Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	D. De Frenne	NDS 110,1745 (2009)	31-Dec-2008

Q(β^-)=−5684 *9*; S(n)=10572 *6*; S(p)=7809 *7*; Q(α)=−2131 *7* 2012Wa38
Note: Current evaluation has used the following Q record −5.66E3 3 *10568* 187806 17-2126 7 2003Au03.

^{102}Pd Levels

All band information from (HI,xnγ) (1996Je02).

Cross Reference (XREF) Flags

A	^{102}Rh β^- decay (207.3 d)	E	^{102}Pd(p,p′γ)	I	^{92}Zr(^{13}C,3nγ)
B	^{102}Ag ε decay (12.9 min)	F	Coulomb excitation	J	^{92}Zr(^{13}C,3nγ),^{94}Zr(^{12}C,4nγ)
C	^{102}Ag ε decay (7.7 min)	G	^{103}Rh(p,2nγ)		
D	^{99}Ru(α,nγ),^{100}Ru(α,2nγ)	H	^{76}Ge(^{34}S,α4nγ)		

E(level)†	J$^\pi$#	T$_{1/2}$‡	XREF	Comments
0@	0$^+$	stable	ABCDEFGHIJ	<r^2>$^{1/2}$=4.4839 fm *44* (2004An14, evaluation).
556.44@ *5*	2$^+$	11.5 ps *8*	ABCDEFGHIJ	Q=−0.20 *15* (1989Ra17) μ=0.82 *8* (1989Ra17) β_2=0.196 *6* (2001Ra27) T$_{1/2}$: From evaluation of 2001Ra27. E(level): from ^{102}Rh β^- decay (207 d). J$^\pi$: E2 γ to 0$^+$.
1275.91@ *7*	4$^+$	2.04 ps *10*	BCDEFGHIJ	J$^\pi$: E2 γ to 2$^+$ (HI,xnγ), strong (ε+β^+) feeding from 5$^+$ (^{102}Ag ε decay (12.9 min)).
1534.48 *10*	2$^+$	0.65 ps *5*	BCDEF IJ	J$^\pi$: J=2 from p$\gamma(\theta)$ in (p,p′γ); positive parity from observation in Coul. ex.
1593.16 *22*	0$^+$	14.5 ns *4*	C EFG	J$^\pi$: E0 γ to 0$^+$. T$_{1/2}$: weighted average of 14.3 ns *5* (p,2nγ), 14.6 ns *7* (p,p′γ) and 17 ns *2* (7.7-min ^{102}Ag ε decay).
1658.1 *5*	0$^+$	0.87 ps *22*	C EF	T$_{1/2}$: deduced from B(E2)(J=second 2$^+$ to third 0$^+$)=0.008 *2*. J$^\pi$: from $\gamma\gamma(\theta)$ in ^{102}Ag ε decay (7.7 min).
1715.0?			D	
1919.0?			D	
1944.48 *25*	2$^+$	1.9 ps *7*	BC EF	T$_{1/2}$: deduced by the evaluator from B(E2)(J=0 to fourth 2$^+$)=0.0010 *3*. J$^\pi$: E2+M1 γ to 2$^+$; p′$\gamma(\theta)$ in (p,p′γ) consistent with J=2 only.
2111.41@ *8*	6$^+$		B DE GHIJ	E(level): the existence of a close-lying doublet was established by comparing the Iγ(835)/Iγ(1555) ratio in different reactions.
2111.66 *12*	3$^+$		B DE HIJ	J$^\pi$: E2+M1 γ to 2$^+$; p′$\gamma(\theta)$ in (p,p′γ) consistent with J=3 only.
2138.03 *8*	4$^+$	0.52 ps *13*	B DEF HIJ	T$_{1/2}$: deduced by the evaluator from B(E2)(J=2 to 4′)=0.017 *4*. J$^\pi$: E2 γ to 2$^+$; log *ft* in ^{102}Ag ε decay (12.9 min).
2248.8 *4*	(2,3)		BC E	J$^\pi$: from p′$\gamma(\theta)$ in (p,p′γ).
2294.57 *9*	(4$^-$)	1.1 ns *1*	D IJ	J$^\pi$: from $\gamma(\theta)$ in γ(linear pol) in (HI,xnγ), (5$^+$) is proposed by 1981Pi02. J=(4$^-$), proposed by 1976Gr12 from the same reaction, is in contradiction to γ(linear pol) results of 1981Pi02. However, 1981Pi02 take into account the possibility of a very close-lying doublet. This possibility is ruled out by 1986An03. From systematics J=4$^-$ most probable. T$_{1/2}$: from (a,γ(t)) in ^{100}Ru(α,2n) (1986An03).
2301.28 *9*	(4)$^+$		B DE HIJ	J$^\pi$: log *ft* in ^{102}Ag ε decay (129 min); γ to 2$^+$.
2342.95 *21*	(3$^-$)		B DEF	J$^\pi$: from p′$\gamma(\theta)$ in (p,p′γ). *J*$^\pi$=(3$^-$) from B(E3) and level systematics in Coul. ex. B(E3)=0.060 *6* (2002Ki06, evaluation).

