Adopted Levels, Gammas

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Ninel Nica, John Cameron and Balraj Singh	NDS 113,1 (2012)	31-Dec-2011

Q(β^-)=−12814.5 *4*; S(n)=15255.5 *8*; S(p)=8506.97 *4*; Q(α)=−6640.92 *3* 2012Wa38
Note: Current evaluation has used the following Q record −12814.21 *35* 15255.5 *8* 8506.99 *5*−6640.92 *3* 2011AuZZ.
S(2n)=27996.79 *34*, S(2p)=14877.82 *6* (2011AuZZ).
Values in 2003Au03: Q(β^-)=−12805 *8*, S(n)=15255.4 *7*, S(p)=8506.97 *5*, Q(α)=−6640.76 *14*, S(2n)=27997.0 *4*, S(2p)=14877.69 *11*.
In XREF table, levels populated in reactions labeled by XREF=Y:
^{1}H(^{35}Cl,α):res: 9117.
^{9}Be(^{40}Ca,^{13}Cγ): 0, 1970.
^{28}Si(^{32}S,^{24}Mg): 0, 1970.
^{36}Ar(p,p′γ): 0, 1970.
^{40}Ca(p,pα),(p,p′α): 0, 1970, 4414.
^{40}Ca(pol p,pα): 0, 1970.
^{40}Ca(p,p$\alpha\gamma$): 0, 1970.
^{40}Ca(α,2α): 0, 1970, 4329.
^{40}Ca(^{40}Ca,X): 0, 1970, 4414.
^{197}Au(^{36}Ar,^{36}Ar′γ): 0, 1970.
^{206}Pb(^{36}Ar,^{36}Ar′γ): 0, 1970.
^{36}Ar identified in mass spectrometer studies by F. W. Aston, Nature 105, 8 (1920).
The ^{35}Cl(p,γ),(p,p′),(p,α):res dataset is abbreviated as ^{35}Cl(p,γ):res.
2008ChZL: measurement of double β decay of ^{36}Ar.
2011Le01: ^{1}H(^{36}Ar,d) E=33 MeV/nucleon; measured $\sigma(\theta)$; deduced neutron ground-state spectroscopic factors.

^{36}Ar Levels

Cross Reference (XREF) Flags

A	^{36}Cl β^- decay (3.01×10^5 y)	M	^{33}S(α,nγ)	Y	^{1}H(^{35}Cl,α):res
B	^{36}K ε decay (342 ms)	N	^{35}Cl(p,γ),(p,p′),(p,α):res	Z	^{9}Be(^{40}Ca,^{13}Cγ)
C	^{37}Ca εp decay (181.1 ms)	O	^{35}Cl(d,nγ)	Others:	
D	^{40}Sc $\varepsilon\alpha$ decay (182.3 ms)	P	^{35}Cl(^{3}He,d)	AA	^{28}Si(^{32}S,^{24}Mg)
E	^{2}H(^{35}Cl,nγ)	Q	^{36}Ar(e,e′)	AB	^{36}Ar(p,p′γ)
F	^{12}C(^{32}S,^{8}Be)	R	^{36}Ar(p,p′)	AC	^{40}Ca(p,pα),(P,P′α)
G	^{20}Ne(^{16}O,^{16}O),(^{16}O,^{12}C):fusion	S	^{36}Ar(d,d′)	AD	^{40}Ca(pol P,Pa)
H	^{24}Mg(^{12}C,α),(^{12}C,^{12}C):fusion	T	^{36}Ar(α,α),(α,α′)	AE	^{40}Ca(P,p$\alpha\gamma$)
I	^{24}Mg(^{20}Ne,2$\alpha\gamma$)	U	^{38}Ar(p,t)	AF	^{40}Ca(α,2α)
J	^{32}S(α,γ):res	V	^{39}K(p,α)	AG	^{40}Ca(^{40}Ca,X)
K	^{32}S(^{6}Li,d)	W	^{40}Ca(d,^{6}Li)	AH	^{197}Au(^{36}Ar,^{36}Ar′γ)
L	^{32}S(^{16}O,^{12}C)	X	^{40}Ca(^{3}He,^{7}Be)	AI	^{206}Pb(^{36}Ar,^{36}Ar′γ)

E(level)†	J$^\pi$‡	T$_{1/2}$	XREF	Comments
0.0[d]	0$^+$#	stable	ABCDEF IJKLMNOPQRSTUVWX Z	XREF: Others: AA, AB, AC, AD, AE, AF, AG, AH, AI Nuclear rms charge radius: 3.3902 fm *20* (2004An14,evaluation); 3.3901 fm *23* from 2008 update of 2004An14. Spin measurement by optical spectroscopy (1937Ko03,1953Me73).
1970.38[d] *5*	2$^+$#	328 fs *20*	BC EF IJKLMNOPQRSTUVWX Z	XREF: Others: AA, AB, AC, AD, AE, AF, AG, AH, AI μ=+0.10 *4* (2006Sp01,2011StZZ) Q=+0.11 *6* (1971Na06,1989Ra17,2011StZZ) μ: transient-field method (2006Sp01).

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Adopted Levels, Gammas (continued)

^{36}Ar Levels (continued)

E(level)[†]	Jπ[‡]	$T_{1/2}$	XREF	Comments
				Q: measured by Coulomb excitation reorientation (1971Na06, ^{206}Pb(^{36}Ar,^{36}Ar′γ)). $T_{1/2}$: weighted average (in fs) of: 310 *31* (^{9}Be(^{40}Ca,^{13}Cγ)), 341 *20* (^{36}Ar(e,e′)), 335 *27* (^{197}Au(^{36}Ar,^{36}Ar′γ)), 305 *49* (^{206}Pb(^{36}Ar,^{36}Ar′γ)), 319 *78* (^{32}S(α,γ):res), 319 *28* (^{35}Cl(p,γ):res); other: 450 *14* (^{12}C(^{32}S,^{8}Be)). 2001Ra27 evaluation gives adopted τ=463 fs *46* or $T_{1/2}$=321 fs *32*.
4178.32 *11*	3⁻	2.3 ps *3*	BC EF IJKLMNOPQRSTUV X	B(E3)=0.0111 *11* (2002Ki06 evaluation), data from lifetime and (e,e′).
4329.1[e] *7*	(0,1,2)+[#]	>485 fs	C I KL N P S V	XREF: Others: AF
4414.40[d] *16*	4+[#]	76 fs *10*	EF I LMN P RST W	XREF: Others: AC, AG
4440.11 *19*	2+	76 fs *14*	B I LMN P UVWX	Jπ: π from 2699.4, M1+E2 γ from 3+, 7140; L=4 in ^{40}Ca(d,^{6}Li).
4951.4[e] *4*	2+[#]	<35 fs	B F I KL N P V	
4974.05 *18*	2⁻	10 ps *3*	B E MN P RS V	
5171.13 *16*	5⁻	88 ps *3*	EF I KLMNOP S V	
5194.4 *8*	(0+,1+,2+,3⁻)	69 fs *21*	KL N P R V	
5836.0 *4*	1⁻	6.2 fs *21*	KL N P	
5856.65 *19*	3⁻	0.31 ps *10*	KL N P V	
5878? *9*	(2+)		RS V X	Jπ: from ^{36}Ar(p,p′).
5895.92 *19*	4⁻	0.35 ps *14*	MN V	
6136.5[e] *15*	4+[#]		I KLMN V	Jπ: E1 γ from 5⁻, 9927 (^{35}Cl(p,γ):res); E2 γ to 2+, 1970 (^{24}Mg(^{20}Ne,2αγ)).
6217.3 *3*	5⁻	201 fs *35*	LMN R V	
6356.0 *6*	4+	0.31 ps *10*	N R V X	
6611.0 *3*	2+	15 fs *6*	B N P UV	T=1 Jπ: log *ft*=3.5 (^{36}K ε decay).
6645.6 *15*	(2+,3+,4+)		N V	
6724 *2*	NOT (2)+		N P x	Jπ: not 1+ (^{35}Cl(p,γ):res) and (1,2)+ from ^{35}Cl(^{3}He,d).
6731.0 *5*	1+,2+		B x	Jπ: log *ft*=5.11 from 2+; γ to 0+.
6835.16 *19*	4⁻	0.56 ps *17*	E N P	
6836.50 *18*	3⁻	166 fs *42*	KL N	
6866.9 *7*	(1+,2+)		B L N P R V	E(level): 6868.5 *10* (1972Ho40), 6865.2 *10* (1974Jo02). Jπ: (1,2+) from ^{35}Cl(p,γ):res; π=− from L=(0) in ^{35}Cl(^{3}He,d).
7136.5 *9*	(1⁻,2+)	9 fs *3*	N P	
7139.6 *4*	3+	69 fs *35*	B N	
7178.9 *4*	(1,2)+		B N P V	Jπ: (1,2+) from ^{35}Cl(p,γ):res; π=+ from L=0 in ^{35}Cl(^{3}He,d).
7247.4 *6*	(1,2,3)⁻	<21 fs	N P	Jπ: 0+,1,2,3,4+ from γ to 2+, 1970; (1,2,3)⁻ from π=− (^{35}Cl(^{3}He,d)).
7258.6 *8*	3⁻	<14 fs	N R V	
7336.6 *6*	3+	10 fs *5*	B N P V	T=1
7353.9 *3*	6⁻	125 fs *28*	I MN V	
7432.3 *7*	1+	1.5 fs *3*	L N PQ V	Jπ,$T_{1/2}$: from ^{36}Ar(e,e′).
7488 *16*	(2⁻)		QR V	E(level): weighted average of values from datasets.

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Adopted Levels, Gammas (continued)

^{36}Ar Levels (continued)

E(level)[†]	Jπ[‡]	$T_{1/2}$	XREF	Comments
				Jπ: from ^{36}Ar(e,e′).
7573.1 *3*	4^-	159 fs *49*	N V	
7672.1 *6*	$(3)^-$		L N P V	Jπ: not$(1,2)^-$ from ^{35}Cl(p,γ):res and $(2,3)^-$ from ^{35}Cl(^{3}He,d).
7706? *10*	$^-$		P	Seen only in ^{35}Cl(^{3}He,d). Jπ: π=− from L=1 in ^{35}Cl(^{3}He,d).
7710.3 *5*	1^+		B N V	T=1 E(level): 7710.7 *18* (1972Ho40), 7711.1 *15* (1974Jo02). Jπ: $1^+,2^+,3^+$ from log *ft*=4.9 (^{36}K ε decay); 1 from ^{35}Cl(p,γ).
7749.7 *5*	2^-		L N PQR V	Jπ: from ^{36}Ar(e,e′).
7767.0[e] *4*	6^+[#]	76 fs *11*	I M V	E(level),$T_{1/2}$: from ^{24}Mg(^{20}Ne,2αγ). Jπ: ΔJ=2 E2 γ to 4^+ 6137 (2^+ less likely by no γ to 0^+ g.s.).
7879 *2*	$(1,2)^-$		L N P V	Jπ: not $(1,3)^-$ from ^{35}Cl(p,γ):res; π=− from L=1 in ^{35}Cl(^{3}He,d).
7971.4 *7*	$1^+,2^+$		B P R V Y	XREF: Others: AD, AF, AG, AH, AI XREF: P(7965,8010). E(level): from ^{36}K ε decay. Jπ: $1^+,2^+,3^+$ from log *ft*=5.4 from 2^+ parent (^{36}K ε decay); 3^+ less likely from no γ to 0^+, g.s.
8015.9 *10*	$(3,4)^-$		N VW Y	XREF: Others: AI XREF: V(8030,8070).
8131.9 *6*	1^+	1.6 fs *4*	B N PQ V	T=1 E(level): from ^{36}Ar(e,e′).
8231 *16*			L P V	
8288 *4*			K M	
8303 *3*	2^-		PQ V	Jπ: from ^{36}Ar(e,e′).
8332.5 *15*	$(3)^-$		N P	Jπ: from ^{35}Cl(^{3}He,d).
8353 *3*	$(1^-,2^+,3^-)$		B	Jπ: from ^{36}K ε decay (α-decayed level).
8365 *3*	2^-		PQ	Jπ: from ^{36}Ar(e,e′).
8398 *3*			B P	
8449 *3*	$(^-)$		P	Jπ: L(^{3}He,d)=(1+3) from $3/2^+$ target.
8472.0 *10*	$(3^-,4^-,5^-)$	30 fs *7*	N P	
8504 *3*	1^+	30 fs *7*	K PQ	Jπ: from ^{36}Ar(e,e′).
8556.3 *10*	2^+		B P R U	T=1 Jπ: $1^+,2^+$ from L(^{3}He,d)=0 from $3/2^+$ parent.
8593 *4*			M	
8672 *3*	$(^-)$		K P	Jπ: from L=(1) in ^{35}Cl(^{3}He,d).
8739 *4*			M R	
8806.4 *18*	$(0^-,1,2,3^-)$		N P	Jπ: from ^{35}Cl(^{3}He,d).
8850 *3*			B	
8887 *4*	$(\leq 5^-)$		P	Jπ: from ^{35}Cl(^{3}He,d).
8909.1 *9*	2^+		B JK	Jπ: ΔJ=2, E2 γ to 0^+, g.s.
8921.6 *23*			M P	
8938.8 *5*	$(2^+,3,4^-)$		N P	
9014.9 *10*	$(3^-,4,5^-)$		N P	
9024.8 *8*	2		B N	
9066.4 *6*	3^-		N P	
9117.0 *10*	1^-		J N Y	Jπ: ΔJ=1, E1 γ to 0^+, g.s.
9132.5 *7*	3^-		N Q	Jπ: from ^{35}Cl(p,γ):res; 2^- in ^{36}Ar(e,e′).
9144.9 *7*	$(2^+,3^-)$		B N	
9186[d] *4*	(6^+)[#]		I M	E(level): from ^{33}S(α,nγ).

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Adopted Levels, Gammas (continued)

^{36}Ar Levels (continued)

E(level)†	Jπ‡	$T_{1/2}$	XREF	Comments
				Jπ: from ^{24}Mg(^{20}Ne,2αγ).
9192.1 *11*	(3⁻,4⁺)		N	
9220.2 *11*	1⁺		B N R	T=1
9240.5 *11*	2⁻		K N Q	Jπ: from ^{36}Ar(e,e′).
9248.4 *11*	(1⁻,2⁻,3⁻)		N	
9258.3 *12*	3⁻		N	
9270? *40*	(1⁺)		Q	
9300.1 *4*	4⁻		N P	T=1
9342.5 *4*	3⁻		N	T=1
9356.0 *8*	2⁺		J N	Jπ: from ^{32}S(α,γ):res.
9365.9 *8*	1⁻		B N	
9374.1 *13*	(1⁻,2⁻,3⁻)		N	
9379.9 *13*	(2⁺,3⁺,4⁺)		B N	
9393.4 *10*	(2⁺,3⁺,4⁺)		N	
9413.9 *29*			MN	
9439.2 *14*	(2⁺,3⁺,4⁺)		N	
9448.1 *9*	1⁻,2⁺,3⁻		J N	
9465.9 *5*	1⁻,2⁺		B J N	
9474.0 *8*	(1,2)		N	
9494.3 *12*			N	
9502.8 *5*	(2,3)		B N	Jπ: (2,3) from ^{35}Cl(p,γ):res; 1⁺,2⁺,3⁺ from log *ft*=4.1 from 2⁺ parent (^{36}K ε decay).
9509.6 *6*	(2⁺,3⁺,4⁺)		N	
9542.0 *11*	(1,2,3)⁻		N	
9550.3 *5*	(0⁺ to 4⁺)		N	
9574.3 *4*	4⁻		N	
9595.4 *7*	2⁺		N	
9606.8 *5*	(0,1,2)⁻		N	
9667.1 *10*	3⁻		N	
9681.9 *5*	4⁺,6⁺		N	
9700 *30*	0⁺		N U	T=1 Jπ: from agreement of experimental and calculated cross sections in (p,t).
9703.2 *14*	(1⁻,2⁺)		B	Jπ: from comparison of experimental and calculated cross sections in (p,t).
9734.3 *5*	1⁻,3⁻,4⁺		N	
9737.5 *8*	3⁻		B N	
9764.5 *5*	(3⁻,4⁻,5⁻)		N	
9812.2 *5*	(1,2,3⁻)		B N	
9862.6 *5*	3⁺		N	
9878.6 *5*	2⁺,3⁺		B N	Jπ: (2⁺,3⁺,4⁺) from ^{35}Cl(p,γ):res; 1⁺,2⁺,3⁺ from log *ft*=5.5 from 2⁺ parent (^{36}K ε decay).
9889.3 *5*			N	
9902.1 *5*	4⁺		N	
9927.0[e] *5*	8⁺[#]	27.4 fs *43*	I	E(level),Jπ,$T_{1/2}$: from ^{24}Mg(^{20}Ne,2αγ).
9927.4 *5*	5⁻		MN	
9942.5 *5*	(2,3⁻)		N	
9956.9 *5*	(1,2⁺)		B N	
9982.6 *16*	(1,3)⁻		N	
9983.2 *5*	1⁺,(2⁺)		N	
9991.9 *16*	1⁻,2⁺		N	
9992.9 *9*			B N Q	
10002.4 *10*	(1⁻,2,3)		N	
10044.4 *12*	1⁻		N	
10050? *60*	1⁺		Q	E(level),Jπ: from ^{36}Ar(e,e′).

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Adopted Levels, Gammas (continued)

^{36}Ar Levels (continued)

E(level)†	Jπ‡	XREF	Comments
10050.6 *15*	2^+	N	
10076.7 *5*	$(1^-,2,3)$	B K N	
10092.3 *29*		N	
10094.9 *15*	2^+	N	
10099.4 *6*	1^-	N	
10139.5 *9*	$(2^+,3^-)$	N	
10143.0 *6*	$(1^-,2)$	N	
10149.6 *5*	$(3^-,4)$	N	
10167.4 *5*	3^-	N	
10173.4 *5*	$(1^-,2^+)$	N	
10186	1^-	J	Jπ: ΔJ=1, E1 γ to 0^+, g.s.
10193.6 *10*	$(3^-,4,5,6^+)$	N	
10201.3 *18*		B N	
10217 *4*	2^+	J	Jπ: ΔJ=2, E2 γ to 0^+, g.s.
10220.3 *5*	$4^{(-)}$	N	
10256.0 *10*	$(3^-,4)$	N	
10257.5 *10*	$(3^-,4^+)$	N	
10260.5 *19*		N	
10267.3 *5*	1^-	N	
10271.7 *6*	$(3^-,4^-,5^-)$	N Q	
10281.1 *10*	3^-	N	
10301.5 *9*	4^+	N	
10308.7 *8*	$(2,3)^-$	N	
10319.5 *15*	2^+	N	
10328 *11*	2^+	B J	
10329.0 *15*	$(3^-,4^-,5^-)$	N	
10377.1 *19*		N	
10420.8 *10*	3^-	N Q	
10435.0 *14*	$(1,2,3^-)$	N	E(level),Jπ: strong γ to 0^+ suggests J^π=1,2,3$^-$. In ^{35}Cl(p,p$_0$) data, J^π=$(1,2,3)^-$ is proposed, but 2^+ is suggested from γ-ray data (as commented in 1978En04 evaluation). This level may be a doublet.
10439.4 *19*	2^+	N	
10449 *3*		B	
10462.2 *9*	2^-	N	
10475.3 *21*		N	
10488.1 *20*	3^-	J N	E(level): from ^{32}S(α,γ):res.
10500.2 *5*	$(1,2,3)^-$	N	
10524 *3*		N	
10539.6 *12*	3^-	N	
10558.5 *20*	2^+	N Q	
10562.1 *9*	3^-	B N	
10568.3 *21*		N	
10582.9 *6*	5^-	N	
10593.3 *21*	2^+	N	
10596 *11*	3^-	B J	
10614 *10*	$1^+,2^+,3^+$	B	Jπ: log *ft*=5.6 from 2^+ parent (^{36}K ε decay).
10615.6 *7*	4^-	N Q	
10617.9 *21*	3^-	N	
10635.7 *5*	1^-	N	
10646.7 *10*		N	
10650.6 *11*	1^-	J N	
10664.1 *21*	$(0^+,1^-,2^+)$	N	
10674.3 *22*	$(3^-,4^+)$	N	
10675.9 *10*	5	N	
10683.9 *10*	1^-	N	

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Adopted Levels, Gammas (continued)

^{36}Ar Levels (continued)

E(level)[†]	Jπ[‡]	$T_{1/2}$	XREF	Comments
10700.4 *15*	2^+		N	
10701.7 *12*	$(0^+,1^-,2^+)$		B N Q	
10738.7 *97*			N	
10751.6 *15*			N	
10759.1 *19*	4^+		N	
10760.9 *15*	$(2,3)^-$		N	
10763.8 *22*	4^+		N Q	
10780.0 *22*	4^+		N	
10790.1 *15*	2^+		J N	
10808.9 *12*	$(1^-,2,3^-)$		N	Jπ: γs to 0^+ and 4^+.
10816.0 *29*			N	
10823.4 *15*			N	
10832.3 *15*	$(1^-,3^-,4^+)$		N	
10845.7 *15*			N	
10852.0 *15*	2^+		N	
10853.8 *15*	0^+	<4 fs	N U	
10854 *11*	3^-		B J	
10865 *7*	$(1^-,3^-,4^+)$		N	
10898.6 *15*			N	
10902 *3*	1^-		N	
10906.0 *10*	$(2^+$ to $5^-)$		N	Jπ: γs to 2^+ and 5^-.
10917 *3*			N	
10934 *3*			N	
10939 *3*			N	
10955.7 *12*	$(2^+$ to $5^-)$		N	Jπ: γs to 2^+ and 5^-.
10960.3 *24*	2^+		N	
10968.1 *15*	1,2		B N	Jπ: 1,2,3 from log *ft*=7.2 from 2^+ parent (^{36}K ε decay); 3 less likely from γ to 0^+, g.s.
10976.2 *24*	4^+		N	
10986.0 *15*			N	
10993.5 *24*	$0^+,1^-,2^+$		N	
11000[a]	5^-[@]		K	Jπ: L=5 in ^{32}S(^{6}Li,d).
11014.3 *15*			N	
11027.7 *15*	$(1^-$ to $5^-)$		N	Jπ: γs to 2^+ and 4^+.
11040 *11*	2^+		J	
11043.4 *15*	4^+		N	
11050 *3*	$0^+,1^-,2^+$		N	Jπ: might Be same level as 11056 if $J^\pi=2^+$.
11056 *3*	$1^+,2^+,3^+$		B	Jπ: log *ft*=5.0 from 2^+ parent (^{36}K ε decay); might Be same level as 11050 if $J^\pi=2^+$.
11059.7 *15*	$1^-,3^-$		N	
11086.1 *15*			N	
11091 *3*	$4^+,(5^-)$		N	
11110 *3*	$0^+,1^-,2^+,3^-$		N	
11118.8 *15*			N	
11123.2 *25*	3^-		N	
11131.4 *15*	$1^-,3^-$		N	
11149.4 *15*	$(1,2,3^-)$		N	Jπ: γ to 0^+.
11155.9 *15*	2^+		N	
11167.8 *15*			N Q	
11182.3 *15*	$(3^+$ to $6^-)$		N	Jπ: γs to 3^- and 6^-.
11206.7 *15*			N	
11210 *3*			N	
11215.7 *15*			N	
11224 *3*	$1^-,2^-$		N	
11237.6 *15*	$1^+,2^+,3^+$		B N	Jπ: log *ft*=4.8 from 2^+ (^{36}K ε decay).

