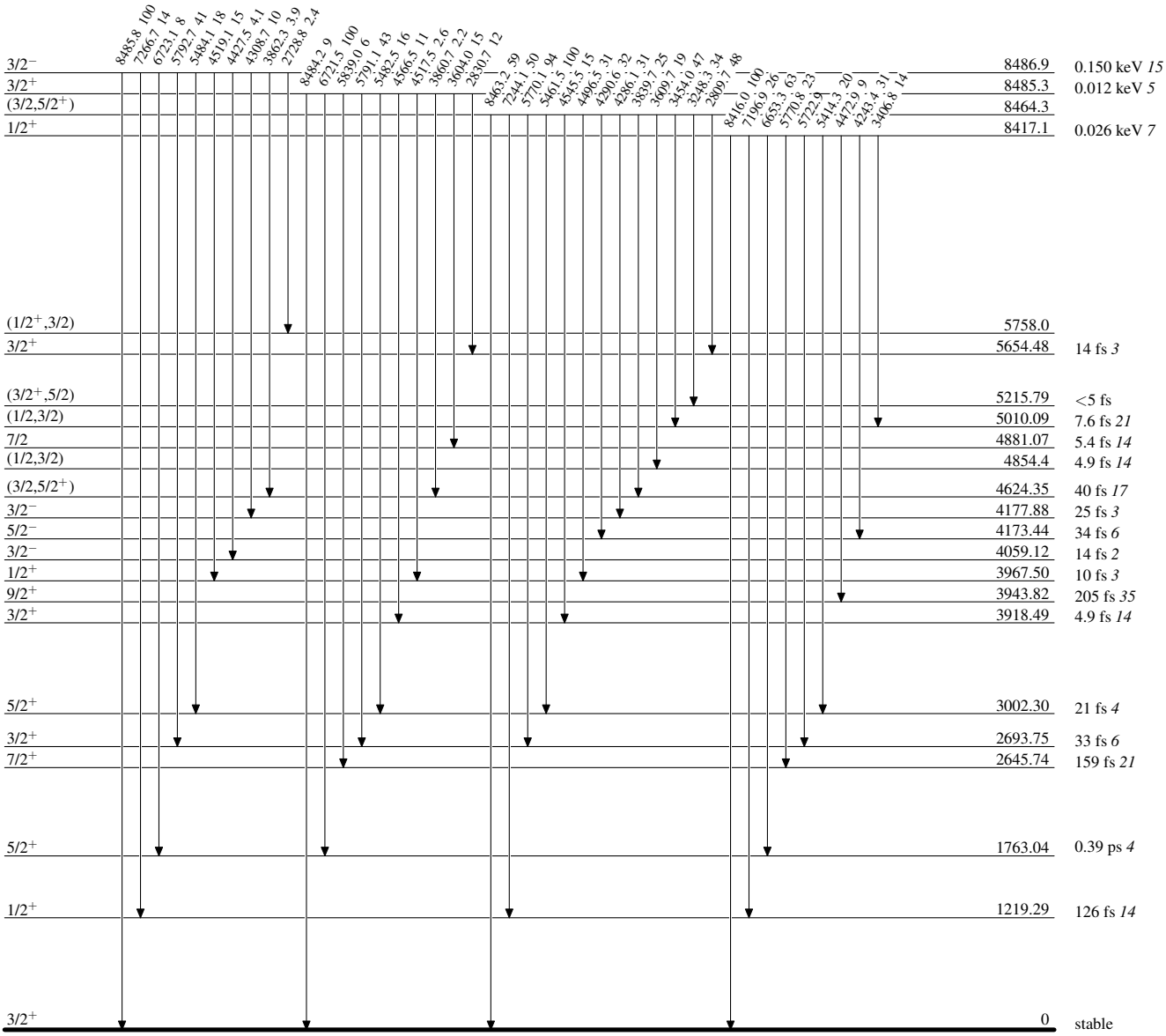


$^{35}_{17}Cl_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

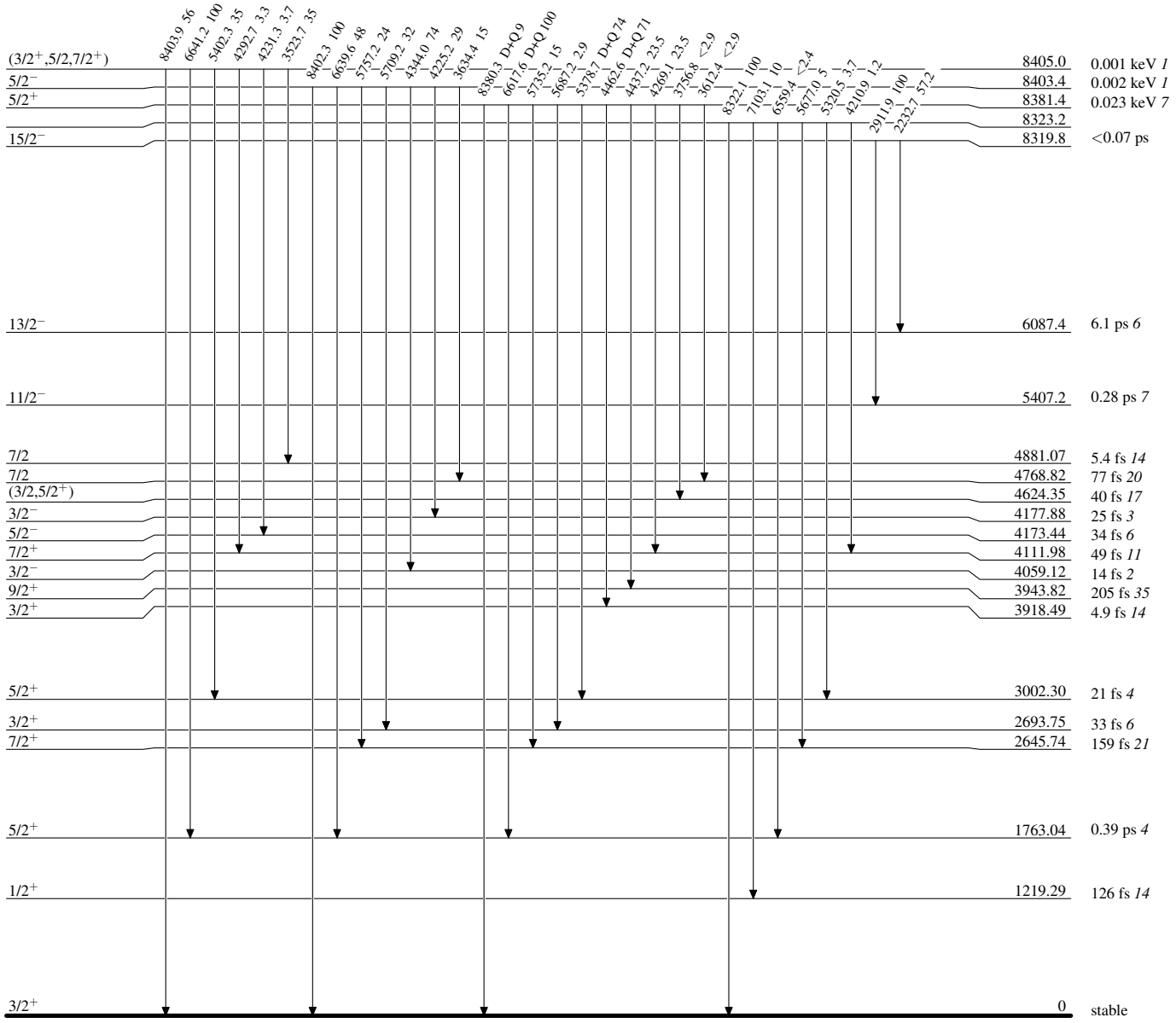
Intensities: Relative photon branching from each level



Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

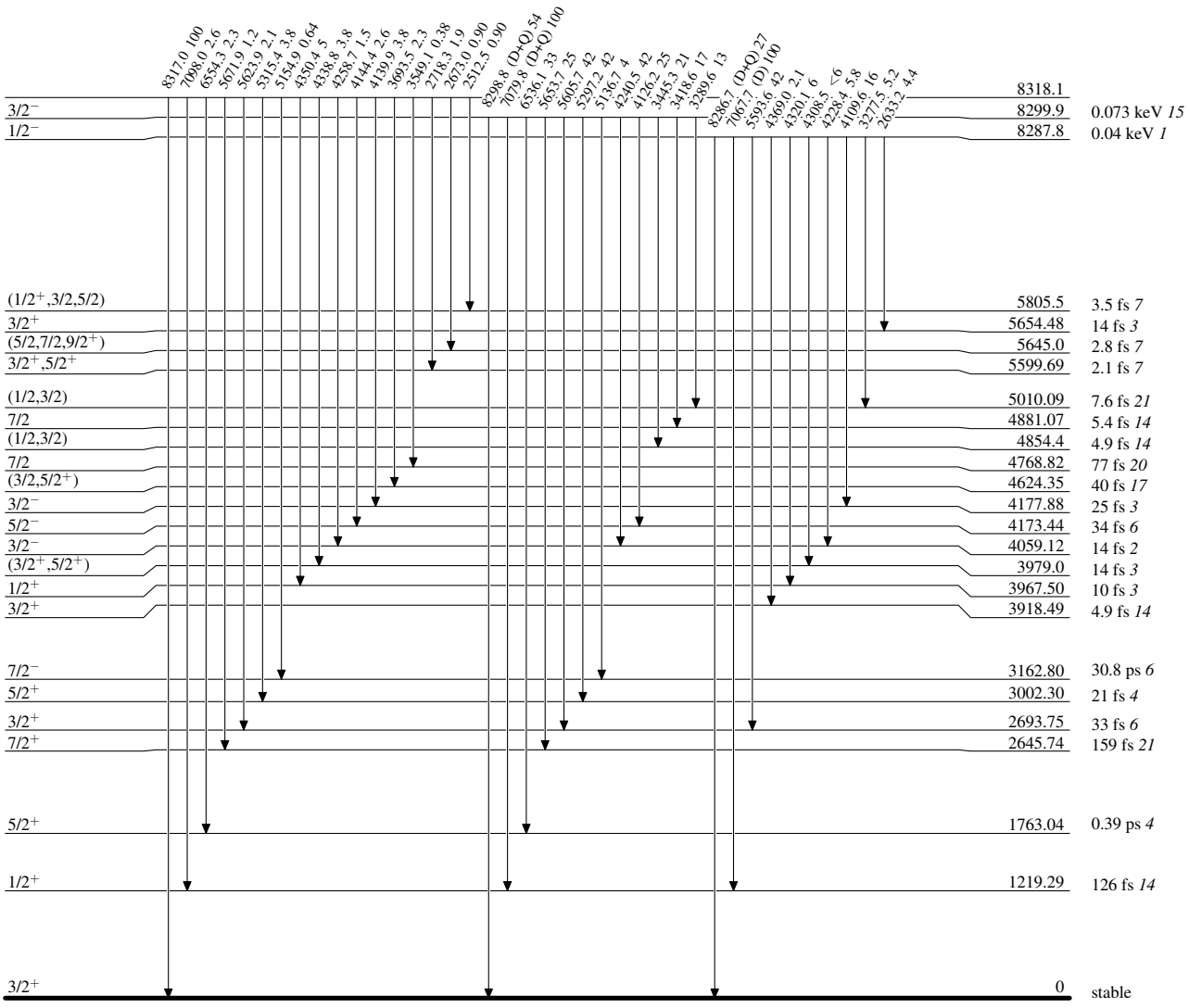


$^{35}_{17}Cl_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

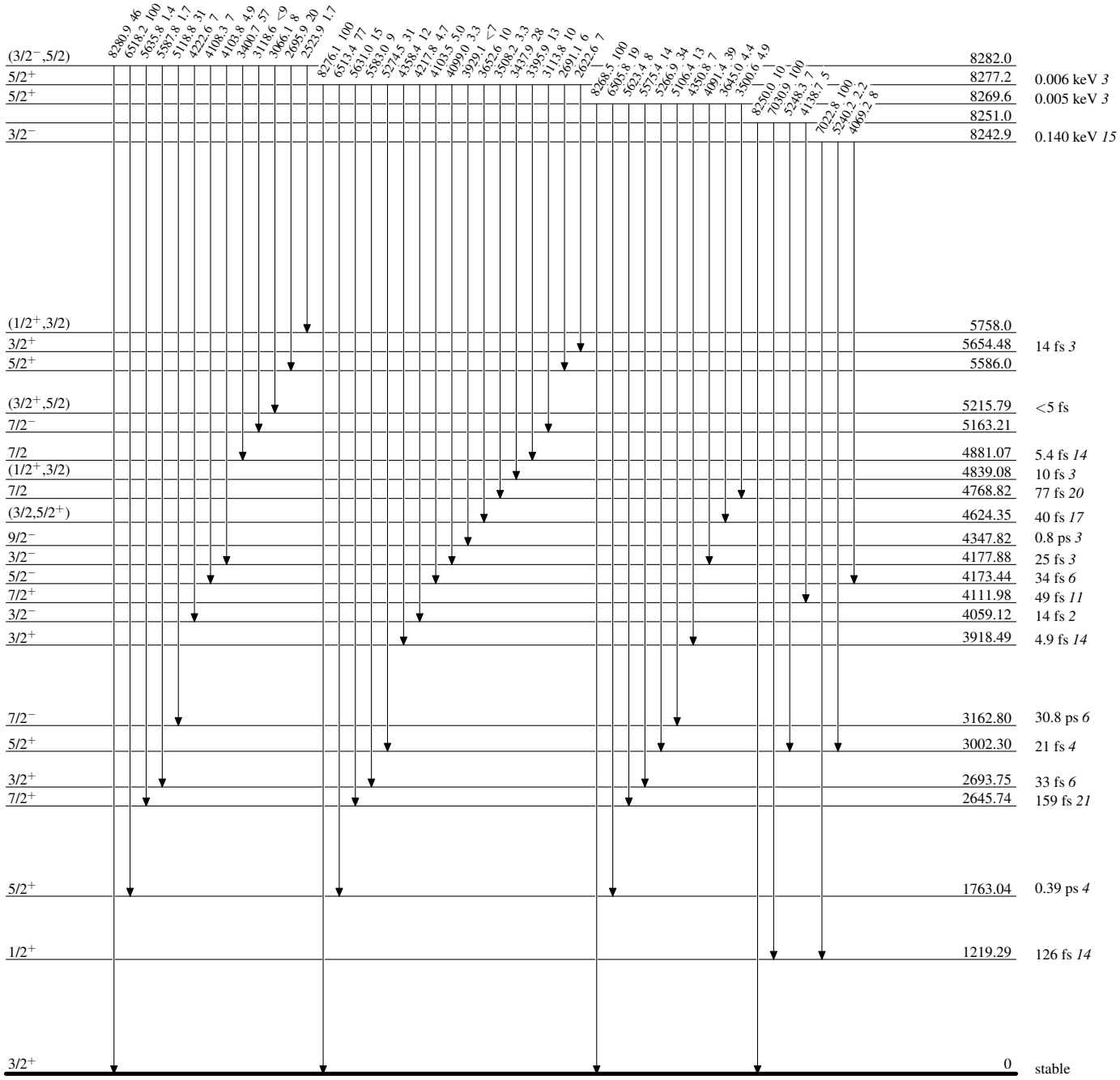


$^{35}_{17}Cl_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

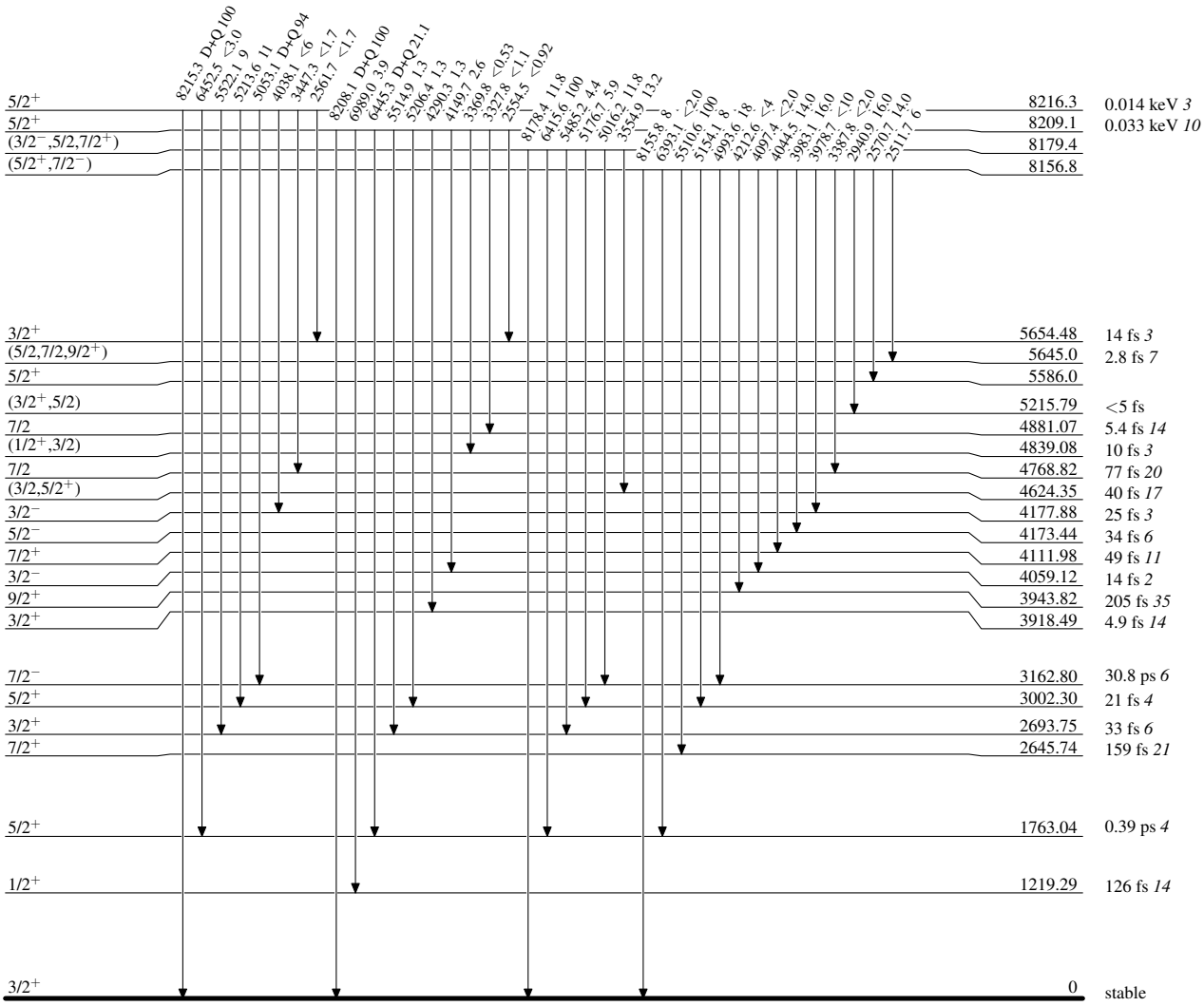


$^{35}_{17}Cl_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