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Adopted Levels, Gammas (continued)

^{102}Pd Levels (continued)

E(level)[†]	Jπ[#]	XREF	Comments
2391.2 *3*	(1,2)$^+$	C E	Jπ: J=(1,2) from p′γ in (p,p′γ); π=+ from log *ft* in ^{102}Ag ε decay (7.7 min).
2431.5 *7*		E	
2474.35 *8*	5$^-$	B D HIJ	Jπ: J=5 from γ(θ) results of 1981Pi02; level populated by E2-cascade from 3727 level (J^π=9$^-$).
2480.3 *10*		B E	
2490.0 *10*		E	
2533.0 *3*	(4)$^+$	B E	Jπ: J=(3,4) from p′γ(θ) in (p,p′γ); from log *ft* in ^{102}Ag ε decay (12.0 min) J=3, and negative parity can be excluded.
2546.2 *7*		E	
2553.5 *10*		D	
2574.3 *4*	(1,2)	C E	Jπ: J=(1,2) from p′γ(θ) in (p,p′γ) probably positive parity.
2582.9 *10*		B E	
2606.5 *5*		B DE	
2610.78 *25*	(1,2)$^+$	C E	Jπ: J=(1,2) from p′γ(θ) in (p,p′γ); log *ft* in ^{102}Ag ε decay (7.7 min).
2651.34 *12*	(4$^+$)	B D J	Jπ: from γ(θ) and γ(linear pol) in (HI,xnγ). J=5$^-$ not excluded.
2660.7 *7*		E	
2669.62 *22*		B	
2675.1 *10*		E	
2695.9 *10*	(1,2)	E	Jπ: from p′γ(θ) in (p,p′γ).
2716.3 *3*	(1,2)$^+$	C E	Jπ: J=(1,2) from p′γ(θ) in (p,p′γ); log *ft* in ^{102}Ag ε decay (7.7 min).
2734.02 *22*		B E	
2737.0 *4*		C	
2749.93 *12*		B	
2769.0? *4*		B D	
2798.9 *4*	(4$^+$)	B	Jπ: log ft=6.1 in ^{102}Ag ε decay (12.9 min); γ to 2$^+$.
2863.60 *12*		B	
2914.19[&] *10*	6$^-$	D HIJ	Jπ: E2+M1 γ to 5$^-$; J=5,7 ruled out from γ(θ) and γ(linear pol) in (HI,xnγ).
2977.0 *4*	4$^{(+)}$,5$^{(+)}$,6$^{(+)}$	B DE	Jπ: J=4,5,6 from log *ft*=5.94 in ^{102}Ag ε decay (12.9 min); π probably +.
3002.9 *4*	4$^+$,5$^+$,6$^+$	B DE	Jπ: from log *ft* in ^{102}Ag ε decay (12.9 min).
3008.79 *14*	(4)	E	Jπ: from log *ft*=6.05 in ^{102}Ag ε decay (12.9 min) and γ-decay to 2$^+$.
3013.13[@] *9*	8$^+$	D HIJ	
3040.0 *10*		E	
3075.26 *9*	4$^+$,5$^+$,6$^+$	B E	Jπ: from log *ft* in ^{102}Ag ε decay (12.9 min).
3113.2 *3*		B	
3123.3 *4*	1$^+$,2$^+$,3$^+$	C E	Jπ: from log *ft*=5.74 in ^{102}Ag ε decay (7.7 min).
3166.36 *11*	4,5,6	B E	Jπ: from log *ft*=6.2 in ^{102}Ag ε decay (12.9 min).
3178.61 *13*	4,5,6	B	Jπ: from log *ft*=6.6 in ^{102}Ag ε decay (12.9 min).
3188.19[b] *10*	7$^-$	D HIJ	Jπ: E2 to 5$^-$. Band structure.
3238.17 *25*	1$^+$,2$^+$	C E	Jπ: from logft=5.13 in ^{102}Ag ε decay (7.7 min) and γ decay to 0$^+$.
3278.9 *8*		B	
3295.9 *5*		B	
3340.35 *10*	8$^+$	D HIJ	Jπ: E2 to 6$^+$, ΔJ=2 for 1228γ (from γγ(θ) from oriented nuclei in (HI,xnγ), 1976Gr12). Consistent with γ(θ) results of 1981Pi02 in (HI,xnγ).
3389.74 *23*	(7$^-$)	IJ	Jπ: populated from 3727 level (J^π=9$^-$), M2+E1 γ to 6$^+$.
3670.64[&] *11*	8$^-$	D HIJ	
3727.84[a] *10*	9$^-$	HIJ	Jπ: 1981Pi02: only 9$^-$ is consistent with γ(θ) and γ(linear pol) with J^π(3340)=8$^+$.
3889.39?[b] *14*	(9$^-$)	HIJ	Jπ: E2 γ to 7$^-$.
3992.78[@] *10*	10$^+$	D HIJ	
4033.2 *8*		H J	
4317.82[&] *11*	10$^-$	HIJ	
4328.77 *12*	(10$^+$)	HIJ	Jπ: (E2) γ to 8$^+$; γ(θ) and γ(linear pol) also consistent with 8$^+$,9$^-$.
4432.82[a] *10*	11$^-$	HIJ	