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Adopted Levels, Gammas (continued)

^{36}Ar Levels (continued)

E(level)[†]	J$^{\pi}$[‡]	$T_{1/2}$	XREF	Comments
11243 *3*	(1$^-$)		N	
11248 *3*	(1$^+$)		N Q	J$^{\pi}$: from ^{36}Ar(e,e′).
11269.7 *15*			N	
11278 *3*	3$^-$		N	
11303 *3*			N	
11312 *3*	4$^+$,5$^-$		N	
11321.9 *19*			N	
11336.4 *19*	2$^+$		N	
11344 *3*	1$^-$		N	
11358.8 *19*			N Q	
11419.1 *19*			N	
11515? *15*			Q	
11580? *60*	(2$^-$)		Q	
11594? *15*			Q	
11640 *20*	1$^+$,2$^+$,3$^+$		B	J$^{\pi}$: log *ft*=5.0 from 2$^+$ (^{36}K ε decay).
11745? *15*			Q	
11902.1 *9*	10$^+$	0.43 ps *7*	I	J$^{\pi}$,$T_{1/2}$: from ^{24}Mg(^{20}Ne,2$\alpha\gamma$).
11946? *15*			Q	
12066? *15*			Q	
12090? *70*	(1$^+$)		Q	
12748.5[e] *7*	10$^+$[#]	10.1 fs *23*	I	
12801? *15*			Q	
13201? *15*			Q	
13481? *15*			Q	
13740? *15*			Q	
13800? *15*			Q	
15350.8[e] *8*	12$^+$[#]	14.1 fs *28*	I	
15400[a]	6$^+$[@]		K	J$^{\pi}$: L=6 in ^{32}S(^{6}Li,d).
16800[a]	7$^-$[@]		K	J$^{\pi}$: L=7 in ^{32}S(^{6}Li,d).
18298.6[e] *9*	14$^+$[#]	11.0 fs *25*	I	
19500[a]	8$^+$[@]		K	J$^{\pi}$: L=8 in ^{32}S(^{6}Li,d).
22365.3[e] *15*	16$^+$[#]	<6.0 fs	I	
25300[a]	10$^+$[@]		K	J$^{\pi}$: L=10 in ^{32}S(^{6}Li,d).
27148[&]	2$^+$[&]		H	
27718[&]	4$^+$[&]		H	
29508[&]	6$^+$[&]		H	
30510	8$^+$		H	
31694[&]	7$^-$[&]		H	
32478[&]	8$^+$[&]		H	
34770	13$^-$		H	
37100	15$^-$		H	
39500	16$^+$		H	
x[bc]	(10$^+$)[b]		G	
2200+x[b]	(12$^+$)[b]	0.83 MeV *16*	G	
4900+x[b]	(15$^-$)[b]		G	
5600+x[b]	(15$^-$)[b]		G	
7200+x[b]	(17$^-$)[b]		G	
8300+x[b]	(17$^-$)[b]	0.41 MeV *7*	G	
11500+x[b]	(19$^-$)[b]	2.5 MeV *3*	G	

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued)

^{36}Ar Levels (continued)

† From ^{35}Cl(p,γ):res, unless noted otherwise.
‡ From ^{35}Cl(p,γ):res from resonance analysis, $\gamma(\theta)$, $\gamma\gamma(\theta)$ and polarization measurements, and RUL. Other arguments may Be given in comments.
# From ^{24}Mg(^{20}Ne,2$\alpha\gamma$) based on $\gamma(\theta)$ which establish stretched E2 for all the in-band and interband linking transitions.
@ From ^{32}S(^{6}Li,d) from d-α angular correlations.
& Possible member of a hyperdeformed structure from ^{24}Mg(^{12}C,α),(^{12}C,^{12}C):fusion. Determined its J^{π} by Regge-pole and phase shift analysis.
[a] Member of a rotational band without parity splitting based on J(J+1) rule, from ^{32}S(^{6}Li,d).
[b] Possible member of a rotational structure populated in ^{20}Ne(^{16}O,^{16}O),(^{16}O,^{12}C) fusion reaction. The J^{π} assignment is from $\sigma(\theta)$ data in above reaction (1996Mi01).
[c] x corresponds to E_R(c.m.)=17.5 MeV in ^{20}Ne(^{16}O,^{16}O) reaction.
[d] Band(A): g.s. band. Band from ^{24}Mg(^{20}Ne,2$\alpha\gamma$).
[e] Band(B): SD band. Band from ^{24}Mg(^{20}Ne,2$\alpha\gamma$). β_2=0.46 *3* (2001Sv02). Experimental B(E2)′s are in good agreement with those from shell model calculations of 2001Lo01 for configuration=$(s_{1/2}d_{3/2})^4(pf)^4$.

Adopted Levels, Gammas (continued)

γ(^{36}Ar)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	δ[‡]	Comments
1970.38	2^+	1970.3	100	0.0	0^+	E2		B(E2)(W.u.)=8.2 *5*
4178.32	3^-	2207.9	100 *1*	1970.38	2^+	E1		B(E1)(W.u.)=2.3×10^{-5} *3*
		4178.1	7.3 *10*	0.0	0^+	[E3]		B(E3)(W.u.)=20.6 *20* (2002Ki06)
4329.1	$(0,1,2)^+$	2358.6	100	1970.38	2^+			
		4328.8	<10	0.0	0^+			
4414.40	4^+	2443.9	100	1970.38	2^+	E2		B(E2)(W.u.)=12.0 *16*
		4414.1	<2	0.0	0^+			
4440.11	2^+	2469.6	56 *3*	1970.38	2^+	M1+E2	>1.5	B(M1)(W.u.)<0.0025; B(E2)(W.u.)>2.3 Mult.,δ: from ^{33}S(α,nγ).
		4439.8	100 *3*	0.0	0^+	E2		B(E2)(W.u.)=0.39 *8* Mult.: from ^{33}S(α,nγ).
4951.4	2^+	537.0	<7	4414.40	4^+			
		773.1	<2.4	4178.32	3^-			
		2980.9	18 *5*	1970.38	2^+			
		4951.0	100 *5*	0.0	0^+			
4974.05	2^-	533.9	<0.3	4440.11	2^+			
		559.6	<0.5	4414.40	4^+			
		795.7	100 *3*	4178.32	3^-	M1+E2	−0.21 *7*	B(M1)(W.u.)=0.0033 *10*; B(E2)(W.u.)=0.8 *6*
		3003.5	5.1 *13*	1970.38	2^+			
		4973.7	23 *3*	0.0	0^+			
5171.13	5^-	197.1	<5	4974.05	2^-			
		219.7	<4	4951.4	2^+			
		731.0	<0.4	4440.11	2^+			
		756.7	14.6 *24*	4414.40	4^+			
		992.8	100 *4*	4178.32	3^-	E2		B(E2)(W.u.)=0.74 *6*
		3200.6	7.3 *12*	1970.38	2^+			
		5170.7	<1.2	0.0	0^+			
5194.4	$(0^+,1^+,2^+,3^-)$	754.3	<3	4440.11	2^+			
		780.0	<3	4414.40	4^+			
		3223.9	100	1970.38	2^+			
		5194.4	<10	0.0	0^+			
5836.0	1^-	664.9	<1	5171.13	5^-			
		861.9	<1	4974.05	2^-			
		884.6	<1	4951.4	2^+			
		1395.9	<1	4440.11	2^+			
		1421.6	<1	4414.40	4^+			
		1506.9	<1	4329.1	$(0,1,2)^+$			
		1657.6	1 *1*	4178.32	3^-			
		3865.4	4.2 *21*	1970.38	2^+			
		5835.5	100.0 *21*	0.0	0^+	E1		B(E1)(W.u.)=0.00047 *16*
5856.65	3^-	x	10.5					Additional information 1.

$^{36}_{18}Ar_{18}$-9

Adopted Levels, Gammas (continued)

γ(^{36}Ar) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	δ[‡]	Comments
5856.65	3⁻	685.5	<1.3	5171.13	5⁻			
		882.6	<2.6	4974.05	2⁻			
		905.2	<2.6	4951.4	2⁺			
		1416.5	<6.6	4440.11	2⁺			
		1442.2	<5.3	4414.40	4⁺			
		1527.5	<4.0	4329.1	(0,1,2)⁺			
		1678.3	17.1 *13*	4178.32	3⁻	M1+E2	−0.46 *17*	B(M1)(W.u.)=0.0015 *6*; B(E2)(W.u.)=0.4 *3* δ: or +2.9 *9*.
		3886.0	100 *3*	1970.38	2⁺	E1(+M2)	+0.02 *2*	B(E1)(W.u.)=(2.4×10^{-5} *8*); B(M2)(W.u.)=(0.003 *+6−3*)
		5856.7	4.0 *13*	0.0	0⁺			
5895.92	4⁻	724.8	<1.0	5171.13	5⁻			
		921.9	<1.0	4974.05	2⁻			
		1481.5	<3.2	4414.40	4⁺			
		1566.8	<2.1	4329.1	(0,1,2)⁺			
		1717.6	100 *2*	4178.32	3⁻	M1+E2	+0.16 *2*	B(M1)(W.u.)=0.011 *5*; B(E2)(W.u.)=0.35 *17*
		3925.3	6.4 *21*	1970.38	2⁺			
		5895.4	<3.2	0.0	0⁺			
6136.5	4⁺	1186.0 *3*	27.7 *10*	4951.4	2⁺			E_γ,I_γ: from ^{24}Mg(^{20}Ne,2αγ).
		1696.7 *4*	8.6 *6*	4440.11	2⁺			E_γ,I_γ: from ^{24}Mg(^{20}Ne,2αγ).
		4165.6 *10*	100 *12*	1970.38	2⁺	E2		E_γ,I_γ,Mult.: from ^{24}Mg(^{20}Ne,2αγ).
6217.3	5⁻	x	15.6					Additional information 2.
		360.7	<3.9	5856.65	3⁻			
		381.3	<3.9	5836.0	1⁻			
		1046.2	2.6 *7*	5171.13	5⁻			
		1243.2	<1.3	4974.05	2⁻			
		1265.9	<2.6	4951.4	2⁺			
		1777.1	<1.3	4440.11	2⁺			
		1802.9	12 *4*	4414.40	4⁺	E1		B(E1)(W.u.)=4.5×10^{-5} *17*
		1888.1	<2.6	4329.1	(0,1,2)⁺			
		2038.9	100 *5*	4178.32	3⁻	E2		B(E2)(W.u.)=8.0 *16*
		4246.7	<2.6	1970.38	2⁺			
		6216.7	<2.6	0.0	0⁺			
6356.0	4⁺	1404.6	<12.5	4951.4	2⁺			
		1915.8	31 *4*	4440.11	2⁺			
		1941.5	77 *4*	4414.40	4⁺			
		4385.3	100 *4*	1970.38	2⁺	E2		B(E2)(W.u.)=0.07 *3*
		6355.4	<14.6	0.0	0⁺			
6611.0	2⁺	754.3	<2.4	5856.65	3⁻			
		775.0	<1.2	5836.0	1⁻			
		1439.8	<6.1	5171.13	5⁻			
		1660	<6.1	4951.4	2⁺			

$^{36}_{18}Ar_{18}$-10

Adopted Levels, Gammas (continued)

γ(^{36}Ar) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	δ[‡]	Comments
6611.0	2^+	2170.8	<7.3	4440.11	2^+			
		2196.5	<6.1	4414.40	4^+			
		2281.8	<7.3	4329.1	$(0,1,2)^+$			
		2432.6	100 *4*	4178.32	3^-			
		4640.3	<6.1	1970.38	2^+			
		6610.3	22 *4*	0.0	0^+			
6645.6	$(2^+,3^+,4^+)$	2205.4	100	4440.11	2^+			
6724	NOT $(2)^+$	x	43					Additional information 3.
		6723	100 *14*	0.0	0^+			
6731.0	$1^+,2^+$	4759.6 *7*	100 *18*	1970.38	2^+			
		6730.5 *5*	100 *16*	0.0	0^+			
6835.16	4^-	978.5	12 *10*	5856.65	3^-			
		1664.0	97 *8*	5171.13	5^-	M1+E2	+0.7 *3*	B(M1)(W.u.)=0.0020 *9*; B(E2)(W.u.)=1.3 *9* δ: or +1.5 *+40−4*.
		1861.1	100 *8*	4974.05	2^-			
		1883.7	<5.2	4951.4	2^+			
		2395.0	12 *3*	4440.11	2^+			
		2506.0	<5.4	4329.1	$(0,1,2)^+$			
		2656.7	49 *5*	4178.32	3^-	M1+E2	+0.32 *8*	B(M1)(W.u.)=0.00034 *12*; B(E2)(W.u.)=0.018 *10* δ: or >+4.
		4864.4	<5.4	1970.38	2^+			
		6834.5	<2.7	0.0	0^+			
6836.50	3^-	1665.3	46 *4*	5171.13	5^-	E2		B(E2)(W.u.)=9 *3*
		1862.4	19 *7*	4974.05	2^-			
		1885.1	6.1 *9*	4951.4	2^+			
		2396.3	4.4 *18*	4440.11	2^+			
		2425	<3.5	4414.40	4^+			
		2658.7	100 *7*	4178.32	3^-	M1+E2	−1.9 *5*	B(M1)(W.u.)=0.0008 *5*; B(E2)(W.u.)=1.6 *5* δ: or +1.5 *+40−4*.
		4865.8	<8.8	1970.38	2^+			
		6835.8	<1.8	0.0	0^+			
6866.9	$(1^+,2^+)$	4896.2	100 *7*	1970.38	2^+			
		6866.2	33 *7*	0.0	0^+			
7136.5	$(1^-,2^+)$	1300.5	<1.3	5836.0	1^-			
		2162.4	<2.5	4974.05	2^-			
		2696.3	<3.8	4440.11	2^+			
		2722.0	<2.5	4414.40	4^+			
		2958.0	<5.1	4178.32	3^-			
		5165.7	26.6 *25*	1970.38	2^+			
		7135.7	100.0 *25*	0.0	0^+			
7139.6	3^+	1282.9	<3.8	5856.65	3^-			
		1303.6	<3.8	5836.0	1^-			

$^{36}_{18}Ar_{18}$-11

Adopted Levels, Gammas (continued)

γ(^{36}Ar) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	δ[‡]	Comments
7139.6	3^+	2699.4	100 *9*	4440.11	2^+	M1+E2	−0.28 *3*	B(M1)(W.u.)=0.008 *4*; B(E2)(W.u.)=0.29 *17* δ: or −1.5 *2* (1973Ho33).
		2725.1	<5.7	4414.40	4^+			
		2961.1	<5.7	4178.32	3^-			
		5168.8	89 *9*	1970.38	2^+			
		7138.8	<3.8	0.0	0^+			
7178.9	$(1,2)^+$	5208.1	49 *15*	1970.38	2^+			
		7178.1	100 *16*	0.0	0^+			
7247.4	$(1,2,3)^-$	3068.9	<5	4178.32	3^-			
		5276.6	100	1970.38	2^+			
		7246.6	<6	0.0	0^+			
7258.6	3^-	x	11					Additional information 4.
		3080.1	<13.3	4178.32	3^-			
		5287.8	100 *6*	1970.38	2^+	E1		B(E1)(W.u.)>0.00024
		7257.8	<16.7	0.0	0^+			
7336.6	3^+	1479.9	<7.4	5856.65	3^-			
		2362.5	<5.6	4974.05	2^-			
		2385.1	<9.3	4951.4	2^+			
		2896.4	100 *4*	4440.11	2^+			
		2922.1	20 *4*	4414.40	4^+	M1(+E2)	+0.02 *7*	B(M1)(W.u.)=(0.009 *5*); B(E2)(W.u.)=(0.0015 *+103−15*) δ: or −4.0 *9*.
		3007.4	<13	4329.1	$(0,1,2)^+$			
		3158.1	17 *4*	4178.32	3^-			
		5365.8	48 *6*	1970.38	2^+	M1+E2	+0.31 *10*	B(M1)(W.u.)=0.0030 *16*; B(E2)(W.u.)=0.04 *3* δ: or >+7.
		7335.8	<5.6	0.0	0^+			
7353.9	6^-	1497.2	<6	5856.65	3^-			
		1517.9	<4	5836.0	1^-			
		2182.7	100	5171.13	5^-	M1+E2	−6.0 *9*	B(M1)(W.u.)=0.00037 *14*; B(E2)(W.u.)=10.2 *24*
		2379.8	<4	4974.05	2^-			
		2402.4	<4	4951.4	2^+			
		2913.7	<3	4440.11	2^+			
		2939.4	<4	4414.40	4^+			
		3024.7	<8	4329.1	$(0,1,2)^+$			
		3175.4	<7	4178.32	3^-			
		5383.1	<5	1970.38	2^+			
		7353.1	<3	0.0	0^+			
7432.3	1^+	5461.5	54 *23*	1970.38	2^+			
		7431.5	100 *23*	0.0	0^+			
7573.1	4^-	1677.1	10.6 *21*	5895.92	4^-			
		1737.1	<4.3	5836.0	1^-			

$^{36}_{18}Ar_{18}$-12

Adopted Levels, Gammas (continued)

γ(^{36}Ar) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	δ[‡]	Comments
7573.1	4⁻	2401.9	100 *4*	5171.13	5⁻	M1+E2	−0.49 *4*	B(M1)(W.u.)=0.0036 *12*; B(E2)(W.u.)=0.55 *19* δ: or −1.68 *12*.
		2598.9	17.0 *21*	4974.05	2⁻	E2		B(E2)(W.u.)=0.33 *11*
		2621.6	<2.1	4951.4	2⁺			
		3132.8	<4.3	4440.11	2⁺			
		3158.6	11 *4*	4414.40	4⁺			
		3243.8	<4.3	4329.1	(0,1,2)⁺			
		3394.6	70 *6*	4178.32	3⁻	M1+E2	−0.07 *4*	B(M1)(W.u.)=0.0011 *4*; B(E2)(W.u.)=0.0017 *+21−17* δ: or −3.2 *5*.
		5602.3	4.3 *9*	1970.38	2⁺			
		7572.2	<2.1	0.0	0⁺			
7672.1	(3)⁻	2697.9	25 *9*	4974.05	2⁻			
		5701.2	100 *9*	1970.38	2⁺			
7710.3	1⁺	5739.4	100 *11*	1970.38	2⁺			
		7709.4	59 *11*	0.0	0⁺			
7749.7	2⁻	5778.8	100	1970.38	2⁺			
7767.0	6⁺	1629.8 *3*	100.0 *17*	6136.5	4⁺			E_γ,I_γ: from ^{24}Mg(^{20}Ne,2αγ).
		3352.5 *8*	42.9 *17*	4414.40	4⁺	E2		B(E2)(W.u.)=0.75 *12* E_γ,I_γ,Mult.: from ^{24}Mg(^{20}Ne,2αγ).
7879	(1,2)⁻	2043	100 *10*	5836.0	1⁻			
		2905	67 *10*	4974.05	2⁻			
7971.4	1⁺,2⁺	7970.5 *7*	100	0.0	0⁺			
8015.9	(3,4)⁻	2159.2	51 *7*	5856.65	3⁻			
		2844.6	40 *4*	5171.13	5⁻			
		3041.7	100 *9*	4974.05	2⁻			
		3575.6	<4.4	4440.11	2⁺			
		3601.3	4.4 *10*	4414.40	4⁺			
		3837.4	27 *4*	4178.32	3⁻			
		6045.0	<6.7	1970.38	2⁺			
		8014.9	<2.2	0.0	0⁺			
8131.9	1⁺	6161.0	67 *12*	1970.38	2⁺			
		8130.9	100 *12*	0.0	0⁺			
8288		2392	100	5895.92	4⁻			
8332.5	(3)⁻	x	100					Additional information 5.
		4153.9	43 *7*	4178.32	3⁻			
8472.0	(3⁻,4⁻,5⁻)	2254.6	13 *3*	6217.3	5⁻			
		2576.0	41 *6*	5895.92	4⁻			
		2615.2	66 *6*	5856.65	3⁻			
		2635.9	<6.3	5836.0	1⁻			
		3300.7	100 *6*	5171.13	5⁻			
		3497.8	<6.3	4974.05	2⁻			

$^{36}_{18}Ar_{18}$-13

Adopted Levels, Gammas (continued)

γ(^{36}Ar) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult.‡	Comments
8472.0	(3⁻,4⁻,5⁻)	3520.4	<6.3	4951.4	2⁺		
		4057.4	88 *6*	4414.40	4⁺		
		4293.4	6.3 *19*	4178.32	3⁻		
		6501.0	<3.1	1970.38	2⁺		
		8470.9	<3.1	0.0	0⁺		
8556.3	2⁺	6585.1 *5*	100	1970.38	2⁺		E_γ,I_γ: from ^{36}K ε decay.
8593		2376	100	6217.3	5⁻		E_γ,I_γ: from ^{33}S(α,nγ).
8739		3568	100	5171.13	5⁻		E_γ,I_γ: from ^{33}S(α,nγ).
8806.4	(0⁻,1,2,3⁻)	6835.3	100	1970.38	2⁺		
8909.1	2⁺	6938.0	100 *16*	1970.38	2⁺		E_γ,I_γ: from ^{32}S(α,γ):res.
		8907.9	61 *10*	0.0	0⁺	E2	E_γ,I_γ,Mult.: from ^{32}S(α,γ):res.
8921.6		3748	100	5171.13	5⁻		E_γ: from ^{33}S(α,nγ).
8938.8	(2⁺,3,4⁻)	1266.7	7.6 *4*	7672.1	(3)⁻		
		2102.2	15 *5*	6836.50	3⁻		
		3082.0	57 *8*	5856.65	3⁻		
		3964.5	5.9 *25*	4974.05	2⁻		
		4524.1	20 *6*	4414.40	4⁺		
		4609.4	<2.1	4329.1	(0,1,2)⁺		
		4760.1	100 *10*	4178.32	3⁻		
		6967.7	5.1 *21*	1970.38	2⁺		
		8937.6	<0.4	0.0	0⁺		
9014.9	(3⁻,4,5⁻)	3843.5	100	5171.13	5⁻		
		4600.2	<5	4414.40	4⁺		
		4685.5	<8	4329.1	(0,1,2)⁺		
		4836.2	<3	4178.32	3⁻		
		7043.8	<6	1970.38	2⁺		
		9013.7	<1.4	0.0	0⁺		
9024.8	2	2158.3	1	6866.9	(1⁺,2⁺)		
		4051.6	1	4974.05	2⁻		
		4610.6	<1	4414.40	4⁺		
		4695.9	<1	4329.1	(0,1,2)⁺		
		4846.6	8	4178.32	3⁻		
		7054.2	100	1970.38	2⁺		
		9024.1	1	0.0	0⁺		
9066.4	3⁻	1729.8	11	7336.6	3⁺		
		2229.8	43	6836.50	3⁻		
		3170.3	11	5895.92	4⁻		
		3209.6	100	5856.65	3⁻		
		3895.0	4	5171.13	5⁻		
		4092.1	18	4974.05	2⁻		
		4114.7	11	4951.4	2⁺		

$^{36}_{18}Ar_{18}$-14

Adopted Levels, Gammas (continued)

γ(^{36}Ar) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	Comments
9066.4	3^-	4626.0	29	4440.11	2^+		
		4651.7	207 *19*	4414.40	4^+		
		4737.0	<4	4329.1	$(0,1,2)^+$		
		4887.7	82	4178.32	3^-		
		7095.3	<4	1970.38	2^+		
		9065.2	<1	0.0	0^+		
9117.0	1^-	9116.8	100	0.0	0^+	E1	E_γ,I_γ,Mult.: from ^{32}S(α,γ):res.
9132.5	3^-	2295.9	13	6836.50	3^-		
		2521.4	4	6611.0	2^+		
		3236.4	7	5895.92	4^-		
		3275.5	17	5856.65	3^-		
		3296.3	2	5836.0	1^-		
		4158.2	9	4974.05	2^-		
		4717.8	4	4414.40	4^+		
		4803.1	<2	4329.1	$(0,1,2)^+$		
		4953.8	28	4178.32	3^-		
		7161.4	100	1970.38	2^+		
		9131.3	2	0.0	0^+		
9144.9	$(2^+,3^-)$	2308.3	6	6836.50	3^-		
		3308.7	22	5836.0	1^-		
		4170.6	3	4974.05	2^-		
		4704.5	97	4440.11	2^+		
		4730.2	6	4414.40	4^+		
		4815.5	<3	4329.1	$(0,1,2)^+$		
		4966.2	75	4178.32	3^-		
		7173.8	100	1970.38	2^+		
		9143.7	3	0.0	0^+		
9186	(6^+)	4015	100 *20*	5171.13	5^-		E_γ,I_γ: from ^{33}S(α,nγ).
		4771	100 *20*	4414.40	4^+		E_γ,I_γ: from ^{33}S(α,nγ).
9192.1	$(3^-,4^+)$	1520.0	11	7672.1	$(3)^-$		
		1855.4	100	7336.6	3^+		
		2355.5	53	6836.50	3^-		
		2468.0	26	6724	NOT $(2)^+$		
		2836.0	11	6356.0	4^+		
		2974.7	21	6217.3	5^-		
		3055.5	11	6136.5	4^+		
		3296.0	26	5895.92	4^-		
		3335.3	21	5856.65	3^-		
		4020.7	47	5171.13	5^-		
		4240.4	42	4951.4	2^+		
		4751.5	16	4440.11	2^+		

