Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Huang Xiaolong	NDS 108,1093 (2007)	1-Jan-2006

Q(β^-)=687 *4*; S(n)=6642 *4*; S(p)=5633 *3*; Q(α)=1273 *4* 2012Wa38

Note: Current evaluation has used the following Q record 687 3 *6641* 3 *5632* 3 *1268* 3 2003Au03.

2000Gr32: ^{196}Pt(d,2nγ),(p,nγ), E=9.1-11.7 MeV,Measured Eγ, Iγ, $\gamma\gamma$, ceγ coin, $\gamma\gamma(\theta)$, ceγ(t), excitation functions, using YRAST ball consisting of 4 four-element Clover detectors, 17 single-crystal HPGe detectors and two LEPS detectors. Conversion electrons were detected by iron-free orange spectrometers and plastic scintillator.

Other reactions: ^{195}Pt(n,e) E=thermal: measured spectra of electrons emitted after thermal neutron capture and obtained complementary capture γ-ray spectra. Interacting boson model (1981KaZR).

^{196}Pt(^{3}He,t),(p,n): E(^{3}He)=60 MeV at 0°. QMG/2 spectrograph, 52cm long resistive wire proportional drift chamber and multi wire drift chamber. Solid state detectors. Measured Eγ, coin. Deduced total, escape and spreading widths of the isobaric analog state in ^{196}Au (1986LeZS).

^{197}Au(^{14}N,^{15}N): E=140 MeV (1983Wi03).

Cross sections and yields: 1987Ba61, 1987De29, 1988Si10, 1988Uw01, 1989Yo01, 1989Zh13, 1991Ha17, 1990Na01, 1990Ga29.

Hyperfine structure and isotope shift measurement: 1987WaZO, 1990Sa21.

^{196}Au Levels

Cross Reference (XREF) Flags

A	^{196}Au IT decay (8.1 s)	E	^{197}Au(d,t)	I	^{195}Pt(^{3}He,d)
B	^{196}Au IT decay (9.6 h)	F	^{197}Au(^{3}He,α),(α,αn),(p,pn)	J	^{197}Au(p,d),(pol d,t)
C	^{197}Au(γ,nγ),(e,e′nγ)	G	^{196}Pt(d,2nγ),(p,nγ)	K	^{198}Hg(pol d,α)
D	^{197}Au(p,d)	H	^{194}Pt(α,d)		

E(level)†	Jπ‡	$T_{1/2}$	XREF	Comments
0.0	2$^-$	6.1669 d *6*	ABCDEFGHIJK	%ε+%β^+=93.0 *3*; %β^-=7.0 *3* %EC+%B+ Deduced by evaluator as follows: β^-(%)=β^-(g.s.,%)+[100−ε(g.s.,%)-β^-(g.s.,%)]× Iγ(426γ)(1+α(426γ)/[Iγ(426γ)(1+α(426γ) + Iγ(356γ)(1+α(356γ))]=7.0 *3*; where β^-(g.s.,%)≤0.3(from systematics),ε(g.s.,%)≤0.9(from systematics). Thus $\varepsilon+\beta^+$(%)=93.0 *3*. Jπ: J=1 from atomic beam method (1970Sc07) and L(p,d)=1 for π. μ=0.5906 *5* (1987Oh11,1989Ra17). Compilation: 2005St24. Q=0.81 *7* (1987Oh11,1989Ra17). Compilation: 2005St24. μ: From radiative detection of nuclear magnetic resonance on oriented nuclei (1987Oh11). Others: μ=+0.580 *15* from resonance ionization mass spectroscopy (1987LeZV), μ=+0.5914 *14* (1978LeZA). $T_{1/2}$: from 2001Li17. Others: 6.183 d *10* (1963Ik01),6.1 d *1* (1976HeZF), 6.1 d *1* (1963Ti02), 6.07 d *11* (1962Li03), 6.15 d *15* (1962Wa16), 6.17 d *5* (1962Bo12), 5.3 d *3* (1963Ka24), 5.6 d *1* (1960Ba63).
6.48 *4*	1$^-$		G IJ	Jπ: L(^{3}He,d)=0 from 1/2$^-$. L(p,d)=1+3 from 3/2$^+$ suggests 1$^-$,2$^-$.
41.6 *3*	0$^-$,1$^-$,2$^-$		CDE GHIJK	XREF: C(34)D(39) Jπ: L(^{3}He,d)=0 from 1/2$^-$,L(p,d)=1 from 3/2$^+$. Supersymmetry scheme (1991Jo01) predicts a low-lying 1$^-$, 2$^-$ doublet.
84.656 *20*	5$^+$	8.1 s *2*	ABCDEFGHIJK	%IT=100 XREF: C(80)D(82)F(85) Jπ: 85 γ E3 to 2$^-$,g.s. L(p,d)=6 from 3/2$^+$ suggests 5$^+$,6$^+$,7$^+$,8$^+$. $T_{1/2}$: weighted average of 8.2 s *2* (1971Ro16) and 7.4 s *6* (1972GlZX). B(E3)=1.4×10^{-5}.
162.56 *4*	2$^-$,3$^-$		DEFG J	XREF: E(164.8)F(163) Jπ: M1 γ to 2$^-$,g.s. L(p,d)=1+3 from 3/2$^+$.

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Adopted Levels, Gammas (continued)

^{196}Au Levels (continued)

E(level)[†]	J$^{\pi}$[‡]	$T_{1/2}$	XREF	Comments
166.40 *4*	$1^-,2^-$	291 ps *50*	GHIJK	$T_{1/2}$: From ce time spectra in (d,2nγ). J$^{\pi}$: M1 γ to 0^-,42. L(^{3}He,d)=0+2 from $1/2^-$,L(p,d)=1+3 from $3/2^+$.
167.44 *4*	$1^-,2^-$		C G	J$^{\pi}$: M1 γ to 1^-,6.5; population from 3^-,490.
197.97 *4*	$1^-,2^-$		CDE G IJK	XREF: C(203)D(192) J$^{\pi}$: γ to 0^-,42. L(^{3}He,d)=0+2 from $1/2^-$, L(p,d)=1+3 from $3/2^+$.
212.80 *4*	4^-	1.79 ns *15*	DEFGH JK	XREF: D(209)F(210) $T_{1/2}$: From ce time spectra in (d,2nγ). J$^{\pi}$: L(pol d,α)=3+5 from 0^+. L(p,d)=3 from $3/2^+$ suggests $1^-,2^-,3^-,4^-$.
232.47 *3*	7^+	1.65 ns *15*	BC GH	J$^{\pi}$: 148γ E2 to 5^+, 188γ M1+E2 from 8^+. $T_{1/2}$: from delayed coincidence (1967Wa02). B(E2)=0.23 from $T_{1/2}$.
234.53 *4*	3^-	≤200 ps	DE G JK	XREF: D(230) $T_{1/2}$: From ce time spectra in (d,2nγ). J$^{\pi}$: M1 γ to 2^-,g.s. L(p,d)=(1)+3+(5) from $3/2^+$ suggests $3^-,4^-$.
252.58 *4*	$1^-,2^-$		CDEFGHIJK	XREF: C(253)D(250)I(253.2)K(253) J$^{\pi}$: L(^{3}He,d)=2 from $1/2^-$. L(p,d)=1+3 from $3/2^+$. L(pol d,α)=2 from 0^+ suggests (2^+).
258.62 *5*	$1^-,2^-$		G J	J$^{\pi}$: γ to 0^-,42. L(p,d)=3 from $3/2^+$ suggests $1^-,2^-,3^-,4^-$.
288.06 *4*	$2^-,3^-$		DE GHIJK	XREF: D(284)I(289.2) J$^{\pi}$: γ to 0^-,42. L(p,d)=1+3 from $3/2^+$. L(^{3}He,d)=2 from $1/2^-$.
298.56 *5*	$1^-,2^-$		c G J	XREF: c(295) J$^{\pi}$: γ to 0^-,42. L(p,d)=1 from $3/2^+$.
307.20 *4*	$1^-,2^-$		CDEFGHIJK	XREF: C(313)D(305)E(303.5)F(306)I(304.3) J$^{\pi}$: L(p,d)=1+3 from $3/2^+$. L(^{3}He,d)=0+2 from $1/2^-$.
323.83 *4*	1^-		E G IJK	XREF: E(320.7)K(324.5) J$^{\pi}$: M1 γ to 0^-,42. L(^{3}He,d)=0+2 from $1/2^-$. L(p,d)=1+3 from $3/2^+$ suggests $1^-,2^-,3^-$.
326.09 *5*	1^-		D G	XREF: D(325) J$^{\pi}$: γ to 3^-,235 and 0^-,42. L(p,d)=1 from $3/2^+$.
348.38 *6*	$5^+,6^+$		FGH JK	XREF: F(346) J$^{\pi}$: L(pol d,α)=4+6 from 0^+. L(p,d)=6 from $3/2^+$ suggests $5^+,6^+,7^+,8^+$.
349.17 *4*	2^-		E G IJ	J$^{\pi}$: M1 γ to 1^-,166; 3^-,235. L(^{3}He,d)=2+5 from $1/2^-$, L(p,d)=1+3 from $3/2^+$.
355.9? *11*	$10^-,1^-,2^-,3^-$		D G J	XREF: D(353) J$^{\pi}$: L(p,d)=1+3 from $3/2^+$. Weak population in (p,nγ) and its γ decay suggests (0^-). 1999Me19 suggests $2^-,3^-$.
365 *2*			C F	XREF: C(363)
370.14 *3*	$6^+,7^+$	<30 ns	B DE G IJ	XREF: D(360) J$^{\pi}$: M1 γ to 7^+, E2 γ to 5^+. L(p,d)=6 from $3/2^+$ suggests $5^+,6^+,7^+,8^+$. L(^{3}He,d)=5 from $1/2^-$ suggests 5^+. $T_{1/2}$: from ceγ(t) (1967Wa02).
375.61 *4*	3^-		D GH JK	XREF: D(377) J$^{\pi}$: M1 γ to 4^-,213. L(pol d,α)=3 from 0^+. L(p,d)=1+3 from $3/2^+$ suggests $2^-,3^-$.
388.22 *4*	3^+		G IJK	J$^{\pi}$: L(^{3}He,d)=3 from $1/2^-$. L(pol d, α)=1,2+4 from 0^+ suggests $(2^-,3^+)$, L(p,d)=1 from $3/2^+$ suggests $0^-,1^-,2^-,3^-$.
400.84 *3*	6^+	<30 ns	BC E G J	XREF: J(399.2) J$^{\pi}$: M1 γ to 7^+, M1+E2 γ to 5^+. L(p,d)=6 from $3/2^+$ suggests $5^+,6^+,7^+,8^+$. $T_{1/2}$: from ceγ(t) (1967Wa02).
403.79 *4*	$3^-,4^-$		D G JK	XREF: D(405) J$^{\pi}$: L(pol d, α)=5 from 0^+. L(pol d,t)=3 from $3/2^+$ suggests $2^-,3^-,4^-$, but 2^- inconsistent with the excitation function in (p,nγ).

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Adopted Levels, Gammas (continued)

^{196}Au Levels (continued)

E(level)†	Jπ‡	$T_{1/2}$	XREF	Comments
408.37 *5*	$2^-,3^-$		G J	Jπ: L(p,d)=1+3 from $3/2^+$. Weak population in (p,nγ) and its γ decay suggests $\leq 2^-$. L (pol d,t) suggests $\leq 3^-$.
413.74 *5*	2^-		E GHIJK	XREF: E(415)I(411.6)K(415.3) Jπ: L(p,d)=1+3 from $3/2^+$. L(^{3}He,d)=2 from $1/2^-$ suggests $2^-,3^-$.
420.75 *3*	8^+	2.0 ns *2*	BC FG J	XREF: F(418) Jπ: M4 γ from 12^-, E2 γ to 6^+. L(p,d)=6 from $3/2^+$ suggests $5^+,6^+,7^+,8^+$. $T_{1/2}$: from delayed coincidence (1967Wa02).
423.65 *5*	$4^+,5^+$		D G	Jπ: γ to 5^+,85. L(p,d)=6 from $3/2^+$.
456.44 *5*	2^-		E GH JK	XREF: E(451.2) Jπ: L(p,d)=1+3 from $3/2^+$. L(pol d, α)= 1+3 from 0^+.
462.0 *3*	2^-		DE J	XREF: D(460)J(465.5) Jπ: L(p,d)=1+3 from $3/2^+$.
467.11 *5*	$3^+,4^+$		GH K	Jπ: L(pol d, α)=2+4,3+5 from 0^+.
480.29 *4*	2^-		DE G IJ	XREF: D(482)E(476.3) Jπ: L(p,d)=1+3 from $3/2^+$,L(^{3}He,d)=2 from $1/2^-$.
490.21 *4*	3^-		C EFGH J	XREF: C(488)E(487.1)F(489) Jπ: M1 γ to 2^-,349. L(p,d)=1+3+5 from $3/2^+$.
491.19 *8*	2^-		D G K	XREF: D(493) Jπ: L(pol d, α)=1+3 from 0^+.
491.60 *9*			G	
499.74 *11*	5^+		EFG I	Jπ: L(^{3}He,d)=5 from $1/2^-$.
501.63 *11*			GH	
502.79 *8*	5^+		G JK	Jπ: L(pol d, α)=4+6 from 0^+. L(p,d)=6 from $3/2^+$ suggests $5^+,6^+,7^+,8^+$.
518.03 *5*	$4^+,5^+$		DEFGHI	XREF: D(511)E(516.9)F(517)H(517.2) Jπ: L(^{3}He,d)=2+5 from $1/2^-$. L(d,t)=1,3 from $3/2^+$.
520.50 *6*	3^-		D G JK	XREF: K(518.5) Jπ: L(p,d)=(1)+3 from $3/2^+$. L(pol d, α)=1+3 from 0^+.
538.1 *3*	2^-		E	Jπ: L(d,t)=1,3 from $3/2^+$.
542.40 *6*	$1^-,2^-$		DE G JK	XREF: E(546.6)K(544.1) Jπ: L(p,d)=1+3 from $3/2^+$.
550.81 *6*	$3^+,4^+,5^+,6^+$		G J	Jπ: L(p,d)=4 from $3/2^+$.
551.70 *11*			G	
564.03 *6*	2^-		DE G IJ	XREF: D(558)E(560.6) Jπ: L(p,d)=1+3 from $3/2^+$. L(^{3}He,d)=2 from $1/2^-$.
565.24 *7*	2^-		DE G	Jπ: L(p,d)=1+3 from $3/2^+$. L(d,t)=1,3 from $1/2^-$.
568.62 *6*			GH	
569.91 *6*	$2^-,3^-,4^-$		C G JK	Jπ: L(pol d, α)=1+3 from 0^+. L(p,d)=1+3+5 from $3/2^+$.
571.40 *6*	(4^-)		G	Jπ: γ to 3^-,235.
575.70 *6*			D FG	XREF: D(580)F(581)
587.55 *8*	$5^+,6^+,7^+,8^+$		DEFG JK	XREF: E(581.1)F(591) Jπ: L(p,d)=6 from $3/2^+$. L(pol d, α)=1+3 from 0^+ suggest (2^-).
595.66 *4*	12^-	9.6 h *1*	B	%IT=100 μ=+5.72 *8* (1982Ha04,1989Ra17). Compilation: 2005St24. μ: From NMR on oriented nuclei (1982Ha04). μ=+5.35 *20* static low temperature nuclear orientation (1971Ba94). Jπ: from atomic beam (1962Ch13,1976Fu06) and 175γ M4 to 8^+. $T_{1/2}$: weighted average of 9.7 h *3* (1960Ba63), 9.5 h *3* (1960Ka21), 9.7 h *1* (1962Bo12), 10.4 h *10* (1963Ka24), 9.5 h *5* (1963Ti02), 9.5 h *2*, 9.4 h *2* (1982Ha04).
598.06 *8*	$5^+,6^+$		DE GH JK	XREF: D(599)E(593.2)H(594.9)K(596) Jπ: L(p,d)=4+6 from $3/2^+$. L(pol d, α)=1+3,2 from 0^+ suggest (2).
625.19 *6*	$3^-,4^-,5^-$		DE G J	XREF: D(623)E(620.7) Jπ: γ to 3^-,235. L(p,d)=3+5 from $3/2^+$.
627.14 *11*			G	

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Adopted Levels, Gammas (continued)

^{196}Au Levels (continued)