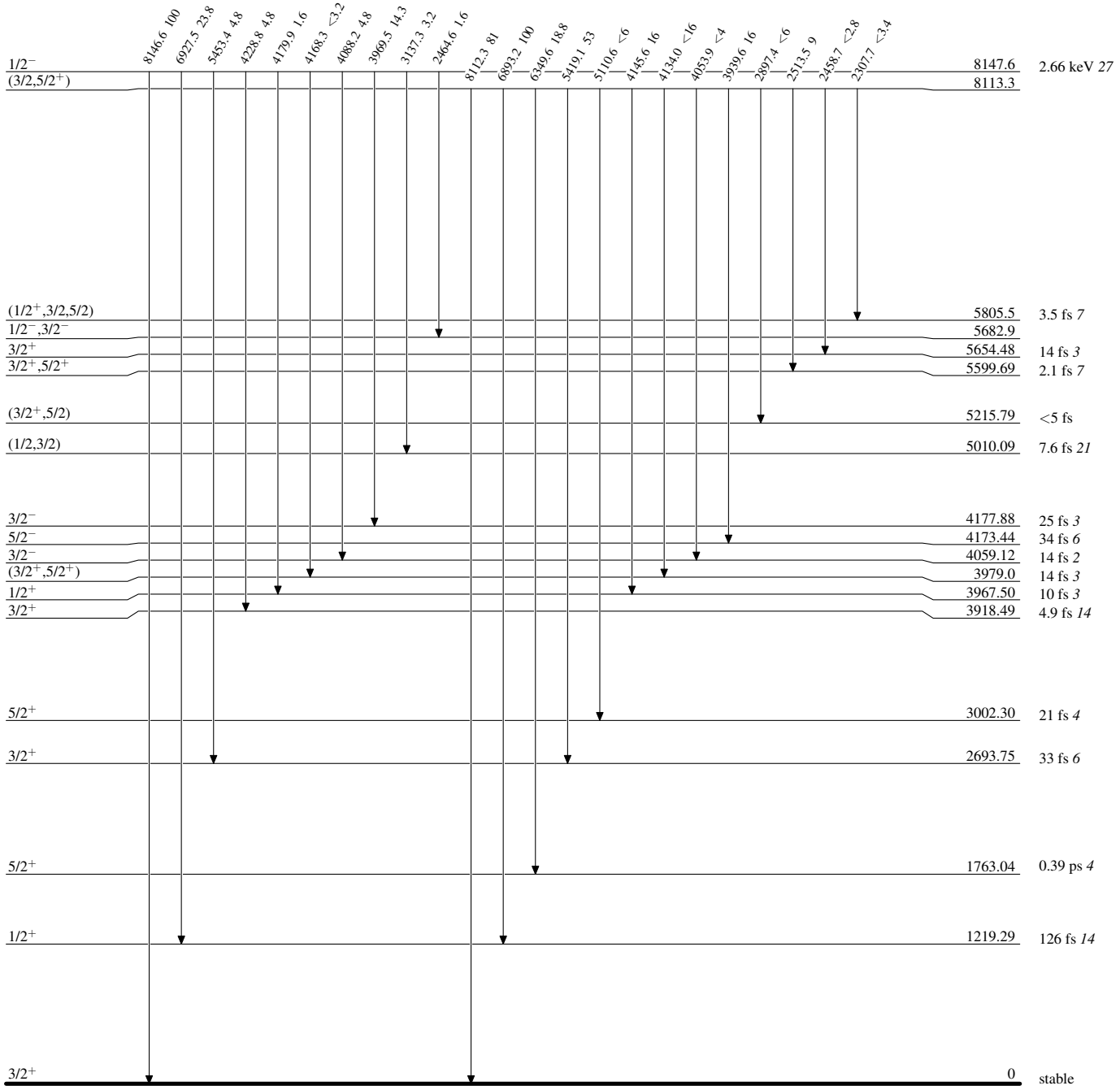


$^{35}_{17}Cl_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

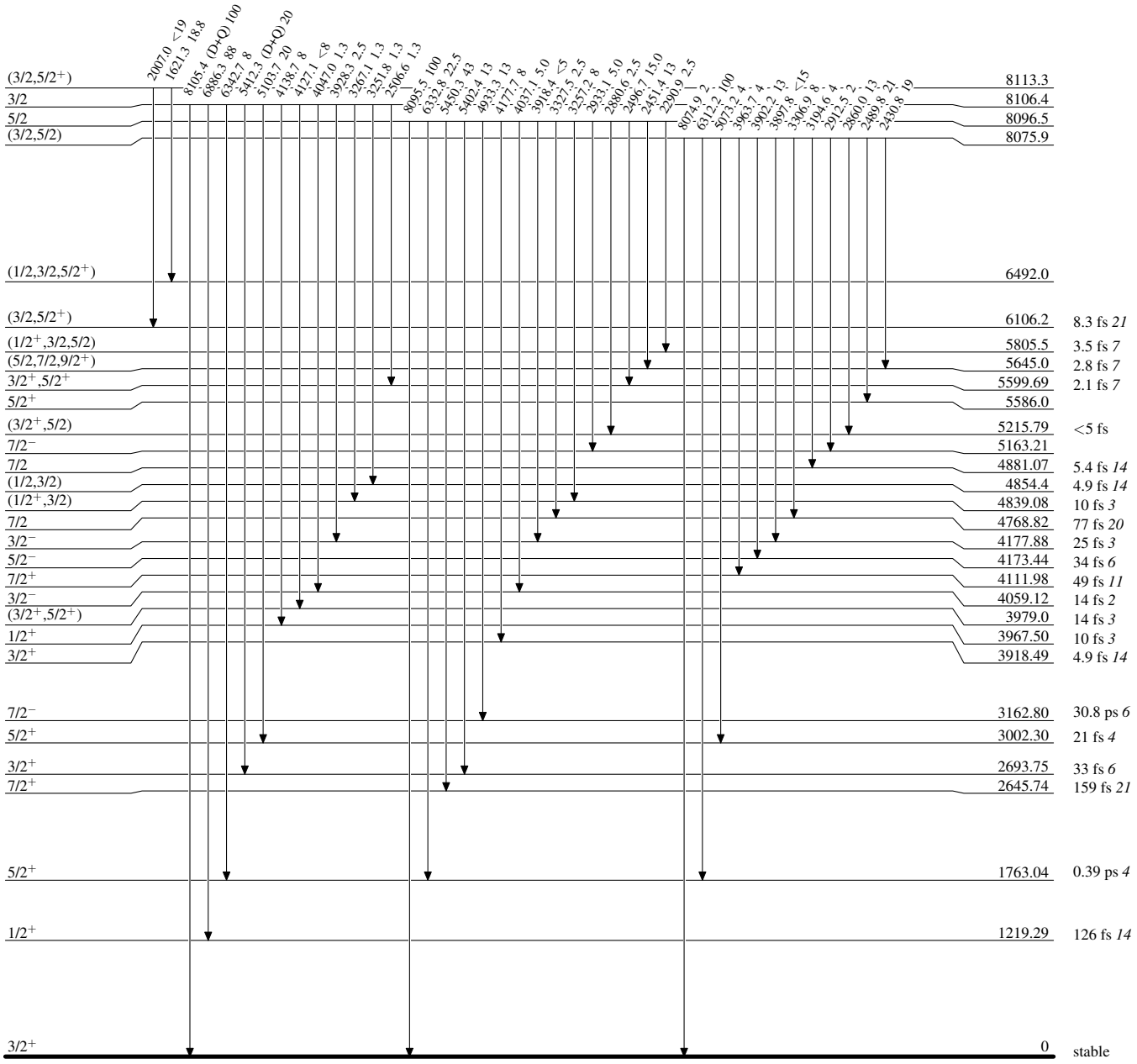


$^{35}_{17}Cl_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

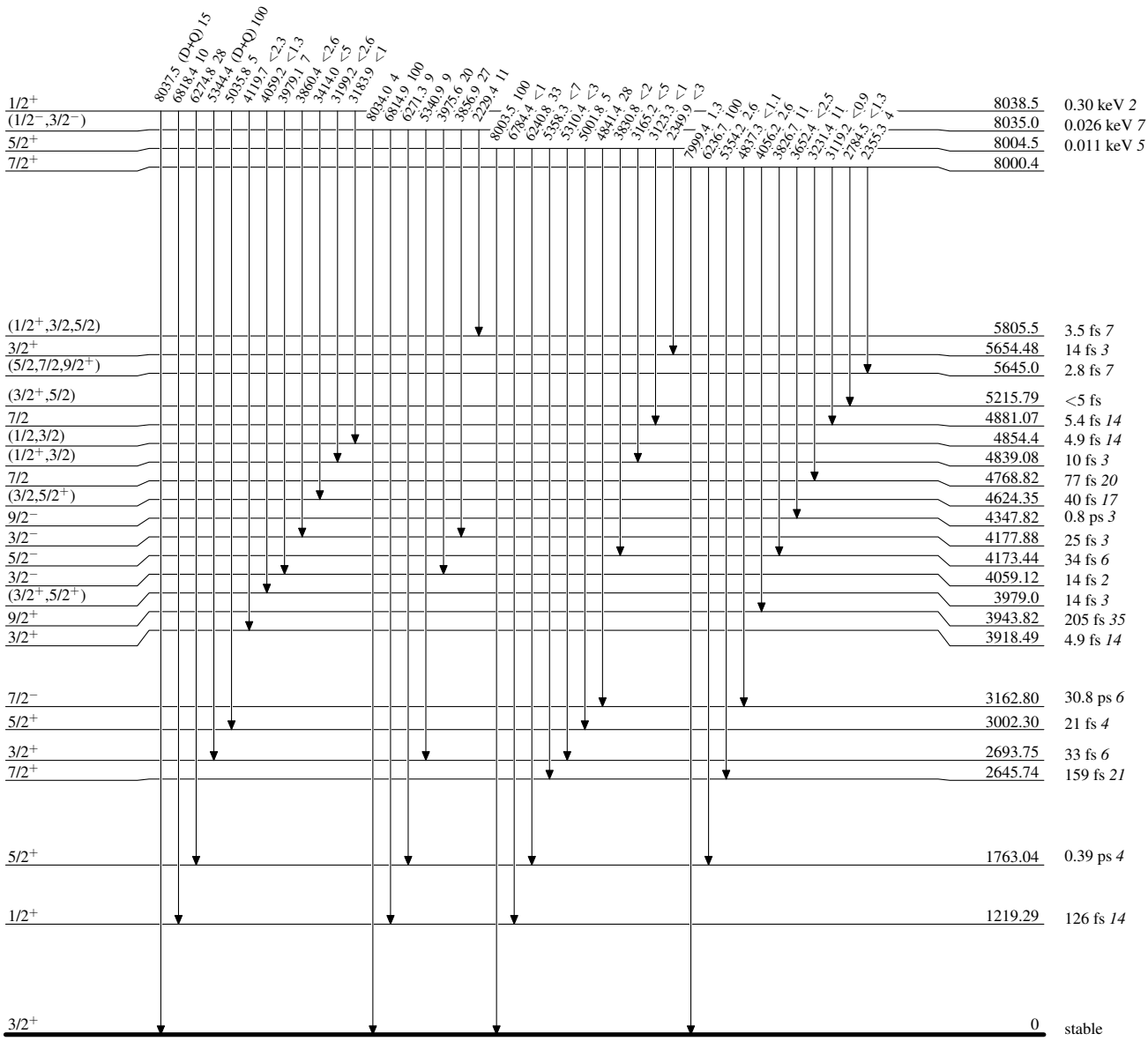


$^{35}_{17}Cl_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