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Adopted Levels, Gammas (continued)

^{102}Pd Levels (continued)

E(level)[†]	Jπ[#]	XREF	Comments
4646.09[b] 25	(11⁻)	HIJ	
4747.2 3		HIJ	
4836.9?		I	
4944.77 18	(11⁻)	H	
5055.17[@] 11	12⁺	HIJ	
5094.11[&] 12	12⁻	HIJ	
5260.68 15	(12⁺)	HIJ	Jπ: E2 γ to (10⁺).
5325.97[a] 12	13⁻	HIJ	
5577.2?[b] 4	(13⁻)	H J	
5768.88 25		H J	
5984.80[&] 13	14⁻	HIJ	
6138.70 19	14⁺	HIJ	Jπ: E2 γ to 12⁺.
6179.9[@] 5	14⁺	H	
6222.7?	(14⁺)	IJ	Jπ: E2 γ to (12⁺).
6345.06[a] 15	15⁻	HIJ	
6539.1?[b] 5	(15⁻)	H	
6988.16[&] 17	16⁻	HIJ	
7428.9[@] 6	16⁺	H	
7461.36[a] 18	17⁻	HIJ	
7585.7?[b] 6	(17⁻)	H	
8063.3[&] 4	18⁻	H	
8707.1[@] 7	18⁺	H	
8737.6[a] 10	19⁻	H	
8778.7?[b] 11	(19⁻)	H	
9214.2[&] 7	20⁻	H	
9892.9 11	20⁺	H	Jπ: E2 to 18⁺.
10178.2[a] 13	21⁻	H	
10223.1[@] 8	20⁺	H	
10540.2[&] 11	22⁻	H	
11227.7 13	(22⁺)	H	Jπ: γ decay to 20⁺.
11886.2[@] 9	22⁺	H	
12025.2[&] 15	24⁻	H	
13592.9[@] 10	24⁺	H	
15414.4?[@] 12	(26⁺)	H	

[†] From a least squares procedure using adopted gammas.
[‡] Deduced from B(E2) in Coul. ex., unless noted otherwise.
[#] Unless noted otherwise, from Iγ(θ), γγ-coin, γγ(θ) from oriented nuclei and γ linear pol. and observed band structure in different (HI,xnγ).
[@] Band(A): probable member of the g.s. ΔJ=2 rotational band.
[&] Band(B): probable member of ΔJ=2 rotational band on Jπ=6⁻ level.
[a] Band(C): probable member of ΔJ=2 rotational band on Jπ=9⁻ level.
[b] Band(D): probable member of ΔJ=2 rotational band on Jπ=7⁻ level.