E(level)[†]	Jπ[‡]	XREF	Comments
635.66 *6*	2^-	E G J	XREF: E(631.3) Jπ: L(p,d)=1+3 from $3/2^+$.
636.59 *9*		G	
637.83 *5*	2^-	CD G I K	Jπ: L(pol d, α)=1+3 from 0^+. L(^{3}He,d)=2 from $1/2^-$.
640.65 *11*		GH	
645.48 *12*	$5^+,6^+$	EFG J	Jπ: L(p,d)=4+6 from $3/2^+$.
645.54 *11*		G	
651.41 *7*	$2^-,3^-$	D G J	Jπ: L(p,d)=1+3 from $3/2^+$.
657.87 *11*	(5^+)	D GH K	XREF: D(655)H(654)K(651.9) Jπ: γ to 7^+,233. L(pol d, α)=2,6 from 0^+ suggests $(1^+,5^+)$.
662.55 *11*	3^-	DE G J	Jπ: L(p,d)=1+3+5 from $3/2^+$.
668.73 *4*	3^-	GH K	XREF: K(671.1) Jπ: L(pol d, α)=3 from 0^+.
672.77 *11*		G	
680.46 *5*	4^-	DE G JK	XREF: D(682)E(674.6)K(683.5) Jπ: L(pol d, α)=3+5 from 0^+. L(p,d)=3 from $3/2^+$ suggests $2^-,3^-,4^-$.
688.55 *5*	2^-	D GH J	XREF: H(686.4) Jπ: L(p,d)=1+3 from $3/2^+$.
702.59 *5*	$2^-,3^-,4^-$	E G J	XREF: E(700.8) Jπ: L(p,d)=1,3 from $3/2^+$.
704.37 *11*	3^+	D G K	XREF: K(706.1) Jπ: L(pol d, α)=2+4 from 0^+.
708.51 *7*	2^-	D GH J	XREF: D(710) Jπ: L(p,d)=1+3 from $3/2^+$.
713.91 *5*	2^-	E G	Jπ: L(d,t)=1,3 from $3/2^+$.
714.35 *11*		G	
716.48 *6*	$1^-,2^-,3^-,4^-$	GH J	XREF: H(718.4) Jπ: L(p,d)=3 from $3/2^+$.
720.39 *5*	$2^-,3^-$	D G J	XREF: D(720) Jπ: L(p,d)=1+3 from $3/2^+$.
720.68 *8*	(5^+)	G K	XREF: K(717.2) Jπ: L(pol d, α)=4+6 from 0^+.
726.00 *8*	2^-	E G	Jπ: L(d,t)=1,3 from $3/2^+$.
733.30 *6*	1^-	CD G IJK	XREF: C(730)D(735) Jπ: L(^{3}He,d)=0+2 from $1/2^-$. L(pol d, α)=1 from 0^+ suggests $(0^-,1^-)$, L(p,d)=1+3 from $3/2^+$ suggests $1^-,2^-,3^-$.
747.92 *6*	$3^-,4^-,5^-$	E G J	XREF: E(742) Jπ: L(p,d)=1+3+5 from $3/2^+$.
749.5? *1*		G	
750.60 *5*	2^-	D GH K	XREF: K(749.1) Jπ: L(pol d, α)=1+3 from 0^+.
753.05 *8*		G	
760.64 *9*	2^-	E G J	Jπ: L(d,t)=1+3 from $3/2^+$.
769.28 *7*	$2^-,3^-,4^-$	G J	Jπ: L(p,d)=3 from $3/2^+$.
780.55 *9*		G	
785.72 *6*	2^-	DE G JK	XREF: E(790.9)K(782.2) Jπ: L(p,d)=1+3 from $3/2^+$. L(pol d, α)=1+3 from 0^+.
797.91 *9*	2^-	EFG	Jπ: L(d,t)=1,3 from $3/2^+$.
799.54 *5*	4^-	GH JK	Jπ: L(pol d, α)=3+5 from 0^+. L(p,d)=3+5 from $3/2^+$ suggests $3^-,4^-,5^-$.
807.48 *8*	$1^-,2^-,3^-$	DE G IJ	XREF: D(802) Jπ: L(p,d)=1+3 from $3/2^+$.
807.83 *7*		G	
813.32 *7*		D G	XREF: D(811)
815.45 *11*	$3^-,4^-$	GH J	Jπ: L(p,d)=1+3+5 from $3/2^+$.
816.03 *8*	(2^-)	D G K	XREF: D(817)

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Adopted Levels, Gammas (continued)

^{196}Au Levels (continued)

E(level)†	Jπ‡	XREF	Comments
			Jπ: L(pol d, α)=1+3 from 0+.
816.60 *6*		G	
819.46 *7*		G	
829.7 *4*	5+,6+,7+	DEF	XREF: D(839)F(833) Jπ: L(d,t)=6 from 3/2+.
841.34 *11*	5+,6+,7+	DE G J	Jπ: L(p,d)=6 from 3/2+. L(d,t)=1,3 from 3/2+.
848.04 *11*		G	
848.08 *12*		G	
850.17 *8*	3−,4−,5−	G IJ	Jπ: L(p,d)=1+3+5 from 3/2+.
851.40 *7*	(3−,4−)	D G K	Jπ: L(pol d, α)=3,3+5 from 0+.
852.81 *14*		G	
852.82 *9*		G	
853.94 *7*		GH	
856.50 *7*	2−,3−,4−	G J	Jπ: L(p,d)=3 from 3/2+.
869.9 *3*	2−	EF	XREF: F(872) Jπ: L(d,t)=1,3 from 3/2+.
876.24 *8*		G	
877.07 *6*		G	
881.68 *8*	3−	E G IJ	Jπ: L(^{3}He,d)=2 from 1/2−. L(p,d)=1+3+5 from 3/2+.
882.64 *8*	(4−,5−)	D G K	Jπ: L(pol d, α)=3+5,5 from 0+.
883.50 *11*		GH	
893.22 *8*	3−	DE G J	XREF: E(888.2) Jπ: L(p,d)=1+3+5 from 3/2+.
895.81 *9*	2−	E G	Jπ: L(d,t)=1,3 from 3/2+.
902.04 *6*	1−	D GHIJK	XREF: I(899.6) Jπ: L(pol d, α)=1 from 0+. L(^{3}He,d)=0,0+2 from 1/2−. L(p,d)=1+3+5 from 3/2+ suggests 3−,4−,5−.
907.28 *9*		G	
908.26 *7*	2−,3−,4−	E G J	XREF: J(907.5) Jπ: L(p,d)=(1)+3 from 3/2+.
921.52 *6*	3−,4−,5−	FGH J	Jπ: L(p,d)=(1)+3+5 from 3/2+.
925.68 *9*	2−	E G	Jπ: L(d,t)=1,3 from 3/2+.
931.64 *11*		G	
931.70 *9*		G	
934.24 *7*		G	
938.38 *7*	3−,4−,5−	D G J	Jπ: L(p,d)=1+3+5 from 3/2+.
940.30 *11*		G	
944.20? *11*		G	
946.22 *11*		G	
948.75 *11*	(5+,6+,7+)	D G	Jπ: L(p,d)=(6) from 3/2+.
951.17 *8*	2−,3−,4−	G J	Jπ: L(p,d)=3+5 from 3/2+.
962.47 *8*	0−,1−,2−,3−	D G J	XREF: D(954) Jπ: L(p,d)=1+3+5 from 3/2+.
967.49 *9*	2−,3−,4−,5−	G J	Jπ: L(p,d)=3+5 from 3/2+.
968.94 *8*	2−,3−,4−,5−	D FG J	XREF: J(973.9) Jπ: L(p,d)=1+3 from 3/2+.
980.22 *7*		G	
989.03 *11*	2−,3−,4−,5−	D G IJ	XREF: I(986.4)J(985.7) Jπ: L(p,d)=1+3 from 3/2+.
990.91 *11*	3−	FG J	Jπ: L(p,d)=1+3+5 from 3/2+.
991.86 *11*		G	
992.07 *8*		G	
993.45 *11*		G	
995.53 *11*		G	
1003.86 *11*	1−	D G I	XREF: D(1000)I(997.4) Jπ: L(^{3}He,d)=0,0+2 from 1/2−. L(p,d)=3 from 3/2+.

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Adopted Levels, Gammas (continued)

^{196}Au Levels (continued)

E(level)[†]	Jπ[‡]	XREF	Comments
1004.29 *11*	$5^+,6^+,7^+,8^+$	G J	Jπ: L(p,d)=6 from $3/2^+$.
1014.65 *8*	1^-	G I	Jπ: L(^{3}He,d)=0+2 from $1/2^-$.
1017.83 *11*	$1^-,2^-,3^-$	D G J	Jπ: L(p,d)=1+3 from $3/2^+$.
1018.53 *11*		G	
1025.05 *8*	$2^-,3^-,4^-,5^-$	D G J	Jπ: L(p,d)=3+5 from $3/2^+$.
1045.73 *11*	2^-	D G J	Jπ: L(p,d)=1+3 from $3/2^+$.
1046.29 *6*		G	
1053.28 *9*		G	
1053.30 *8*	$0^-,1^-$	G I	Jπ: L(^{3}He,d)=0 from $1/2^-$.
1053.34 *11*		G	
1056.25 *9*	$2^-,3^-,4^-$	G J	Jπ: L(p,d)=3 from $3/2^+$.
1058.46 *11*		G	
1065.93 *7*	$2^-,3^-$	G J	Jπ: L(p,d)=1+3 from $3/2^+$.
1070.79 *11*	$2^-,3^-,4^-,5^-$	G J	Jπ: L(p,d)=3 from $3/2^+$.
1074.87 *8*	$2^-,3^-,4^-,5^-$	G J	XREF: J(1083.7) Jπ: L(p,d)=3 from $3/2^+$.
1088.90 *11*	$2^-,3^-$	D G J	XREF: D(1086) Jπ: L(p,d)=1+3 from $3/2^+$.
1093.48 *7*		G	
1095.20 *11*	$2^-,3^-$	D G J	Jπ: L(p,d)=1+3 from $3/2^+$.
1096.33 *11*		G	
1100.89 *8*	1^-	D G I	Jπ: L(^{3}He,d)=0,0+2 from $1/2^-$. L(p,d)=(1) from $3/2^+$.
1107.78 *7*	$0^-,1^-,2^-$	D G	XREF: D(1105) Jπ: L(p,d)=1 from $3/2^+$.
1112.0 *8*	$2^-,3^-$	D J	Jπ: L(p,d)=1+3 from $3/2^+$.
1120.53 *13*	$0^-,1^-,2^-$	D G	Jπ: L(p,d)=1 from $3/2^+$.
1121.46 *11*	3^-	G IJ	XREF: I(1127) Jπ: L(p,d)=1+3+5 from $3/2^+$.
1134.39 *11*	$2^-,3^-$	D G J	XREF: D(1130)J(1129.7) Jπ: L(p,d)=1+3 from $3/2^+$.
1140.41 *11*	$2^-,3^-$	D G J	XREF: J(1137.1) Jπ: L(p,d)=1+3 from $3/2^+$.
1146.93 *11*	$5^+,6^+$	D G IJ	XREF: J(1144) Jπ: L(p,d)=4+6 from $3/2^+$.
1152.90 *8*	$1^-,2^-,3^-$	D J	Jπ: L(p,d)=1+3 from $3/2^+$.
1156.60 *12*		G	
1166.3 *9*	3^-	IJ	Jπ: L(p,d)=1+3+5 from $3/2^+$.
1174.92 *11*	$2^-,3^-,4^-$	G J	Jπ: L(p,d)=3 from $3/2^+$.
1175.4 *8*	$5^+,6^+,7^+,8^+$	J	Jπ: L(p,d)=6 from $3/2^+$.
1188.81 *11*	3^-	D G J	Jπ: L(p,d)=1+3+5 from $3/2^+$.
1196.20 *12*		G	
1198.01 *9*	$1^-,2^-,3^-$	G IJ	XREF: I(1200.2) Jπ: L(p,d)=1+3 from $3/2^+$.
1203.40 *8*	$2^-,3^-,4^-,5^-$	D G J	XREF: D(1205) Jπ: L(p,d)=3 from $3/2^+$.
1207.23 *11*	$2^-,3^-,4^-,5^-$	G J	Jπ: L(p,d)=3 from $3/2^+$.
1213.56 *7*		G	
1217.4 *6*		I	
1223.2 *10*	3^-	D J	Jπ: L(p,d)=1+3+5 from $3/2^+$.
1229.19 *11*		G J	
1236.6 *11*	3^-	D IJ	Jπ: L(p,d)=1+3+5 from $3/2^+$.
1244.2 *12*		J	
1248.71 *8*	$2^-,3^-$	D G J	XREF: D(1246) Jπ: L(p,d)=1+3 from $3/2^+$.
1254 *8*	$2^-,3^-,4^-$	D	Jπ: L(p,d)=3 from $3/2^+$.

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Adopted Levels, Gammas (continued)

^{196}Au Levels (continued)

E(level)[†]	Jπ[‡]	XREF	Comments
1268.67 *8*	0⁻,1⁻,2⁻	D G	XREF: D(1263) Jπ: L(p,d)=1 from 3/2⁺.
1270.2 *11*	3⁻	D IJ	XREF: D(1269) Jπ: L(p,d)=1+3+5 from 3/2⁺. L(^{3}He,d)=0+5 from 1/2⁻.
1279.03 *11*	2⁻	D G J	Jπ: L(p,d)=1+3 from 3/2⁺.
1280.90 *12*		G	
1292.00 *11*	2⁻,3⁻,4⁻	D G	XREF: D(1288) Jπ: L(p,d)=3 from 3/2⁺.
1295.83 *11*		G	
1296.12 *11*	3⁻,4⁻,5⁻	D G J	Jπ: L(p,d)=3+5 from 3/2⁺.
1298.00 *11*		G	
1310.2 *13*	2⁻,3⁻,4⁻	D IJ	XREF: D(1308) Jπ: L(p,d)=3 from 3/2⁺.
1318.3 *13*	3⁻,4⁻	D J	Jπ: L(p,d)=3+5 from 3/2⁺.
1324.6 *13*	1⁻,2⁻	D J	Jπ: L(p,d)=1+3 from 3/2⁺.
1326.4 *6*	4⁺,5⁺	D	Jπ: L(^{3}He,d)=5 from 1/2⁻.
1331.8 *13*	3⁻,4⁻,5⁻	D J	XREF: D(1327) Jπ: L(p,d)=(1)+3+5 from 3/2⁺.
1337.73 *9*	3⁻,4⁻,5⁻	D G J	XREF: J(1341.7) Jπ: L(p,d)=(1)+3+5 from 3/2⁺.
1347.63 *11*	2⁻,3⁻,4⁻	G J	Jπ: L(p,d)=1+3 from 3/2⁺.
1350.93 *11*		G	
1354.6 *14*	2⁻,3⁻,4⁻,5⁻	D J	Jπ: L(p,d)=3 from 3/2⁺.
1361.79 *11*	2⁻,3⁻	G J	XREF: J(1359.1) Jπ: L(p,d)=1+3 from 3/2⁺.
1364.48 *12*		G	
1387.31 *12*	2⁻,3⁻,4⁻	D G	XREF: D(1384) Jπ: L(p,d)=3 from 3/2⁺.
1391 *8*	(0⁻,1⁻)	D	Jπ: L(p,d)=(1) from 3/2⁺.
1403.15 *11*	(2⁻,3⁻,4⁻)	D G	Jπ: L(p,d)=(3) from 3/2⁺.
1416.31 *11*	(0⁻,1⁻)	D G	XREF: D(1408) Jπ: L(p,d)=(1) from 3/2⁺.
1426.85 *11*	0⁻,1⁻	D G	XREF: D(1421) Jπ: L(p,d)=1 from 3/2⁺.
1431.25 *11*		G	
1432.25 *9*		G	
1457.32 *11*		D G	XREF: D(1462)
1476 *8*	2⁻,3⁻,4⁻	D	Jπ: L(p,d)=3 from 3/2⁺.
1491.83 *13*	5⁺,6⁺,7⁺	D G	XREF: D(1483) Jπ: L(p,d)=6 from 3/2⁺.
1495 *8*	0⁻,1⁻	D	Jπ: L(p,d)=1 from 3/2⁺.
1505 *8*	0⁻,1⁻	D	Jπ: L(p,d)=1 from 3/2⁺.
1513 *8*	(2⁻,3⁻,4⁻)	D	Jπ: L(p,d)=(3) from 3/2⁺.
1522.65 *11*	(2⁻,3⁻,4⁻)	D G	XREF: D(1528) Jπ: L(p,d)=(3) from 3/2⁺.
1534 *8*	(2⁻,3⁻,4⁻)	D	Jπ: L(p,d)=(3) from 3/2⁺.
1552.42 *11*	2⁻,3⁻,4⁻	D G	XREF: D(1555) Jπ: L(p,d)=3 from 3/2⁺.
1568.85 *11*		G	
1586 *8*		D	
1599.49 *8*		G	
1632.21 *12*		G	
1634.45 *11*		G	
1640.42 *11*		G	
1657.15 *11*		G	
1664.91 *12*		G	

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued)

^{196}Au Levels (continued)

E(level)[†]	Jπ[‡]	XREF	Comments
1672.95 *11*		G	
1720 *20*	$2^-,3^-,4^-$	D	Jπ: L(p,d)=3 from $3/2^+$.
1880 *20*	$2^-,3^-,4^-$	D	Jπ: L(p,d)=3 from $3/2^+$.

[†] From a least-squares fit to adopted Eγ.
[‡] From angular distributions and DWBA in (^{3}He,d) and (pol d,α); spectroscopic strengths and DWBA in (pol d,t), except as noted.