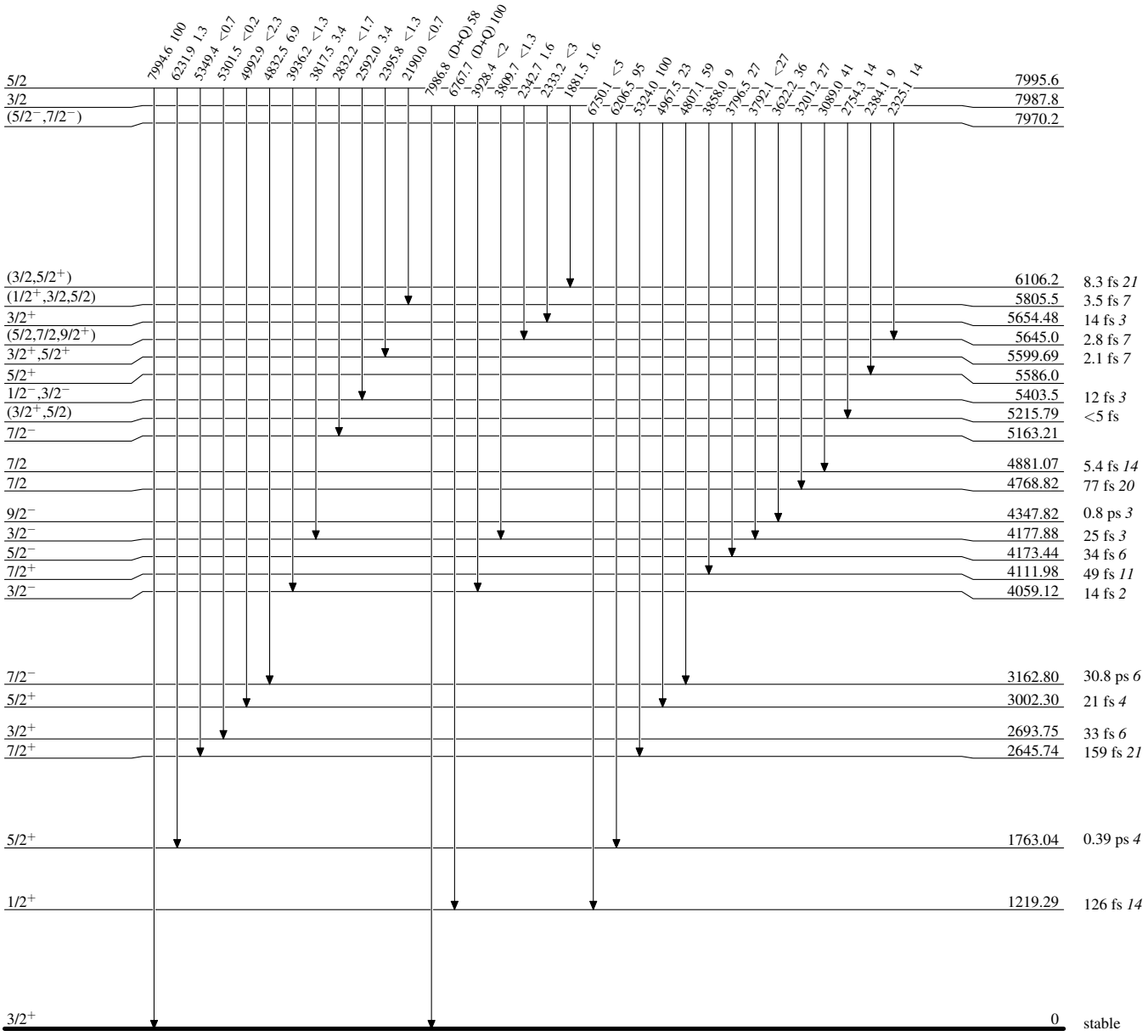


$^{35}_{17}Cl_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

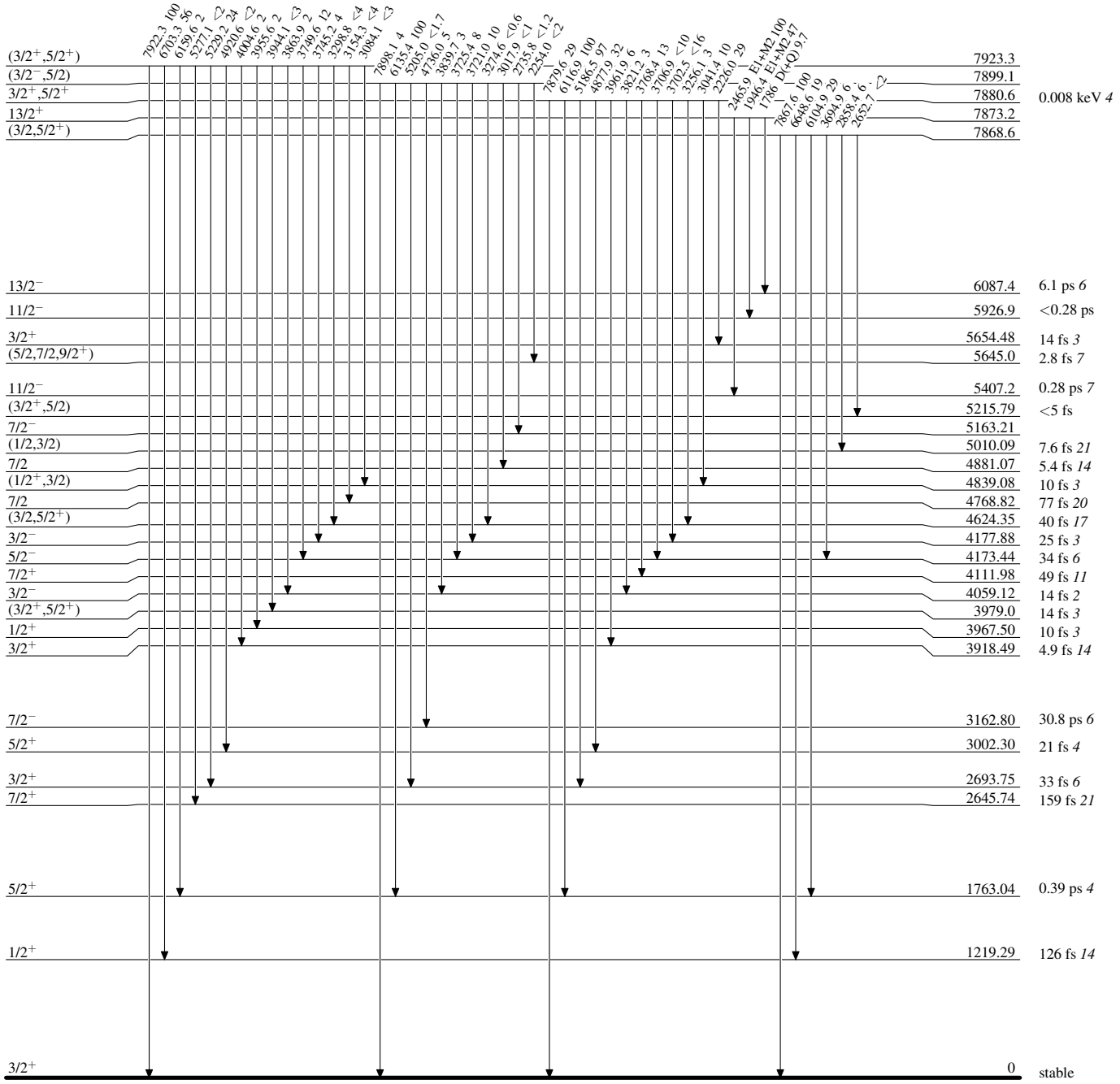


$^{35}_{17}Cl_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

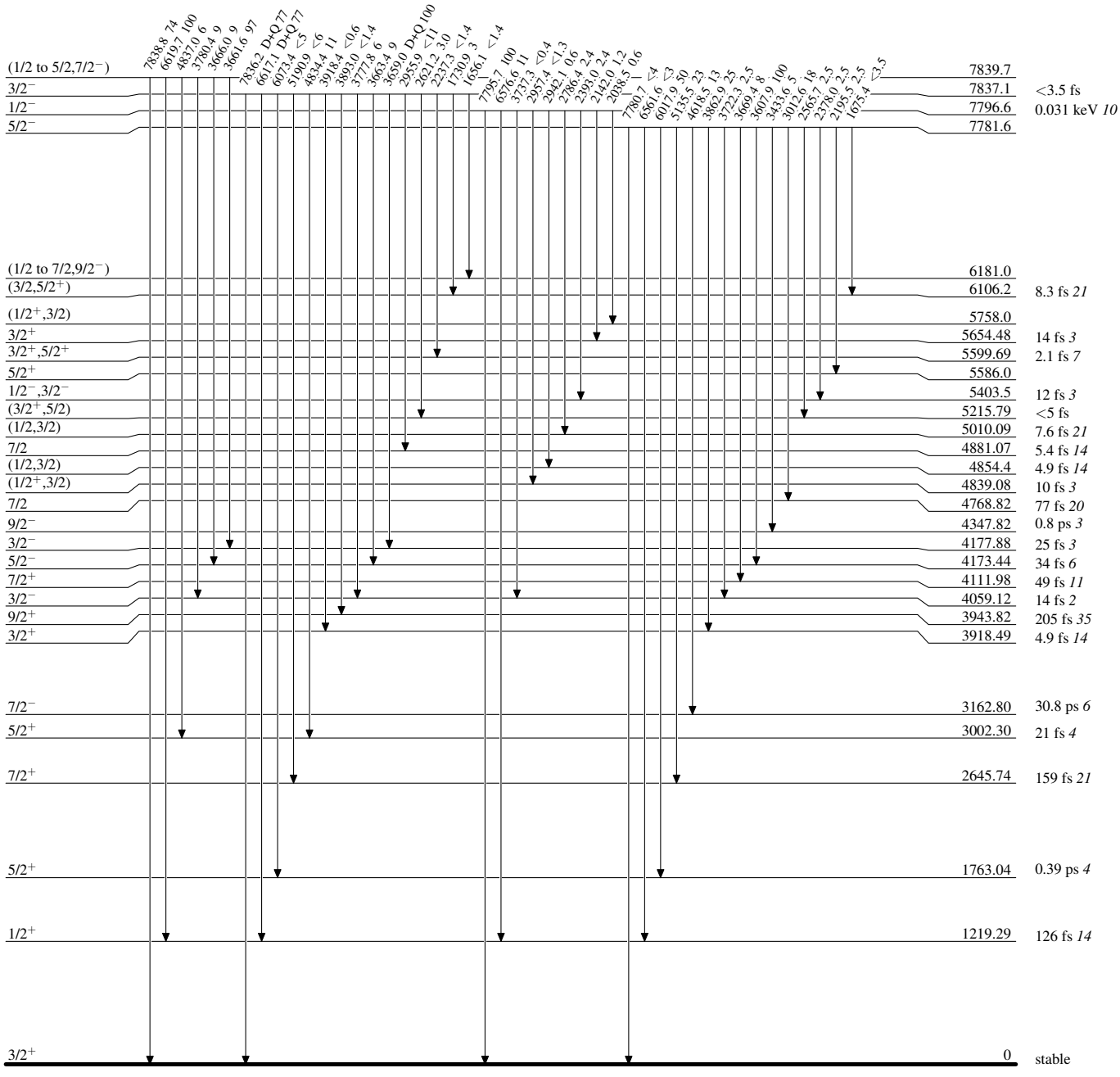


$^{35}_{17}Cl_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

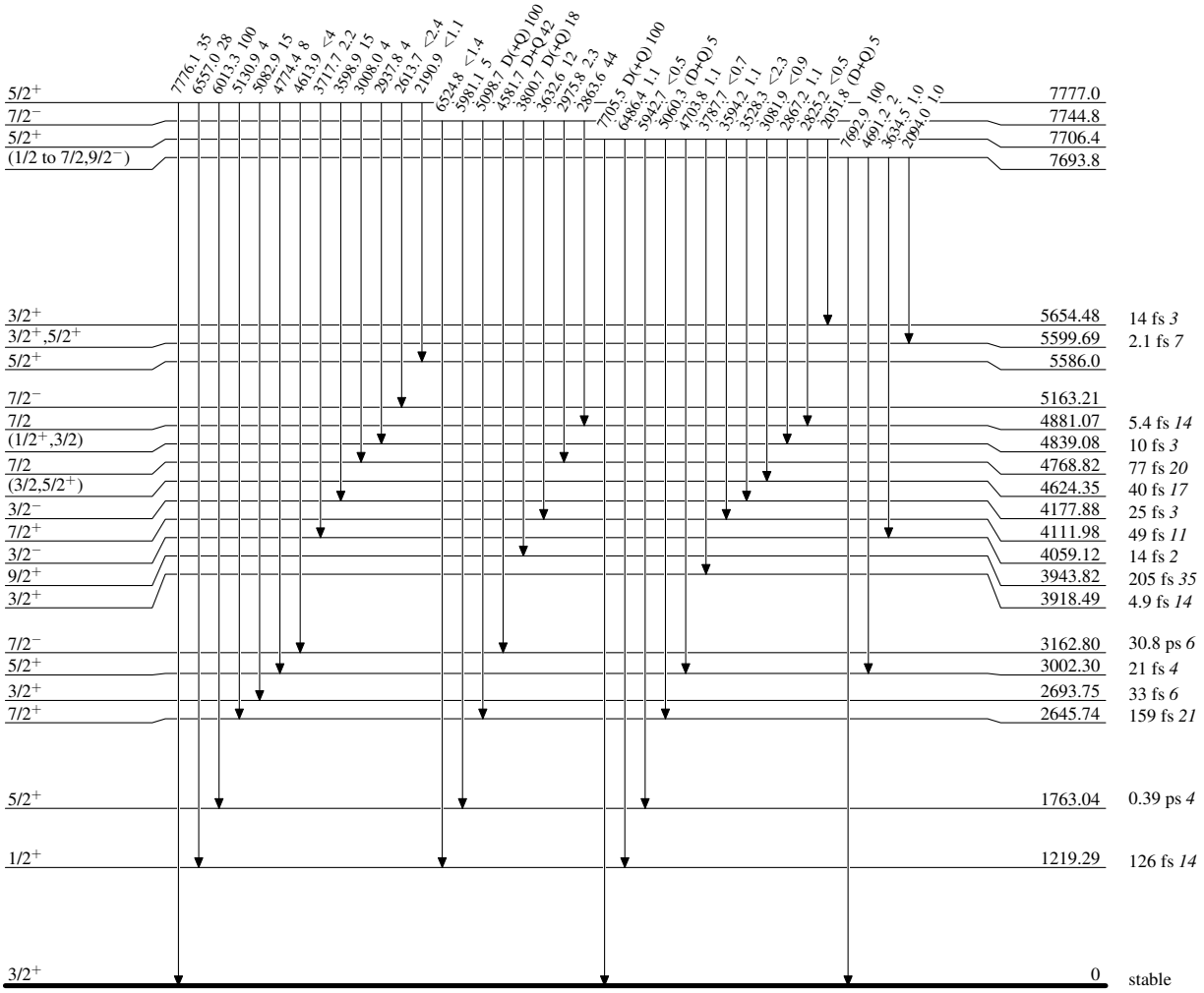