Adopted Levels, Gammas (continued)

$\gamma(^{102}Pd)$

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	δ[#]	Comments
556.44	2^+	556.41 *5*	100	0	0^+	E2		B(E2)(W.u.)=32.6 *23* E_γ: from (HI,xnγ). Mult.: from α in (p,p′γ) see also ^{102}Ag ε decay and (p,2nγ).
1275.91	4^+	719.38 *6*	100	556.44	2^+	E2		B(E2)(W.u.)=50.9 *25* Mult.: from α in (p,p′γ) see also ^{102}Ag ε decay and (p,2nγ).
1534.48	2^+	259[&]		1275.91	4^+			
		977.78 *18*	97 *8*	556.44	2^+	E2+M1	2.8 *2*	B(M1)(W.u.)=0.0020 *4*; B(E2)(W.u.)=15.0 *20* Mult.: from on-line nuclear orientation in 12.9-min ^{102}Ag decay (1987Wo04). B(E2)(W.u.),B(M1)(W.u.): deduced from B(E2) (J=2 to second 2^+) in Coul. ex. and adopted decay properties of 1534 level. δ from ^{102}Ag ε decay.
		1534.71 *16*	100 *10*	0	0^+			B(E2)(W.u.)=4.2 *21* B(E2)(W.u.): deduced from B(E2) (J=2 to 2′) in Coul. ex. and adopted decay properties of 1534 level.
1593.16	0^+	58.3		1534.48	2^+			
		1035.6		556.44	2^+			
		1592.6 *5*		0	0^+	E0		From Coul. ex. ρ^2(J=second 0^+ to 0)=4.0×10^{-3}. q^2_K(E0/E2) > 2, X(E0/E2) > 0.0048, ρ^2(E0)=0.004 *15* (2005Ki02, evaluation).
1658.1	0^+	1101.7 *5*	100	556.44	2^+			
		1658.1		0	0^+	E0		From Coul. ex. ρ^2(J=third 0^+ to 0)<0.3×10^{-3}. q^2_K(E0/E2) < 0.0014 , X(E0/E2) < 0.00038 ρ^2(E0) < 0.002 (2005Ki02, evaluation).
1715.0?		439[&]	100	1275.91	4^+			
1919.0?		383[&]	100	1534.48	2^+			
1944.48	2^+	351.4 *2*		1593.16	0^+			
		1387.8 *4*	100	556.44	2^+	E2+M1	+8.1 *+73−26*	B(M1)(W.u.)=5.E−5 *+10−5*; B(E2)(W.u.)=1.6 *6* Mult.: from (p,p′γ).
		1943.8	23	0	0^+			
2111.41	6^+	835.48 *5*	100	1275.91	4^+	E2		
2111.66	3^+	1555.24 *17*	100	556.44	2^+	E2(+M1)	>15	δ: From (p,p′γ); +0.24 *16* (1976Gr12) is in disagreement with the (p,p′γ) results of 1977La16.
2138.03	4^+	27[&]		2111.41	6^+			It is unclear if 27γ decays to 2111.41 or 2111.66 level or both if it is an unresolved doublet.
		221[&]		1919.0?				
		603.59 *18*	11.6 *14*	1534.48	2^+			
		861[&]		1275.91	4^+			
		1581.54 *9*	100 *9*	556.44	2^+	E2		B(E2)(W.u.)=3.5 *10*

$^{102}_{46}Pd_{56}$-4

Adopted Levels, Gammas (continued)