Adopted Levels, Gammas (continued)

γ(^{196}Au)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[#]	α[@]	Comments
84.656	5$^+$	84.66 *2*	100	0.0	2$^-$	E3	327	α(K)=0.289 *5*; α(L)=239 *4*; α(M)=68.0 *10*; α(N+..)=19.7 *3* B(E3)(W.u.)=0.0064 *3* α: E3 α(theory)′s mult. By 0.975 *10* (Cf. 1990Ne01). HF=160 wu.
162.56	2$^-$,3$^-$	120.7[&] *1*	≤2	41.6	0$^-$,1$^-$,2$^-$			
		156.1[&] *1*	≤5	6.48	1$^-$			
		162.6 *1*	100 *30*	0.0	2$^-$	M1	1.82	α(K)=1.493 *21*; α(L)=0.249 *4*; α(M)=0.0578 *9*; α(N+..)=0.01723 *25*
166.40	1$^-$,2$^-$	124.5 *1*	4.4 *12*	41.6	0$^-$,1$^-$,2$^-$	M1	3.88	α(K)=3.18 *5*; α(L)=0.533 *8*; α(M)=0.1238 *18*; α(N+..)=0.0369 *6* B(M1)(W.u.)=0.0006 *3*
		159.8[&] *1*	≤1	6.48	1$^-$			
		166.4 *1*	100 *30*	0.0	2$^-$	M1	1.702	α(K)=1.399 *20*; α(L)=0.233 *4*; α(M)=0.0541 *8*; α(N+..)=0.01614 *23* B(M1)(W.u.)=0.006 *3*
167.44	1$^-$,2$^-$	125.6[&] *1*	≤6	41.6	0$^-$,1$^-$,2$^-$			
		160.9 *1*	100 *30*	6.48	1$^-$	M1	1.87	α(K)=1.538 *22*; α(L)=0.257 *4*; α(M)=0.0595 *9*; α(N+..)=0.0177 *3*
		167.5[&] *1*	≤10	0.0	2$^-$			
197.97	1$^-$,2$^-$	31.6[&] *1*	6 *2*	166.40	1$^-$,2$^-$	(M1)	38.1 *7*	α(L)=29.3 *5*; α(M)=6.81 *12*; α(N+..)=2.03 *4*
		156.4 *1*	20 *6*	41.6	0$^-$,1$^-$,2$^-$			
		191.5 *1*	100 *30*	6.48	1$^-$			
		198.0 *1*	44 *13*	0.0	2$^-$			
212.80	4$^-$	50.2[&] *1*	0.10 *3*	162.56	2$^-$,3$^-$	(E2)	123.1 *21*	α(L)=92.4 *16*; α(M)=23.9 *4*; α(N+..)=6.80 *12* B(E2)(W.u.)=10 *5*
		170.9[&] *1*	≤1	41.6	0$^-$,1$^-$,2$^-$			
		206.3[&] *1*	≤1	6.48	1$^-$			
		212.8 *1*	100 *30*	0.0	2$^-$	E2	0.303	α(K)=0.1456 *21*; α(L)=0.1187 *17*; α(M)=0.0304 *5*; α(N+..)=0.00874 *13* B(E2)(W.u.)=7 *3*
232.47	7$^+$	147.81 *2*	100 *5*	84.656	5$^+$	E2	1.107	α(K)=0.346 *5*; α(L)=0.571 *8*; α(M)=0.1478 *21*; α(N+..)=0.0423 *6* B(E2)(W.u.)=34 *4* HF=0.030 wu.
234.53	3$^-$	192.7[&] *1*	≤1	41.6	0$^-$,1$^-$,2$^-$			
		228.0 *1*	18 *5*	6.48	1$^-$	E2	0.241	α(K)=0.1226 *18*; α(L)=0.0893 *13*; α(M)=0.0228 *4*; α(N+..)=0.00657 *10* B(E2)(W.u.)>6.5
		234.5 *1*	100 *30*	0.0	2$^-$	M1	0.653	α(K)=0.537 *8*; α(L)=0.0891 *13*; α(M)=0.0206 *3*; α(N+..)=0.00615 *9* B(M1)(W.u.)>0.0045
252.58	1$^-$,2$^-$	18.1[&] *1*	0.005 *2*	234.53	3$^-$			
		86.2 *1*	30 *9*	166.40	1$^-$,2$^-$			
		90.0 *1*	15 *5*	162.56	2$^-$,3$^-$			
		210.7 *1*	≈10	41.6	0$^-$,1$^-$,2$^-$			
		246.1 *1*	100 *30*	6.48	1$^-$			

$^{196}_{79}Au_{117}$-9

Adopted Levels, Gammas (continued)

γ(^{196}Au) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[#]	α[@]	Comments
252.58	1⁻,2⁻	252.6 *1*	64 *19*	0.0	2⁻			
258.62	1⁻,2⁻	91.2 *1*		167.44	1⁻,2⁻			
		216.7 *1*	100 *30*	41.6	0⁻,1⁻,2⁻			
		252.1 *1*	70 *21*	6.48	1⁻			
		258.6 *1*	25 *8*	0.0	2⁻			
288.06	2⁻,3⁻	120.6 *1*	5 *2*	167.44	1⁻,2⁻			
		121.8[&] *1*	≤2	166.40	1⁻,2⁻			
		125.5[&] *1*	≤2	162.56	2⁻,3⁻			
		246.2 *1*	19 *6*	41.6	0⁻,1⁻,2⁻			
		281.6 *1*	100 *30*	6.48	1⁻	M1	0.395	α(K)=0.325 *5*; α(L)=0.0537 *8*; α(M)=0.01243 *18*; α(N+..)=0.00371 *6*
		288.2[&] *1*	≤2	0.0	2⁻			
298.56	1⁻,2⁻	131.2 *1*	≈15	167.44	1⁻,2⁻			
		132.2 *1*	42 *12*	166.40	1⁻,2⁻			
		256.6 *1*	71 *21*	41.6	0⁻,1⁻,2⁻			
		292.1 *1*	100 *30*	6.48	1⁻			
		298.4 *1*	≈20	0.0	2⁻			
307.20	1⁻,2⁻	139.7 *1*	15 *5*	167.44	1⁻,2⁻			
		140.8[&] *1*	≤5	166.40	1⁻,2⁻			
		144.5[&] *1*	≤1	162.56	2⁻,3⁻			
		265.4[&] *1*	≤2	41.6	0⁻,1⁻,2⁻			E_γ: 258.8 in 2000Gr32 seems a misprint.
		300.7 *1*	100 *30*	6.48	1⁻			
		307.2[&] *1*	≤5	0.0	2⁻			
323.83	1⁻	110.9[&] *1*	≤3	212.80	4⁻			
		125.9 *1*	4 *1*	197.97	1⁻,2⁻			
		156.4 *1*	9 *3*	167.44	1⁻,2⁻			
		157.3 *1*	24 *7*	166.40	1⁻,2⁻			
		161.1[&] *1*	≤6	162.56	2⁻,3⁻			
		281.9 *1*	100 *30*	41.6	0⁻,1⁻,2⁻	M1	0.393	α(K)=0.324 *5*; α(L)=0.0535 *8*; α(M)=0.01240 *18*; α(N+..)=0.00370 *6*
		317.2[&] *1*	8 *2*	6.48	1⁻			
		323.8[&] *1*	8 *2*	0.0	2⁻			
326.09	1⁻	91.6 *1*		234.53	3⁻			
		158.7[&] *1*	≤2	167.44	1⁻,2⁻			
		159.8[&] *1*	≤2	166.40	1⁻,2⁻			
		163.5 *1*	8 *2*	162.56	2⁻,3⁻			
		284.2[&] *1*	≤3	41.6	0⁻,1⁻,2⁻			
		319.6 *1*	70 *21*	6.48	1⁻			
		326.2 *1*	100 *30*	0.0	2⁻			

$^{196}_{79}Au_{117}$-10

Adopted Levels, Gammas (continued)

γ(^{196}Au) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[#]	δ[‡]	α[@]	Comments
348.38	$5^+,6^+$	263.7 *1*	100	84.656	5^+				
349.17	2^-	114.6 *1*	≈2	234.53	3^-	M1		4.91	α(K)=4.03 *6*; α(L)=0.677 *10*; α(M)=0.1571 *23*; α(N+..)=0.0468 *7*
		136.3[&] *1*	≤1	212.80	4^-				
		151.2[&] *1*	≈4	197.97	$1^-,2^-$				
		181.7[&] *1*	≈8	167.44	$1^-,2^-$				
		182.8 *1*	100 *30*	166.40	$1^-,2^-$	M1		1.307	α(K)=1.074 *16*; α(L)=0.179 *3*; α(M)=0.0415 *6*; α(N+..)=0.01237 *18*
		186.5[&] *1*	≤2	162.56	$2^-,3^-$				
		307.3[&] *1*	≤2	41.6	$0^-,1^-,2^-$				
		342.8 *1*	19 *6*	6.48	1^-				
		349.2 *1*	13 *4*	0.0	2^-				
355.9?	$10^-,1^-,2^-,3^-$	97.3[&] *1*	100	258.62	$1^-,2^-$				
370.14	$6^+,7^+$	137.69 *3*	29 *10*	232.47	7^+	M1		2.91	α(K)=2.39 *4*; α(L)=0.400 *6*; α(M)=0.0928 *13*; α(N+..)=0.0277 *4* B(M1)(W.u.)>3.5×10^{-5}
		285.49 *7*	100 *10*	84.656	5^+	(E2)		0.1188	α(K)=0.0701 *10*; α(L)=0.0367 *6*; α(M)=0.00927 *13*; α(N+..)=0.00268 *4* B(E2)(W.u.)>0.064
375.61	3^-	141.0 *1*	2.9 *9*	234.53	3^-				
		162.7 *1*	16 *5*	212.80	4^-	M1		1.81	α(K)=1.490 *21*; α(L)=0.249 *4*; α(M)=0.0577 *9*; α(N+..)=0.01720 *25* I_γ: 6 for 162.7γ and 16 for 208.3γ in figure 12 of 2000Gr32 are misprints confirmed by e-mail in July 2001 from one of the authors (Guenther).
		208.3 *1*	6 *2*	167.44	$1^-,2^-$				
		375.7 *1*	100 *30*	0.0	2^-				
388.22	3^+	175.4 *1*	0.90 *9*	212.80	4^-				
		303.6 *1*	100 *30*	84.656	5^+				
		388.2 *1*	4.8 *5*	0.0	2^-				
400.84	6^+	30.71 *1*	2.8	370.14	$6^+,7^+$	M1		41.5	B(M1)(W.u.)>0.00016 α(L)=31.9 *5*; α(M)=7.41 *11*; α(N+..)=2.21 *3*
		168.37 *2*	100 *6*	232.47	7^+	M1		1.647	α(K)=1.353 *19*; α(L)=0.226 *4*; α(M)=0.0524 *8*; α(N+..)=0.01561 *22* B(M1)(W.u.)>3.5×10^{-5}
		316.19 *5*	38 *3*	84.656	5^+	M1+E2	>3	0.098 *10*	α(K)=0.064 *10*; α(L)=0.0257 *8*; α(M)=0.00642 *17*; α(N+..)=0.00186 *6* B(E2)(W.u.)>0.0068
403.79	$3^-,4^-$	169.3 *1*	≈2	234.53	3^-				
		191.0 *1*	≈4	212.80	4^-				
		236.3[&] *1*	≤1	167.44	$1^-,2^-$				

$^{196}_{79}Au_{117}$-11

Adopted Levels, Gammas (continued)

γ(^{196}Au) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[#]	δ[‡]	α[@]	Comments
403.79	3⁻,4⁻	237.4[&] *1*	≤1	166.40	1⁻,2⁻				
		241.1 *1*	11 *3*	162.56	2⁻,3⁻				
		361.9[&] *1*	≤2	41.6	0⁻,1⁻,2⁻				
		397.2[&] *1*	≤2	6.48	1⁻				
		403.8 *1*	100 *30*	0.0	2⁻				
408.37	2⁻,3⁻	120.3 *1*	≈5	288.06	2⁻,3⁻				
		155.8 *1*		252.58	1⁻,2⁻				
		210.4 *1*	100 *30*	197.97	1⁻,2⁻				
		240.6 *1*	≈25	167.44	1⁻,2⁻				
		242.2 *1*	≈25	166.40	1⁻,2⁻				
413.74	2⁻	106.6 *1*		307.20	1⁻,2⁻				
		125.6 *1*	≈2	288.06	2⁻,3⁻				
		215.8 *1*	100 *30*	197.97	1⁻,2⁻				
		247.2 *1*	≈15	166.40	1⁻,2⁻				
420.75	8⁺	19.92 *1*	0.005	400.84	6⁺	(E2)		1.177×10^4	B(E2)(W.u.)=24 *3* α(L)=8.87×10^3 *13*; α(M)=2.27×10^3 *4*; α(N+..)=642 *10*
		50.57 *2*	0.02	370.14	6⁺,7⁺	(E2)		118.8	B(E2)(W.u.)=0.90 *11* α(L)=89.1 *13*; α(M)=23.1 *4*; α(N+..)=6.57 *10*
		188.27 *3*	100 *5*	232.47	7⁺	M1+E2	+0.12 *2*	1.193 *18*	α(K)=0.978 *15*; α(L)=0.1651 *24*; α(M)=0.0384 *6*; α(N+..)=0.01143 *16* B(M1)(W.u.)=0.00058 *7*; B(E2)(W.u.)=0.09 *4* Intensity imbalance at the 232.5 level supports an E2 admixture. δ: from 1982Ha04. δ^2<0.025 (1967Wa02). HF(M1)=1.8×10^4, HF(E2)=0.020.
423.65	4⁺,5⁺	339.0 *1*	100	84.656	5⁺				
456.44	2⁻	107.5 *1*		349.17	2⁻				
		132.7 *1*	≈10	323.83	1⁻				
		197.8 *1*	41 *12*	258.62	1⁻,2⁻				
		203.8 *1*	49 *15*	252.58	1⁻,2⁻				
		221.7 *1*	8 *2*	234.53	3⁻				
		289.0 *1*	34 *10*	167.44	1⁻,2⁻				
		290.0 *1*	100 *30*	166.40	1⁻,2⁻				
		293.8[&] *1*	≤8	162.56	2⁻,3⁻				
467.11	3⁺,4⁺	78.9 *1*		388.22	3⁺				
		382.5 *1*		84.656	5⁺				
480.29	2⁻	104.6 *1*		375.61	3⁻				
		131.2 *1*	≈3	349.17	2⁻				
		192.3 *1*	≈3	288.06	2⁻,3⁻				
		227.7 *1*	16 *5*	252.58	1⁻,2⁻				

Adopted Levels, Gammas (continued)

γ(^{196}Au) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[#]	α[@]	Comments
480.29	2⁻	245.8 *1*	≈5	234.53	3⁻			
		312.9[&] *1*	≤3	167.44	1⁻,2⁻			
		473.8 *1*	7 *2*	6.48	1⁻			
		480.2 *1*	100 *30*	0.0	2⁻			
490.21	3⁻	141.0 *1*	20 *6*	349.17	2⁻	M1	2.72	α(K)=2.23 *4*; α(L)=0.374 *6*; α(M)=0.0867 *13*; α(N+..)=0.0258 *4*
		183.2 *1*	≤12	307.20	1⁻,2⁻			
		202.0 *1*	18 *5*	288.06	2⁻,3⁻			
		237.6 *1*	20 *6*	252.58	1⁻,2⁻			
		255.7 *1*	≤5	234.53	3⁻			
		322.7 *1*	≈15	167.44	1⁻,2⁻			
		323.7 *1*	≈15	166.40	1⁻,2⁻			
		327.7 *1*	≈13	162.56	2⁻,3⁻			
		448.3[&] *1*	≤5	41.6	0⁻,1⁻,2⁻			
		483.7 *1*	9 *3*	6.48	1⁻			
		490.2 *1*	100 *30*	0.0	2⁻			
491.19	2⁻	115.5 *1*		375.61	3⁻			
		293.3 *1*	100 *30*	197.97	1⁻,2⁻			
491.60		259.1 *1*	100	232.47	7⁺			
499.74	5⁺	98.9 *1*	100	400.84	6⁺			
501.63		177.8 *1*		323.83	1⁻			
		242.9[&] *1*		258.62	1⁻,2⁻			
502.79	5⁺	102.0 *1*		400.84	6⁺			
		132.6 *1*		370.14	6⁺,7⁺			
518.03	4⁺,5⁺	94.3 *1*		423.65	4⁺,5⁺			
		129.8 *1*		388.22	3⁺			
		169.7 *1*		348.38	5⁺,6⁺			
		433.4 *1*		84.656	5⁺			
520.50	3⁻	144.8		375.61	3⁻			
		171.4 *1*		349.17	2⁻			
		213.2 *1*		307.20	1⁻,2⁻			
		267.8 *1*		252.58	1⁻,2⁻			
		307.8 *1*		212.80	4⁻			
542.40	1⁻,2⁻	218.4 *1*		323.83	1⁻			
		283.9 *1*		258.62	1⁻,2⁻			
		375.0 *1*		167.44	1⁻,2⁻			
		376.0 *1*		166.40	1⁻,2⁻			
550.81	3⁺,4⁺,5⁺,6⁺	127.2 *1*		423.65	4⁺,5⁺			
		162.6 *1*		388.22	3⁺			
		202.4[&] *1*		348.38	5⁺,6⁺			
551.70		338.9[&] *1*		212.80	4⁻			

Adopted Levels, Gammas (continued)