$^{36}_{18}Ar_{18}$-15

Adopted Levels, Gammas (continued)

$\gamma(^{36}Ar)$ (continued)

E_i(level)	J_i^π	E_γ†	I_γ†	E_f	J_f^π
9192.1	$(3^-,4^+)$	4777.4	100	4414.40	4^+
		4862.6	<5	4329.1	$(0,1,2)^+$
		5013.4	42	4178.32	3^-
		7220.9	<11	1970.38	2^+
		9190.8	<16	0.0	0^+
9220.2	1^+	3384.0	2	5836.0	1^-
		4245.9	6	4974.05	2^-
		4268.5	2	4951.4	2^+
		4779.7	22	4440.11	2^+
		4805.5	<2	4414.40	4^+
		4890.7	1	4329.1	$(0,1,2)^+$
		5041.5	<2	4178.32	3^-
		7249.0	100	1970.38	2^+
		9218.9	68	0.0	0^+
9240.5	2^-	1993.0	13	7247.4	$(1,2,3)^-$
		2103.9	11	7136.5	$(1^-,2^+)$
		2373.5	5	6866.9	$(1^+,2^+)$
		3404.3	14	5836.0	1^-
		4266.2	11	4974.05	2^-
		4288.8	14	4951.4	2^+
		4825.8	<2	4414.40	4^+
		4911.0	7	4329.1	$(0,1,2)^+$
		5061.8	4	4178.32	3^-
		7269.3	100	1970.38	2^+
		9239.2	<1	0.0	0^+
9248.4	$(1^-,2^-,3^-)$	2411.8	48	6836.50	3^-
		3391.6	12	5856.65	3^-
		3412.2	9	5836.0	1^-
		4274.1	9	4974.05	2^-
		4807.9	100	4440.11	2^+
		4833.7	<3	4414.40	4^+
		4918.9	<6	4329.1	$(0,1,2)^+$
		5069.7	33	4178.32	3^-
		7277.2	88	1970.38	2^+
		9247.1	3	0.0	0^+
9258.3	3^-	2423.1	11	6835.16	4^-
		2902.2	8	6356.0	4^+
		3362.2	19	5895.92	4^-
		3401.5	8	5856.65	3^-
		3422.1	6	5836.0	1^-
		4284.0	8	4974.05	2^-
		4306.6	6	4951.4	2^+

$^{36}_{18}Ar_{18}$-16

Adopted Levels, Gammas (continued)

γ(^{36}Ar) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	δ[‡]
9258.3	3⁻	4817.8	61	4440.11	2⁺		
		4843.6	33	4414.40	4⁺		
		4928.8	<3	4329.1	(0,1,2)⁺		
		5079.6	100	4178.32	3⁻		
		7287.1	17	1970.38	2⁺		
		9257.0	<3	0.0	0⁺		
9300.1	4⁻	1628.0	1	7672.1	(3)⁻		
		2041.4	6	7258.6	3⁻		
		2464.8	100	6835.16	4⁻	M1(+E2)	0.0 *2*
		3082.7	9	6217.3	5⁻		
		3404.0	28	5895.92	4⁻	M1(+E2)	−0.12 *17*
		3443.3	11	5856.65	3⁻	M1(+E2)	−0.01 *7*
		4128.7	30	5171.13	5⁻	M1(+E2)	+0.05 *+8−3*
		4885.3	13	4414.40	4⁺	E1(+M2)	−0.1 *2*
		5121.4	15	4178.32	3⁻	M1(+E2)	+0.02 *6*
		7328.9	1	1970.38	2⁺		
9342.5	3⁻	1769.4	2	7573.1	4⁻		
		2505.9	20	6836.50	3⁻	M1+E2	+0.09 *4*
		3446.4	8	5895.92	4⁻	M1(+E2)	−0.02 *3*
		3485	10	5856.65	3⁻	M1+E2	+0.10 *7*
		4368.2	19	4974.05	2⁻	M1+E2	−0.10 *2*
		4927.7	2	4414.40	4⁺		
		5013.0	<5	4329.1	(0,1,2)⁺		
		5163.8	100	4178.32	3⁻	M1(+E2)	+0.017 *17*
		7371.3	8	1970.38	2⁺	E1+M2	+0.11 *3*
		9341.2	<1	0.0	0⁺		
9356.0	2⁺	2019.3	9	7336.6	3⁺		
		4381.7	7	4974.05	2⁻		
		4404.3	10	4951.4	2⁺		
		4941.2	<3	4414.40	4⁺		
		5026.5	<3	4329.1	(0,1,2)⁺		
		5177.3	9	4178.32	3⁻		
		7384.8	12	1970.38	2⁺		
		9354.7	100	0.0	0⁺		
9365.9	1⁻	1486.9	3	7879	(1,2)⁻		
		2108.5	12	7258.6	3⁻		
		2229.3	21	7136.5	(1⁻,2⁺)		
		2754.8	25	6611.0	2⁺		
		3529.7	13	5836.0	1⁻		
		4171.2	1	5194.4	(0⁺,1⁺,2⁺,3⁻)		
		4414.2	2	4951.4	2⁺		
		4925.4	8	4440.11	2⁺		

$^{36}_{18}Ar_{18}$-17

Adopted Levels, Gammas (continued)

γ(^{36}Ar) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Comments
9365.9	1⁻	5036.4	2	4329.1	(0,1,2)⁺	
		5187.2	<2	4178.32	3⁻	
		7394.7	100	1970.38	2⁺	
		9364.6	13	0.0	0⁺	
9374.1	(1⁻,2⁻,3⁻)	2538.8	2	6835.16	4⁻	
		3537.9	3	5836.0	1⁻	
		4399.8	1	4974.05	2⁻	
		4933.6	1	4440.11	2⁺	
		4959.3	<1	4414.40	4⁺	
		5044.6	<1	4329.1	(0,1,2)⁺	
		5195.4	6	4178.32	3⁻	
		7402.9	100	1970.38	2⁺	
		9372.8	1	0.0	0⁺	
9379.9	(2⁺,3⁺,4⁺)	2240.2	3	7139.6	3⁺	
		2543.3	1	6836.50	3⁻	
		4939.4	31	4440.11	2⁺	
		4965.1	15	4414.40	4⁺	
		5050.4	<2	4329.1	(0,1,2)⁺	
		5201.2	3	4178.32	3⁻	
		7408.7	100	1970.38	2⁺	
		9378.6	<0.2	0.0	0⁺	
9393.4	(2⁺,3⁺,4⁺)	4441.7	3	4951.4	2⁺	
		4952.9	3	4440.11	2⁺	
		4978.6	5	4414.40	4⁺	
		5063.9	<1	4329.1	(0,1,2)⁺	
		5214.7	3	4178.32	3⁻	
		7422.2	100	1970.38	2⁺	
		9392.1	<1	0.0	0⁺	
9413.9		2060		7353.9	6⁻	E_γ: from ^{33}S(α,nγ).
9439.2	(2⁺,3⁺,4⁺)	4998.7	28	4440.11	2⁺	
		5024.4	21	4414.40	4⁺	
		5109.7	<4	4329.1	(0,1,2)⁺	
		5260.5	<6	4178.32	3⁻	
		7468.0	100	1970.38	2⁺	
		9437.9	<2	0.0	0⁺	
9448.1	1⁻,2⁺,3⁻	2611.5	13	6836.50	3⁻	
		4473.8	11	4974.05	2⁻	
		5033.3	6	4414.40	4⁺	
		5118.6	<4	4329.1	(0,1,2)⁺	
		5269.4	58	4178.32	3⁻	
		7476.9	100	1970.38	2⁺	
		9446.8	<2	0.0	0⁺	

$^{36}_{18}Ar_{18}$-18

Adopted Levels, Gammas (continued)

$\gamma(^{36}Ar)$ (continued)

E_i(level)	J^π_i	E_γ†	I_γ†	E_f	J^π_f
9465.9	$1^-,2^+$	1755.6	2	7710.3	1^+
		5025.4	3	4440.11	2^+
		5051.1	2	4414.40	4^+
		5136.4	6	4329.1	$(0,1,2)^+$
		5287.2	4	4178.32	3^-
		7494.7	100	1970.38	2^+
		9464.6	86	0.0	0^+
9474.0	(1,2)	1342.1	22	8131.9	1^+
		1763.7	27	7710.3	1^+
		4522.3	16	4951.4	2^+
		5033.5	81	4440.11	2^+
		5059.2	<5	4414.40	4^+
		5144.5	<11	4329.1	$(0,1,2)^+$
		5295.3	<8	4178.32	3^-
		7502.8	29	1970.38	2^+
		9472.7	100	0.0	0^+
9502.8	(2,3)	2166.1	14	7336.6	3^+
		2891.7	28	6611.0	2^+
		5062.3	25	4440.11	2^+
		5088.0	7	4414.40	4^+
		5173.3	<2	4329.1	$(0,1,2)^+$
		5324.1	<2	4178.32	3^-
		7531.6	100	1970.38	2^+
		9501.5	2	0.0	0^+
9509.6	$(2^+,3^+,4^+)$	5069.1	3	4440.11	2^+
		5094.8	5	4414.40	4^+
		5180.1	<2	4329.1	$(0,1,2)^+$
		5330.9	<3	4178.32	3^-
		7538.4	100	1970.38	2^+
		9508.3	<0.5	0.0	0^+
9542.0	$(1,2,3)^-$	2705.4	44	6836.50	3^-
		3705.8	16	5836.0	1^-
		4590.3	16	4951.4	2^+
		5101.5	22	4440.11	2^+
		5127.2	<2	4414.40	4^+
		5212.5	<4	4329.1	$(0,1,2)^+$
		5363.3	24	4178.32	3^-
		7570.8	100	1970.38	2^+
		9540.6	<1.	0.0	0^+
9550.3	$(0^+$ to $4^+)$	4575.9	1	4974.05	2^-
		5109.8	21	4440.11	2^+
		5135.5	<0.4	4414.40	4^+

$^{36}_{18}Ar_{18}$-19

Adopted Levels, Gammas (continued)

γ(^{36}Ar) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	δ[‡]
9550.3	$(0^+$ to $4^+)$	5220.8	<0.4	4329.1	$(0,1,2)^+$		
		5371.5	<1	4178.32	3^-		
		7579.1	100	1970.38	2^+		
		9548.9	<0.1	0.0	0^+		
9574.3	4^-	1558.4	2	8015.9	$(3,4)^-$		
		2001.1	36	7573.1	4^-	M1+E2	−0.08 *3*
		3356.8	4	6217.3	5^-	M1+E2	+0.03 *6*
		3678	28	5895.92	4^-	M1+E2	−0.06 *4*
		3717.4	6	5856.65	3^-	M1+E2	+0.05 *3*
		4402.9	100	5171.13	5^-	M1+E2	+0.05 *1*
		5159.6	<2	4414.40	4^+		
		5244.8	<2	4329.1	$(0,1,2)^+$		
		5395.5	24	4178.32	3^-	M1+E2	−0.03 *1*
		7603.1	<2	1970.38	2^+		
		9572.9	<0.2	0.0	0^+		
9595.4	2^+	2347.9	4	7247.4	$(1,2,3)^-$		
		2458.8	16	7136.5	$(1^-,2^+)$		
		3759.2	14	5836.0	1^-		
		4400.7	4	5194.4	$(0^+,1^+,2^+,3^-)$		
		5154.9	7	4440.11	2^+		
		5180.6	<2	4414.40	4^+		
		5265.9	<2	4329.1	$(0,1,2)^+$		
		5416.6	<4	4178.32	3^-		
		7624.2	100	1970.38	2^+		
		9594.0	34	0.0	0^+		
9606.8	$(0,1,2)^-$	1896.4	6	7710.3	1^+		
		3770.6	100	5836.0	1^-		
		5192.0	<3	4414.40	4^+		
		5277.3	<2	4329.1	$(0,1,2)^+$		
		5428.0	<2	4178.32	3^-		
		7635.6	<2	1970.38	2^+		
		9605.4	<0.5	0.0	0^+		
9667.1	3^-	3771.0	8	5895.92	4^-		
		4495.7	5	5171.13	5^-		
		5226.6	13	4440.11	2^+		
		5252.3	16	4414.40	4^+		
		5337.6	<3	4329.1	$(0,1,2)^+$		
		5488.3	17	4178.32	3^-		
		7695.8	100	1970.38	2^+		
		9665.7	<2	0.0	0^+		
9681.9	$4^+,6^+$	5267.1	100	4414.40	4^+	E2,M1+E2	
		5352.4	<2	4329.1	$(0,1,2)^+$		

$^{36}_{18}Ar_{18}$-20

Adopted Levels, Gammas (continued)

γ(^{36}Ar) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	δ[‡]
9681.9	$4^+,6^+$	5503.1	<3	4178.32	3^-		
		7710.6	<1	1970.38	2^+		
9734.3	$1^-,3^-,4^+$	3123.2		6611.0	2^+		
		5555.5		4178.32	3^-		
9737.5	3^-	1987.7	5	7749.7	2^-		
		2065.3	16	7672.1	$(3)^-$		
		2490.0	47	7247.4	$(1,2,3)^-$		
		2600.9	42	7136.5	$(1^-,2^+)$		
		2870.5	5	6866.9	$(1^+,2^+)$		
		2900.9	100	6836.50	3^-		
		3126.4	21	6611.0	2^+		
		3880.6	42	5856.65	3^-		
		3901.3	53	5836.0	1^-		
		4763.1	26	4974.05	2^-		
		4785.8	4	4951.4	2^+		
		5297.0	84	4440.11	2^+		
		5322.7	<5	4414.40	4^+		
		5408.0	<5	4329.1	$(0,1,2)^+$		
		5558.7	11	4178.32	3^-		
		7766.2	68	1970.38	2^+		
		9736.1	1	0.0	0^+		
9764.5	$(3^-,4^-,5^-)$	2505.8	5	7258.6	3^-		
		2927.9	49	6836.50	3^-		
		3907.6	11	5856.65	3^-		
		4593.1	100	5171.13	5^-		
		5349.7	95	4414.40	4^+		
		5435.0	<5	4329.1	$(0,1,2)^+$		
		5585.7	22	4178.32	3^-		
		7793.2	<3	1970.38	2^+		
9812.2	$(1,2,3^-)$	5371.7	100	4440.11	2^+		
		5397.4	<6	4414.40	4^+		
		5482.7	47	4329.1	$(0,1,2)^+$		
		5633.4	24	4178.32	3^-		
		7840.9	79	1970.38	2^+		
		9810.8	44	0.0	0^+		
9862.6	3^+	2525.9	100	7336.6	3^+	M1(+E2)	−0.07 *10*
		3251.4	24	6611.0	2^+		
		5422.1	94	4440.11	2^+	(M1+)E2	
		5447.8	<9	4414.40	4^+		
		5533.0	<9	4329.1	$(0,1,2)^+$		
		5683.8	24	4178.32	3^-	E1(+M2)	+1.0 *+16−7*
		7891.3	58	1970.38	2^+	M1+E2	>+8

$^{36}_{18}Ar_{18}$-21

Adopted Levels, Gammas (continued)

γ(^{36}Ar) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	Comments
9862.6	3^+	9861.1	3	0.0	0^+		
9878.6	$2^+,3^+$	2541.9	56	7336.6	3^+		
		3267.4	100	6611.0	2^+		
		4021.9	8	5856.65	3^-		
		5438.0	75	4440.11	2^+		
		5463.8	31	4414.40	4^+		
		5549.0	<1	4329.1	$(0,1,2)^+$		
		5699.8	8	4178.32	3^-		
		7907.3	<3	1970.38	2^+		
		9877.1	<1	0.0	0^+		
9889.3		2641.8	2	7247.4	$(1,2,3)^-$		
		3278.1	2	6611.0	2^+		
		3993.1	3	5895.92	4^-		
		4032.4	3	5856.65	3^-		
		4053.1	5	5836.0	1^-		
		4937.5	5	4951.4	2^+		
		5448.7	17	4440.11	2^+		
		5474.5	<2	4414.40	4^+		
		5559.7	<2	4329.1	$(0,1,2)^+$		
		5710.5	17	4178.32	3^-		
		7918.0	100	1970.38	2^+		
		9887.8	2	0.0	0^+		
9902.1	4^+	2229.9	8	7672.1	$(3)^-$		
		2565.4	14	7336.6	3^+		
		3065.5	30	6836.50	3^-		
		3684.6	5	6217.3	5^-		
		4730.6	16	5171.13	5^-		
		4950.3	24	4951.4	2^+		
		5461.5	19	4440.11	2^+		
		5487.3	8	4414.40	4^+		
		5572.5	<3	4329.1	$(0,1,2)^+$		
		5723.3	50	4178.32	3^-		
		7930.8	100	1970.38	2^+		
9927.0	8^+	2160.0 *3*	100	7767.0	6^+		E_γ,I_γ: from ^{24}Mg(^{20}Ne,2αγ).
9927.4	5^-	2668.7	8	7258.6	3^-		
		3090.8	10	6836.50	3^-		
		3709.9	2	6217.3	5^-		
		3790.7	5	6136.5	4^+	E1	
		4031.2	3	5895.92	4^-		
		4070.5	16	5856.65	3^-	E2	
		4755.9	15	5171.13	5^-		
		5511.5	100	4414.40	4^+	E1	

$^{36}_{18}Ar_{18}$-22

Adopted Levels, Gammas (continued)

γ(^{36}Ar) (continued)

E_i(level)	J_i^π	E_γ†	I_γ†	E_f	J_f^π
9927.4	5^-	5597.8	<2	4329.1	$(0,1,2)^+$
		5748.6	3	4178.32	3^-
		7956.1	<2	1970.38	2^+
9942.5	$(2,3^-)$	2605.8	5	7336.6	3^+
		2695.0	7	7247.4	$(1,2,3)^-$
		2805.9	4	7136.5	$(1^-,2^+)$
		3105.9	2	6836.50	3^-
		3331.3	36	6611.0	2^+
		4106.2	5	5836.0	1^-
		4968.1	11	4974.05	2^-
		4990.7	2	4951.4	2^+
		5501.9	5	4440.11	2^+
		5527.6	<2	4414.40	4^+
		5612.9	<2	4329.1	$(0,1,2)^+$
		5763.7	2	4178.32	3^-
		7971.5	100	1970.38	2^+
		9941.5	2	0.0	0^+
9956.9	$(1,2^+)$	2709.4	0.3	7247.4	$(1,2,3)^-$
		4120.6	2	5836.0	1^-
		4762.2	2	5194.4	$(0^+,1^+,2^+,3^-)$
		4982.5	3	4974.05	2^-
		5516.3	5	4440.11	2^+
		5542.0	<0.2	4414.40	4^+
		5627.3	0.2	4329.1	$(0,1,2)^+$
		5778.1	<0.5	4178.32	3^-
		7985.6	1	1970.38	2^+
		9955.4	100	0.0	0^+
9983.2	$1^+,(2^+)$	2735.7	0.6	7247.4	$(1,2,3)^-$
		4146.9	1	5836.0	1^-
		4788.5	2	5194.4	$(0^+,1^+,2^+,3^-)$
		5008.8	2	4974.05	2^-
		5542.6	6	4440.11	2^+
		5568.3	<0.1	4414.40	4^+
		5653.6	0.6	4329.1	$(0,1,2)^+$
		8011.9	4	1970.38	2^+
		9981.7	100	0.0	0^+
9992.9		1860.9	8	8131.9	1^+
		2419.7	5	7573.1	4^-
		3157.6	8	6835.16	4^-
		3775.4	10	6217.3	5^-
		4096.7	26	5895.92	4^-
		4136.0	3	5856.65	3^-
9992.9		4821.4	54	5171.13	5^-
		5018.5	5	4974.05	2^-
		5578.0	23	4414.40	4^+
		5663.3	<5	4329.1	$(0,1,2)^+$
		5814.1	100	4178.32	3^-
		8021.6	15	1970.38	2^+
10002.4	$(1^-,2,3)$	3391.2	16	6611.0	2^+
		5028.0	37	4974.05	2^-
		5561.8	25	4440.11	2^+
		5587.5	<8	4414.40	4^+
		5672.8	<8	4329.1	$(0,1,2)^+$
		5823.6	100	4178.32	3^-
		8031.6	<10	1970.38	2^+
		10000.9	18	0.0	0^+
10044.4	1^-	5629.5	<1	4414.40	4^+
		5714.8	<1	4329.1	$(0,1,2)^+$
		5865.6	<1	4178.32	3^-
		8073.1	<1	1970.38	2^+
		10042.9	100	0.0	0^+
10050.6	2^+	5610.0	11	4440.11	2^+
		5635.7	11	4414.40	4^+
		5871.8	63	4178.32	3^-
		8079.3	<7	1970.38	2^+
		10049.1	100	0.0	0^+
10076.7	$(1^-,2,3)$	5102.3	13	4974.05	2^-
		5636.1	19	4440.11	2^+
		5661.8	<4	4414.40	4^+
		5747.1	<4	4329.1	$(0,1,2)^+$
		5897.9	100	4178.32	3^-
		8105.3	56	1970.38	2^+
		10075.2	4	0.0	0^+
10094.9	2^+	2384.5	20	7710.3	1^+
		2758.2	20	7336.6	3^+
		4900.1	8	5194.4	$(0^+,1^+,2^+,3^-)$
		5120.5	6	4974.05	2^-
		5654.3	8	4440.11	2^+
		5680.0	<4	4414.40	4^+
		5765.3	2	4329.1	$(0,1,2)^+$
		5916.1	24	4178.32	3^-
		8123.5	12	1970.38	2^+
		10093.4	100	0.0	0^+
10099.4	1^-	3488.2	9	6611.0	2^+

$^{36}_{18}Ar_{18}$-23

Adopted Levels, Gammas (continued)

γ(^{36}Ar) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π
10099.4	1^-	5124.0	1	4974.05	2^-
		5658.8	7	4440.11	2^+
		5684.5	<1	4414.40	4^+
		5769.8	1	4329.1	$(0,1,2)^+$
		5920.6	<2	4178.32	3^-
		8128.0	4	1970.38	2^+
		10097.9	100	0.0	0^+
10139.5	$(2^+,3^-)$	2802.8	6	7336.6	3^+
		5187.7	17	4951.4	2^+
		5724.6	62	4414.40	4^+
		5809.9	<4	4329.1	$(0,1,2)^+$
		5960.7	100	4178.32	3^-
		8168.1	4	1970.38	2^+
		10138.0	4	0.0	0^+
10143.0	$(1^-,2)$	3006.4	7	7136.5	$(1^-,2^+)$
		5168.6	24	4974.05	2^-
		5191.2	5	4951.4	2^+
		5702.4	5	4440.11	2^+
		5728.1	2	4414.40	4^+
		5813.4	<2	4329.1	$(0,1,2)^+$
		5964.2	7	4178.32	3^-
		8171.6	88	1970.38	2^+
		10141.5	100	0.0	0^+
10149.6	$(3^-,4)$	2477.4	11	7672.1	$(3)^-$
		2576.4	11	7573.1	4^-
		2890.9	17	7258.6	3^-
		3009.7	44	7139.6	3^+
		3313.0	33	6836.50	3^-
		3314.3	72	6835.16	4^-
		3932.1	94	6217.3	5^-
		4253.4	6	5895.92	4^-
		4978.1	100	5171.13	5^-
		5734.7	67	4414.40	4^+
		5820.0	<11	4329.1	$(0,1,2)^+$
		5970.8	89	4178.32	3^-
		8178.2	<11	1970.38	2^+
		10148.1	11	0.0	0^+
10167.4	3^-	2495.2	18	7672.1	$(3)^-$
		4310.5	30	5856.65	3^-
		5193.0	8	4974.05	2^-
		5726.8	25	4440.11	2^+
		5752.5	100	4414.40	4^+