$^{35}_{17}Cl_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

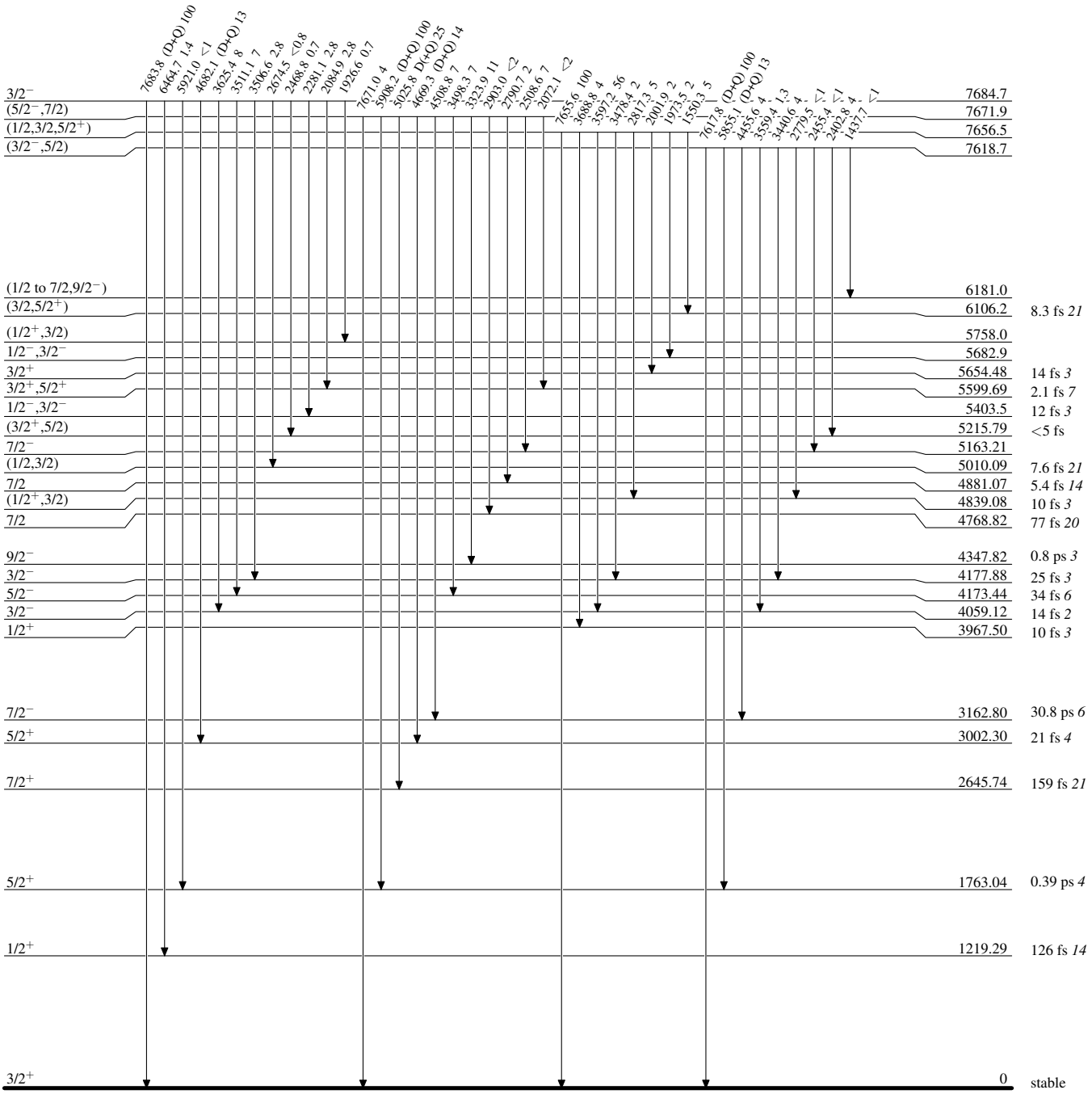


$^{35}_{17}Cl_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

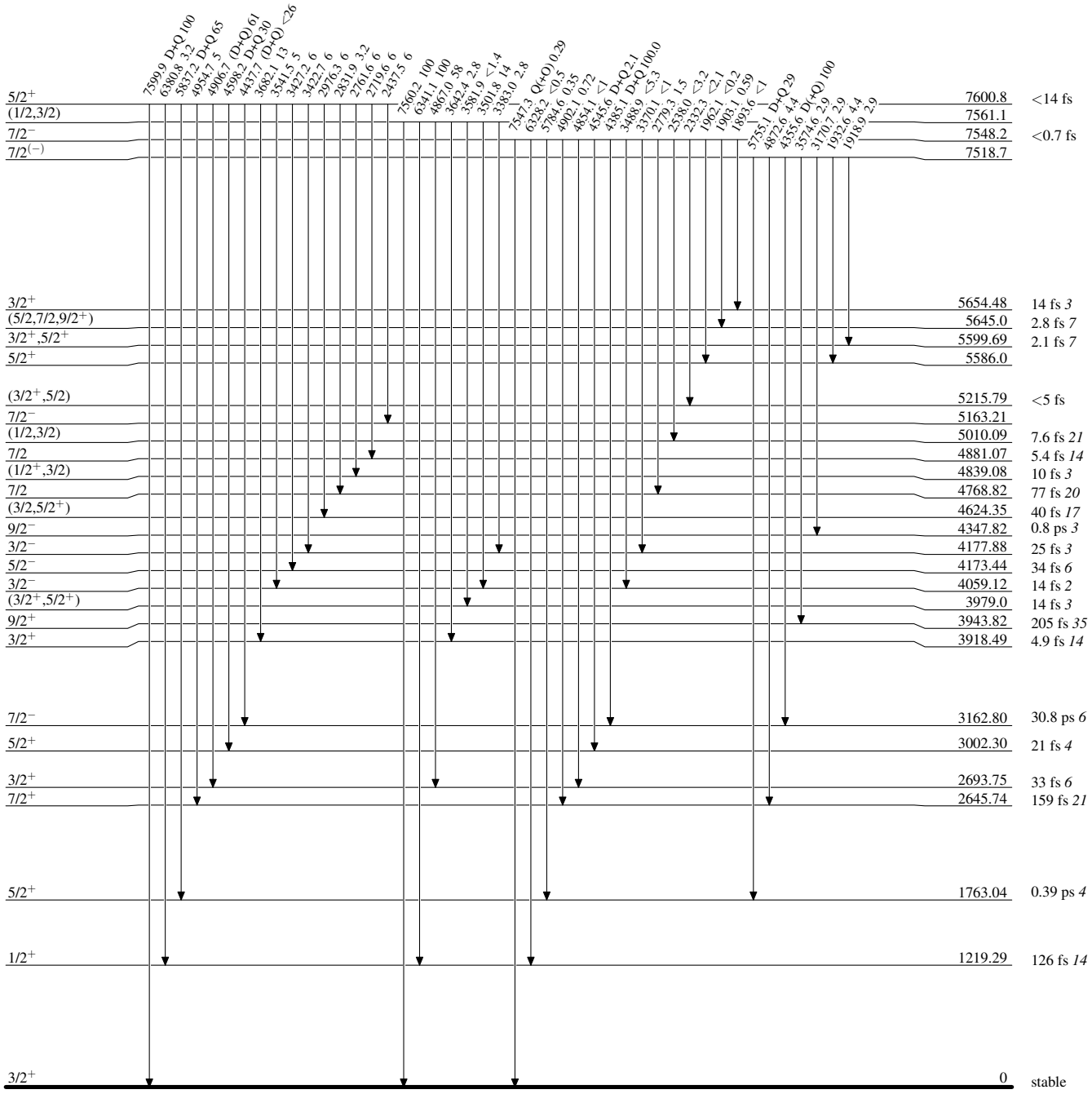


$^{35}_{17}Cl_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

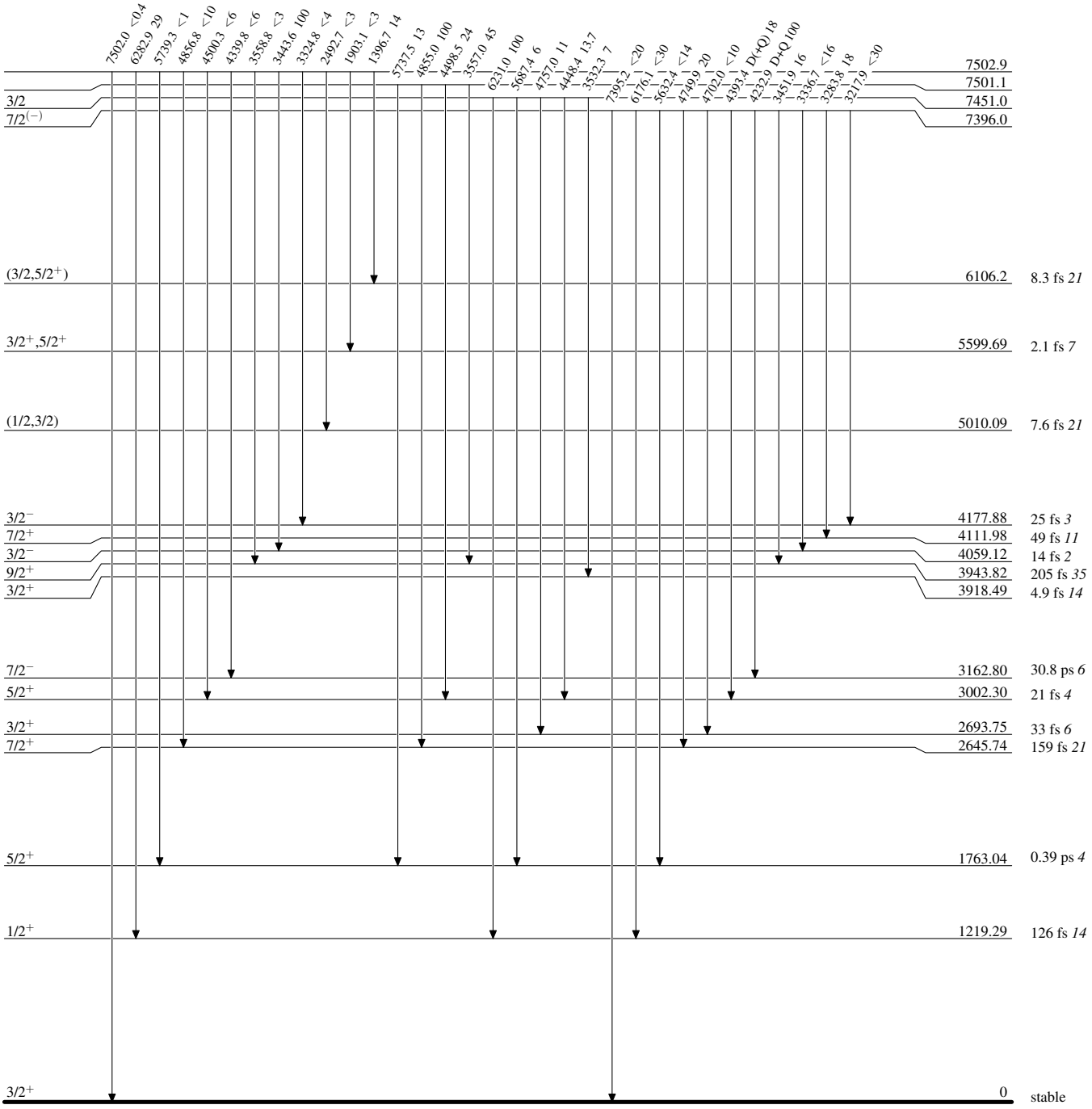