γ(^{196}Au) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[#]	α[@]	Comments
551.70		385.3 *1*		166.40	1⁻,2⁻			
564.03	2⁻	214.7 *1*		349.17	2⁻			
		240.2 *1*		323.83	1⁻			
		256.9 *1*		307.20	1⁻,2⁻			
		366.2 *1*		197.97	1⁻,2⁻			
		397.6 *1*		166.40	1⁻,2⁻			
565.24	2⁻	151.3[&] *1*		413.74	2⁻			
		216.0 *1*		349.17	2⁻			
		277.2 *1*		288.06	2⁻,3⁻			
		352.5 *1*		212.80	4⁻			
568.62		193.1 *1*		375.61	3⁻			
		334.2 *1*		234.53	3⁻			
		355.9[&] *1*		212.80	4⁻			
		401.1 *1*		167.44	1⁻,2⁻			
		406.0 *1*		162.56	2⁻,3⁻			
569.91	2⁻,3⁻,4⁻	245.9 *1*		323.83	1⁻			
		372.1 *1*		197.97	1⁻,2⁻			
		402.5 *1*		167.44	1⁻,2⁻			
		403.5 *1*		166.40	1⁻,2⁻			
571.40	(4⁻)	336.8 *1*		234.53	3⁻			
		358.6 *1*		212.80	4⁻			
		408.9 *1*		162.56	2⁻,3⁻			
575.70		226.6 *1*		349.17	2⁻			
		268.4 *1*		307.20	1⁻,2⁻			
		323.4 *1*		252.58	1⁻,2⁻			
		377.6 *1*		197.97	1⁻,2⁻			
		409.4[&] *1*		166.40	1⁻,2⁻			
587.55	5⁺,6⁺,7⁺,8⁺	186.8 *1*		400.84	6⁺			
		355.0 *1*		232.47	7⁺			
595.66	12⁻	174.91 *2*	100	420.75	8⁺	M4	227	α(K)=60.5 *9*; α(L)=119.5 *17*; α(M)=36.1 *5*; α(N+..)=10.83 *16* B(M4)(W.u.)=4.56 *15* α: M4 α(theory)'s mult. by 0.975 *5* (Cf. 1990Ne01). HF(M4)=0.23.
598.06	5⁺,6⁺	177.3 *1*		420.75	8⁺			
		365.6 *1*		232.47	7⁺			
625.19	3⁻,4⁻,5⁻	221.4 *1*		403.79	3⁻,4⁻			
		299.0 *1*		326.09	1⁻			
		390.6 *1*		234.53	3⁻			
		462.7 *1*		162.56	2⁻,3⁻			
627.14		226.3 *1*		400.84	6⁺			
635.66	2⁻	227.2 *1*		408.37	2⁻,3⁻			

Adopted Levels, Gammas (continued)

γ(^{196}Au) (continued)

E_i(level)	J_i^π	E_γ †	E_f	J_f^π
635.66	2⁻	260.0 *1*	375.61	3⁻
		286.4 *1*	349.17	2⁻
		311.9 *1*	323.83	1⁻
		469.4 *1*	166.40	1⁻,2⁻
636.59		118.5 *1*	518.03	4⁺,5⁺
		213.0 *1*	423.65	4⁺,5⁺
637.83	2⁻	224.1 *1*	413.74	2⁻
		234.2 *1*	403.79	3⁻,4⁻
		288.6 *1*	349.17	2⁻
		349.8 *1*	288.06	2⁻,3⁻
		385.2 *1*	252.58	1⁻,2⁻
		425.0 *1*	212.80	4⁻
		470.3 *1*	167.44	1⁻,2⁻
640.65		219.9 *1*	420.75	8⁺
645.48	5⁺,6⁺	297.1 *1*	348.38	5⁺,6⁺
645.54		275.4 *1*	370.14	6⁺,7⁺
651.41	2⁻,3⁻	327.6 *1*	323.83	1⁻
		392.7 *1*	258.62	1⁻,2⁻
		453.5 *1*	197.97	1⁻,2⁻
657.87	(5⁺)	425.4 *1*	232.47	7⁺
662.55	3⁻	238.9 *1*	423.65	4⁺,5⁺
		314.1& *1*	348.38	5⁺,6⁺
668.73	3⁻	178.5 *1*	490.21	3⁻
		254.7 *1*	413.74	2⁻
		293.2 *1*	375.61	3⁻
		319.6 *1*	349.17	2⁻
		342.7 *1*	326.09	1⁻
		361.7& *1*	307.20	1⁻,2⁻
		380.8 *1*	288.06	2⁻,3⁻
		416.1 *1*	252.58	1⁻,2⁻
		434.3 *1*	234.53	3⁻
		456.0 *1*	212.80	4⁻
		470.7 *1*	197.97	1⁻,2⁻
		501.2 *1*	167.44	1⁻,2⁻
		506.2 *1*	162.56	2⁻,3⁻
672.77		302.6& *1*	370.14	6⁺,7⁺
		440.3 *1*	232.47	7⁺
680.46	4⁻	190.4 *1*	490.21	3⁻
		276.7 *1*	403.79	3⁻,4⁻
		304.9 *1*	375.61	3⁻
680.46	4⁻	331.2& *1*	349.17	2⁻
		445.9 *1*	234.53	3⁻
		467.5 *1*	212.80	4⁻
		513.0 *1*	167.44	1⁻,2⁻
688.55	2⁻	274.7 *1*	413.74	2⁻
		339.4 *1*	349.17	2⁻
		364.8 *1*	323.83	1⁻
		381.4 *1*	307.20	1⁻,2⁻
		389.9 *1*	298.56	1⁻,2⁻
		490.6 *1*	197.97	1⁻,2⁻
702.59	2⁻,3⁻,4⁻	212.4& *1*	490.21	3⁻
		222.2 *1*	480.29	2⁻
		326.9 *1*	375.61	3⁻
		395.2& *1*	307.20	1⁻,2⁻
		414.6 *1*	288.06	2⁻,3⁻
		468.0 *1*	234.53	3⁻
		489.8 *1*	212.80	4⁻
		540.2 *1*	162.56	2⁻,3⁻
704.37	3⁺	303.6& *1*	400.84	6⁺
		471.9 *1*	232.47	7⁺
708.51	2⁻	294.8 *1*	413.74	2⁻
		359.4 *1*	349.17	2⁻
		449.8 *1*	258.62	1⁻,2⁻
713.91	2⁻	246.8 *1*	467.11	3⁺,4⁺
		290.3 *1*	423.65	4⁺,5⁺
		325.7 *1*	388.22	3⁺
		713.8 *1*	0.0	2⁻
714.35		293.6 *1*	420.75	8⁺
716.48	1⁻,2⁻,3⁻,4⁻	302.9 *1*	413.74	2⁻
		340.8 *1*	375.61	3⁻
		367.2 *1*	349.17	2⁻
		409.3 *1*	307.20	1⁻,2⁻
		463.9 *1*	252.58	1⁻,2⁻
720.39	2⁻,3⁻	316.5 *1*	403.79	3⁻,4⁻
		394.4 *1*	326.09	1⁻
		485.8 *1*	234.53	3⁻
		507.6 *1*	212.80	4⁻
		557.8 *1*	162.56	2⁻,3⁻
720.68	(5⁺)	297.1 *1*	423.65	4⁺,5⁺
		332.4 *1*	388.22	3⁺

Adopted Levels, Gammas (continued)

γ(^{196}Au) (continued)

E_i(level)	J_i^π	E_γ[†]	E_f	J_f^π
726.00	2⁻	355.9 *1*	370.14	6⁺,7⁺
		493.5 *1*	232.47	7⁺
733.30	1⁻	319.6 *1*	413.74	2⁻
		384.1 *1*	349.17	2⁻
		409.5 *1*	323.83	1⁻
		565.8 *1*	167.44	1⁻,2⁻
747.92	3⁻,4⁻,5⁻	372.2 *1*	375.61	3⁻
		459.9 *1*	288.06	2⁻,3⁻
		549.9 *1*	197.97	1⁻,2⁻
		580.6 *1*	167.44	1⁻,2⁻
		581.5 *1*	166.40	1⁻,2⁻
749.5?		461.4[&] *1*	288.06	2⁻,3⁻
750.60	2⁻	175.0 *1*	575.70	
		260.3 *1*	490.21	3⁻
		346.9 *1*	403.79	3⁻,4⁻
		375.0 *1*	375.61	3⁻
		424.4 *1*	326.09	1⁻
		588.0 *1*	162.56	2⁻,3⁻
753.05		403.9 *1*	349.17	2⁻
		518.5 *1*	234.53	3⁻
		585.8[&] *1*	167.44	1⁻,2⁻
760.64	2⁻	269.0 *1*	491.60	
		528.2 *1*	232.47	7⁺
769.28	2⁻,3⁻,4⁻	393.6 *1*	375.61	3⁻
		420.1 *1*	349.17	2⁻
		481.3 *1*	288.06	2⁻,3⁻
		606.7[&] *1*	162.56	2⁻,3⁻
780.55		262.5[&] *1*	518.03	4⁺,5⁺
		392.4 *1*	388.22	3⁺
		432.1 *1*	348.38	5⁺,6⁺
785.72	2⁻	461.7 *1*	323.83	1⁻
		551.2 *1*	234.53	3⁻
		587.8 *1*	197.97	1⁻,2⁻
		618.4 *1*	167.44	1⁻,2⁻
797.91	2⁻	409.7 *1*	388.22	3⁺
799.54	4⁻	279.0 *1*	520.50	3⁻
		309.2 *1*	490.21	3⁻
		319.4 *1*	480.29	2⁻
		395.7 *1*	403.79	3⁻,4⁻
799.54	4⁻	473.5 *1*	326.09	1⁻
		565.0 *1*	234.53	3⁻
807.48	1⁻,2⁻,3⁻	519.3 *1*	288.06	2⁻,3⁻
		641.2 *1*	166.40	1⁻,2⁻
807.83		289.5[&] *1*	518.03	4⁺,5⁺
		340.8 *1*	467.11	3⁺,4⁺
		384.1 *1*	423.65	4⁺,5⁺
		419.6 *1*	388.22	3⁺
813.32		295.4 *1*	518.03	4⁺,5⁺
		389.6 *1*	423.65	4⁺,5⁺
		464.9 *1*	348.38	5⁺,6⁺
815.45	3⁻,4⁻	394.7 *1*	420.75	8⁺
816.03	(2⁻)	492.2 *1*	323.83	1⁻
		557.4 *1*	258.62	1⁻,2⁻
		648.9[&] *1*	167.44	1⁻,2⁻
816.60		490.6 *1*	326.09	1⁻
		509.3[&] *1*	307.20	1⁻,2⁻
		582.1 *1*	234.53	3⁻
		603.7 *1*	212.80	4⁻
		648.9[&] *1*	167.44	1⁻,2⁻
		654.0 *1*	162.56	2⁻,3⁻
819.46		250.9 *1*	568.62	
		606.6 *1*	212.80	4⁻
		656.9 *1*	162.56	2⁻,3⁻
841.34	5⁺,6⁺,7⁺	440.5 *1*	400.84	6⁺
848.04		477.9 *1*	370.14	6⁺,7⁺
848.08		499.7 *1*	348.38	5⁺,6⁺
850.17	3⁻,4⁻,5⁻	474.6 *1*	375.61	3⁻
		615.6 *1*	234.53	3⁻
851.40	(3⁻,4⁻)	502.3 *1*	349.17	2⁻
		544.0 *1*	307.20	1⁻,2⁻
		684.1 *1*	167.44	1⁻,2⁻
852.81		482.7 *1*	370.14	6⁺,7⁺
852.82		334.8 *1*	518.03	4⁺,5⁺
		429.2 *1*	423.65	4⁺,5⁺
853.94		546.7 *1*	307.20	1⁻,2⁻
		619.5 *1*	234.53	3⁻
		641.1 *1*	212.80	4⁻
856.50	2⁻,3⁻,4⁻	622.0 *1*	234.53	3⁻

Adopted Levels, Gammas (continued)

γ(^{196}Au) (continued)

E_i(level)	J_i^π	E_γ †	E_f	J_f^π
856.50	2⁻,3⁻,4⁻	643.7 *1*	212.80	4⁻
		693.9 *1*	162.56	2⁻,3⁻
876.24		358.2 *1*	518.03	4⁺,5⁺
		452.7& *1*	423.65	4⁺,5⁺
		488.0 *1*	388.22	3⁺
877.07		156.6 *1*	720.39	2⁻,3⁻
		305.7 *1*	571.40	(4⁻)
		473.3 *1*	403.79	3⁻,4⁻
		664.3 *1*	212.80	4⁻
881.68	3⁻	557.9 *1*	323.83	1⁻
		647.1 *1*	234.53	3⁻
882.64	(4⁻,5⁻)	392.5 *1*	490.21	3⁻
		533.4 *1*	349.17	2⁻
		575.4& *1*	307.20	1⁻,2⁻
883.50		513.4 *1*	370.14	6⁺,7⁺
		651.0 *1*	232.47	7⁺
893.22	3⁻	403.0 *1*	490.21	3⁻
		725.8 *1*	167.44	1⁻,2⁻
895.81	2⁻	472.1 *1*	423.65	4⁺,5⁺
		547.5 *1*	348.38	5⁺,6⁺
902.04	1⁻	421.7 *1*	480.29	2⁻
		667.6 *1*	234.53	3⁻
		703.8& *1*	197.97	1⁻,2⁻
		734.6 *1*	167.44	1⁻,2⁻
		735.6 *1*	166.40	1⁻,2⁻
907.28		440.1 *1*	467.11	3⁺,4⁺
		483.7 *1*	423.65	4⁺,5⁺
908.26	2⁻,3⁻,4⁻	601.1 *1*	307.20	1⁻,2⁻
		673.8 *1*	234.53	3⁻
		745.6 *1*	162.56	2⁻,3⁻
921.52	3⁻,4⁻,5⁻	441.2 *1*	480.29	2⁻
		517.6 *1*	403.79	3⁻,4⁻
		687.0 *1*	234.53	3⁻
		759.1 *1*	162.56	2⁻,3⁻
925.68	2⁻	458.6 *1*	467.11	3⁺,4⁺
		502.0 *1*	423.65	4⁺,5⁺
931.64		561.5 *1*	370.14	6⁺,7⁺
931.70		413.7 *1*	518.03	4⁺,5⁺
		583.3 *1*	348.38	5⁺,6⁺
934.24		220.3 *1*	713.91	2⁻
		383.5 *1*	550.81	3⁺,4⁺,5⁺,6⁺
		546.0 *1*	388.22	3⁺
938.38	3⁻,4⁻,5⁻	589.3 *1*	349.17	2⁻
		631.1 *1*	307.20	1⁻,2⁻
		650.3 *1*	288.06	2⁻,3⁻
940.30		727.5 *1*	212.80	4⁻
944.20?		731.4& *1*	212.80	4⁻
946.22		522.7& *1*	423.65	4⁺,5⁺
		558.0 *1*	388.22	3⁺
948.75	(5⁺,6⁺,7⁺)	528.0 *1*	420.75	8⁺
951.17	2⁻,3⁻,4⁻	575.7 *1*	375.61	3⁻
		716.5 *1*	234.53	3⁻
962.47	0⁻,1⁻,2⁻,3⁻	444.4 *1*	518.03	4⁺,5⁺
		495.6& *1*	467.11	3⁺,4⁺
		538.6& *1*	423.65	4⁺,5⁺
		574.3 *1*	388.22	3⁺
967.49	2⁻,3⁻,4⁻,5⁻	342.2 *1*	625.19	3⁻,4⁻,5⁻
		563.8 *1*	403.79	3⁻,4⁻
968.94	2⁻,3⁻,4⁻,5⁻	619.9 *1*	349.17	2⁻
		802.4 *1*	166.40	1⁻,2⁻
980.22		462.1 *1*	518.03	4⁺,5⁺
		556.7 *1*	423.65	4⁺,5⁺
		592.0 *1*	388.22	3⁺
		631.8 *1*	348.38	5⁺,6⁺
989.03	2⁻,3⁻,4⁻,5⁻	665.2 *1*	323.83	1⁻
		823.0& *1*	166.40	1⁻,2⁻
990.91	3⁻	615.3 *1*	375.61	3⁻
		778.0& *1*	212.80	4⁻
991.86		703.8 *1*	288.06	2⁻,3⁻
992.07		524.9 *1*	467.11	3⁺,4⁺
		603.9 *1*	388.22	3⁺
993.45		569.8 *1*	423.65	4⁺,5⁺
995.53		761.0 *1*	234.53	3⁻
1003.86	1⁻	841.3 *1*	162.56	2⁻,3⁻

$^{196}_{79}Au_{117}$-17

Adopted Levels, Gammas (continued)

γ(^{196}Au) (continued)