$^{36}_{18}Ar_{18}$-24

Adopted Levels, Gammas (continued)

γ(^{36}Ar) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	Comments
10167.4	3^-	5837.8	<5	4329.1	$(0,1,2)^+$		
		5988.6	32	4178.32	3^-		
		8196.0	25	1970.38	2^+		
		10165.9	13	0.0	0^+		
10173.4	$(1^-,2^+)$	2294.3	1	7879	$(1,2)^-$		
		3562.2	1	6611.0	2^+		
		5732.8	2	4440.11	2^+		
		5758.5	<1	4414.40	4^+		
		5843.8	1	4329.1	$(0,1,2)^+$		
		5994.5	<1	4178.32	3^-		
		8202.0	10	1970.38	2^+		
		10171.9	100	0.0	0^+		
10186	1^-	10184	100	0.0	0^+	E1	E_γ,I_γ,Mult.: from ^{32}S(α,γ):res.
10193.6	$(3^-,4,5,6^+)$	5022.1	15	5171.13	5^-		
		5778.7	100	4414.40	4^+		
		5864.0	<7	4329.1	$(0,1,2)^+$		
		6014.7	<5	4178.32	3^-		
10217	2^+	10215		0.0	0^+	E2	Mult.: from ^{32}S(α,γ):res.
10220.3	$4^{(-)}$	3080.6	20	7139.6	3^+	(E1)	
		3574.5	4	6645.6	$(2^+,3^+,4^+)$		
		3864.1	7	6356.0	4^+		
		5805.4	100	4414.40	4^+		
		5890.7	<1	4329.1	$(0,1,2)^+$		
		6041.4	3	4178.32	3^-		
		8248.9	1	1970.38	2^+		
		10218.7	<0.1	0.0	0^+		
10256.0	$(3^-,4)$	2240.0	15	8015.9	$(3,4)^-$		
		2583.8	15	7672.1	$(3)^-$		
		2682.8	7	7573.1	4^-		
		2902.0	7	7353.9	6^-		
		2919.3	15	7336.6	3^+		
		3420.7	63	6835.16	4^-		
		3531.8	7	6724	NOT $(2)^+$		
		4038.5	56	6217.3	5^-		
		5084.5	100	5171.13	5^-		
		5841.1	33	4414.40	4^+		
		5926.4	<7	4329.1	$(0,1,2)^+$		
		6077.1	52	4178.32	3^-		
		8284.6	<7	1970.38	2^+		
		10254.4	<4	0.0	0^+		
10257.5	$(3^-,4^+)$	5086.0	7	5171.13	5^-		

$^{36}_{18}Ar_{18}$-25

Adopted Levels, Gammas (continued)

$\gamma(^{36}Ar)$ (continued)

E_i(level)	J^{π}_i	E_{γ} †	I_{γ} †	E_f	J^{π}_f
10257.5	$(3^-,4^+)$	5842.6	100	4414.40	4^+
		5927.9	<3	4329.1	$(0,1,2)^+$
		6078.6	<5	4178.32	3^-
		8286.1	3	1970.38	2^+
		10255.9	<1	0.0	0^+
10267.3	1^-	3400.2	4	6866.9	$(1^+,2^+)$
		4410.4	2	5856.65	3^-
		5072.5	4	5194.4	$(0^+,1^+,2^+,3^-)$
		5826	8	4440.11	2^+
		5852.4	<2	4414.40	4^+
		5937.7	8	4329.1	$(0,1,2)^+$
		6088.4	<4	4178.32	3^-
		8295.9	100	1970.38	2^+
		10265.7	64	0.0	0^+
10271.7	$(3^-,4^-,5^-)$	2254.7	29	8015.9	$(3,4)^-$
		2599.5	21	7672.1	$(3)^-$
		3436.4	92	6835.16	4^-
		4054.2	54	6217.3	5^-
		4414.8	25	5856.65	3^-
		5100.2	100	5171.13	5^-
		5856.8	13	4414.40	4^+
		5942.1	<4	4329.1	$(0,1,2)^+$
		6092.8	83	4178.32	3^-
10281.1	3^-	2944.4	41	7336.6	3^+
		3669.9	100	6611.0	2^+
		5109.6	50	5171.13	5^-
		5306.6	77	4974.05	2^-
		5329.3	95	4951.4	2^+
		5840.5	50	4440.11	2^+
		5866.2	23	4414.40	4^+
		5951.5	<14	4329.1	$(0,1,2)^+$
		6102.2	18	4178.32	3^-
		8309.7	<9	1970.38	2^+
		10279.5	<5	0.0	0^+
10301.5	4^+	2964.8	3	7336.6	3^+
		3464.8	1	6836.50	3^-
		4164.7	0.7	6136.5	4^+
		5860.9	14	4440.11	2^+
		5886.6	13	4414.40	4^+
		5971.9	<1	4329.1	$(0,1,2)^+$
		6122.6	7	4178.32	3^-
		8330.1	100	1970.38	2^+

$^{36}_{18}Ar_{18}$-26

Adopted Levels, Gammas (continued)

γ(^{36}Ar) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	Comments
10301.5	4^+	10299.9	<0.4	0.0	0^+		
10308.7	$(2,3)^-$	2972.0	11	7336.6	3^+		
		3050.0	5	7258.6	3^-		
		4412.5	9	5895.92	4^-		
		5868.1	48	4440.11	2^+		
		5893.8	<7	4414.40	4^+		
		5979.1	<10	4329.1	$(0,1,2)^+$		
		6129.8	41	4178.32	3^-		
		8337.3	100	1970.38	2^+		
10319.5	2^+	4462.6	6	5856.65	3^-		
		5345.0	6	4974.05	2^-		
		5878.9	3	4440.11	2^+		
		5904.6	<1	4414.40	4^+		
		5989.9	<1	4329.1	$(0,1,2)^+$		
		6140.6	1	4178.32	3^-		
		8348.1	27	1970.38	2^+		
		10317.9	100	0.0	0^+		
10328	2^+	8356.6	35 *20*	1970.38	2^+	M1	E_γ,I_γ,Mult.: from ^{32}S(α,γ):res.
		10326	100	0.0	0^+	E2	E_γ,I_γ,Mult.: from ^{32}S(α,γ):res.
10329.0	$(3^-,4^-,5^-)$	3070.3	23	7258.6	3^-		
		3492.3	38	6836.50	3^-		
		4432.8	19	5895.92	4^-		
		5157.5	9	5171.13	5^-		
		5914.1	100	4414.40	4^+		
		5999.4	<4	4329.1	$(0,1,2)^+$		
		6150.1	<6	4178.32	3^-		
		8357.6	<4	1970.38	2^+		
10420.8	3^-	2671.0	5	7749.7	2^-		
		3162.1	9	7258.6	3^-		
		3173.3	5	7247.4	$(1,2,3)^-$		
		3584.1	14	6836.50	3^-		
		4525.6	7	5895.92	4^-		
		4563.8	32	5856.65	3^-		
		5446.3	2	4974.05	2^-		
		5980.2	2	4440.11	2^+		
		6005.9	18	4414.40	4^+		
		6091.2	<2	4329.1	$(0,1,2)^+$		
		6241.9	100	4178.32	3^-		
		8449.4	34	1970.38	2^+		
10435.0	$(1,2,3^-)$	3098.3	17	7336.6	3^+		
		4598.7	8	5836.0	1^-		

$^{36}_{18}Ar_{18}$-27

Adopted Levels, Gammas (continued)

γ(^{36}Ar) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	Comments
10435.0	(1,2,3$^-$)	5994.4	17	4440.11	2$^+$		
		6020.1	<2	4414.40	4$^+$		
		6256.1	17	4178.32	3$^-$		
		8463.6	50	1970.38	2$^+$		
		10433.4	100	0.0	0$^+$		
10488.1	3$^-$	6310.1	70 *40*	4178.32	3$^-$	M1	E_γ,I_γ,Mult.: from ^{32}S(α,γ):res.
		8517.5	100	1970.38	2$^+$	E1	E_γ,I_γ,Mult.: from ^{32}S(α,γ):res.
		10487		0.0	0$^+$		E_γ: from ^{32}S(α,γ):res.
10500.2	(1,2,3)$^-$	3241.4	31	7258.6	3$^-$		
		3252.6	31	7247.4	(1,2,3)$^-$		
		3663.5	19	6836.50	3$^-$		
		3889.0	31	6611.0	2$^+$		
		4663.9	46	5836.0	1$^-$		
		5525.7	42	4974.05	2$^-$		
		6085.3	<8	4414.40	4$^+$		
		6170.5	<12	4329.1	(0,1,2)$^+$		
		6321.3	100	4178.32	3$^-$		
		8528.7	77	1970.38	2$^+$		
		10498.6	8	0.0	0$^+$		
10539.6	3$^-$	4703.3	3	5836.0	1$^-$		
		5565.1	4	4974.05	2$^-$		
		6098.9	15	4440.11	2$^+$		
		6210.0	<3	4329.1	(0,1,2)$^+$		
		6360.7	<4	4178.32	3$^-$		
		8568.1	100	1970.38	2$^+$		
		10537.9	6	0.0	0$^+$		
10562.1	3$^-$	2988.9	35	7573.1	4$^-$		
		3225.3	23	7336.6	3$^+$		
		3303.3	12	7258.6	3$^-$		
		3314.5	12	7247.4	(1,2,3)$^-$		
		3726.7	38	6835.16	4$^-$		
		3950.9	15	6611.0	2$^+$		
		4344.5	19	6217.3	5$^-$		
		4705.1	12	5856.65	3$^-$		
		5587.6	100	4974.05	2$^-$		
		6232.4	<8	4329.1	(0,1,2)$^+$		
		6383.2	77	4178.32	3$^-$		
		8590.6	20	1970.38	2$^+$		
		10560.4	4	0.0	0$^+$		
10582.9	5$^-$	2566.9	5	8015.9	(3,4)$^-$		
		2910.7	4	7672.1	(3)$^-$		

$^{36}_{18}Ar_{18}$-28

Adopted Levels, Gammas (continued)

γ(^{36}Ar) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	δ[‡]	Comments
10582.9	5⁻	3228.8	35	7353.9	6⁻			
		3324.1	2	7258.6	3⁻			
		4365.3	100	6217.3	5⁻			
		4686.7	5	5895.92	4⁻			
		5411.3	12	5171.13	5⁻			
		5608.4	1	4974.05	2⁻			
		6167.9	<2	4414.40	4⁺			
		6253.2	<2	4329.1	(0,1,2)⁺			
		6404.0	11	4178.32	3⁻			
		8611.4	1	1970.38	2⁺			
10596	3⁻	8624.5	100	1970.38	2⁺	E1		E_γ,I_γ,Mult.: from ^{32}S(α,γ):res.
		10594	<6	0.0	0⁺			E_γ,I_γ: from ^{32}S(α,γ):res.
10615.6	4⁻	3042.4	50	7573.1	4⁻	M1+E2	+0.18 *+12−44*	
		3278.8	6	7336.6	3⁺			
		3356.8	9	7258.6	3⁻	M1		
		3780.2	100	6835.16	4⁻	M1		
		4398.0	43	6217.3	5⁻	M1+E2	−0.19 *6*	
		4719.4	38	5895.92	4⁻	M1(+E2)	+0.11 *+10−38*	
		4758.5	34	5856.65	3⁻	M1		
		6200.6	25	4414.40	4⁺			
		6285.9	<3	4329.1	(0,1,2)⁺			
		6436.7	<3	4178.32	3⁻			
		8644.1	6	1970.38	2⁺			
		10613.9	<0.6	0.0	0⁺			
10635.7	1⁻	3376.9	6	7258.6	3⁻			
		4799.4	4	5836.0	1⁻			
		5661.2	4	4974.05	2⁻			
		6195.0	10	4440.11	2⁺			
		6220.7	<1	4414.40	4⁺			
		6306.0	<1	4329.1	(0,1,2)⁺			
		6456.8	3	4178.32	3⁻			
		8664.2	100	1970.38	2⁺			
		10634.0	0.6	0.0	0⁺			
10650.6	1⁻	8679.1	<16	1970.38	2⁺			E_γ,I_γ: from ^{32}S(α,γ):res.
		10648.6	100	0.0	0⁺	E1		E_γ,I_γ,Mult.: from ^{32}S(α,γ):res.
10675.9	5	3321.8	30	7353.9	6⁻	D(+Q)	+0.04 *4*	
		4319.6	13	6356.0	4⁺	D+Q	−0.07 *4*	
		4458.3	100	6217.3	5⁻	D(+Q)	−0.04 *8*	
		4779.6	15	5895.92	4⁻			
		5504.3	8	5171.13	5⁻	D(+Q)	−0.03 *17*	
		6260.9	<7	4414.40	4⁺			

$^{36}_{18}Ar_{18}$-29

Adopted Levels, Gammas (continued)

γ(^{36}Ar) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	δ[‡]	Comments
10675.9	5	6346.2	<5	4329.1	$(0,1,2)^+$			
		6497.0	<5	4178.32	3^-			
		10674.2	<2	0.0	0^+			
10700.4	2^+	3267.9	7	7432.3	1^+			
		3452.8	5	7247.4	$(1,2,3)^-$			
		3521.3	37	7178.9	$(1,2)^+$			
		3833.3	5	6866.9	$(1^+,2^+)$			
		4089.2	1	6611.0	2^+			
		4864.1	7	5836.0	1^-			
		5725.9	7	4974.05	2^-			
		5748.5	36	4951.4	2^+			
		6259.7	11	4440.11	2^+			
		6285.4	<1	4414.40	4^+			
		6370.7	1	4329.1	$(0,1,2)^+$			
		6521.5	100	4178.32	3^-	E1		
		8728.9	27	1970.38	2^+	M1+E2	+0.18 *11*	
		10698.7	14	0.0	0^+	E2		
10790.1	2^+	8818.6	100	1970.38	2^+	M1		E_γ,I_γ,Mult.: from ^{32}S(α,γ):res.
		10788.1	<7	0.0	0^+			E_γ,I_γ: from ^{32}S(α,γ):res.
10808.9	$(1^-,2,3^-)$	2676.9	5	8131.9	1^+			
		3235.6	7	7573.1	4^-			
		3454.8	7	7353.9	6^-			
		3550.1	3	7258.6	3^-			
		3972.2	2	6836.50	3^-			
		4452.6	2	6356.0	4^+			
		4591.3	3	6217.3	5^-			
		4912.6	3	5895.92	4^-			
		4951.9	3	5856.65	3^-			
		5637.3	2	5171.13	5^-			
		5834.3	13	4974.05	2^-			
		6393.9	100	4414.40	4^+			
		6479.2	<2	4329.1	$(0,1,2)^+$			
		6629.9	3	4178.32	3^-			
		8837.4	3	1970.38	2^+			
		10807.2	7	0.0	0^+			
10823.4		4605.8	100	6217.3	5^-			
10832.3	$(1^-,3^-,4^+)$	8860.8	100	1970.38	2^+			
10845.7		4489.4	100	6356.0	4^+			
		4628.1	72	6217.3	5^-			
10852.0	2^+	8880.4	100	1970.38	2^+			
10853.8	0^+	2721.8	100 *23*	8131.9	1^+			

$^{36}_{18}Ar_{18}$-30

Adopted Levels, Gammas (continued)

γ(^{36}Ar) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	Comments
10853.8	0^+	3143.4	54 *23*	7710.3	1^+		
10854	3^-	8882.4	100	1970.38	2^+	E1	E_γ,I_γ,Mult.: from ^{32}S(α,γ):res.
		10852	<20	0.0	0^+		E_γ,I_γ: from ^{32}S(α,γ):res.
10906.0	(2^+ to 5^-)	2890.0	100	8015.9	$(3,4)^-$		
		3233.7	24	7672.1	$(3)^-$		
		3332.7	81	7573.1	4^-		
		3647.2	24	7258.6	3^-		
		3658.4	5	7247.4	$(1,2,3)^-$		
		4069.3	14	6835.16	4^-		
		4688.4	100	6217.3	5^-		
		5009.7	57	5895.92	4^-		
		5049.0	38	5856.65	3^-		
		5734.4	14	5171.13	5^-		
		6491.0	<5	4414.40	4^+		
		6576.3	<5	4329.1	$(0,1,2)^+$		
		6727.0	14	4178.32	3^-		
		8934.4	5	1970.38	2^+		
		10904.2	<1	0.0	0^+		
10955.7	(2^+ to 5^-)	2939.7		8015.9	$(3,4)^-$		
		3696.9	10	7258.6	3^-		
		3708.1[#]	10[#]	7247.4	$(1,2,3)^-$		
		4119.0	17	6836.50	3^-		
		4344.2	21	6611.0	2^+		
		5059.4	7	5895.92	4^-		
		5784.1	10	5171.13	5^-		
		6515.0	36	4440.11	2^+		
		6540.7	21	4414.40	4^+		
		6776.7	100	4178.32	3^-		
		8984.1	10	1970.38	2^+		
10968.1	1,2	5993.5	13	4974.05	2^-		
		6553.1	<1	4414.40	4^+		
		6789.1	4	4178.32	3^-		
		8996.5	24	1970.38	2^+		
		10966.3	100	0.0	0^+		
11027.7	(1^- to 5^-)	4671.4	11	6356.0	4^+		
		6586.9	6	4440.11	2^+		
		6612.7	96	4414.40	4^+		
		6697.9	<4	4329.1	$(0,1,2)^+$		
		6848.7	<4	4178.32	3^-		
		9056.1	100	1970.38	2^+		
		11025.9	<0.6	0.0	0^+		

$^{36}_{18}Ar_{18}$-31

Adopted Levels, Gammas (continued)

γ(^{36}Ar) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	Comments
11040	2^+	9068.4	100	1970.38	2^+	M1	E_γ,I_γ,Mult.: from ^{32}S(α,γ):res.
		11038	<7	0.0	0^+		E_γ,I_γ: from ^{32}S(α,γ):res.
11149.4	(1,2,3$^-$)	5313.0	1	5836.0	1^-		
		5954.5	6	5194.4	(0^+,1^+,2^+,3^-)		
		6708.6	2	4440.11	2^+		
		6734.3	<1	4414.40	4^+		
		6819.6	1	4329.1	$(0,1,2)^+$		
		6970.4	0.3	4178.32	3^-		
		9177.8	10	1970.38	2^+		
		11147.5	100	0.0	0^+		
11182.3	(3^+ to 6^-)	2710.2	100	8472.0	(3^-,4^-,5^-)		
		2849.7	21	8332.5	$(3)^-$		
		3828.2	33	7353.9	6^-		
		4346.9	33	6836.50	3^-		
		4964.6	14	6217.3	5^-		
		6010.6	2	5171.13	5^-		
		6767.2	30	4414.40	4^+		
		6852.5	<2	4329.1	$(0,1,2)^+$		
		7003.3	<2	4178.32	3^-		
11336.4	2^+	3982.3	43	7353.9	6^-		
		4199.6	22	7136.5	(1^-,2^+)		
		4499.6	17	6836.50	3^-		
		5118.7	17	6217.3	5^-		
		5440.0	96	5895.92	4^-		
		6164.7	4	5171.13	5^-		
		6361.8	13	4974.05	2^-		
		6384.4	17	4951.4	2^+		
		6895.6	22	4440.11	2^+		
		6921.3	100	4414.40	4^+		
		7006.6	<4	4329.1	$(0,1,2)^+$		
		7157.3	4	4178.32	3^-		
		9364.7	65	1970.38	2^+		
		11334.5	<4	0.0	0^+		
11419.1		11419.1	100	0.0	0^+		
11902.1	10^+	1974.8 *10*	100	9927.0	8^+		E_γ,I_γ: from ^{24}Mg(^{20}Ne,2$\alpha\gamma$).
12748.5	10^+	2821.4 *4*	100	9927.0	8^+		E_γ,I_γ: from ^{24}Mg(^{20}Ne,2$\alpha\gamma$).
15350.8	12^+	2602.2 *4*	100.0 *15*	12748.5	10^+		E_γ,I_γ: from ^{24}Mg(^{20}Ne,2$\alpha\gamma$).
		3448.4 *10*	22.4 *15*	11902.1	10^+		E_γ,I_γ: from ^{24}Mg(^{20}Ne,2$\alpha\gamma$).
18298.6	14^+	2947.7 *5*	100	15350.8	12^+		E_γ,I_γ: from ^{24}Mg(^{20}Ne,2$\alpha\gamma$).
22365.3	16^+	4066.4 *12*	100	18298.6	14^+		E_γ,I_γ: from ^{24}Mg(^{20}Ne,2$\alpha\gamma$).

$^{36}_{18}Ar_{18}$-32

Adopted Levels, Gammas (continued)

$\gamma(^{36}Ar)$ (continued)

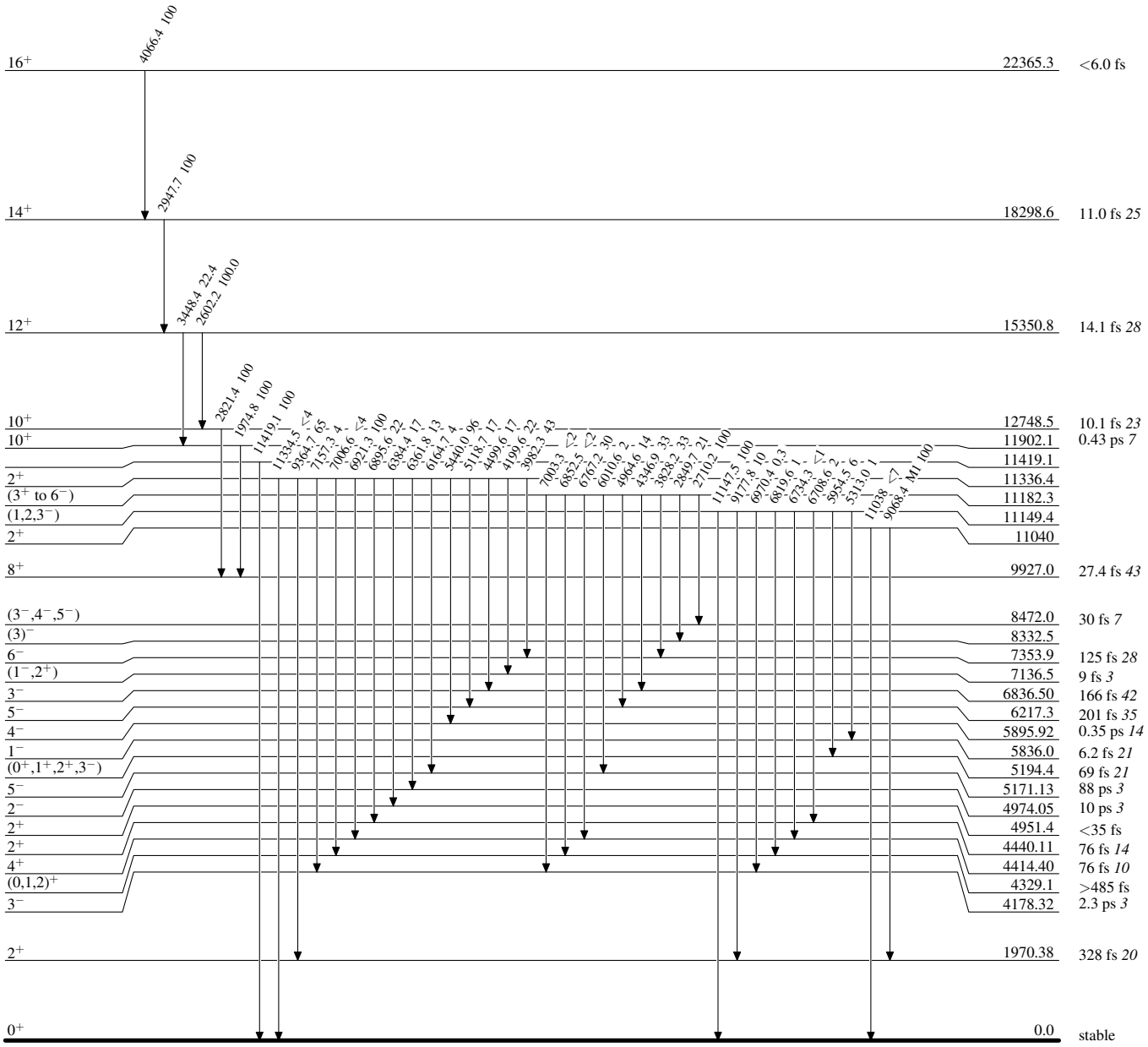
† From $^{35}Cl(p,\gamma)$:res, unless noted otherwise.
‡ From $^{35}Cl(p,\gamma)$:res by angular correlations and polarization measurements, unless noted otherwise.
# Multiply placed with undivided intensity.