$^{35}_{17}Cl_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

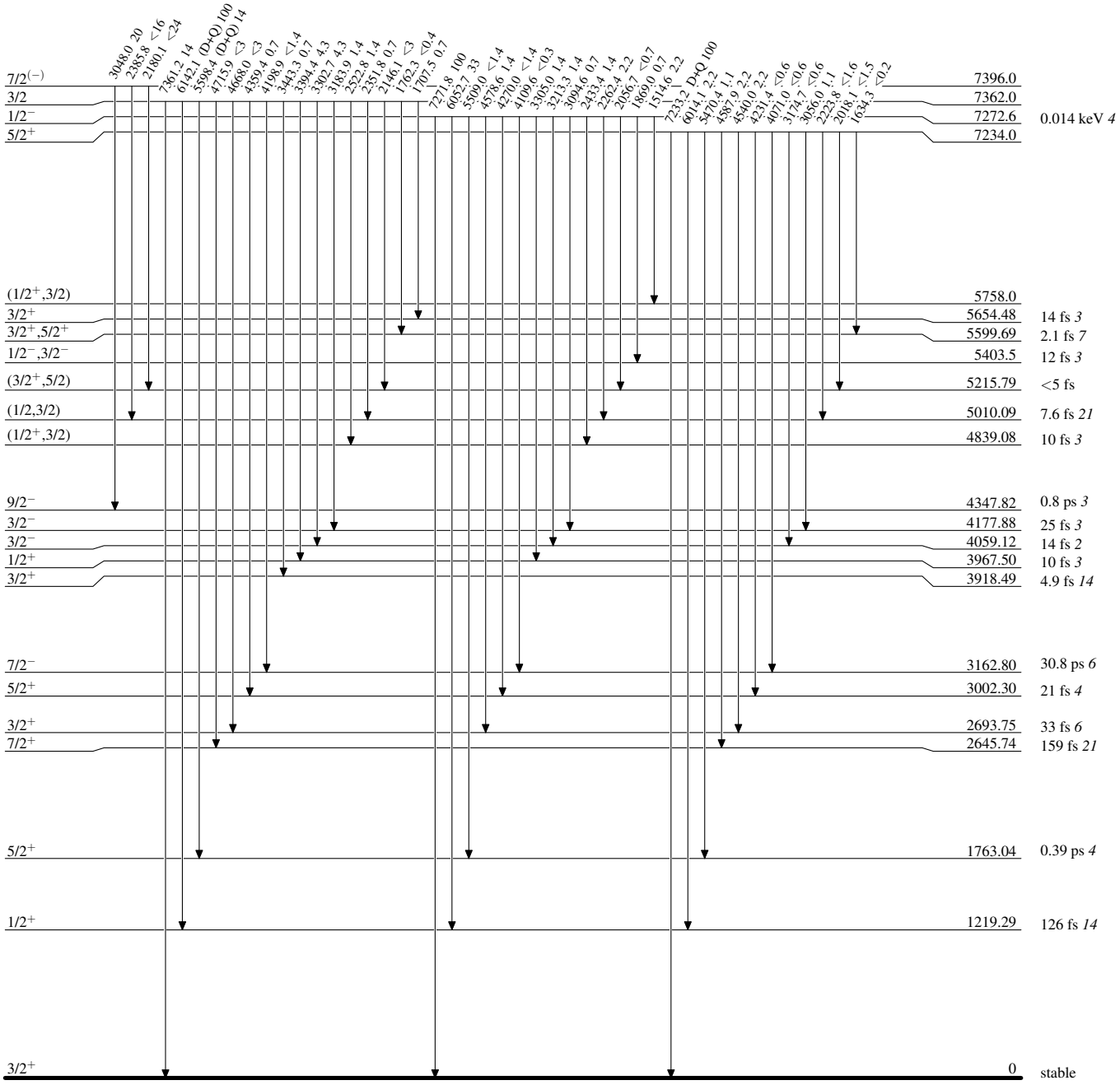


$^{35}_{17}Cl_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

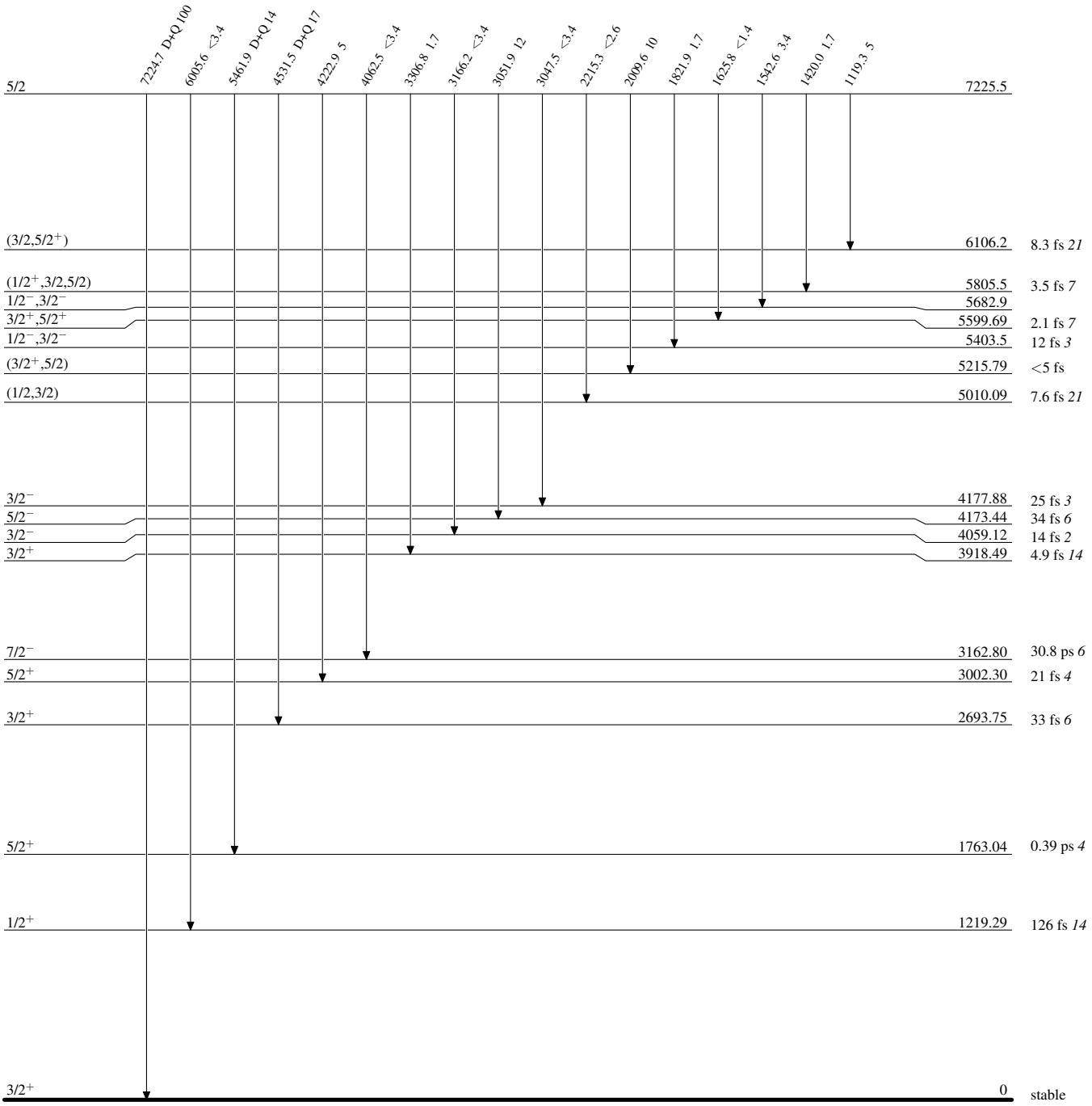


$^{35}_{17}Cl_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

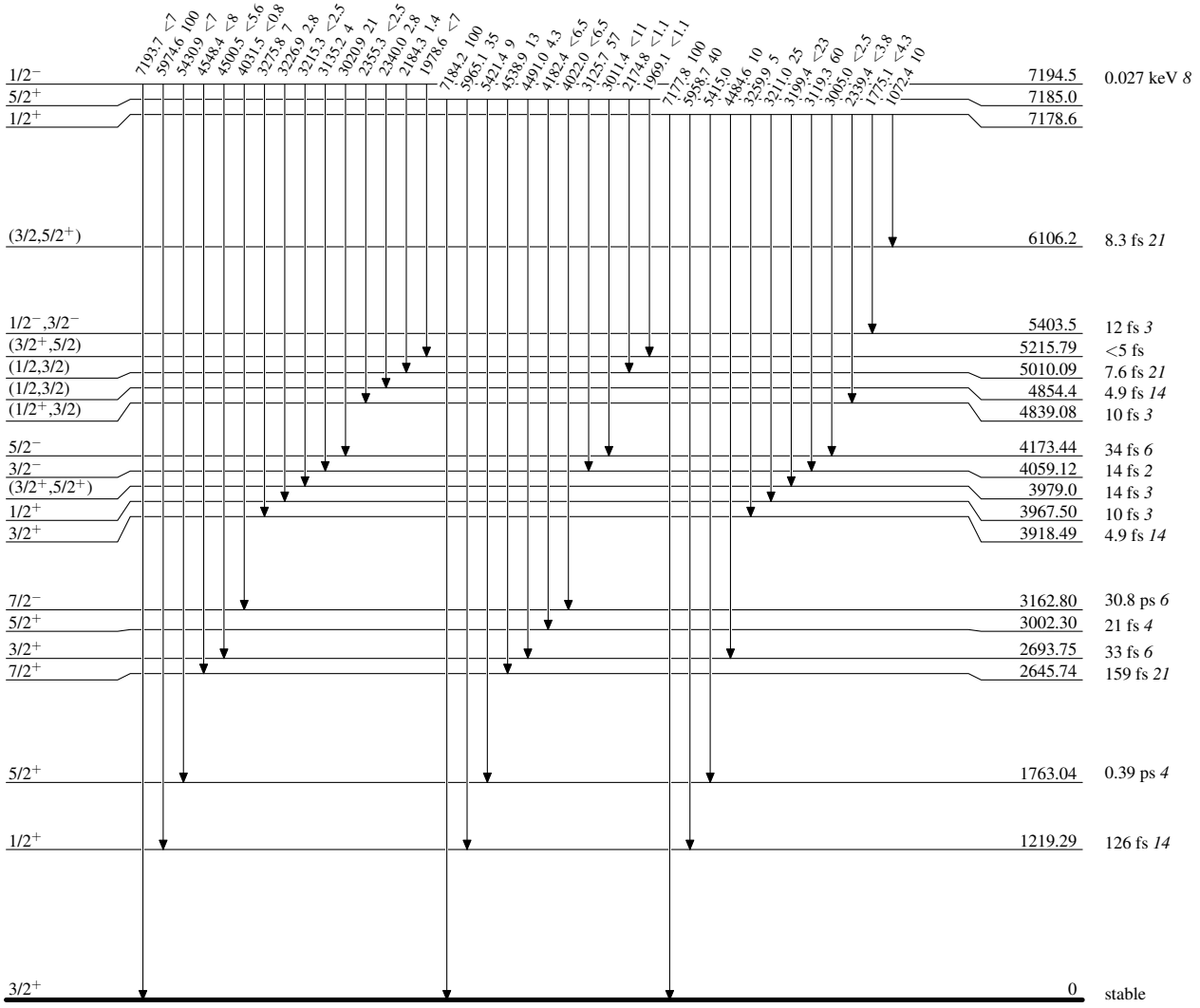


$^{35}_{17}Cl_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