E_i(level)	J_i^π	E_γ[†]	E_f	J_f^π
1004.29	$5^+,6^+,7^+,8^+$	678.2 *1*	326.09	1^-
1014.65	1^-	610.7 *1*	403.79	$3^-,4^-$
		802.0 *1*	212.80	4^-
1017.83	$1^-,2^-,3^-$	694.0 *1*	323.83	1^-
1018.53		784.0 *1*	234.53	3^-
1025.05	$2^-,3^-,4^-,5^-$	675.8 *1*	349.17	2^-
		790.6 *1*	234.53	3^-
1045.73	2^-	721.9 *1*	323.83	1^-
1046.29		248.4 *1*	797.91	2^-
		332.3 *1*	713.91	2^-
		495.4 *1*	550.81	$3^+,4^+,5^+,6^+$
		658.2 *1*	388.22	3^+
		811.8 *1*	234.53	3^-
1053.28		586.2 *1*	467.11	$3^+,4^+$
		629.6 *1*	423.65	$4^+,5^+$
1053.30	$0^-,1^-$	765.2 *1*	288.06	$2^-,3^-$
		885.9 *1*	167.44	$1^-,2^-$
1053.34		683.2 *1*	370.14	$6^+,7^+$
1056.25	$2^-,3^-,4^-$	484.8 *1*	571.40	(4^-)
		652.5 *1*	403.79	$3^-,4^-$
		843.6[&] *1*	212.80	4^-
1058.46		895.9 *1*	162.56	$2^-,3^-$
1065.93	$2^-,3^-$	515.2 *1*	550.81	$3^+,4^+,5^+,6^+$
		547.8 *1*	518.03	$4^+,5^+$
		641.9[&] *1*	423.65	$4^+,5^+$
		677.7 *1*	388.22	3^+
		717.6 *1*	348.38	$5^+,6^+$
1070.79	$2^-,3^-,4^-,5^-$	667.0 *1*	403.79	$3^-,4^-$
1074.87	$2^-,3^-,4^-,5^-$	607.8 *1*	467.11	$3^+,4^+$
		686.6 *1*	388.22	3^+
1088.90	$2^-,3^-$	876.1 *1*	212.80	4^-
1093.48		217.2 *1*	876.24	
		575.6 *1*	518.03	$4^+,5^+$
		626.4 *1*	467.11	$3^+,4^+$
		669.7 *1*	423.65	$4^+,5^+$
1095.20	$2^-,3^-$	788.0 *1*	307.20	$1^-,2^-$
		807.2[&] *1*	288.06	$2^-,3^-$
1096.33		772.5 *1*	323.83	1^-
1100.89	1^-	751.7 *1*	349.17	2^-
		793.7 *1*	307.20	$1^-,2^-$
1107.78	$0^-,1^-,2^-$	393.9 *1*	713.91	2^-
		640.7 *1*	467.11	$3^+,4^+$
		719.5 *1*	388.22	3^+
1120.53	$0^-,1^-,2^-$	127.1[&] *1*	993.45	
		312.7 *1*	807.83	
		569.8[&] *1*	550.81	$3^+,4^+,5^+,6^+$
		697.2[&] *1*	423.65	$4^+,5^+$
1121.46	3^-	958.9 *1*	162.56	$2^-,3^-$
1134.39	$2^-,3^-$	730.6 *1*	403.79	$3^-,4^-$
1140.41	$2^-,3^-$	673.3 *1*	467.11	$3^+,4^+$
1146.93	$5^+,6^+$	912.4 *1*	234.53	3^-
1152.90	$1^-,2^-,3^-$	749.0 *1*	403.79	$3^-,4^-$
		940.2 *1*	212.80	4^-
1156.60		585.2 *1*	571.40	(4^-)
1174.92	$2^-,3^-,4^-$	916.3 *1*	258.62	$1^-,2^-$
1188.81	3^-	721.7 *1*	467.11	$3^+,4^+$
1196.20		624.8 *1*	571.40	(4^-)
1198.01	$1^-,2^-,3^-$	774.4 *1*	423.65	$4^+,5^+$
		849.6 *1*	348.38	$5^+,6^+$
1203.40	$2^-,3^-,4^-,5^-$	896.2 *1*	307.20	$1^-,2^-$
		990.6 *1*	212.80	4^-
1207.23	$2^-,3^-,4^-,5^-$	972.7 *1*	234.53	3^-
1213.56		499.7 *1*	713.91	2^-
		789.9 *1*	423.65	$4^+,5^+$
		825.3 *1*	388.22	3^+
1229.19		825.4 *1*	403.79	$3^-,4^-$
1248.71	$2^-,3^-$	758.4 *1*	490.21	3^-
		873.2 *1*	375.61	3^-
1268.67	$0^-,1^-,2^-$	801.6 *1*	467.11	$3^+,4^+$
		880.4 *1*	388.22	3^+
1279.03	2^-	1044.5 *1*	234.53	3^-
1280.90		709.5 *1*	571.40	(4^-)
1292.00	$2^-,3^-,4^-$	984.8 *1*	307.20	$1^-,2^-$
1295.83		1061.3 *1*	234.53	3^-

$^{196}_{79}Au_{117}$-18

Adopted Levels, Gammas (continued)

γ(^{196}Au) (continued)

E_i(level)	J_i^π	E_γ †	E_f	J_f^π	E_i(level)	J_i^π	E_γ †	E_f	J_f^π
1296.12	$3^-,4^-,5^-$	907.9 *1*	388.22	3^+	1432.25		1083.9 *1*	348.38	$5^+,6^+$
1298.00		1085.2 *1*	212.80	4^-	1457.32		1069.1 *1*	388.22	3^+
1337.73	$3^-,4^-,5^-$	870.5 *1*	467.11	$3^+,4^+$	1491.83	$5^+,6^+,7^+$	684.0 *1*	807.83	
		914.2 *1*	423.65	$4^+,5^+$	1522.65	$(2^-,3^-,4^-)$	1099.0 *1*	423.65	$4^+,5^+$
1347.63	$2^-,3^-,4^-$	1113.1 *1*	234.53	3^-	1552.42	$2^-,3^-,4^-$	1085.3 *1*	467.11	$3^+,4^+$
1350.93		1116.4 *1*	234.53	3^-	1568.85		1145.2 *1*	423.65	$4^+,5^+$
1361.79	$2^-,3^-$	958.0 *1*	403.79	$3^-,4^-$	1599.49		1175.8 *1*	423.65	$4^+,5^+$
1364.48		1016.1 *1*	348.38	$5^+,6^+$			1211.3 *1*	388.22	3^+
1387.31	$2^-,3^-,4^-$	673.4 *1*	713.91	2^-	1632.21		918.3 *1*	713.91	2^-
1403.15	$(2^-,3^-,4^-)$	979.5 *1*	423.65	$4^+,5^+$	1634.45		1210.8 *1*	423.65	$4^+,5^+$
1416.31	$(0^-,1^-)$	949.2 *1*	467.11	$3^+,4^+$	1640.42		1252.2 *1*	388.22	3^+
1426.85	$0^-,1^-$	1003.2 *1*	423.65	$4^+,5^+$	1657.15		1233.5 *1*	423.65	$4^+,5^+$
1431.25		1007.6 *1*	423.65	$4^+,5^+$	1664.91		951.0 *1*	713.91	2^-
1432.25		965.1 *1*	467.11	$3^+,4^+$	1672.95		1249.3 *1*	423.65	$4^+,5^+$

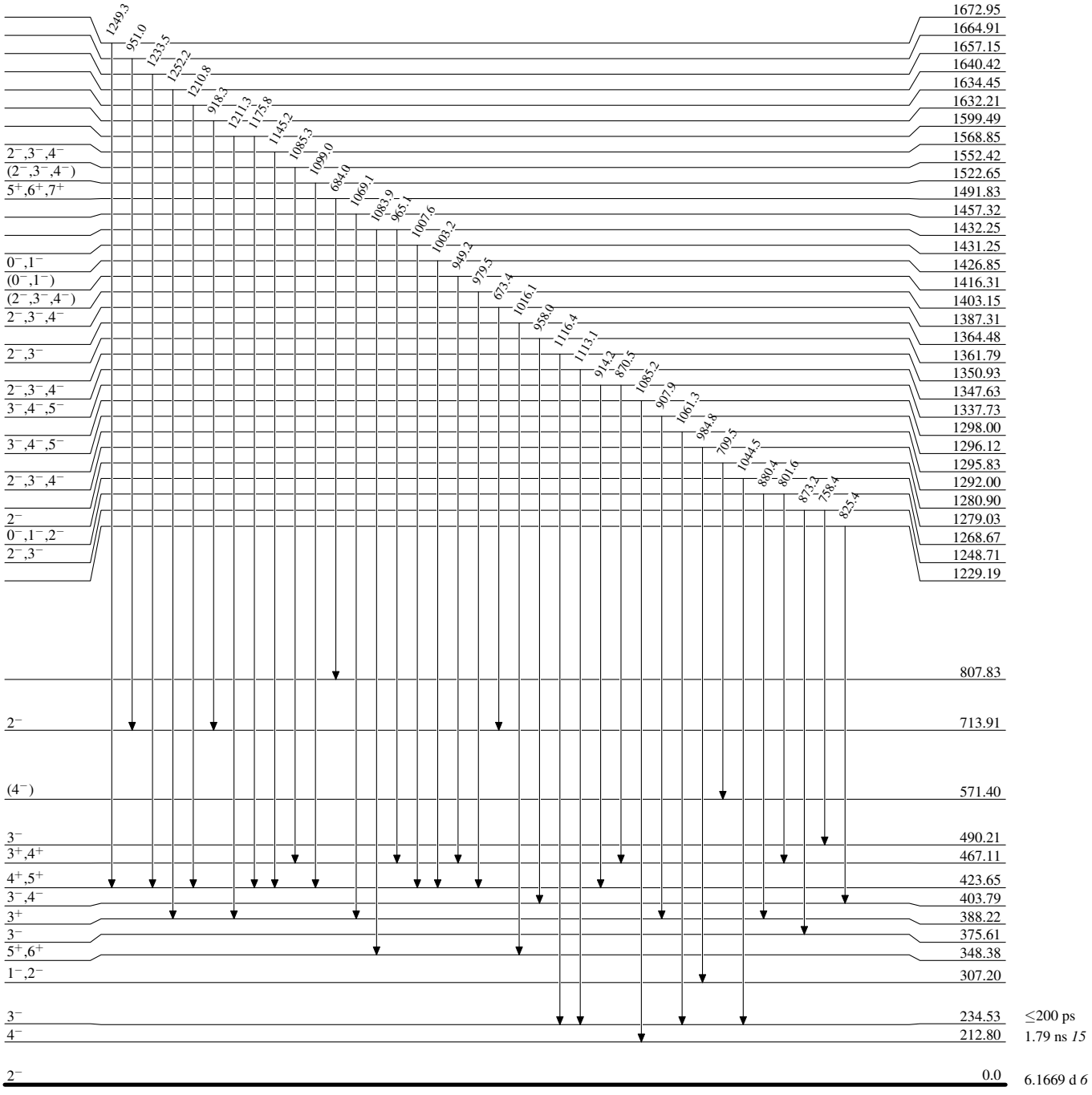
† From ^{196}Au IT decay (9.6 h), (d,2nγ), (p,nγ).
‡ From ^{196}Au IT decay (9.6 h).
# Based upon ce ratios from IT decay, and singles ce and γ ray spectra in (d,2nγ).
@ Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with "Frozen Orbitals" approximation based on γ-ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.
& Placement of transition in the level scheme is uncertain.

$^{196}_{79}Au_{117}$-19

Adopted Levels, Gammas

Level Scheme

Intensities: Relative photon branching from each level

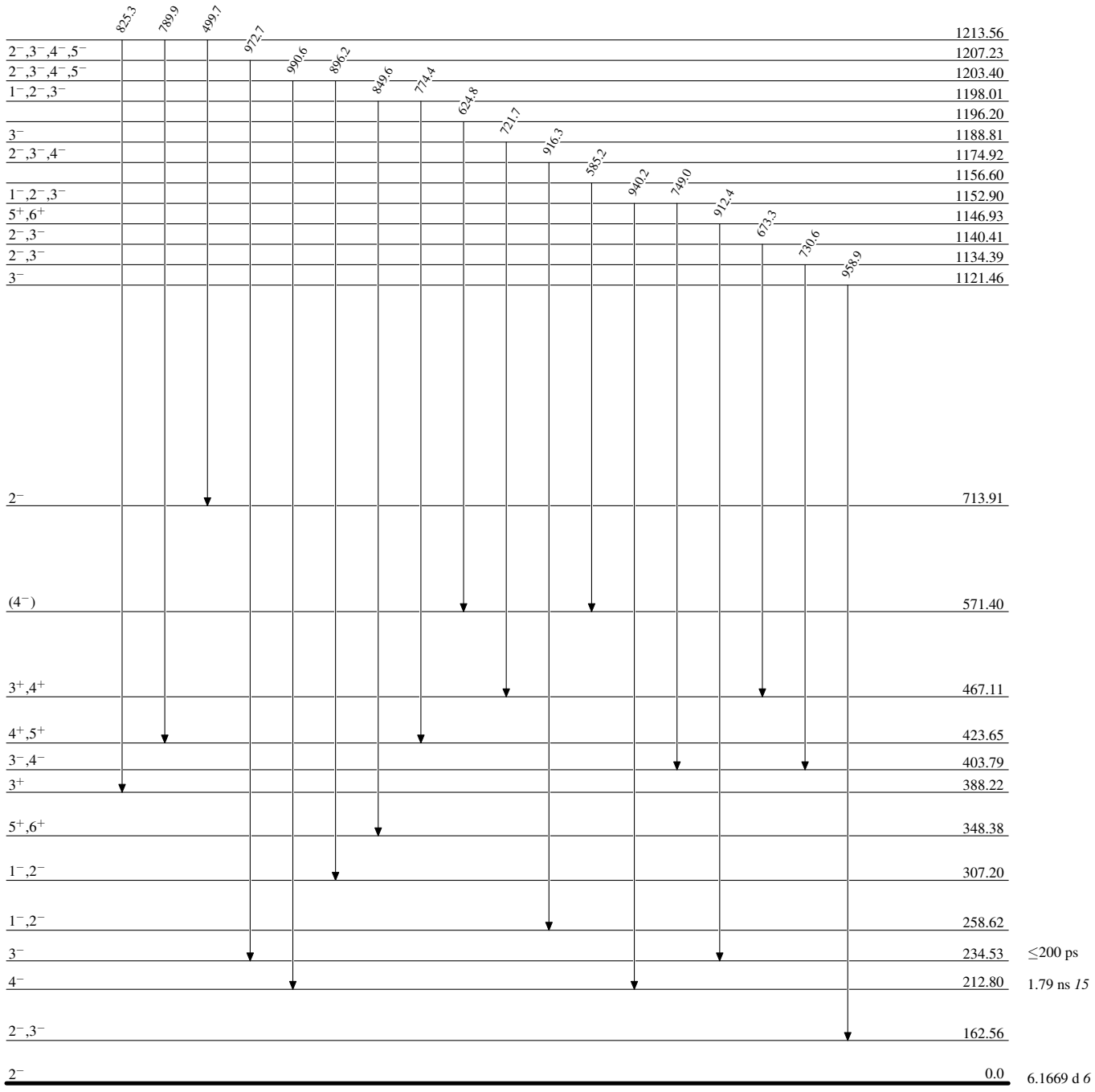


$^{196}_{79}Au_{117}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



$^{196}_{79}Au_{117}$

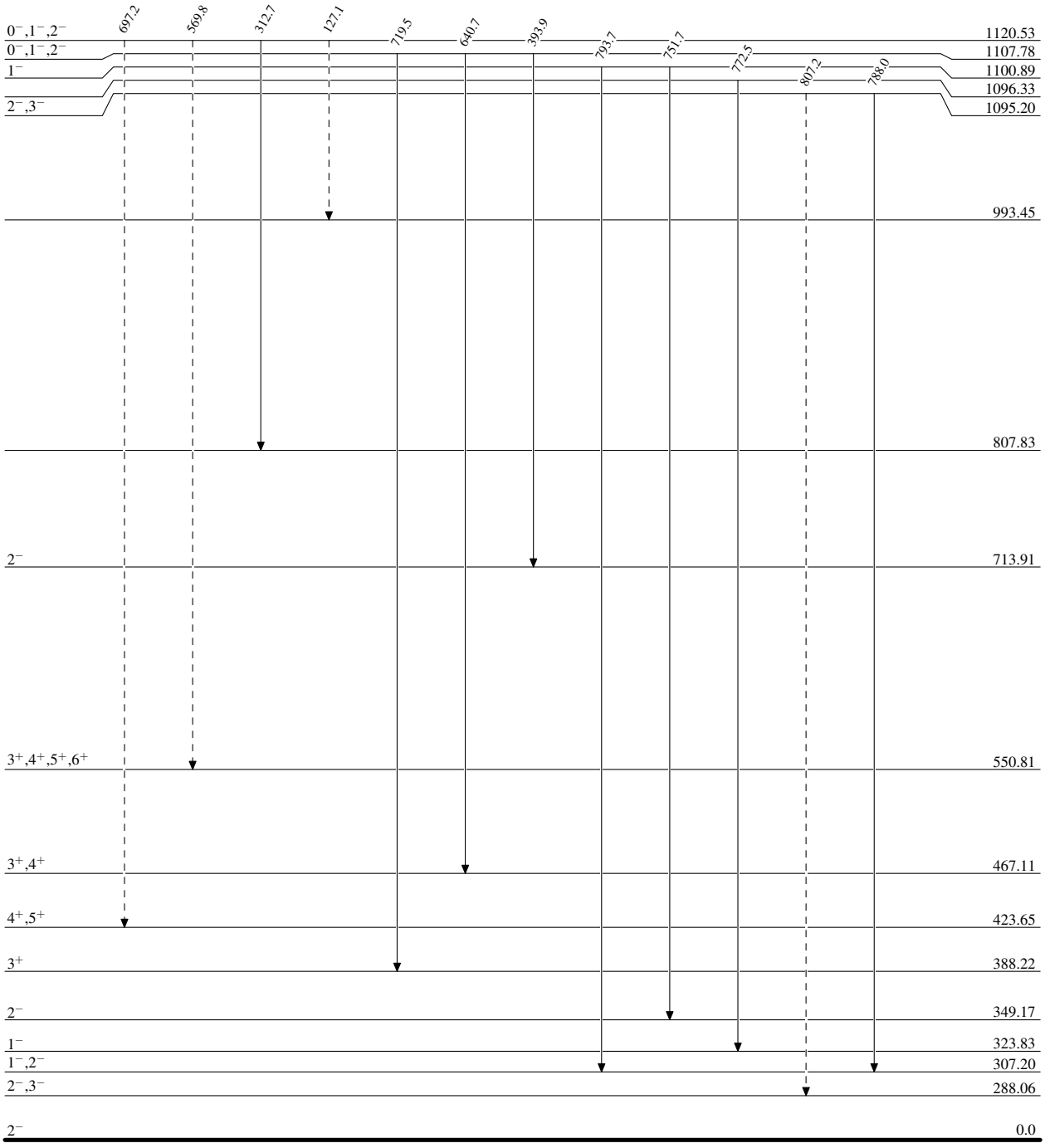
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{196}_{79}Au_{117}$