$^{36}_{18}Ar_{18}$-33

Adopted Levels, Gammas

Level Scheme

Intensities: Relative photon branching from each level

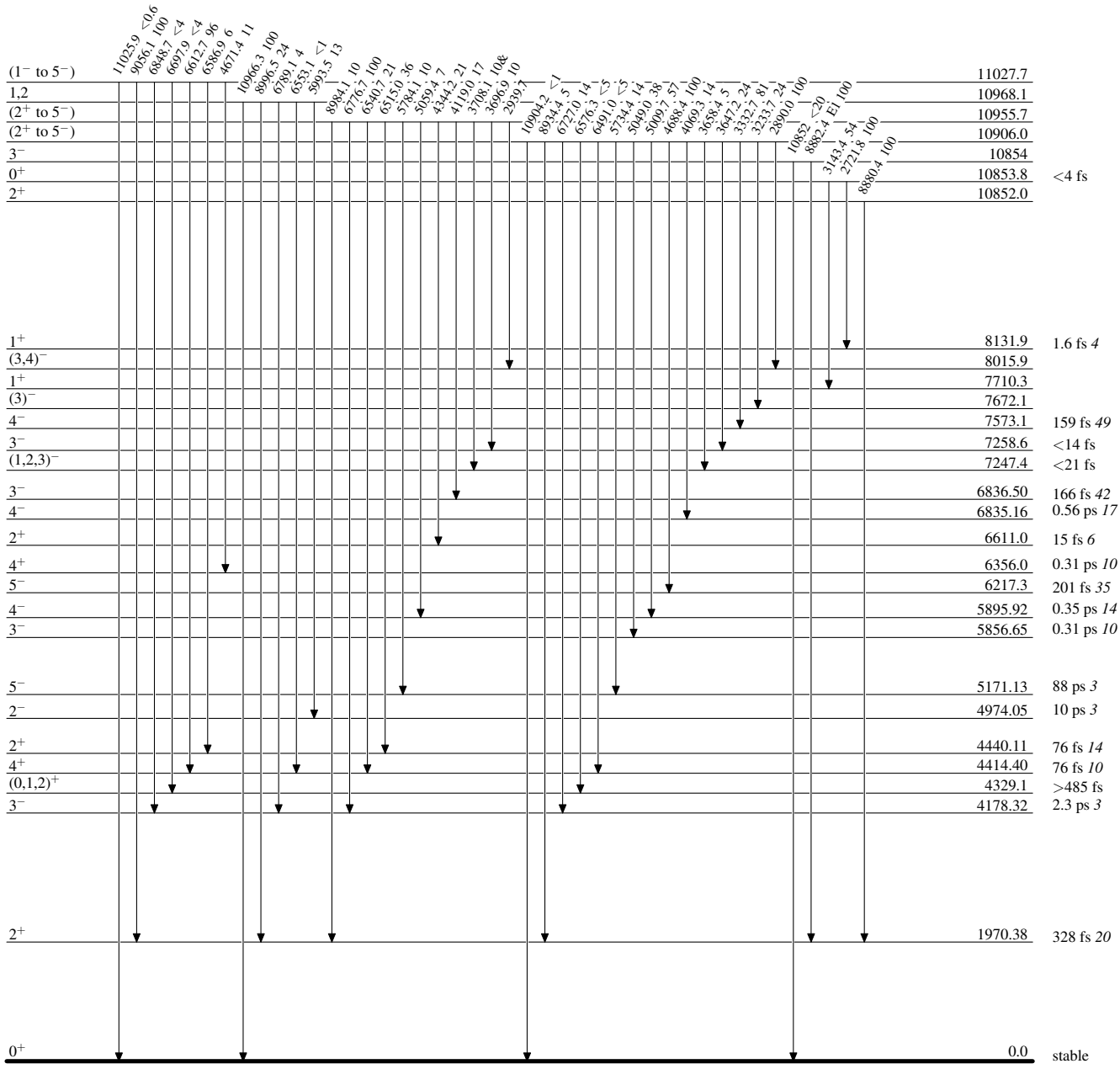


$^{36}_{18}Ar_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given

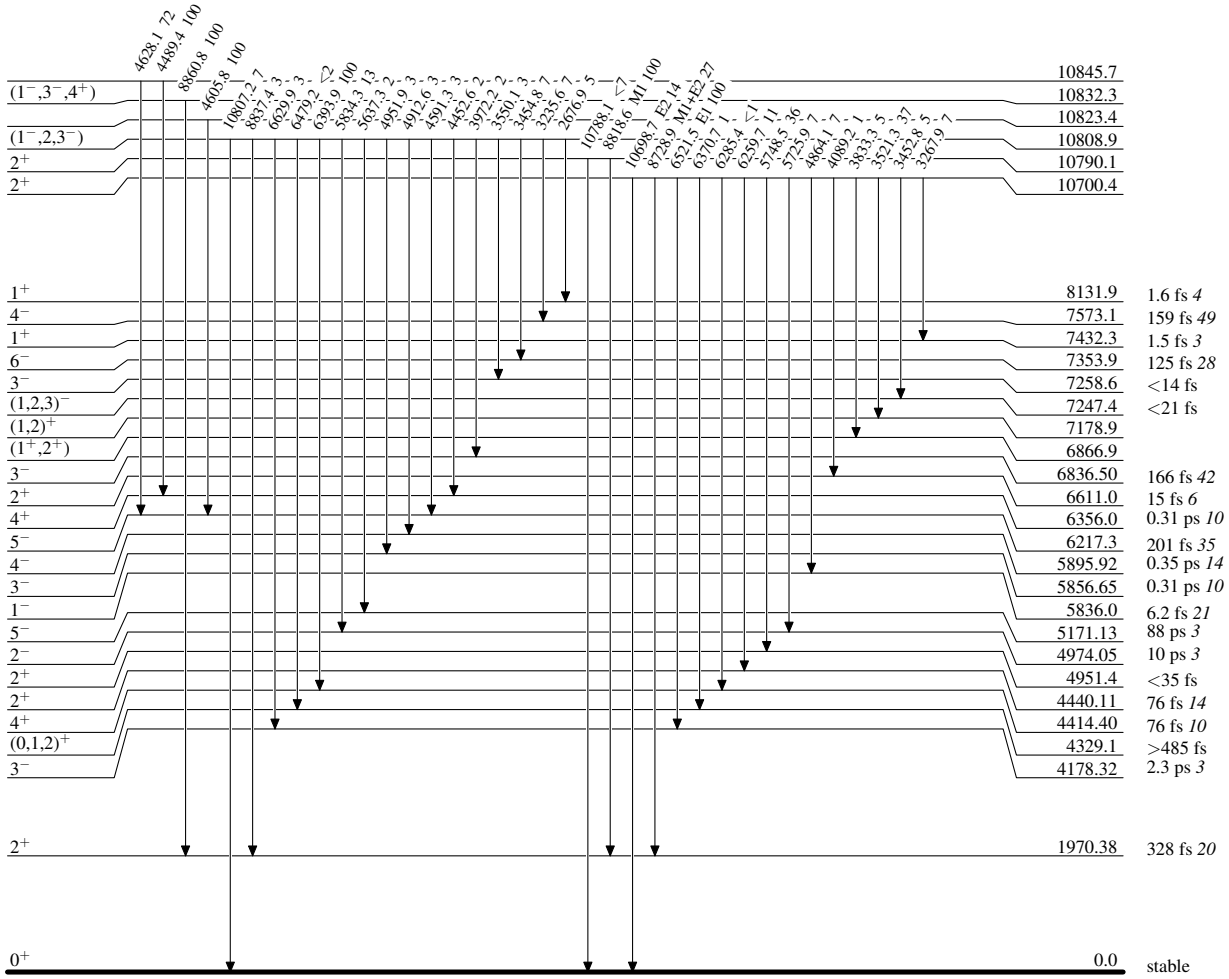


$^{36}_{18}Ar_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given

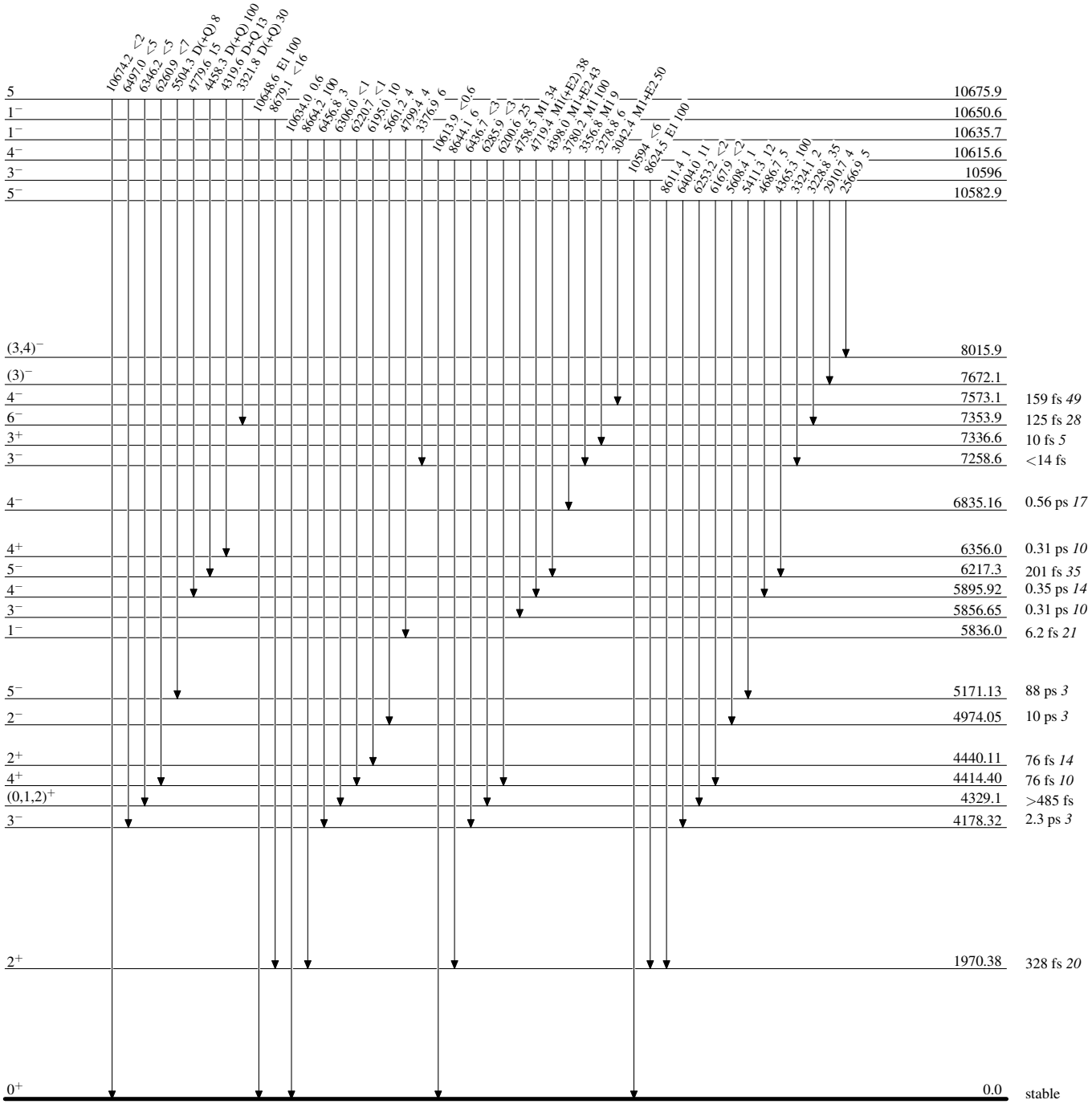


$^{36}_{18}Ar_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given

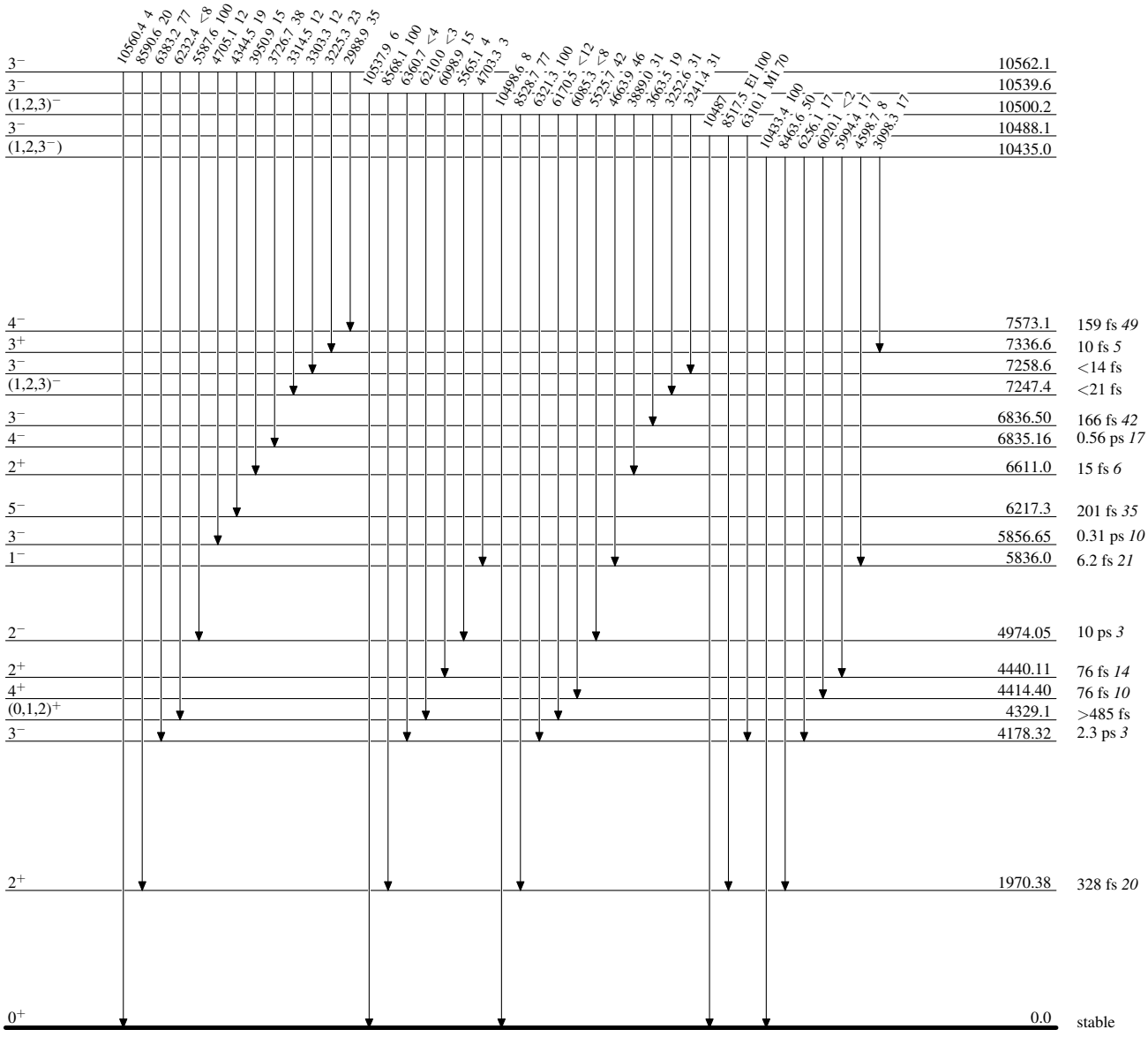


$^{36}_{18}Ar_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given

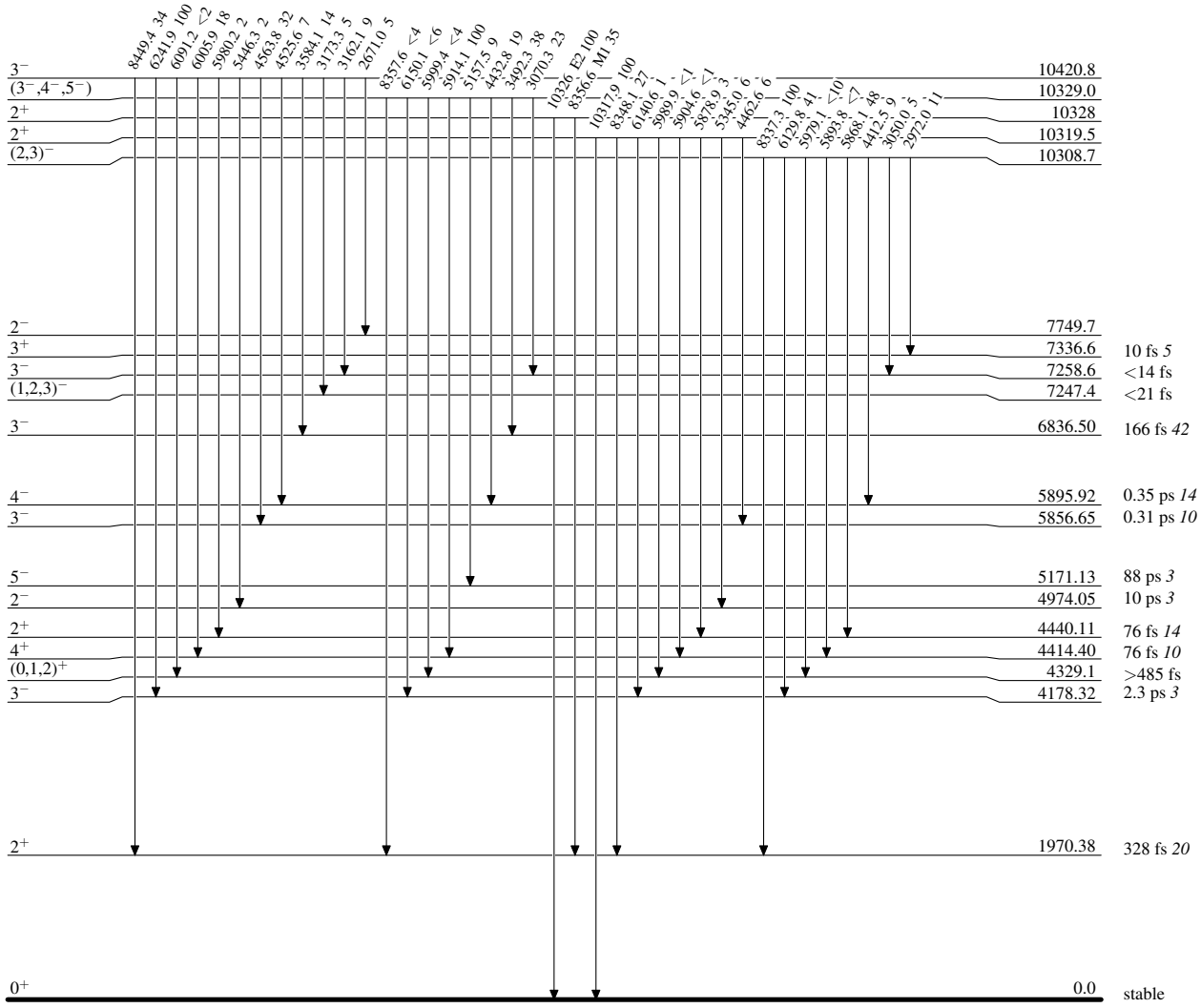


$^{36}_{18}Ar_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given

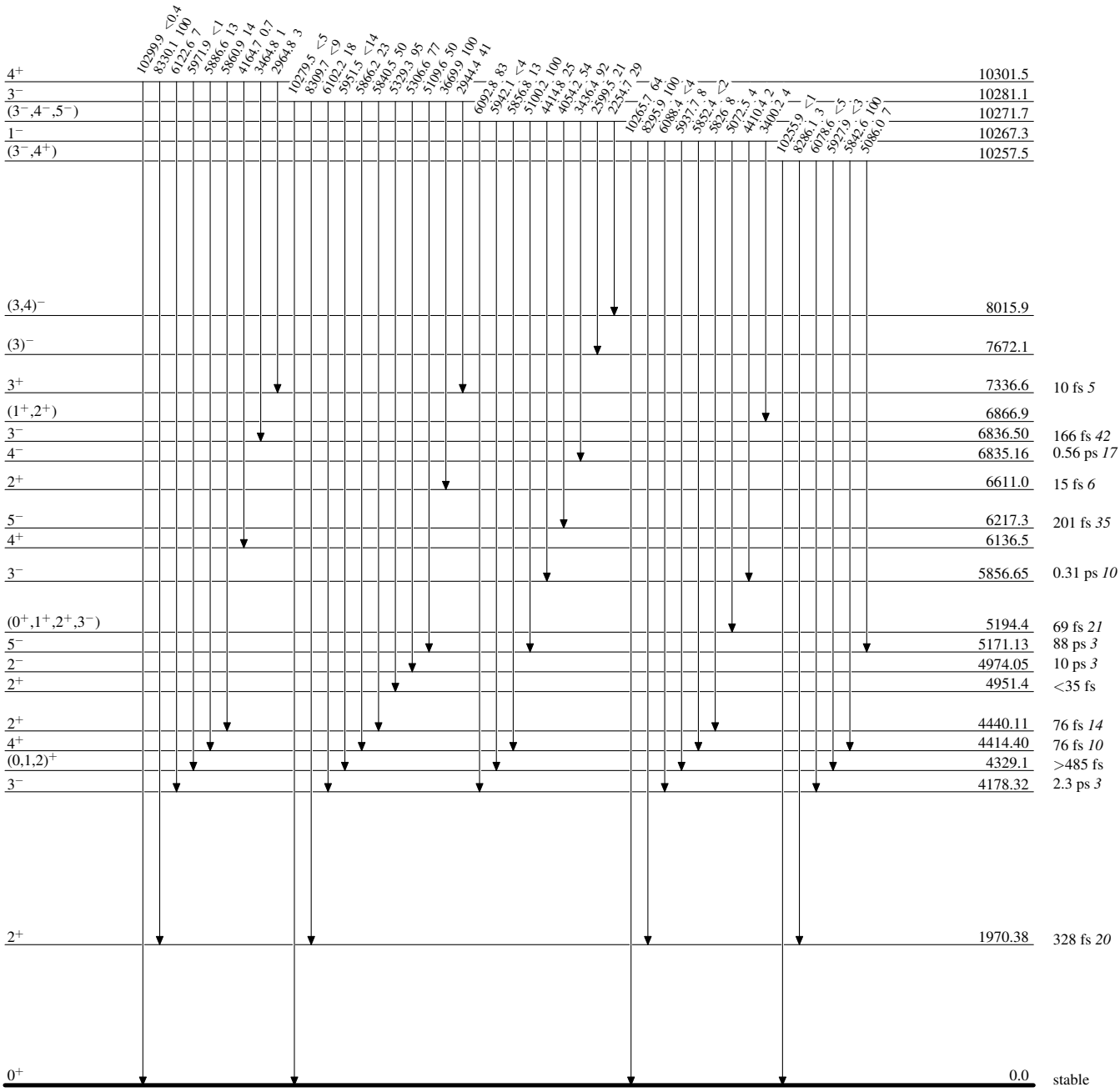


$^{36}_{18}Ar_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given

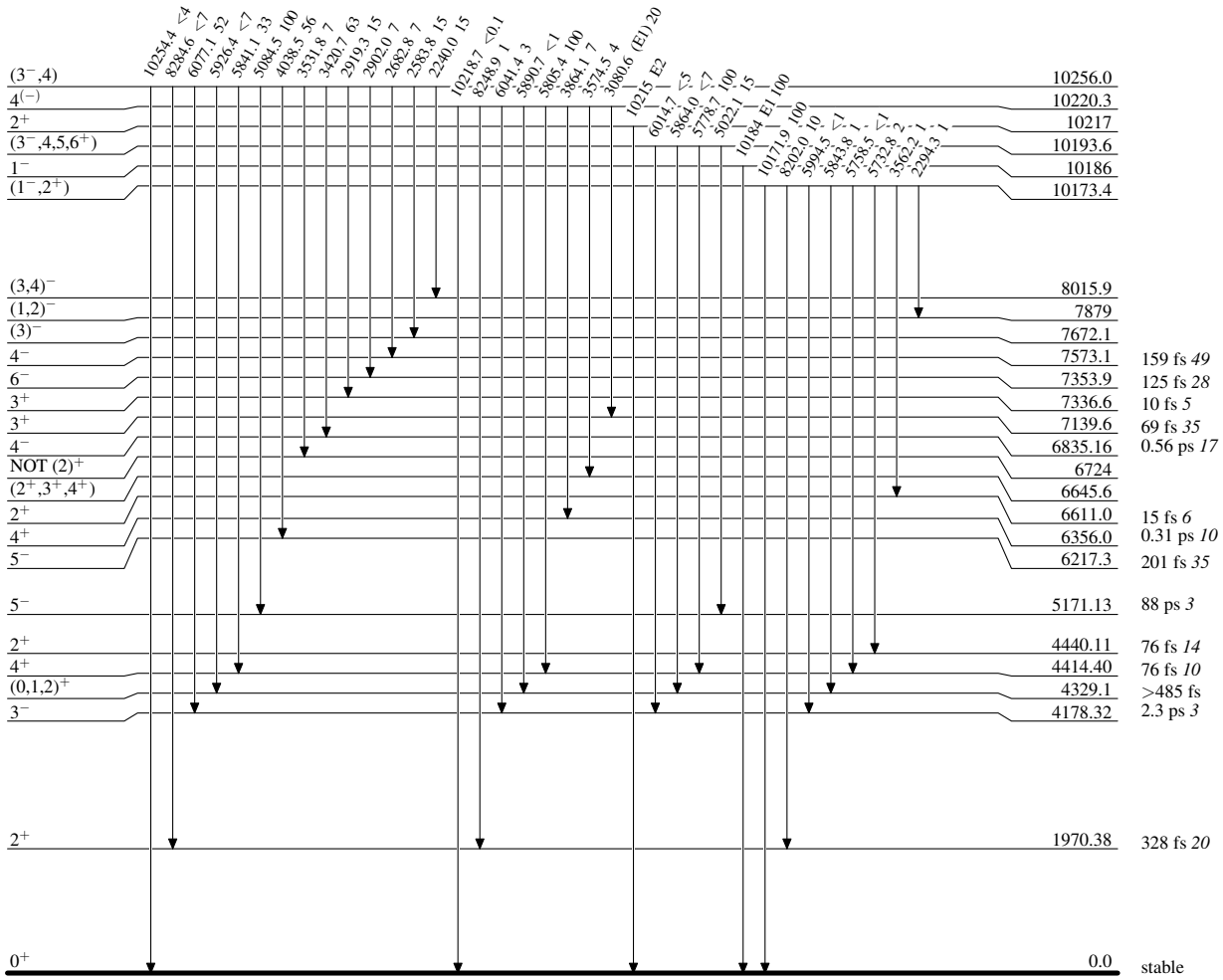


$^{36}_{18}Ar_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

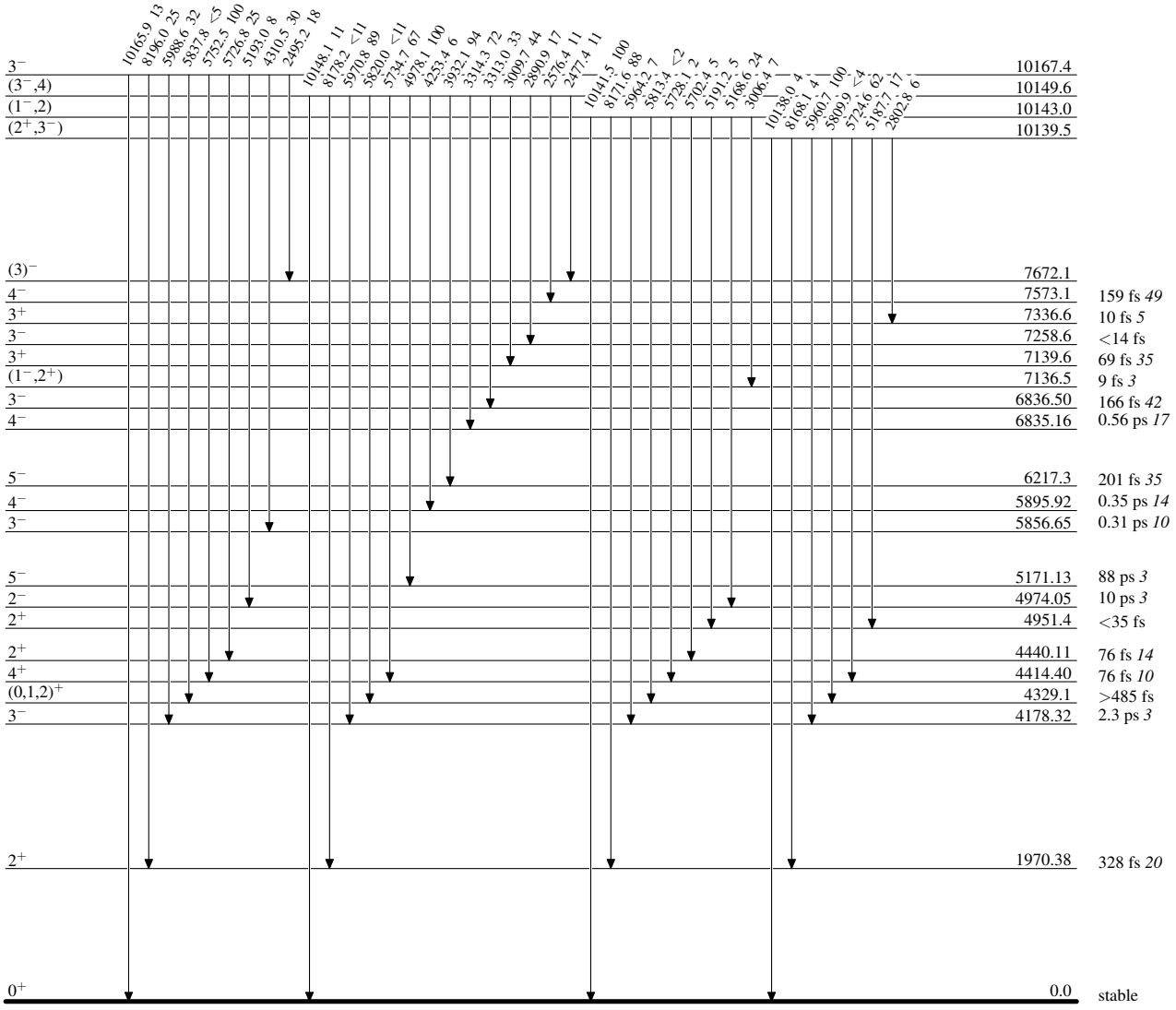
Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given



Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given

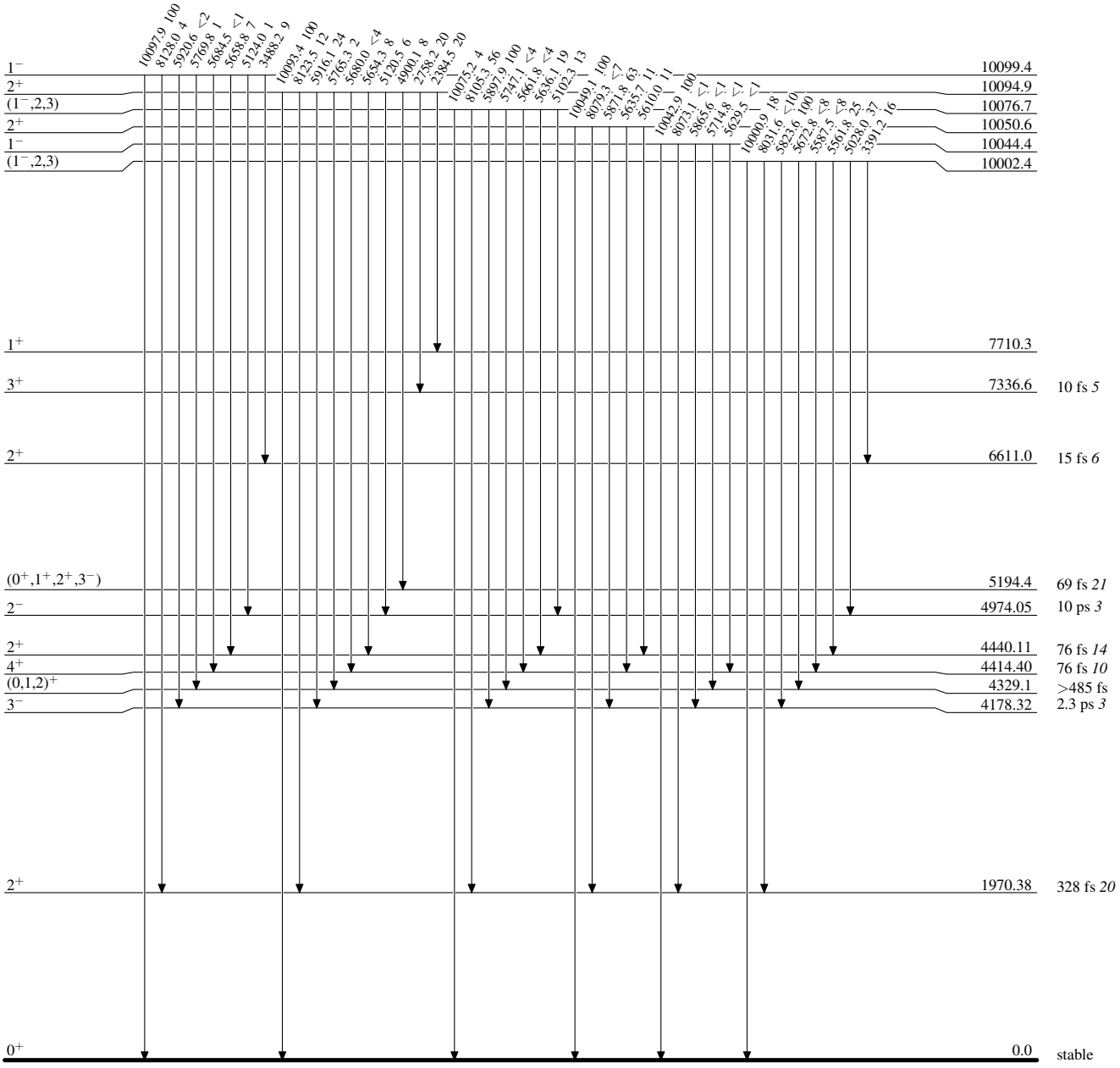


$^{36}_{18}Ar_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given

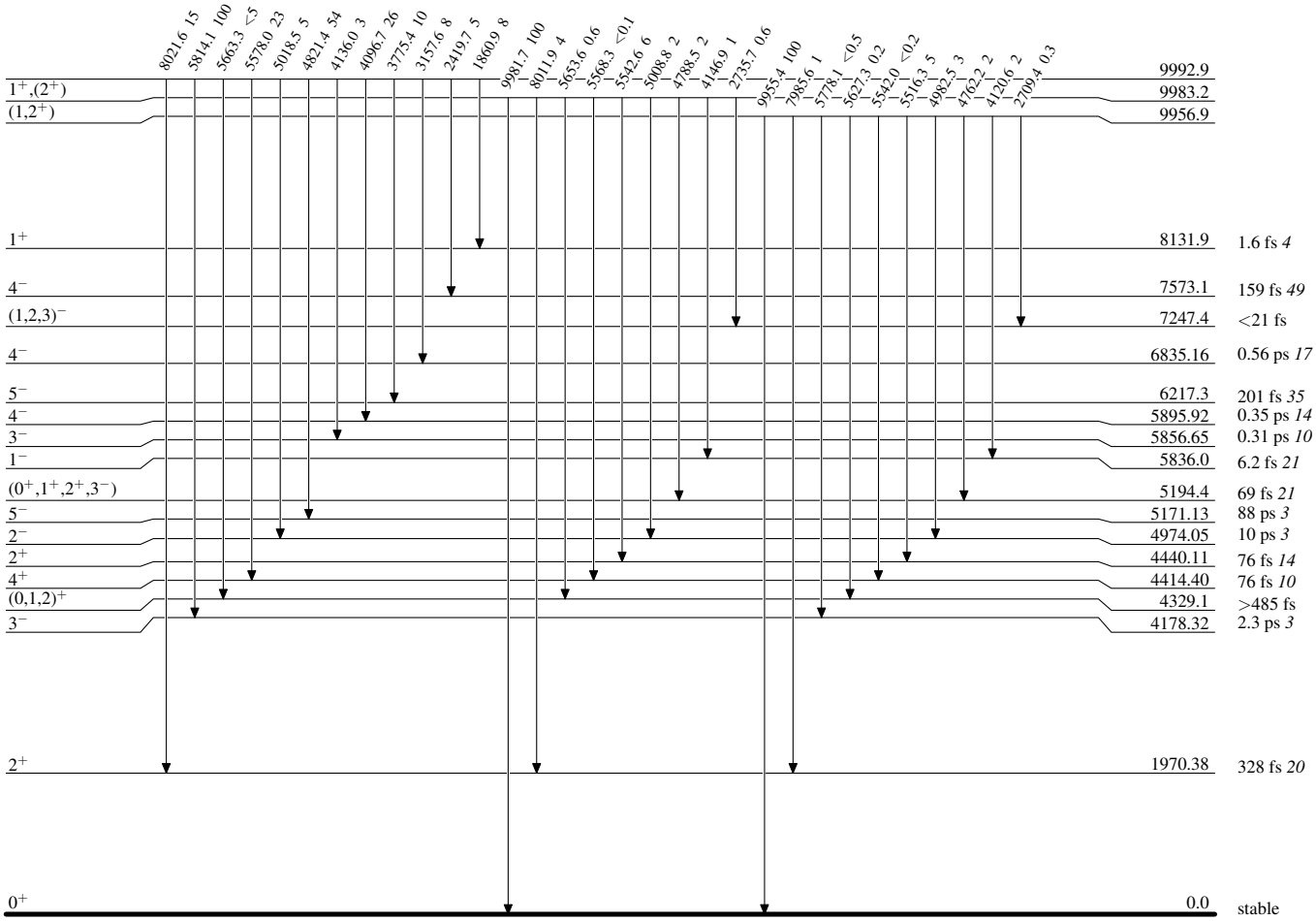


$^{36}_{18}Ar_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given

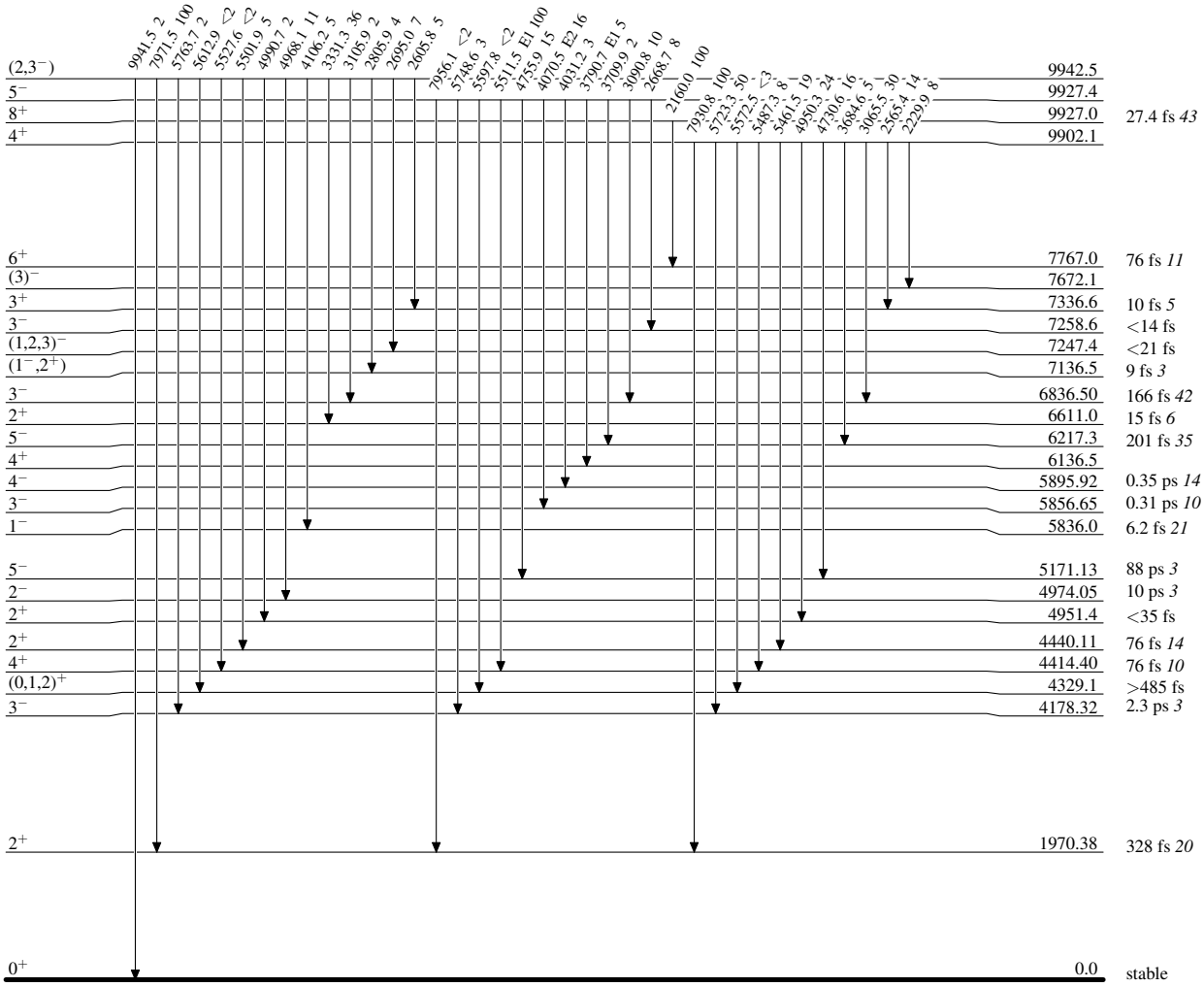


$^{36}_{18}Ar_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given

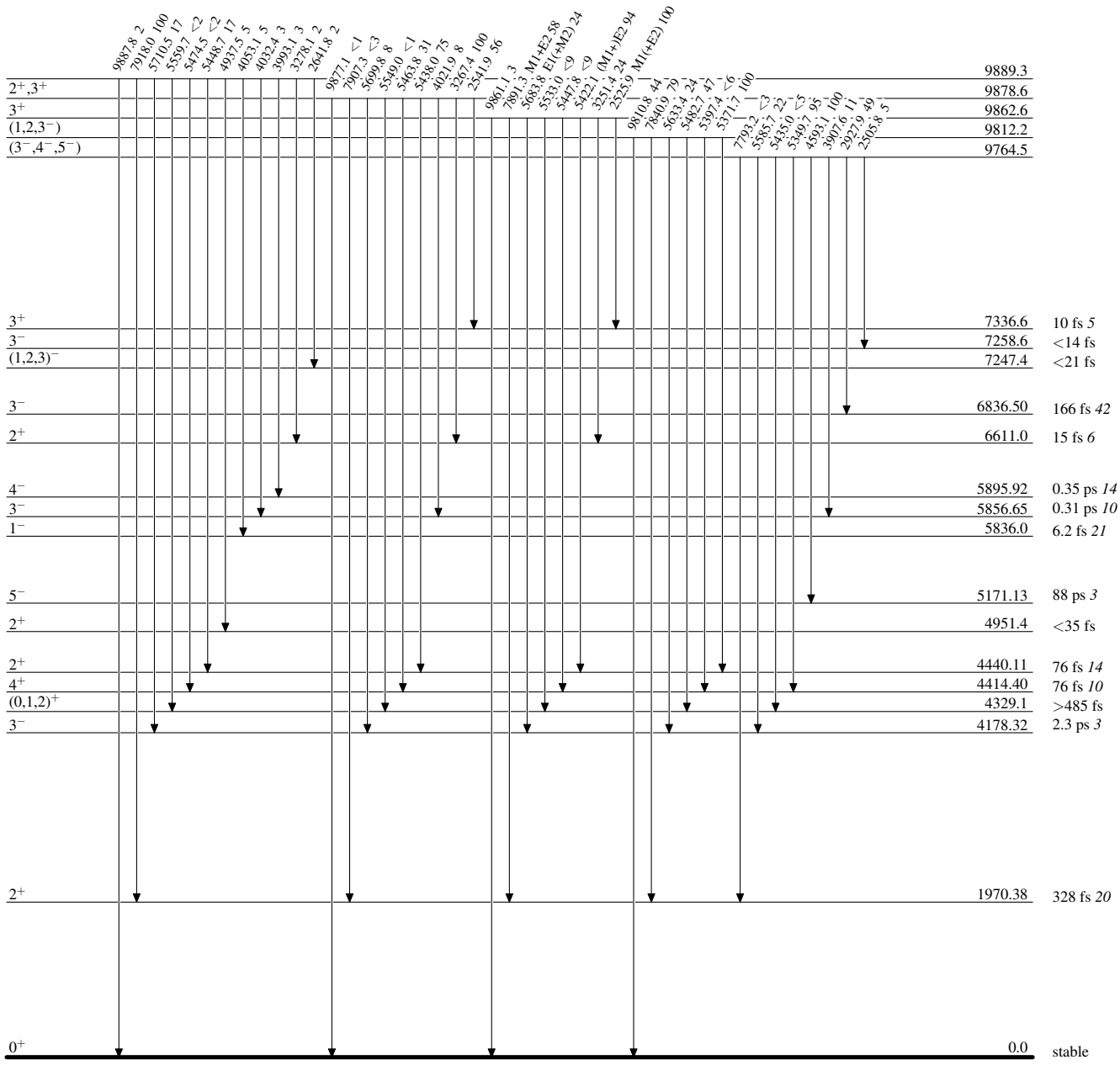


$^{36}_{18}Ar_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given

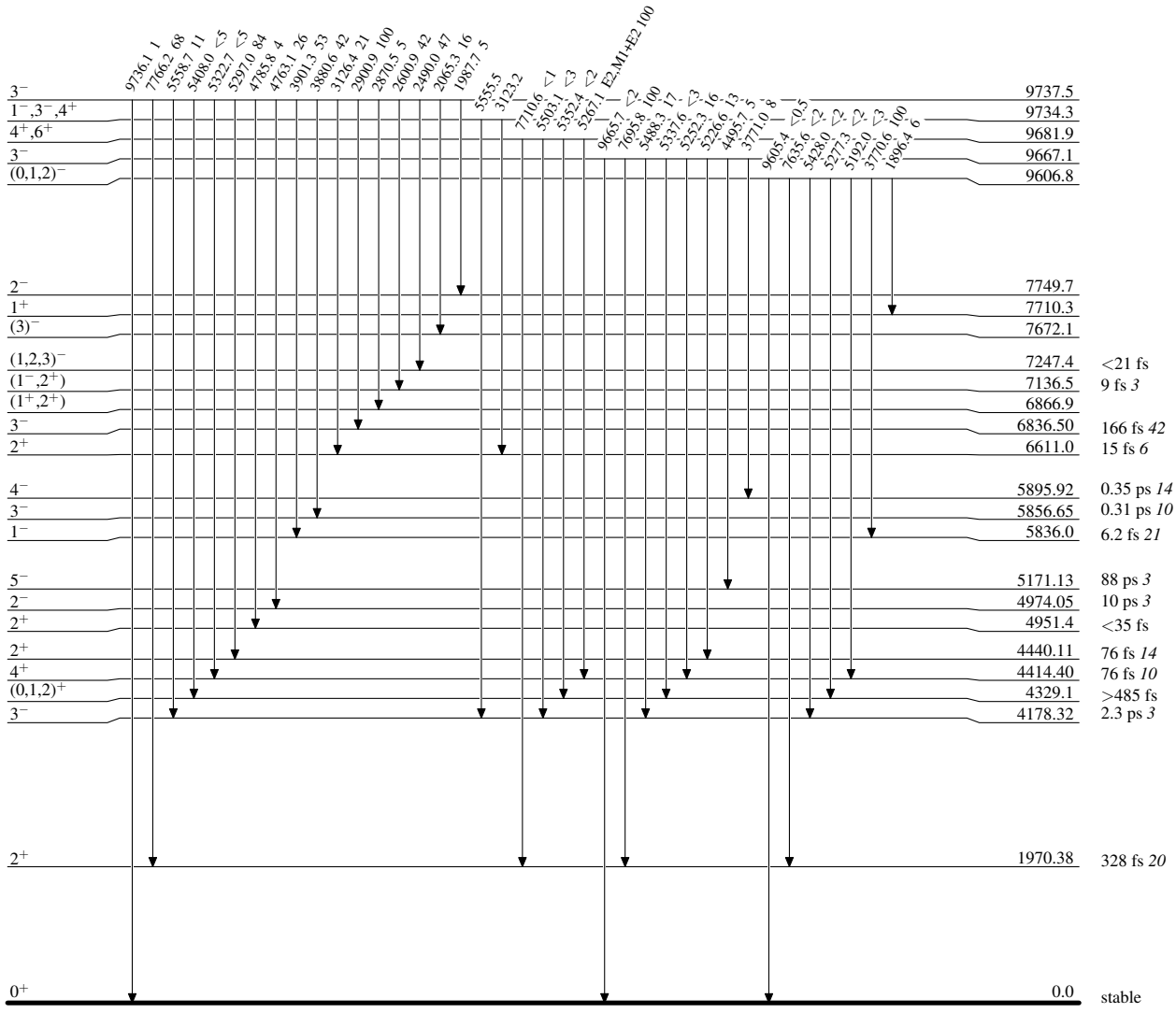


$^{36}_{18}Ar_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given

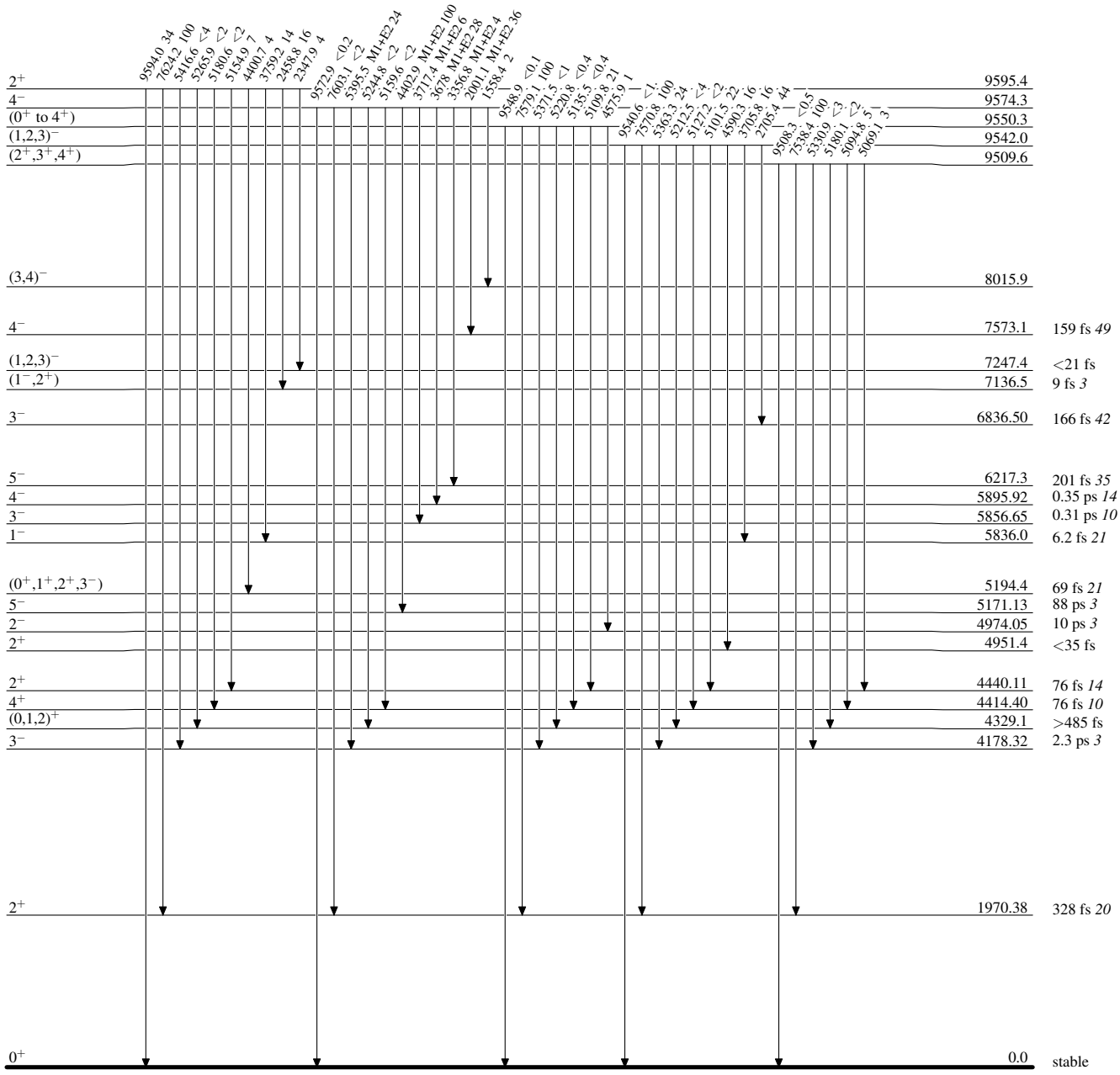


$^{36}_{18}Ar_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given