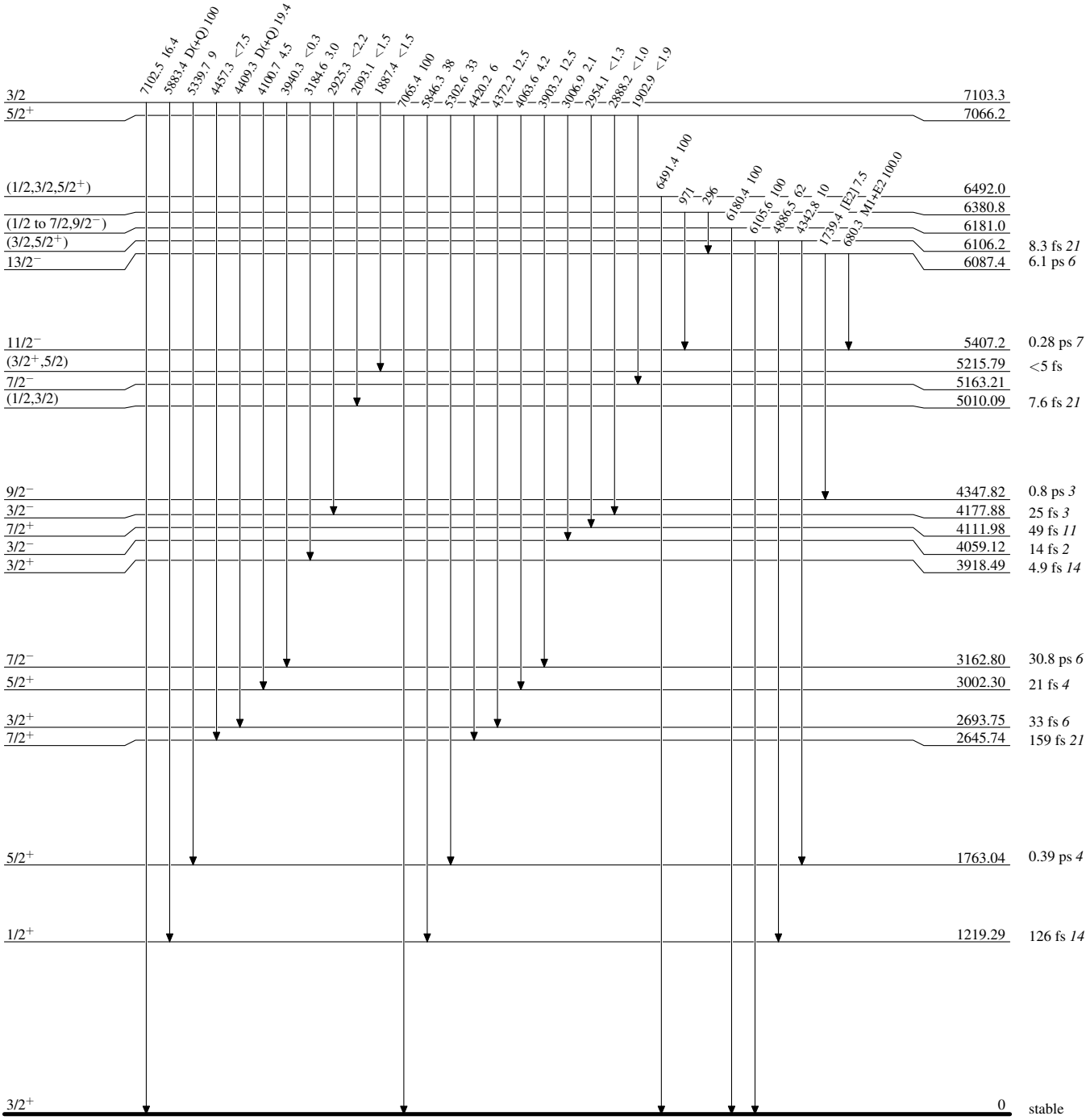


$^{35}_{17}Cl_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

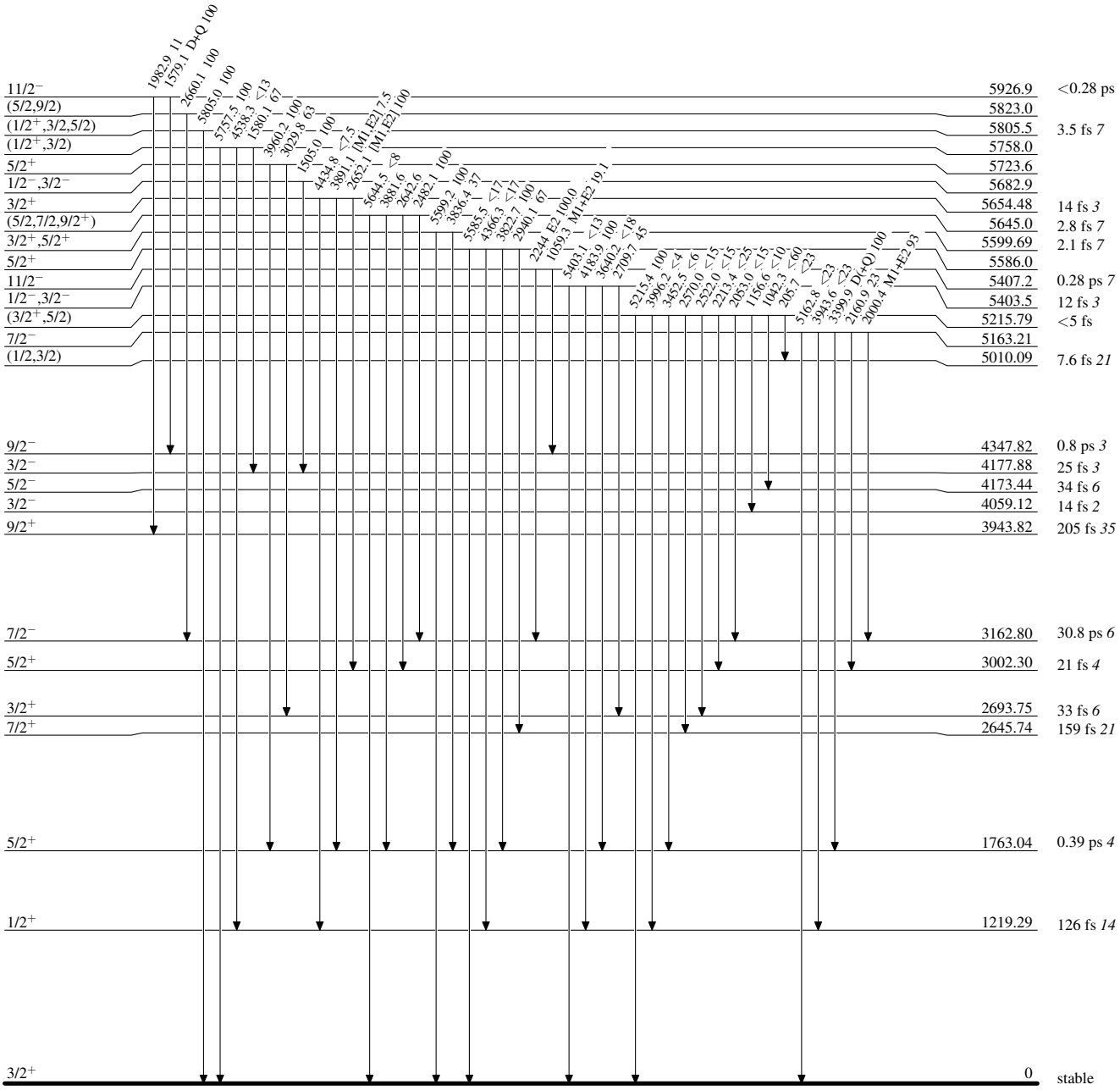


$^{35}_{17}Cl_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

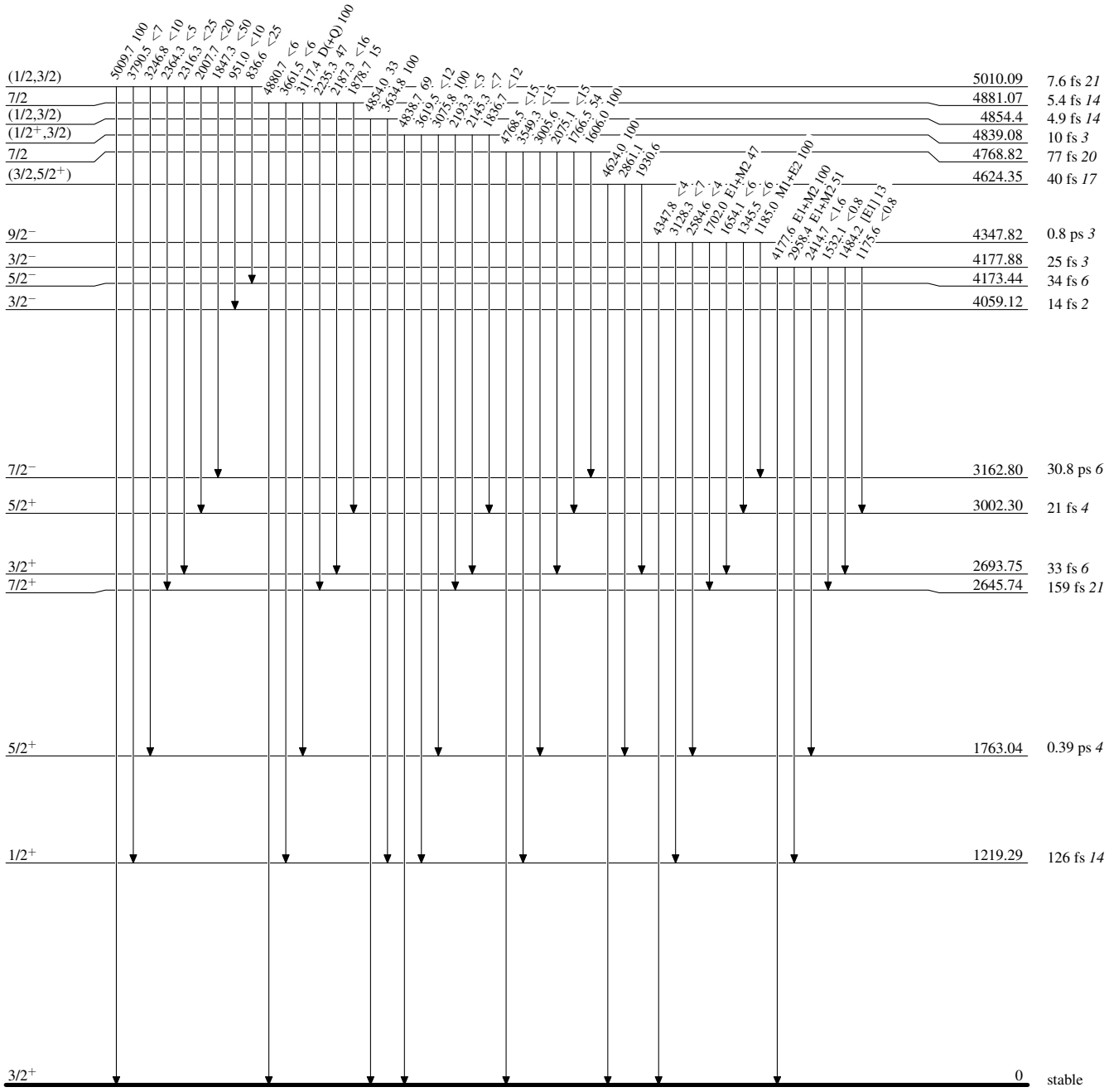


$^{35}_{17}Cl_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

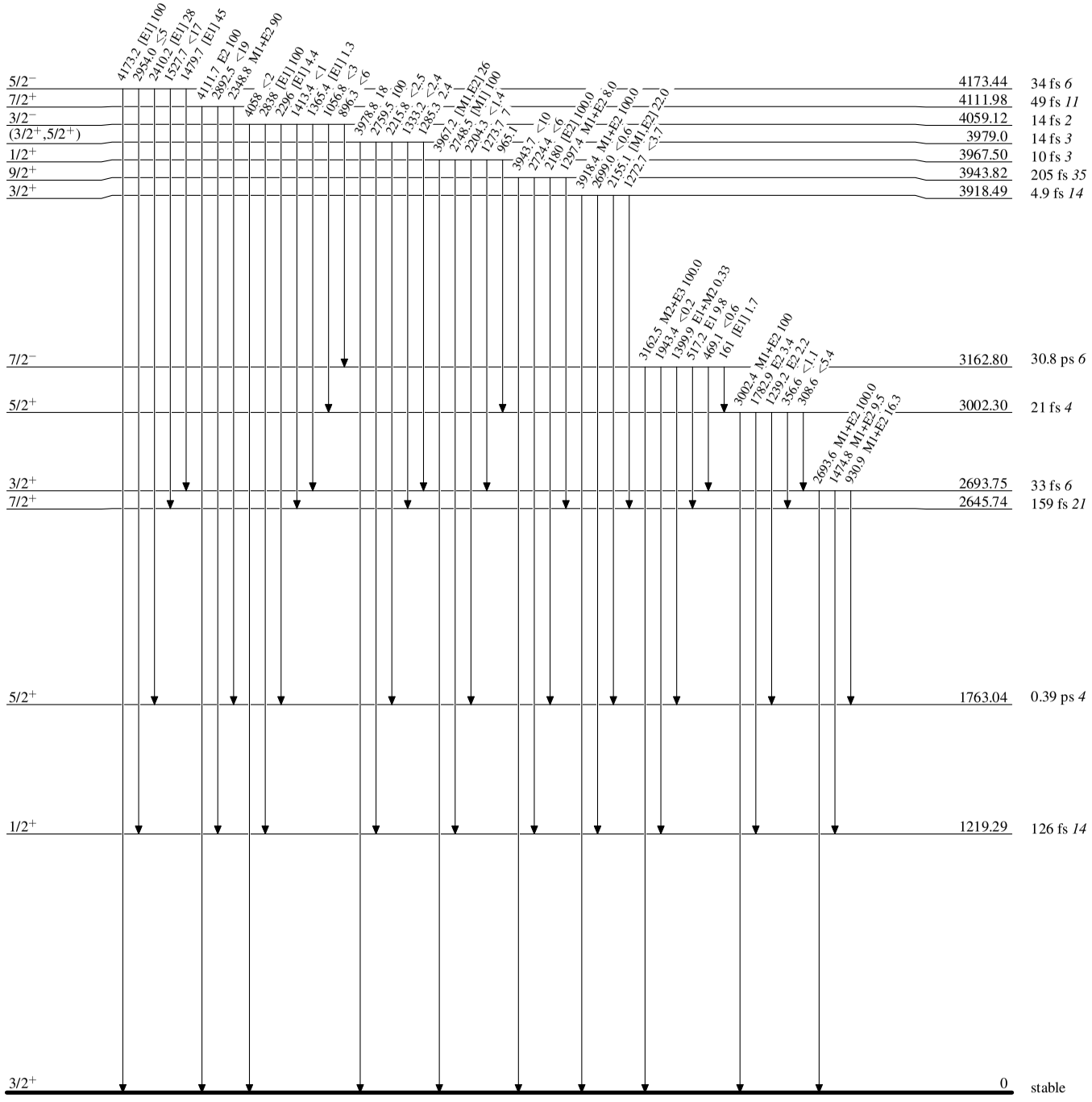