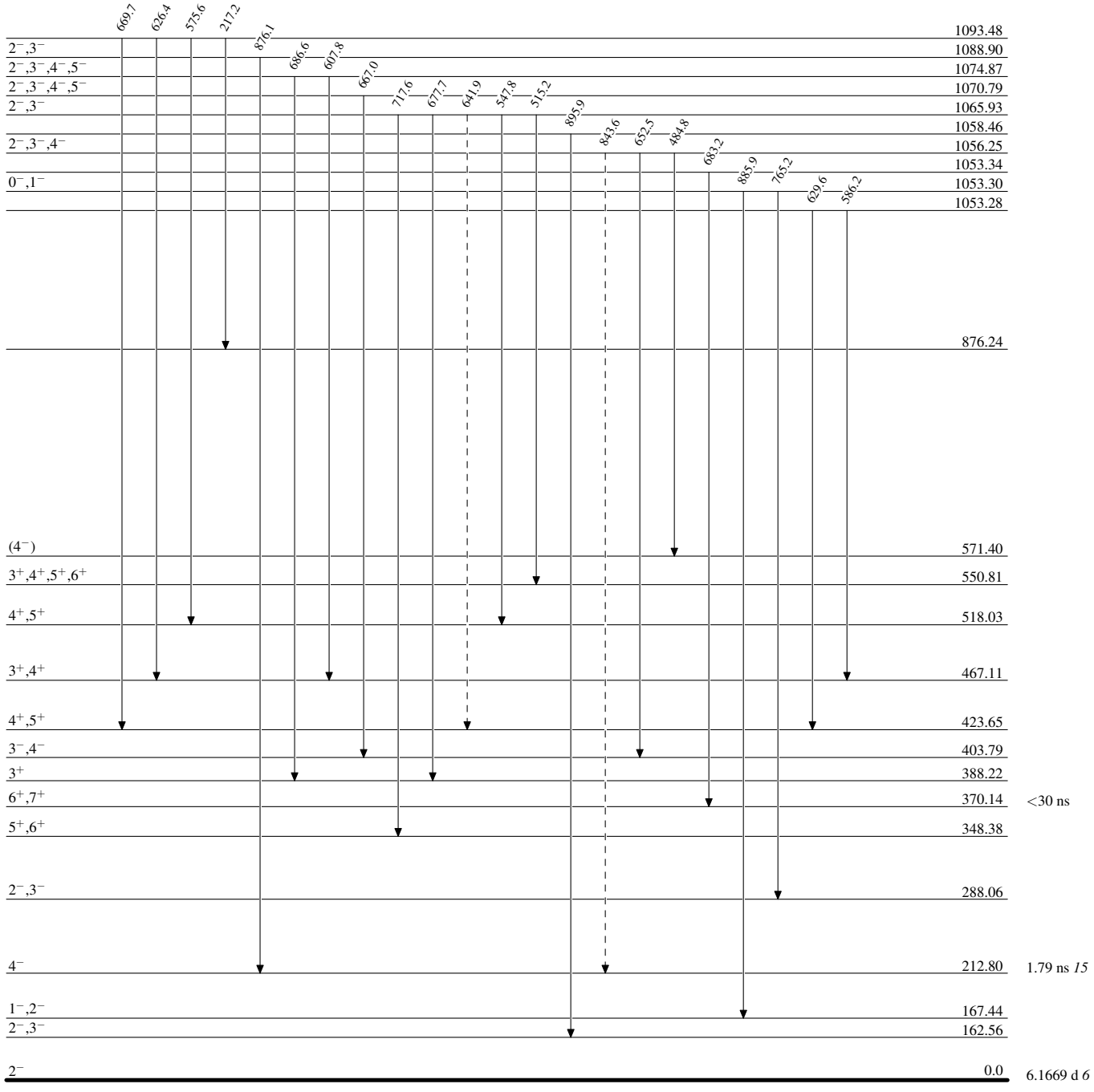
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

– – – – – – ► γ Decay (Uncertain)



$^{196}_{79}Au_{117}$

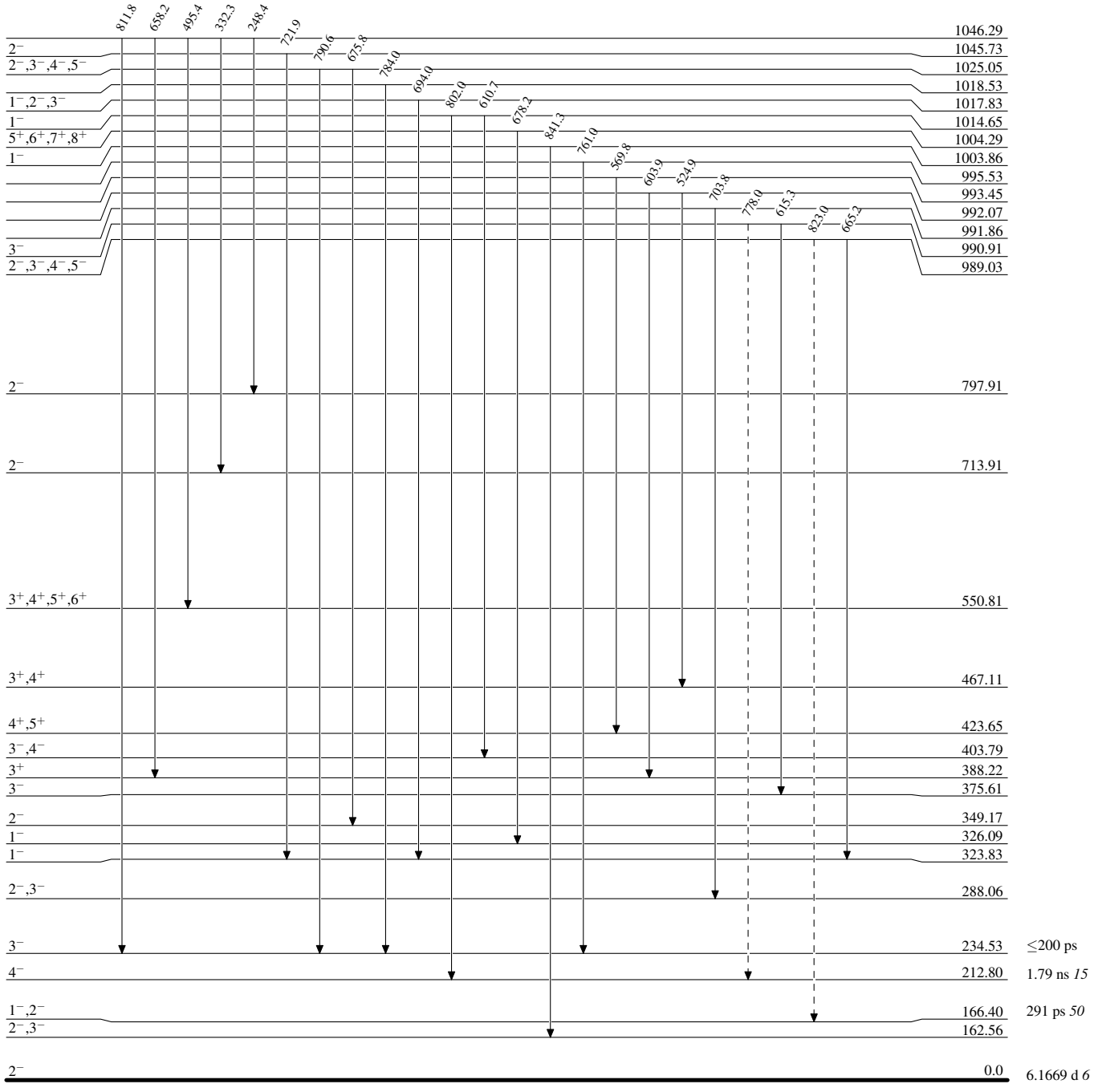
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

– – – – – – ► γ Decay (Uncertain)



$^{196}_{79}Au_{117}$

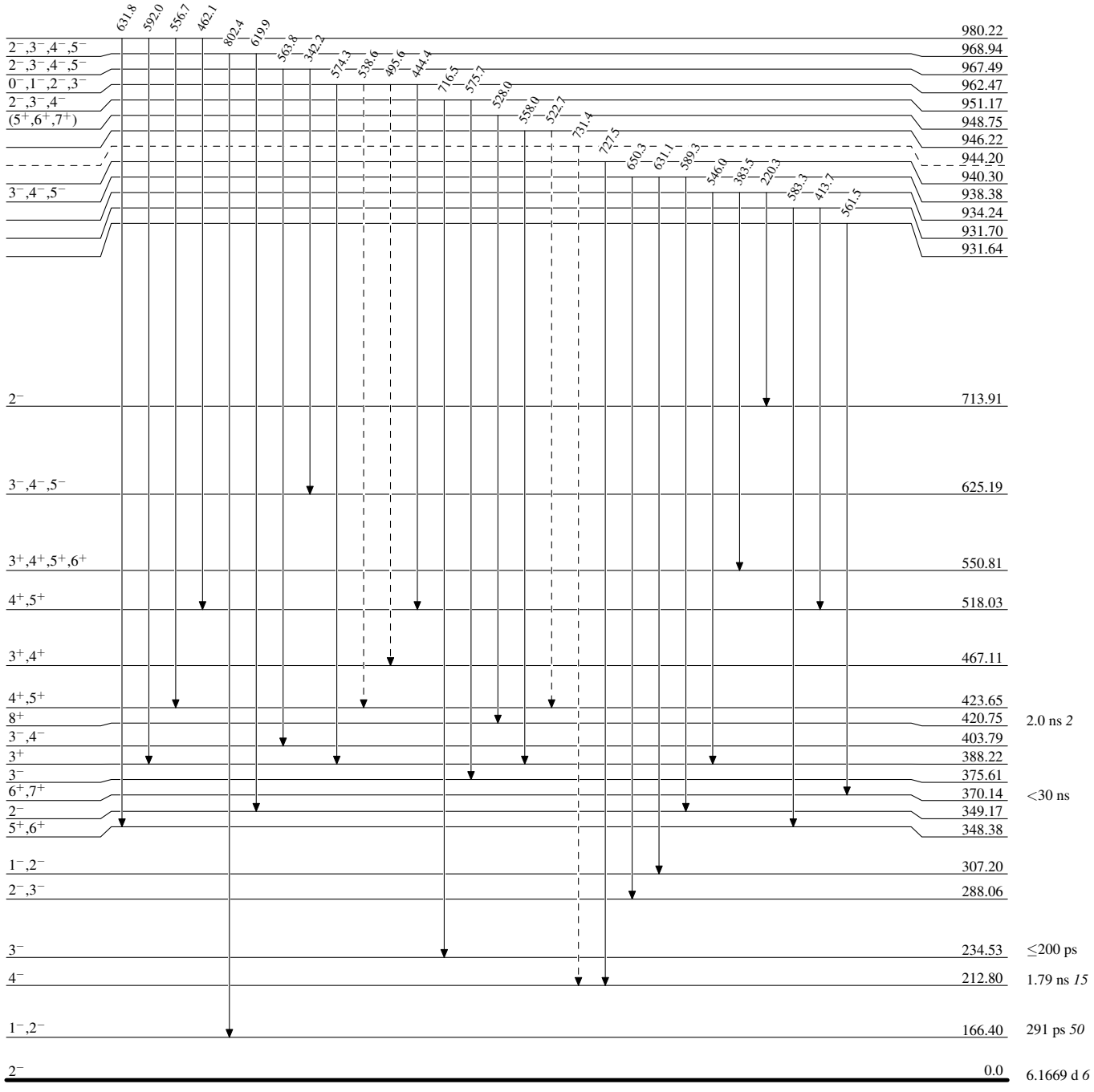
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{196}_{79}Au_{117}$

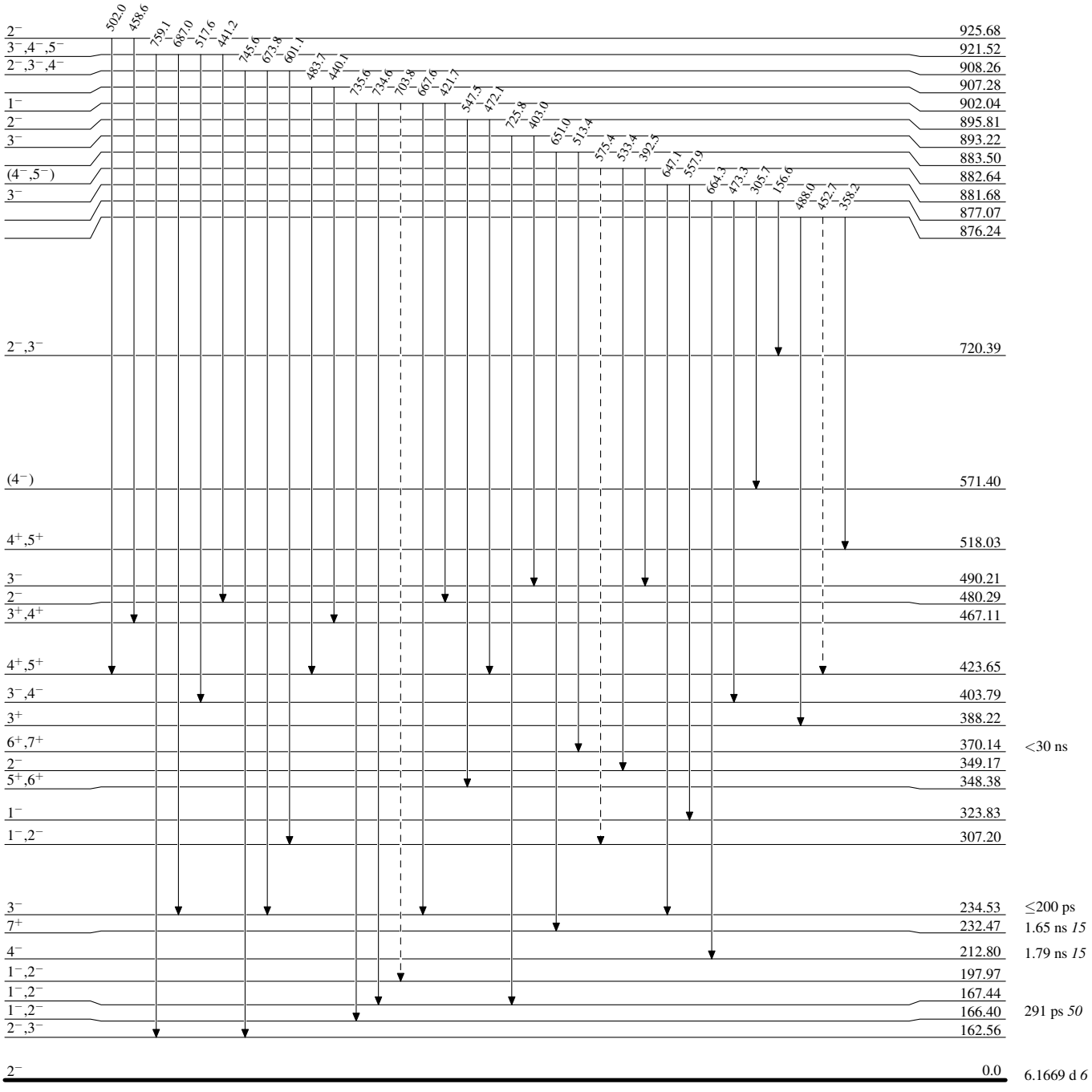
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

– – – – – – ► γ Decay (Uncertain)