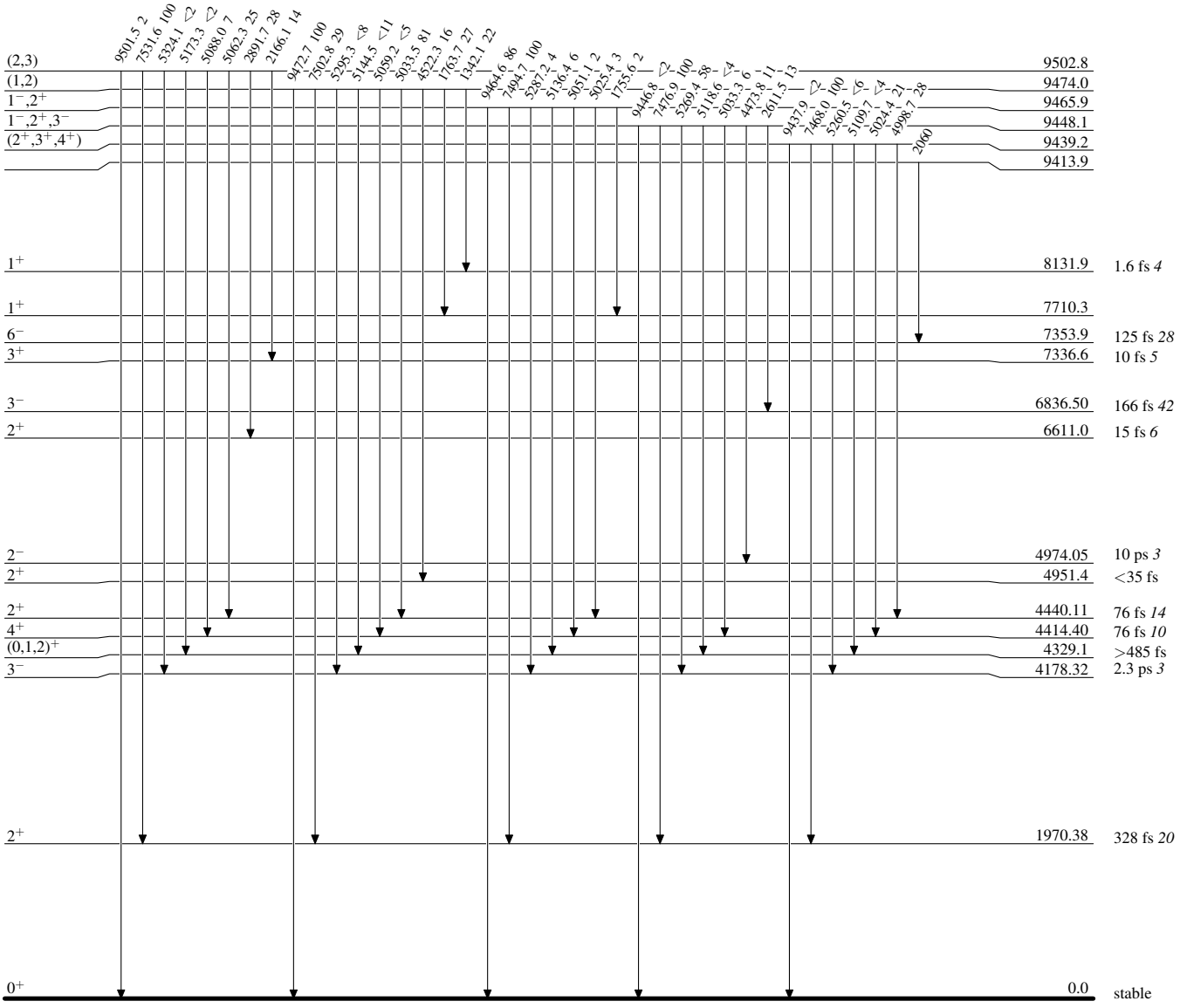


$^{36}_{18}Ar_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given

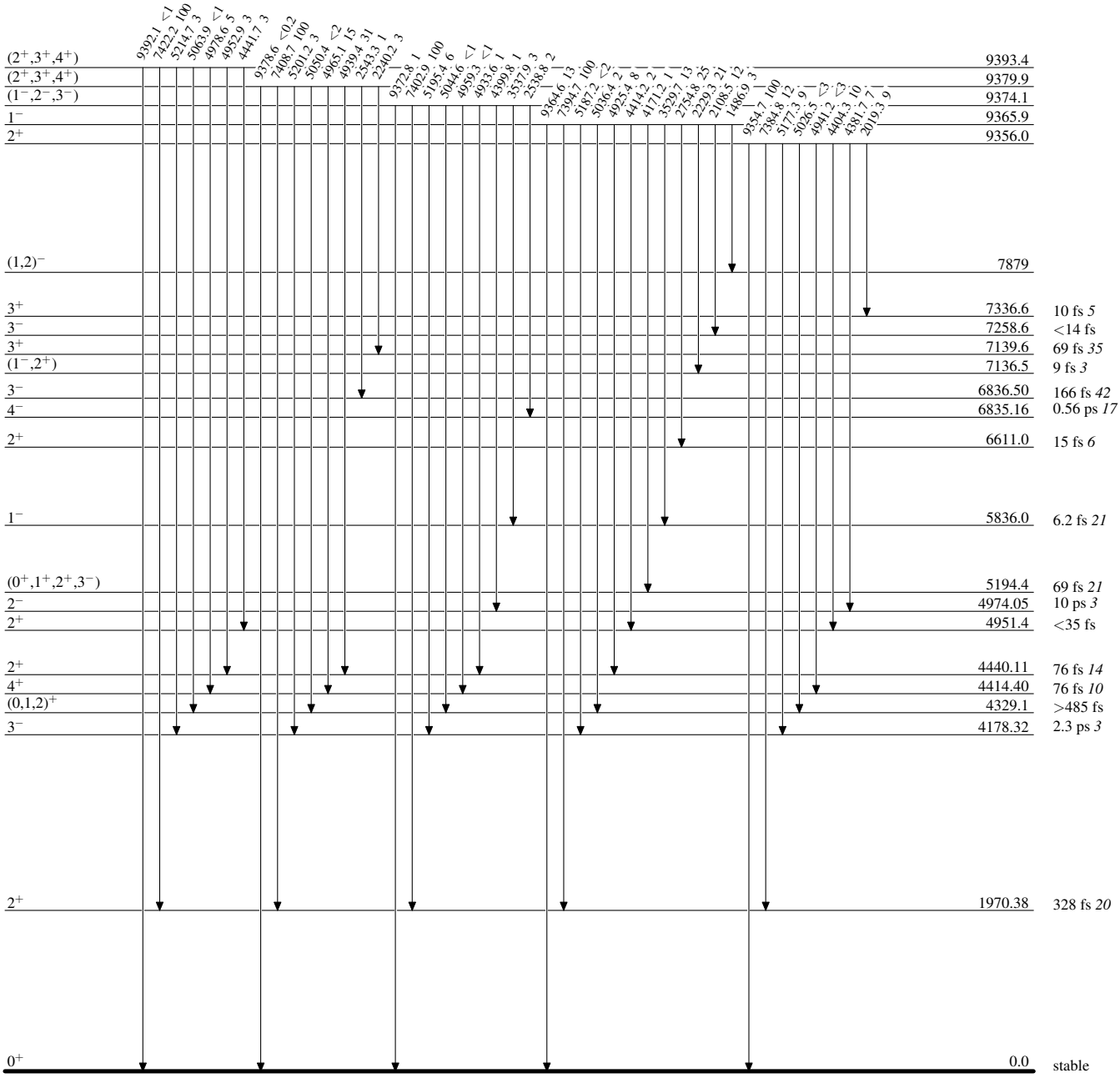


$^{36}_{18}Ar_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given

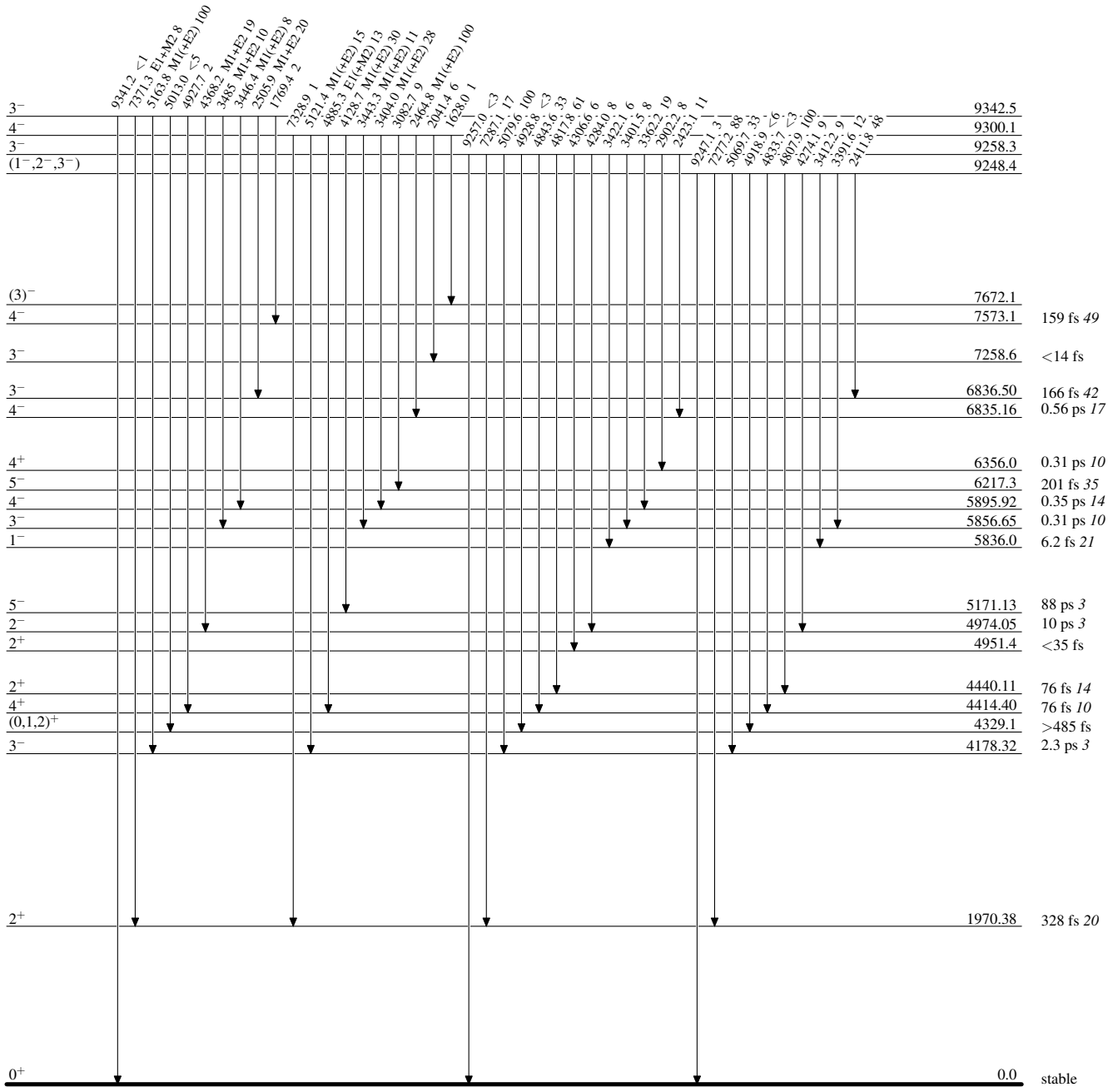


$^{36}_{18}Ar_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given

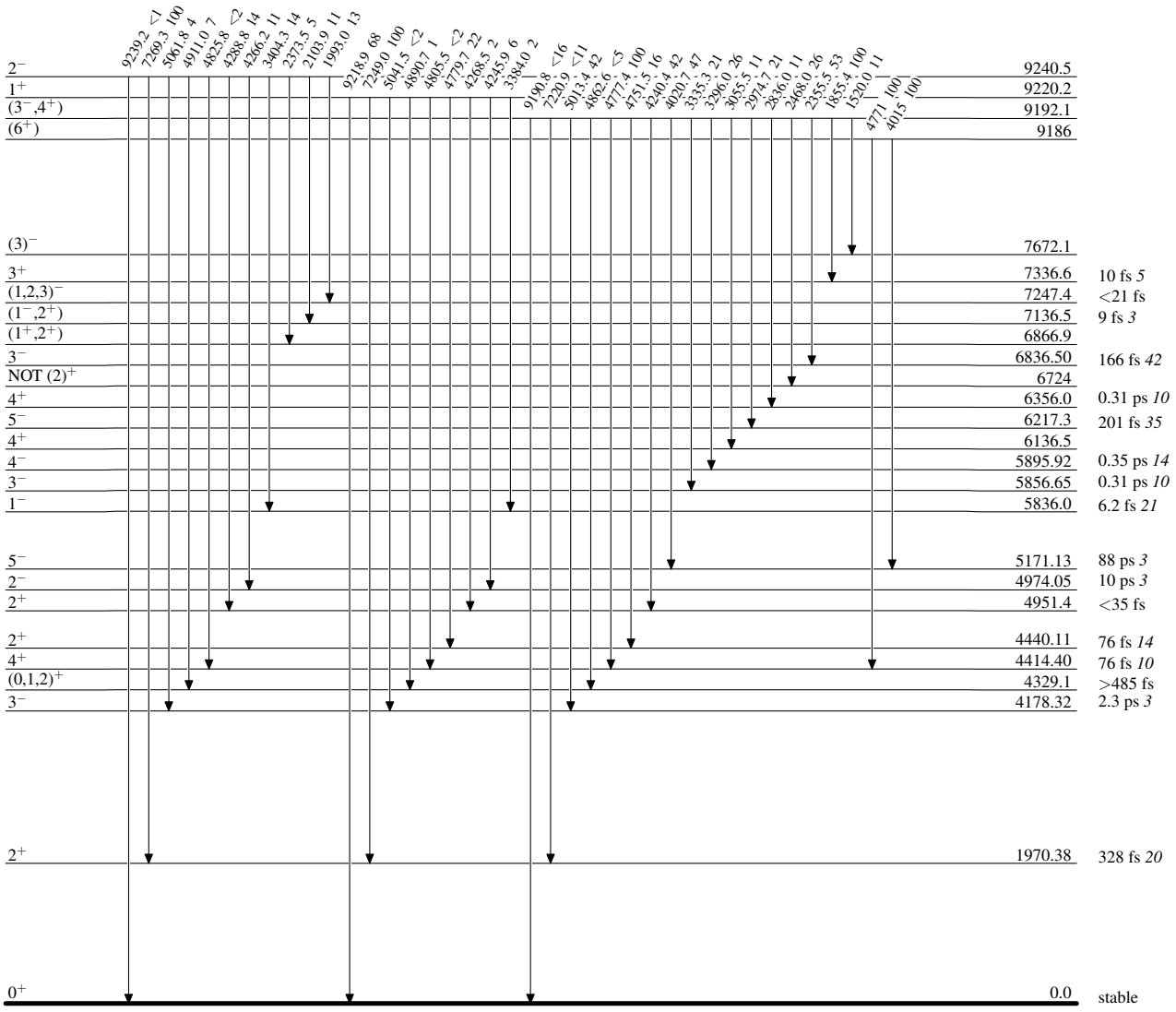


$^{36}_{18}Ar_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given

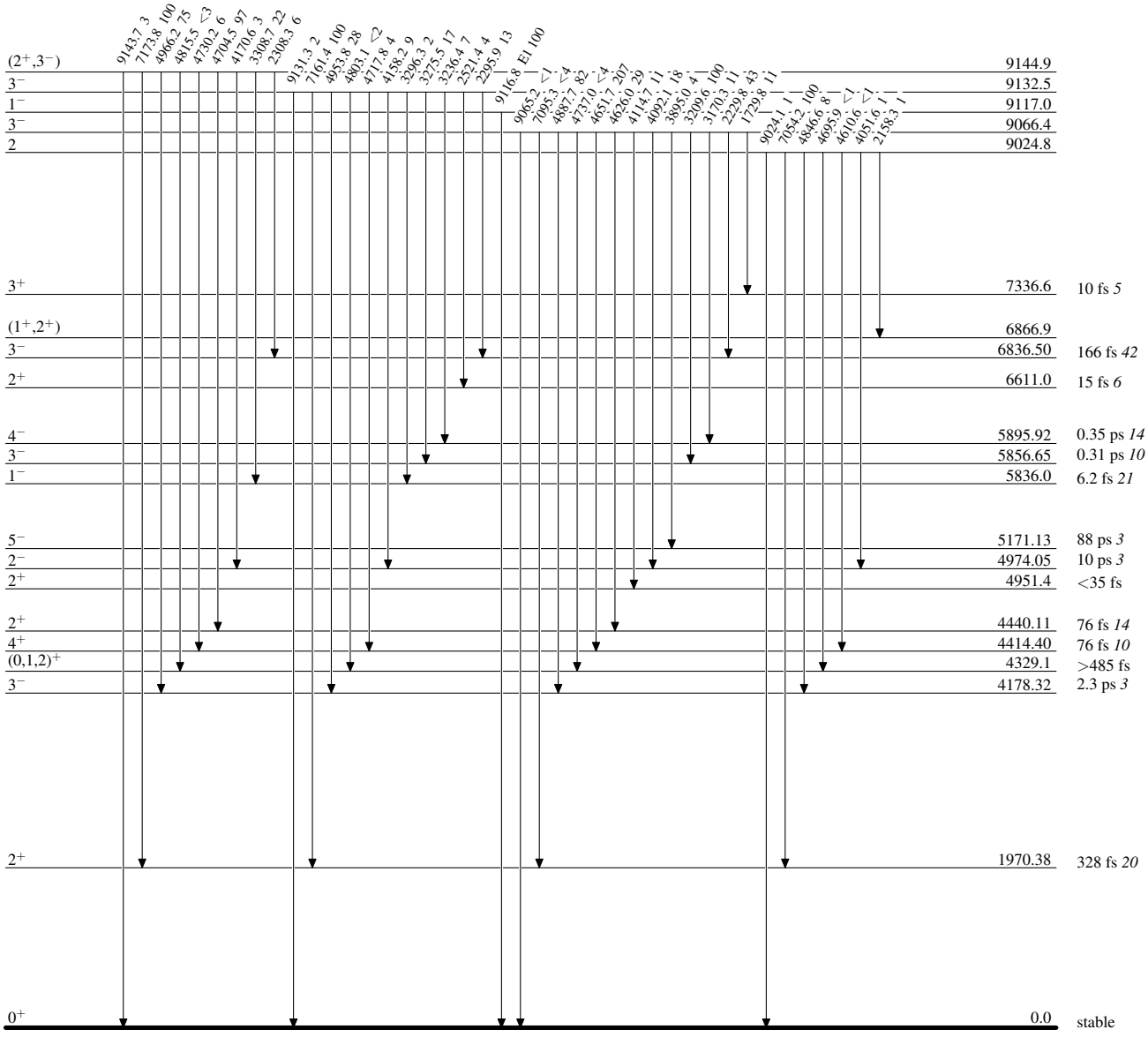


$^{36}_{18}Ar_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

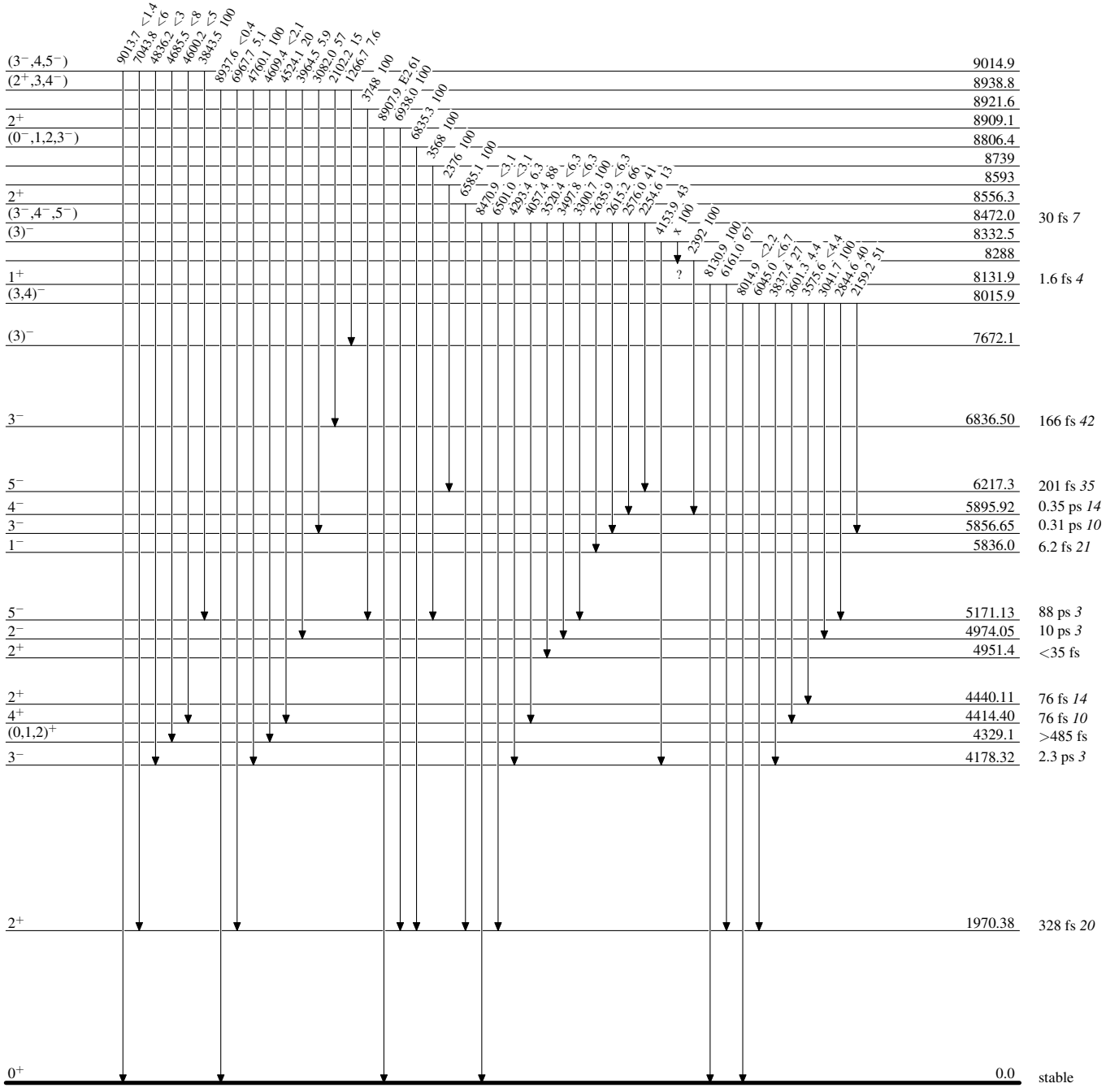
Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given



Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given