$^{35}_{17}Cl_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

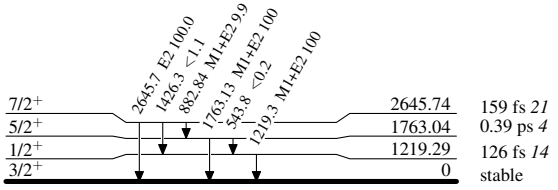


$^{35}_{17}Cl_{18}$

Adopted Levels, Gammas

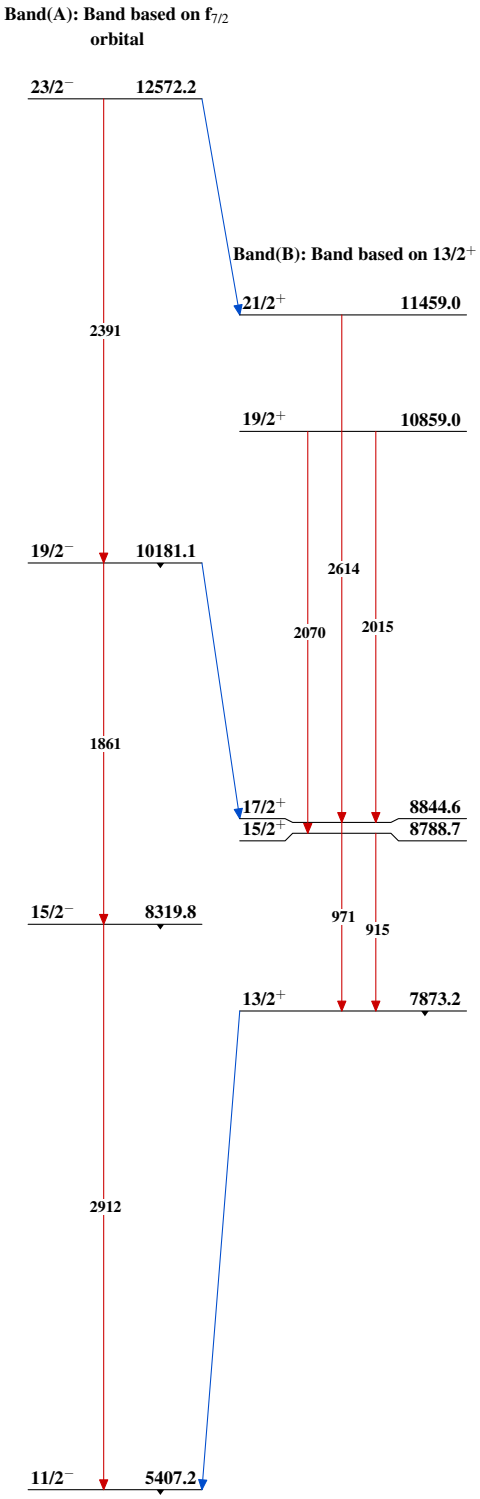
Level Scheme (continued)

Intensities: Relative photon branching from each level



$^{35}_{17}Cl_{18}$

Adopted Levels, Gammas



$^{35}_{17}Cl_{18}$