$^{196}_{79}Au_{117}$

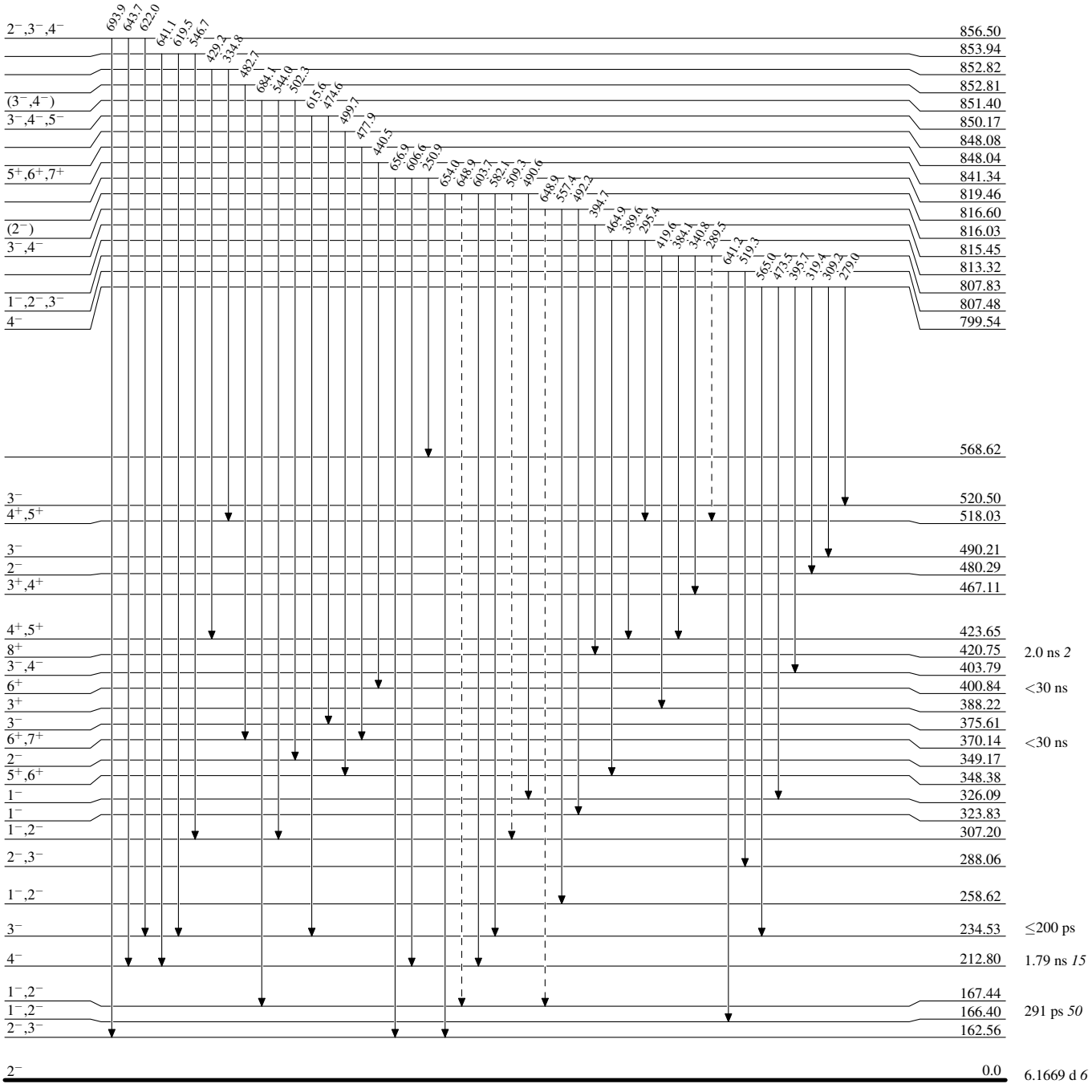
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

– – – – – – ► γ Decay (Uncertain)



$^{196}_{79}Au_{117}$

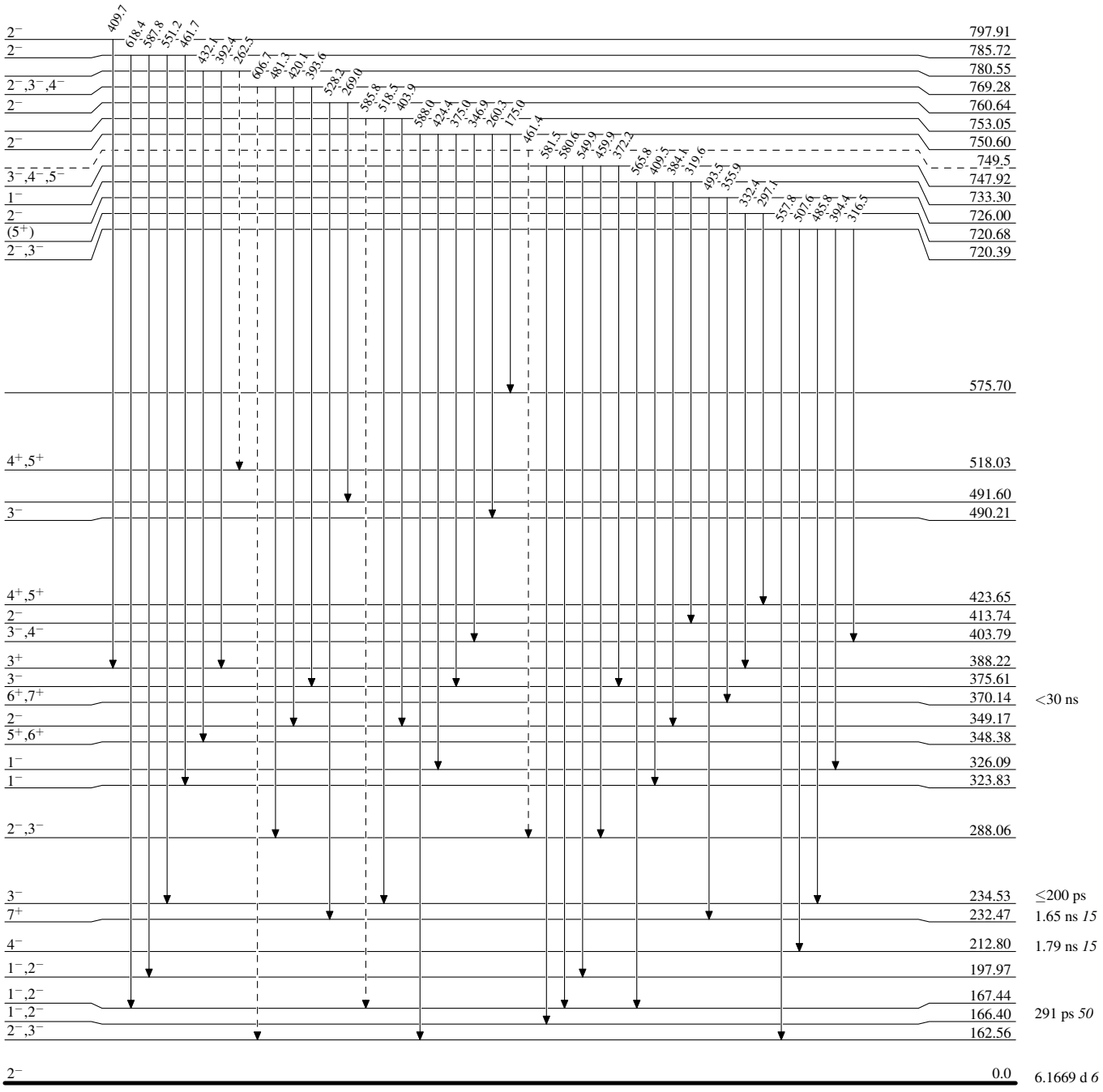
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{196}_{79}Au_{117}$

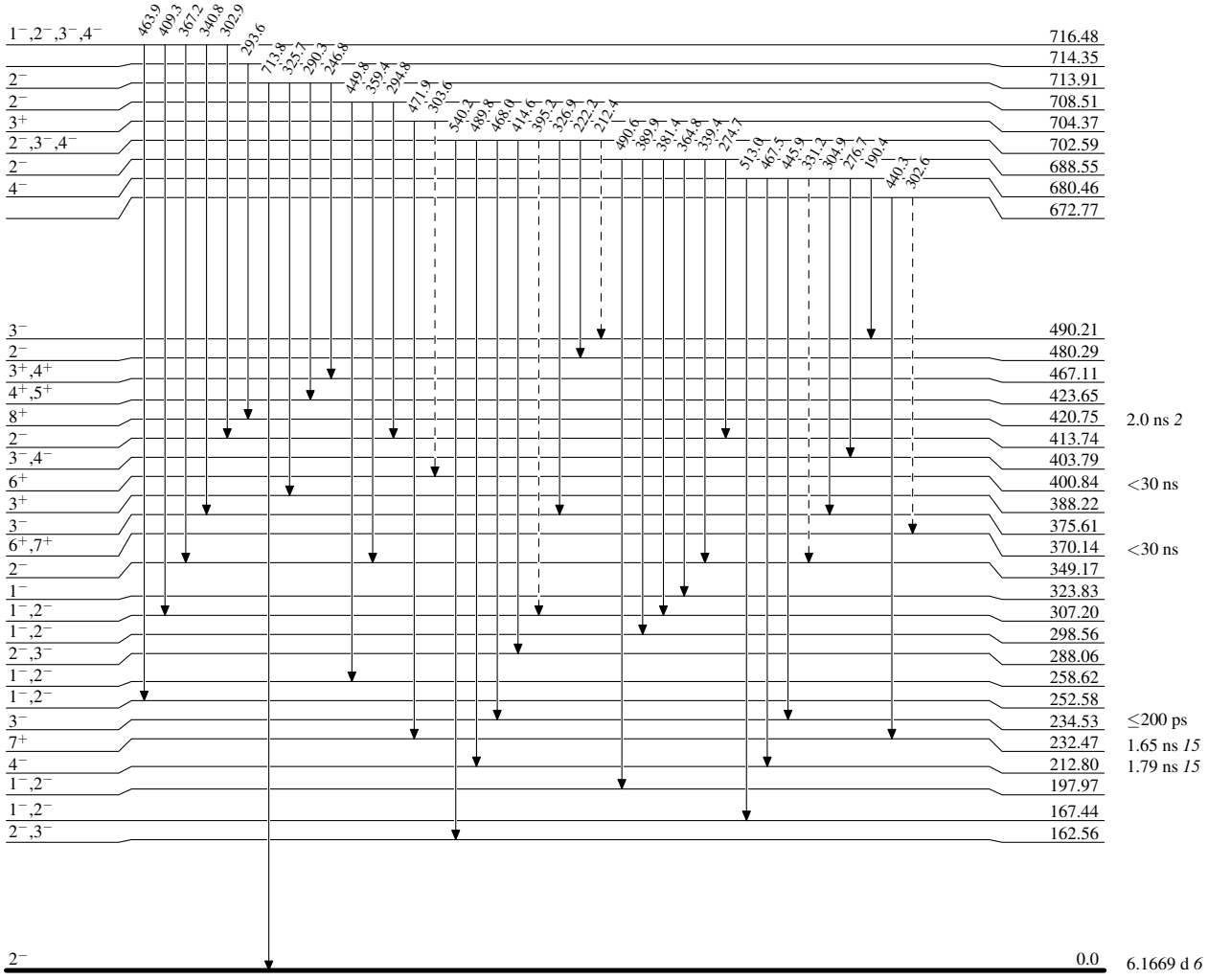
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{196}_{79}Au_{117}$

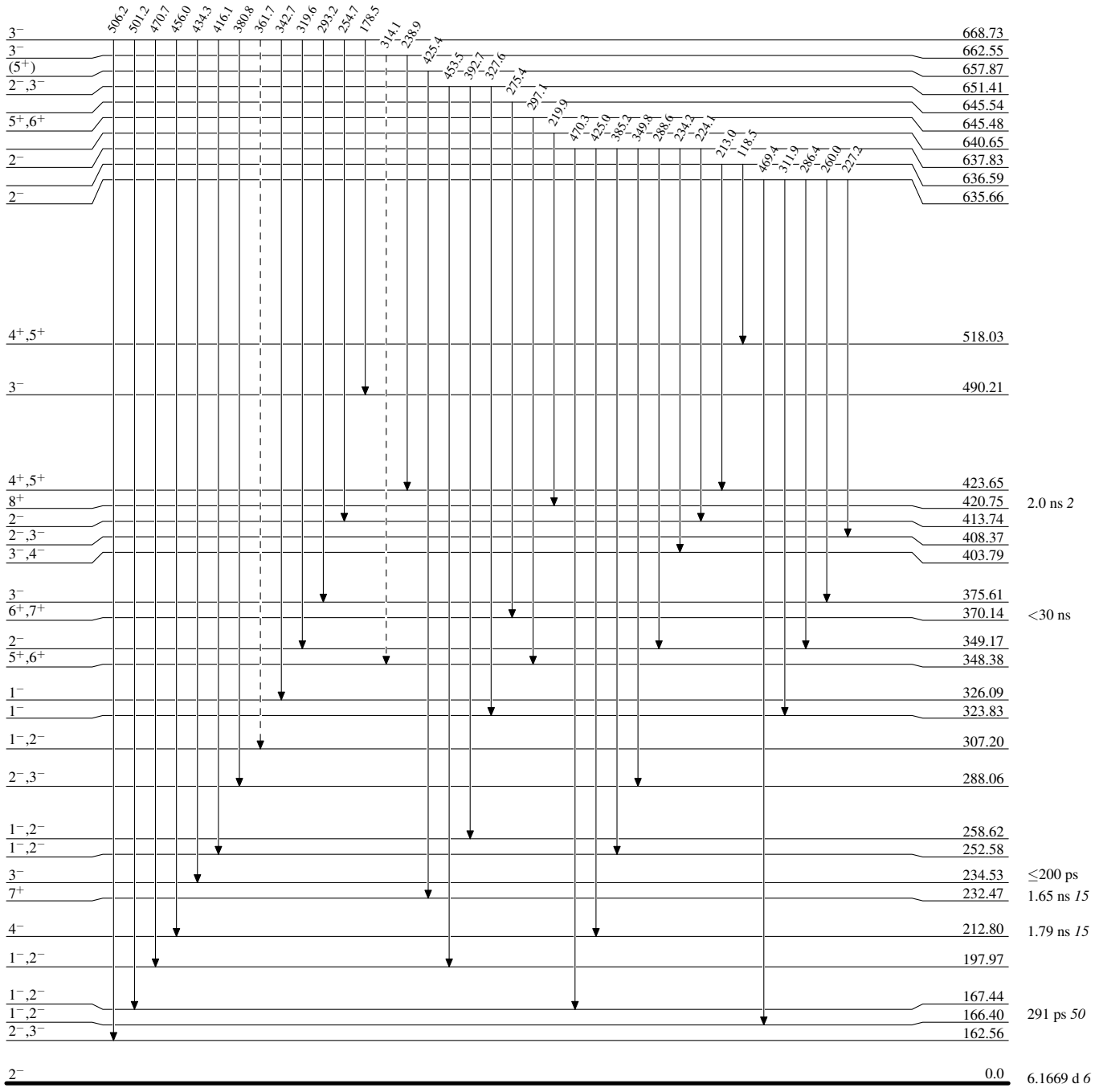
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

– – – – – – ► γ Decay (Uncertain)



$^{196}_{79}Au_{117}$

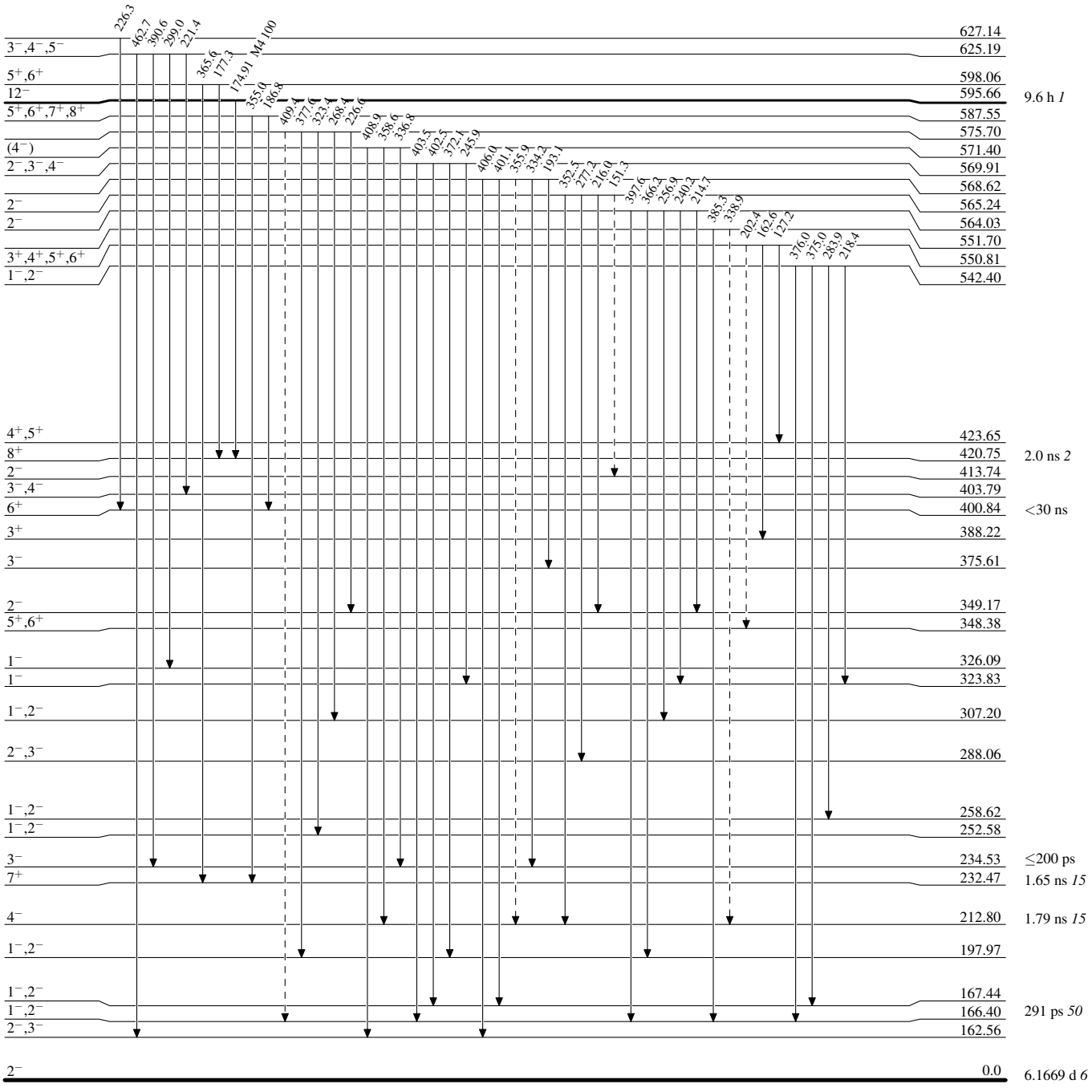
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