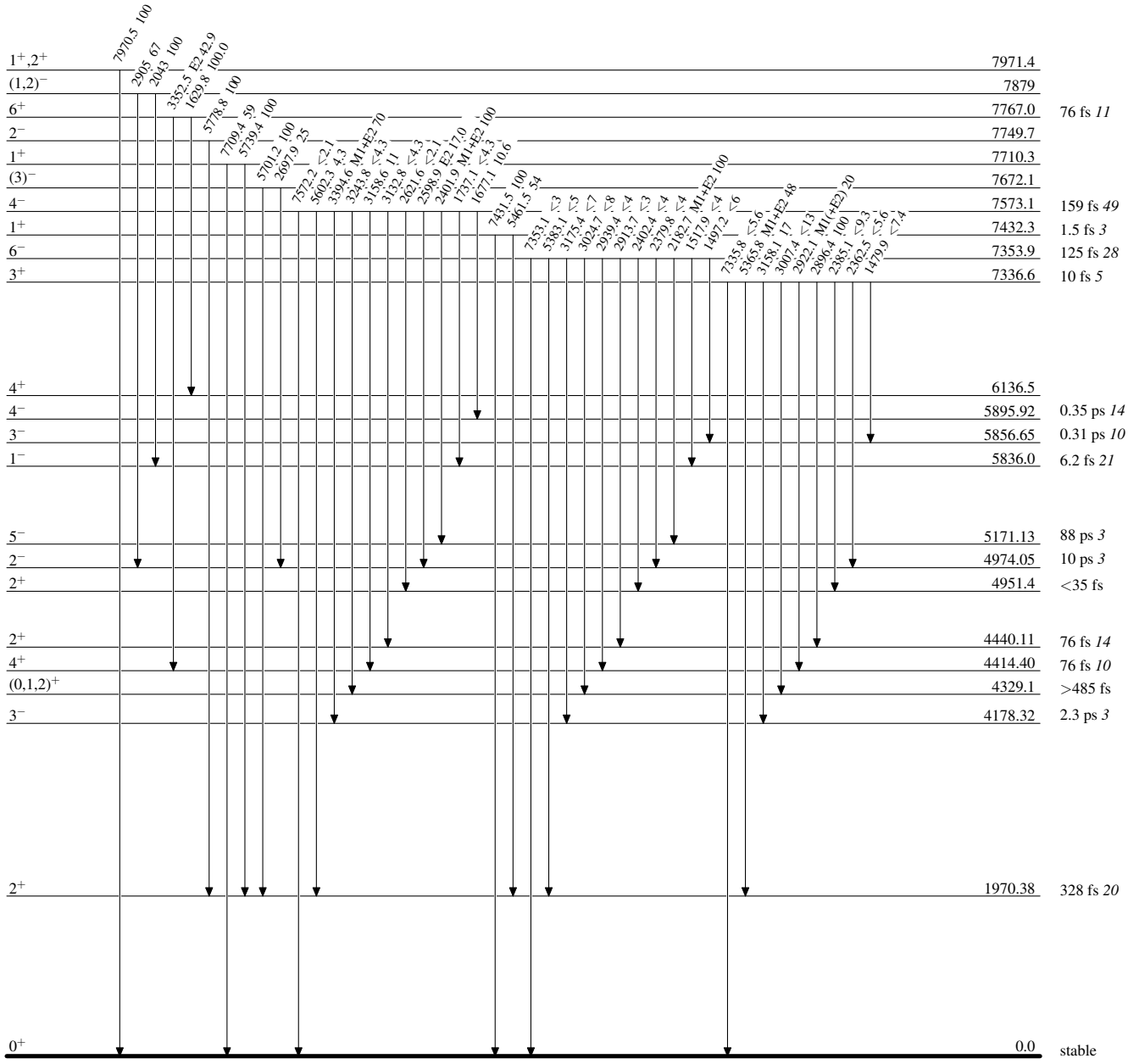


$^{36}_{18}Ar_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given

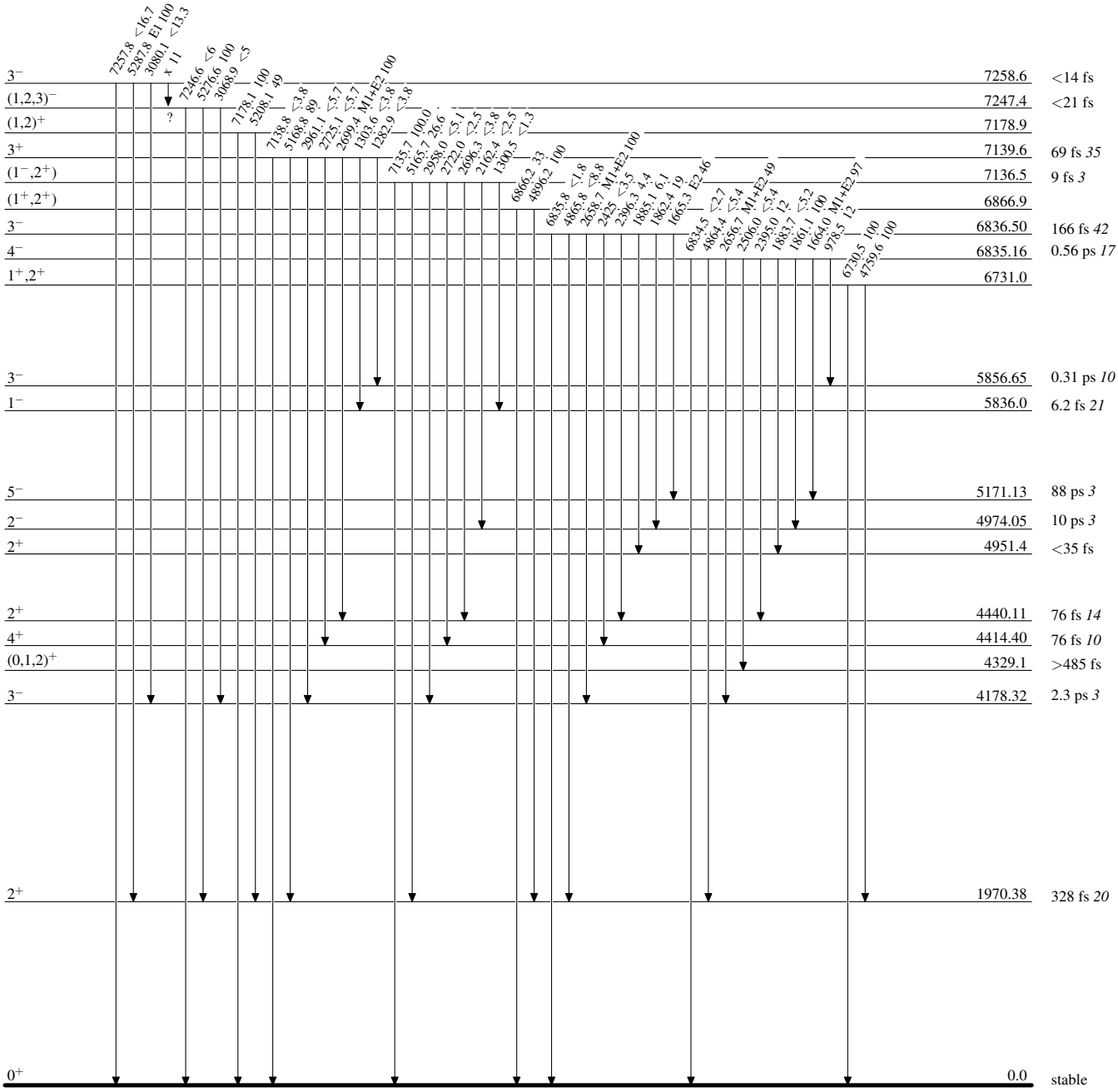


$^{36}_{18}Ar_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given

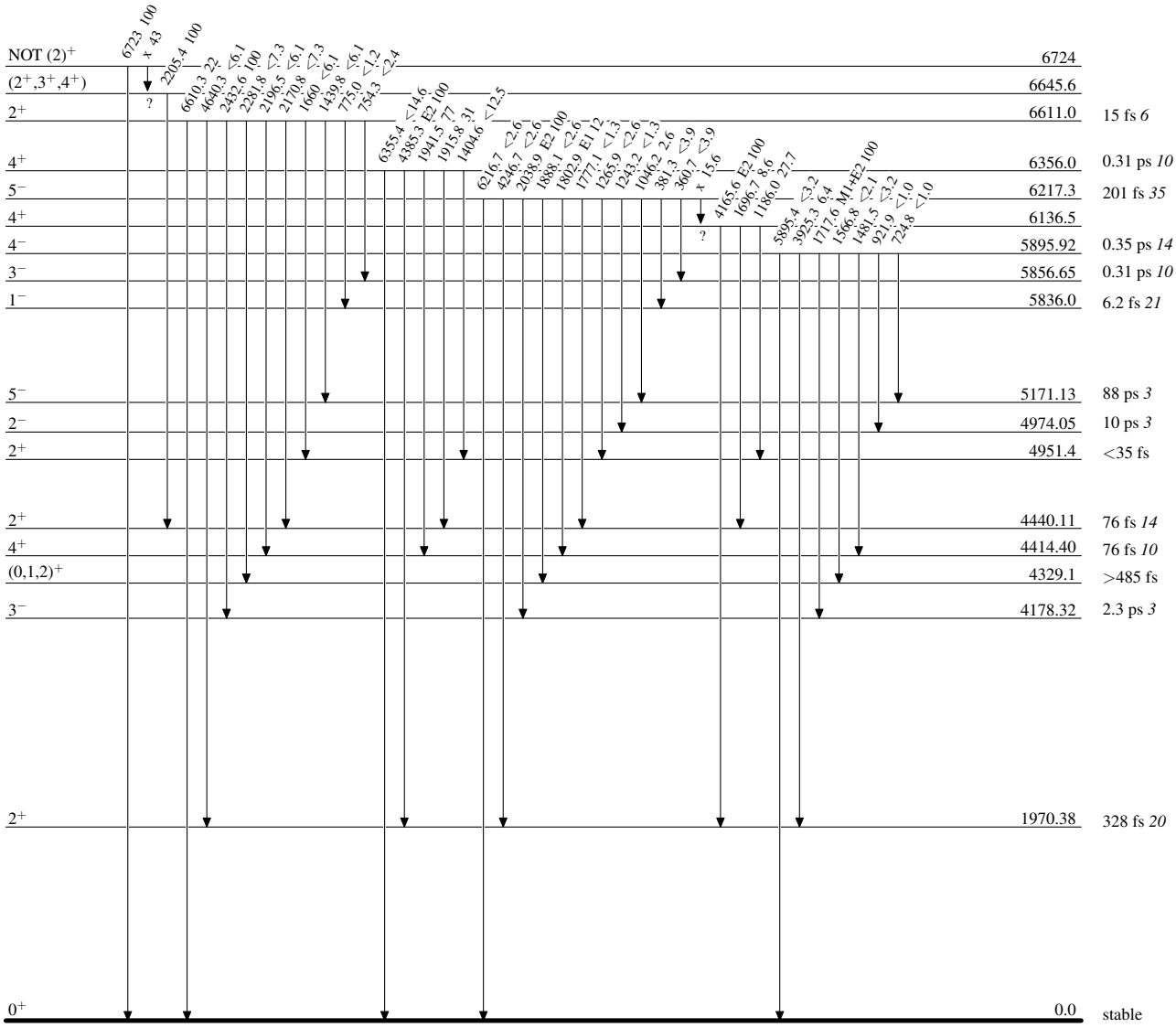


$^{36}_{18}Ar_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given

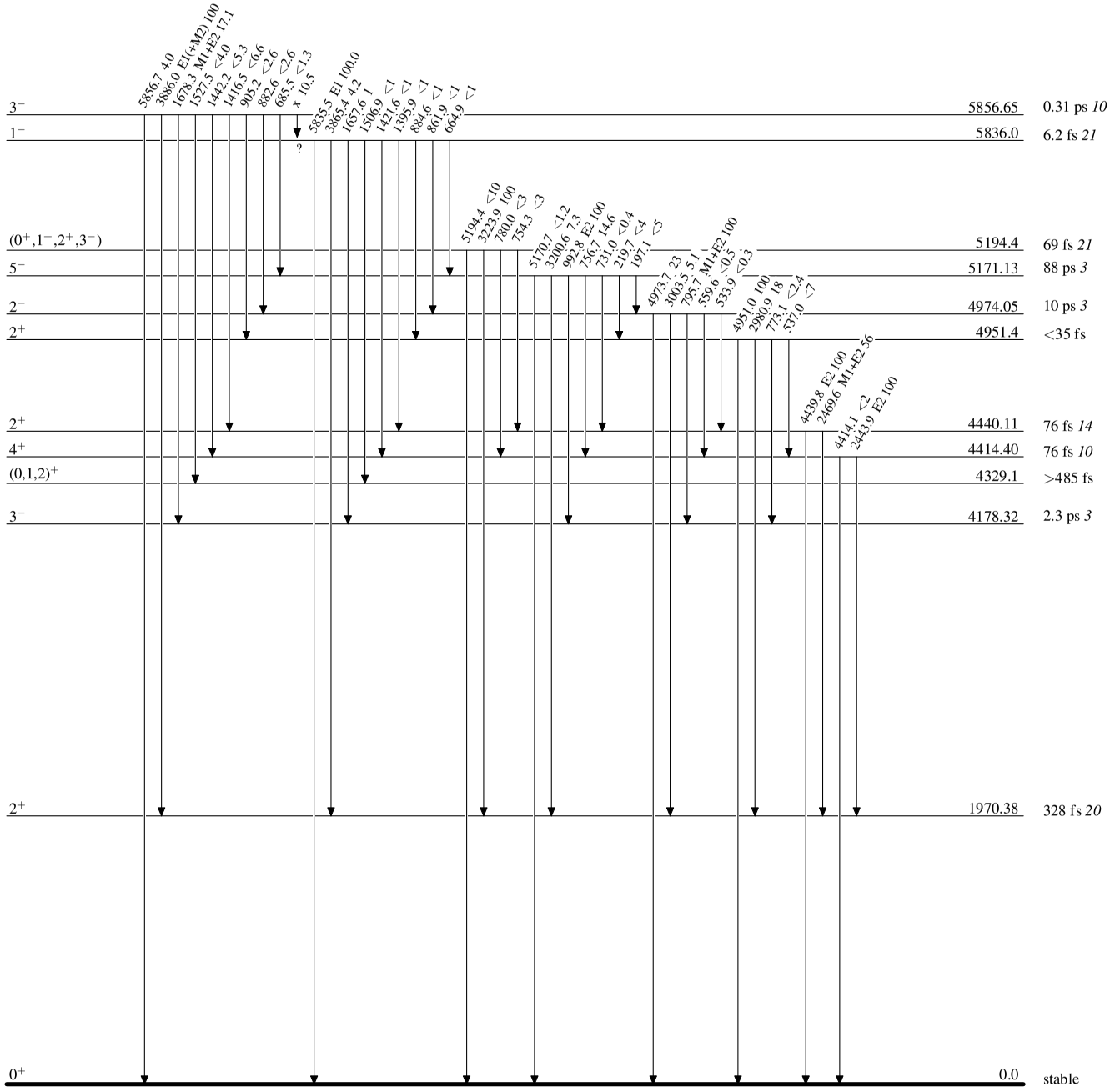


$^{36}_{18}Ar_{18}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given

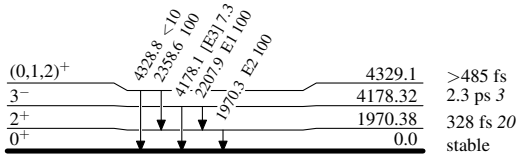


$^{36}_{18}Ar_{18}$

Adopted Levels, Gammas

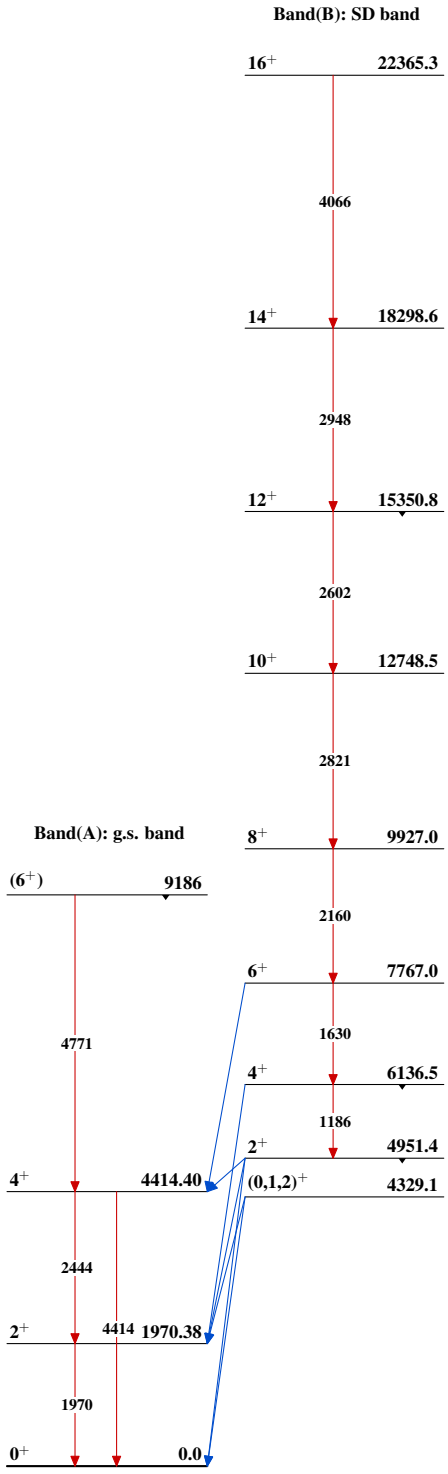
Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given



$^{36}_{18}Ar_{18}$

Adopted Levels, Gammas



$^{36}_{18}Ar_{18}$