γ(^{102}Pd) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	δ[#]	Comments
2248.8	(2,3)	1692.3 *4*	100	556.44	2^+			
2294.57	(4^-)	156.7 *2*	23 *10*	2138.03	4^+	E1		B(E1)(W.u.)=9.E−6 *5* Mult.: from (α,2nγ).
		182.88 *12*	47 *11*	2111.66	3^+	E1(+M2)	−0.05 *5*	B(E1)(W.u.)=1.6×10^{-5} *5*; B(M2)(W.u.)=4.E+1 *+6−4*
		1018.56 *9*	100 *28*	1275.91	4^+	E1		B(E1)(W.u.)=1.4×10^{-7} *5* Mult.: from αγ(θ) in (α,2nγ) (1986An03).
2301.28	$(4)^+$	1025.0 *3*	24.6 *25*	1275.91	4^+	M1(+E2)	0.01 *8*	Mult.: from on-line nuclear orientation in 12.9-min ^{102}Ag decay (1987Wo04).
		1745.05 *9*	100 *9*	556.44	2^+			
2342.95	(3^-)	1786.5 *2*	100	556.44	2^+			
2391.2	$(1,2)^+$	1834.7 *3*	100	556.44	2^+			
2431.5		897.2	28	1534.48	2^+			
		1874.9	100	556.44	2^+			
2474.35	5^-	173.3 *1*	43 *10*	2301.28	$(4)^+$	M2+E1	−0.12 *4*	
		179.75 *7*	54 *8*	2294.57	(4^-)	E2+M1	+0.47 *6*	
		336.30 *7*	100 *20*	2138.03	4^+			
		1198.38 *9*	40.2 *20*	1275.91	4^+	E1(+M2)	−0.04 *6*	
2480.3		946.4	33 *4*	1534.48	2^+			
		1924.1	100 *11*	556.44	2^+			
2490.0		1933.5	100	556.44	2^+			
2533.0	$(4)^+$	231.7 *1*	1.79 *17*	2301.28	$(4)^+$			
		998.3 *3*	0.8 *3*	1534.48	2^+			
		1257.1 *3*	100 *6*	1275.91	4^+			
		1976.0 *3*	0.8 *4*	556.44	2^+			
2546.2		1012.2	100	1534.48	2^+			
		1989.3	87	556.44	2^+			
2553.5		1277.7 *10*	100	1275.91	4^+			
2574.3	(1,2)	2017.8 *4*	100	556.44	2^+			
2582.9		1307.0	100	1275.91	4^+			
2606.5		1330.6 *5*	100	1275.91	4^+			
2610.78	$(1,2)^+$	1017.6 *2*		1593.16	0^+			
		2054.5 *4*	100 *16*	556.44	2^+			
		2609.8	17	0	0^+			
2651.34	(4^+)	176		2474.35	5^-			
		512.5 *9*		2138.03	4^+			
		540.0 *2*	36	2111.41	6^+			
		1375.42 *10*	100	1275.91	4^+	M1(+E2)	+0.61[@] *63*	δ: if J(8651)=5^-, δ(M2/E1)≈0.1.
2660.7		1126.5	40	1534.48	2^+			
		2103.9	100	556.44	2^+			
2669.62		1393.7 *2*	100	1275.91	4^+			
2675.1		2118.6	100	556.44	2^+			

$^{102}_{46}Pd_{56}$-5

Adopted Levels, Gammas (continued)