– – – – – – ► γ Decay (Uncertain)



$^{196}_{79}Au_{117}$

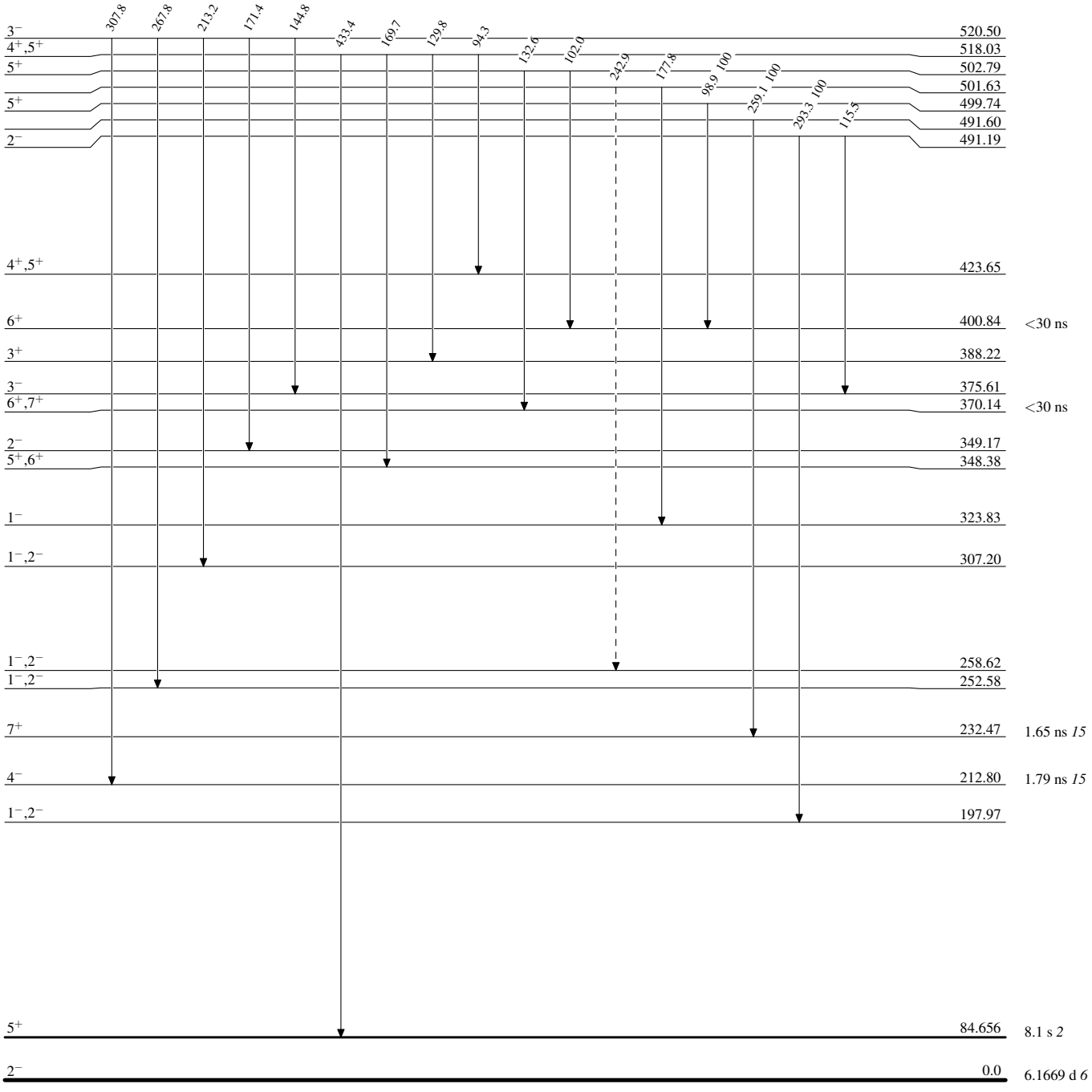
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{196}_{79}Au_{117}$

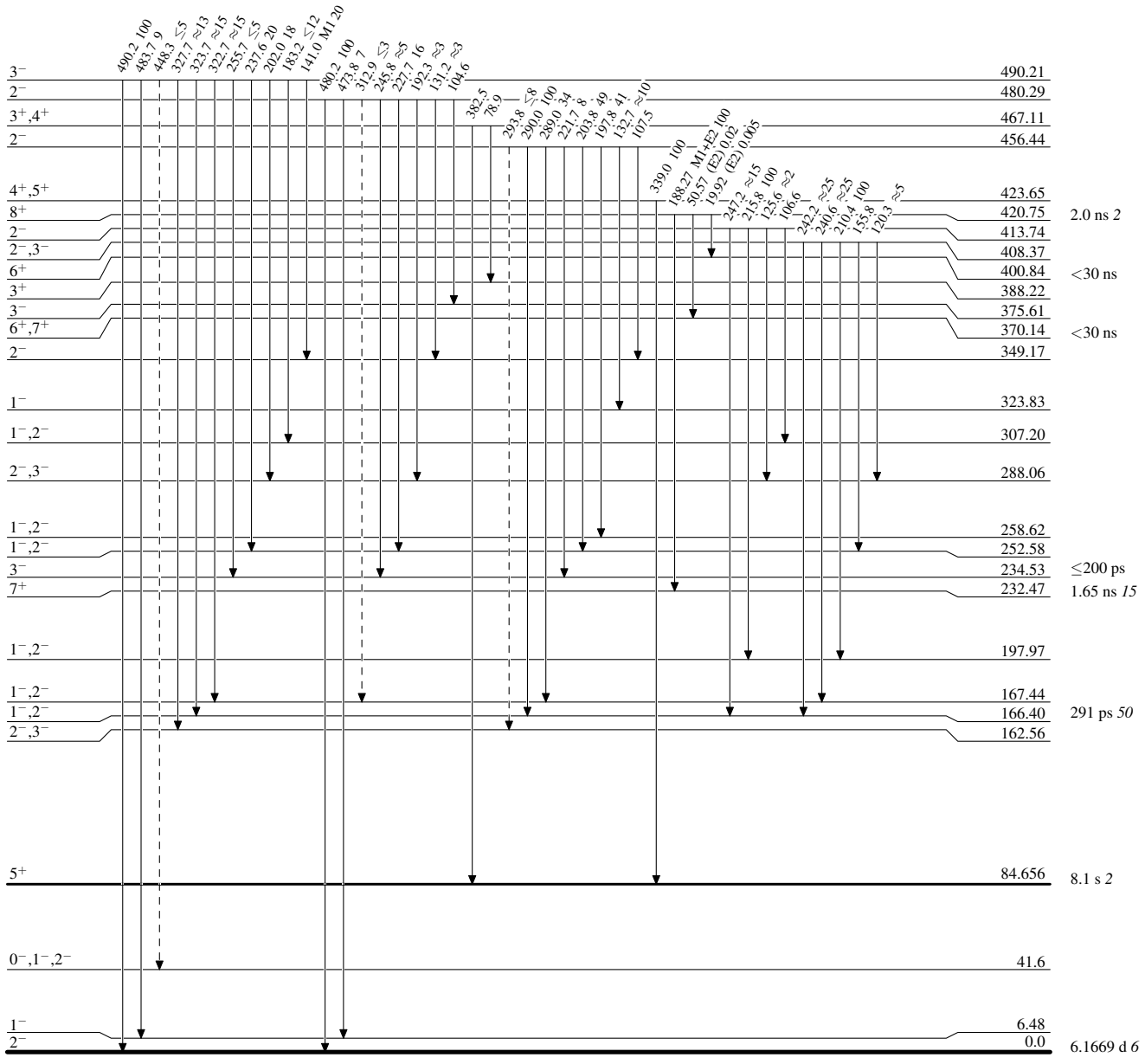
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{196}_{79}Au_{117}$

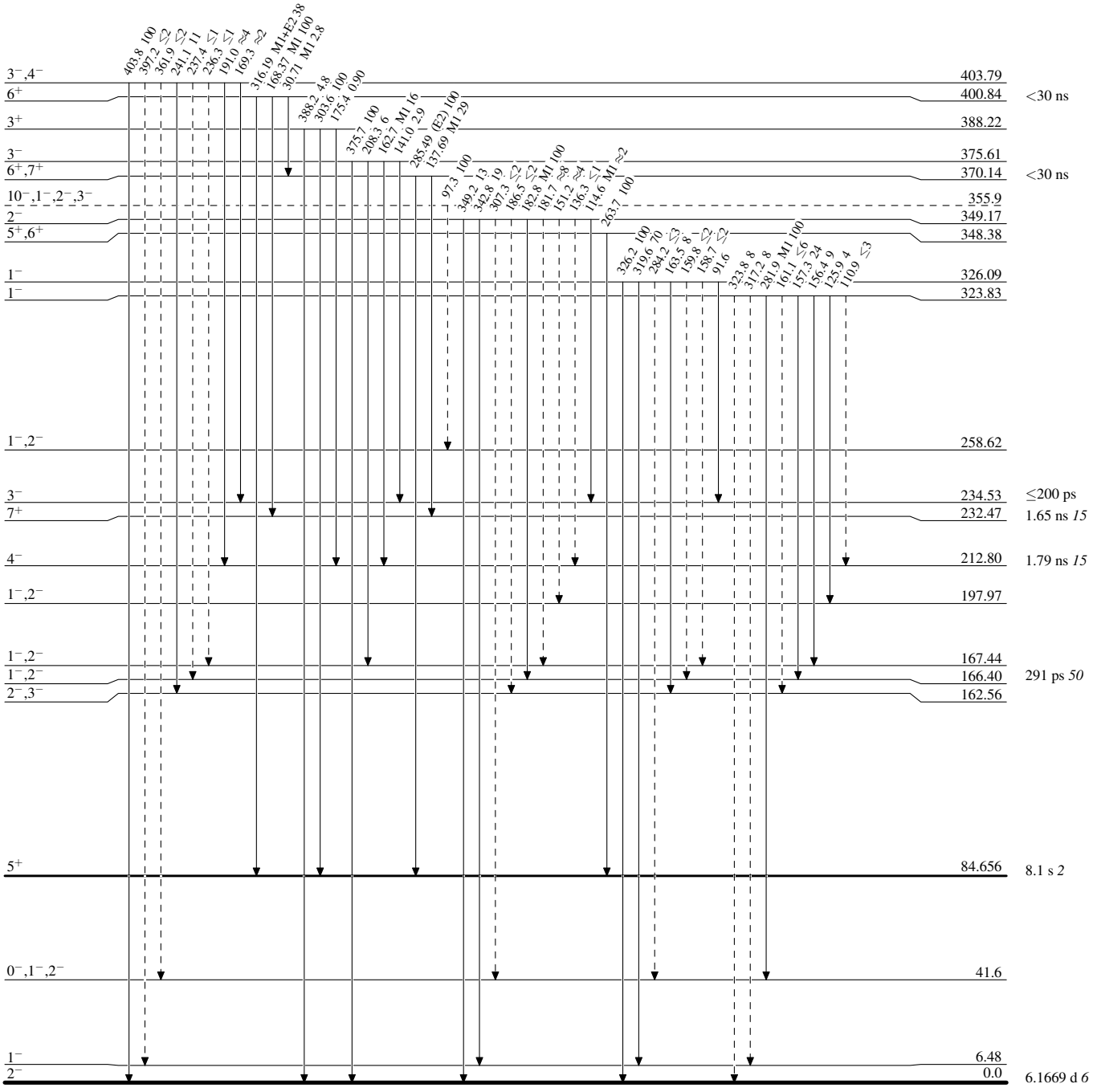
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{196}_{79}Au_{117}$

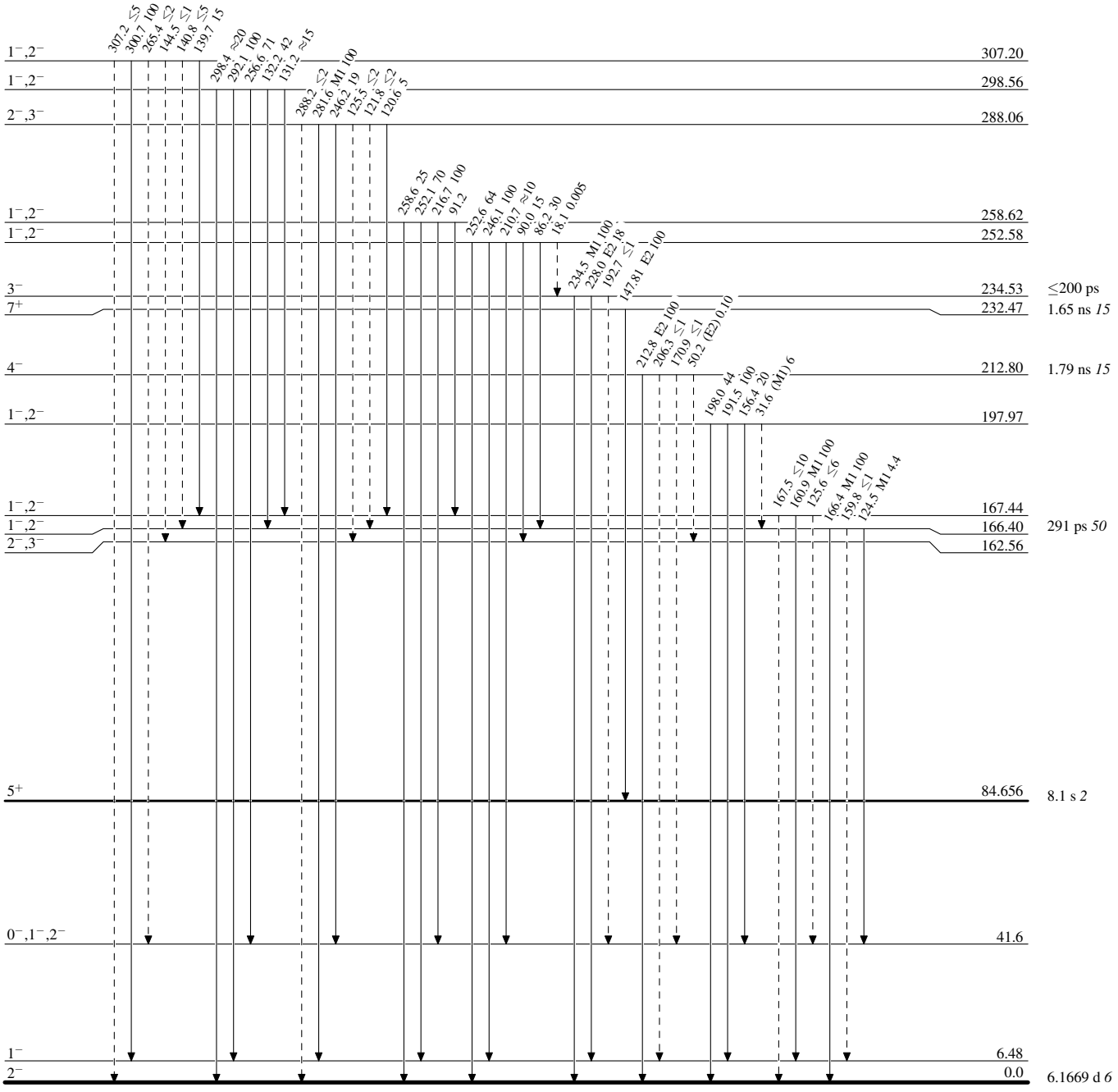
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

- - - - - - ► γ Decay (Uncertain)



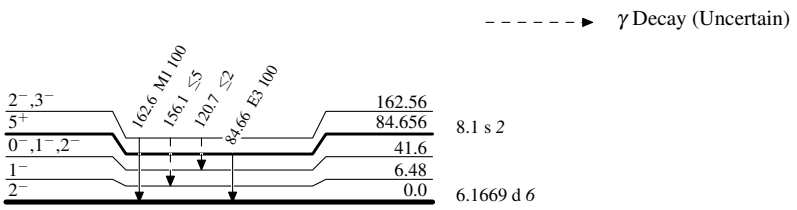
$^{196}_{79}Au_{117}$

Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level



$^{196}_{79}Au_{117}$