γ(^{102}Pd) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult.‡	δ#	Comments
2695.9	(1,2)	2695.9	100	0	0^+			
2716.3	$(1,2)^+$	2159.5 *4*	100 *18*	556.44	2^+			
		2716.5 *4*	37 *13*	0	0^+			
2734.02		1458.1 *2*	100	1275.91	4^+			
2737.0		1461.1 *4*	100	1275.91	4^+			
2749.93		1215.5 *3*	4.6 *12*	1534.48	2^+			
		1474.0 *1*	100 *18*	1275.91	4^+			
2769.0?		1493.10& *30*	100	1275.91	4^+			
2798.9	(4^+)	660.5 *1*	10 *5*	2138.03	4^+			
		854.3 *1*	8 *5*	1944.48	2^+			
		1263.9 *1*	34 *4*	1534.48	2^+			
		1522.7 *4*	100 *10*	1275.91	4^+			
		2241.6 *8*	37 *16*	556.44	2^+			
2863.60		1329.1 *1*	33 *7*	1534.48	2^+			
		1587.7 *2*	100 *11*	1275.91	4^+			
2914.19	6^-	439.90 *7*	100 *13*	2474.35	5^-	E2+M1	+0.32 *3*	δ: δ=+0.40 *9* from1981Pi02.
		619.50 *19*	34 *4*	2294.57	(4^-)	E2		
2977.0	$4^{(+)},5^{(+)},6^{(+)}$	865.0 *2*	100 *9*	2111.41	6^+			
		1700.4 *3*		1275.91	4^+			
3002.9	$4^+,5^+,6^+$	891.5 *3*	100 *11*	2111.41	6^+			
		1727.9 *3*	6.6 *8*	1275.91	4^+			
3008.79	(4)	1474.3 *1*	100	1534.48	2^+			
3013.13	8^+	719.4&		2294.57	(4^-)			
		901.71 *4*	100	2111.41	6^+	E2		
3040.0		2483.5	100	556.44	2^+			
3075.26	$4^+,5^+,6^+$	424.4 *1*	3.1 *9*	2651.34	(4^+)			
		937.7 *2*	62 *5*	2138.03	4^+			
		963.3 *5*	9 *5*	2111.66	3^+			
		964.2 *1*	55 *5*	2111.41	6^+			
		1799.5 *1*	100 *11*	1275.91	4^+			
3113.2		1837.3 *3*	100	1275.91	4^+			
3123.3	$1^+,2^+,3^+$	1588.8 *4*	100 *33*	1534.48	2^+			
		2566.9 *5*	67 *44*	556.44	2^+			
3166.36	4,5,6	634.1 *1*	32 *5*	2533.0	$(4)^+$			
		1054.9 *5*	19 *8*	2111.66	3^+			
		1055.4 *2*	100 *12*	2111.41	6^+			
		1889.4 *3*	68 *8*	1275.91	4^+			E_γ: poor fit. Level-energy difference=1890.6.
3178.61	4,5,6	1067.2 *1*	100	2111.41	6^+			
3188.19	7^-	274.1 *2*	36 *7*	2914.19	6^-	E2+M1	+0.20@ *7*	δ: Other: +0.48 *21* or +0.17 *2* (1976Gr12).
		713.8 *1*	100 *15*	2474.35	5^-	E2		E_γ: from (HI,xnγ) (1996Je02).
3238.17	$1^+,2^+$	1644.1 *4*		1593.16	0^+			

Adopted Levels, Gammas (continued)

γ(^{102}Pd) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]	δ[#]	Comments
3238.17	1$^+$,2$^+$	2682.1 *4*	35 *14*	556.44	2$^+$			
		3238.6 *4*	100 *22*	0	0$^+$			
3278.9		1167.5 *8*	100	2111.41	6$^+$			
3295.9		1184.5 *5*	100	2111.41	6$^+$			
3340.35	8$^+$	327.22 *4*	100 *11*	3013.13	8$^+$	E2+M1	−0.19 *5*	δ: Other: −0.27 *13* from ^{92}Zr(^{13}C,3nγ) (1981Pi02).
		1228.94 *20*	20.4 *21*	2111.41	6$^+$	E2		
3389.74	(7$^-$)	1278.31[&] *15*	100	2111.41	6$^+$	M2+E1	−0.05 *4*	
3670.64	8$^-$	482.4 *1*	28 *5*	3188.19	7$^-$	E2+M1	+1.5[@] *5*	δ: Other: +1.6 *7* in ^{92}Zr(^{13}C,3nγ).
		756.5 *1*	100 *6*	2914.19	6$^-$	E2		
3727.84	9$^-$	338.1 *2*	18.7 *14*	3389.74	(7$^-$)			
		387.5 *1*	23 *4*	3340.35	8$^+$	M2+E1	−0.15 *4*	
		539.7 *1*	35 *9*	3188.19	7$^-$	E2		
		714.6 *1*	100 *9*	3013.13	8$^+$	E1(+M2)	−0.05 *4*	
3889.39?	(9$^-$)	701.2 *1*	100	3188.19	7$^-$	E2		The relative order of the 756.7γ and 701.22γ is not established, and the reverse ordering would define a level at 3945.0 rather than at 3889.5.
3992.78	10$^+$	979.66 *5*	100	3013.13	8$^+$	E2		E_γ: from (HI,xnγ) (1996Je02).
4033.2		1020[&]		3013.13	8$^+$			
4317.82	10$^-$	428.5[&] *4*	44 *4*	3889.39?	(9$^-$)	M1(+E2)	−0.05[@] *7*	
		590.0 *3*	16 *3*	3727.84	9$^-$	E2+M1	+0.14[@] *9*	
		647.18 *5*	100 *8*	3670.64	8$^-$	E2		
4328.77	(10$^+$)	336.0 *1*	89 *14*	3992.78	10$^+$			
		988.4 *1*	100 *11*	3340.35	8$^+$	(E2)		
4432.82	11$^-$	440.1 *1*	6 *1*	3992.78	10$^+$			
		704.95 *5*	100 *2*	3727.84	9$^-$	E2		
4646.09	(11$^-$)	756.7 *2*	100	3889.39?	(9$^-$)	E2		
4747.2		1019.5 *4*	100	3727.84	9$^-$			
4836.9?		508.3[&] *3*	100	4328.77	(10$^+$)			
4944.77	(11$^-$)	951.6 *2*	100	3992.78	10$^+$			
5055.17	12$^+$	110.0 *2*		4944.77	(11$^-$)			
		1022.0 *8*	60 *19*	4033.2				
		1062.41 *5*	100 *2*	3992.78	10$^+$	E2		
5094.11	12$^-$	661.3 *1*	32 *3*	4432.82	11$^-$	D		
		776.3 *1*	100 *9*	4317.82	10$^-$	E2		
5260.68	(12$^+$)	513.5 *3*	81 *11*	4747.2				
		931.9 *1*	100 *11*	4328.77	(10$^+$)	E2		
5325.97	13$^-$	893.14 *7*	100	4432.82	11$^-$	E2		
5577.2?	(13$^-$)	931.1 *3*	100	4646.09	(11$^-$)	E2		
5768.88		508.2 *2*	100	5260.68	(12$^+$)			
5984.80	14$^-$	658.8 *1*	19 *4*	5325.97	13$^-$	D		
		890.7 *1*	100 *10*	5094.11	12$^-$	E2		

$^{102}_{46}Pd_{56}$-7

Adopted Levels, Gammas (continued)

γ(^{102}Pd) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[‡]
6138.70	14^+	1083.53 *15*	100	5055.17	12^+	E2
6179.9	14^+	1124.7 *4*	100	5055.17	12^+	E2
6222.7?	(14^+)	962.2[&] *2*	100	5260.68	(12^+)	E2
6345.06	15^-	1019.1 *1*	100	5325.97	13^-	E2
6539.1?	(15^-)	961.9 *3*	100	5577.2?	(13^-)	(E2)
6988.16	16^-	643.1 *1*	26 *4*	6345.06	15^-	
		1003.3 *2*	100 *8*	5984.80	14^-	E2
7428.9	16^+	1249.0 *4*	100	6179.9	14^+	E2
7461.36	17^-	1116.3 *1*	100	6345.06	15^-	E2
7585.7?	(17^-)	1046.6 *3*	100	6539.1?	(15^-)	E2
8063.3	18^-	602.1 *4*	13 *3*	7461.36	17^-	
		1074.9 *5*	100 *11*	6988.16	16^-	E2
8707.1	18^+	1278.2 *3*	100	7428.9	16^+	E2
8737.6	19^-	1276.2 *9*	100	7461.36	17^-	
8778.7?	(19^-)	1193.0 *9*	100	7585.7?	(17^-)	E2
9214.2	20^-	1150.9 *5*	100	8063.3	18^-	
9892.9	20^+	1185.8 *9*	100	8707.1	18^+	E2
10178.2	21^-	1440.6 *9*	100	8737.6	19^-	
10223.1	20^+	1516.0 *4*	100	8707.1	18^+	E2
10540.2	22^-	1326.0 *9*	100	9214.2	20^-	
11227.7	(22^+)	1334.8 *6*	100	9892.9	20^+	
11886.2	22^+	1663.1 *4*	100	10223.1	20^+	E2
12025.2	24^-	1485.0 *9*	100	10540.2	22^-	E2
13592.9	24^+	1706.7 *5*	100	11886.2	22^+	
15414.4?	(26^+)	1821.4 *5*	100	13592.9	24^+	

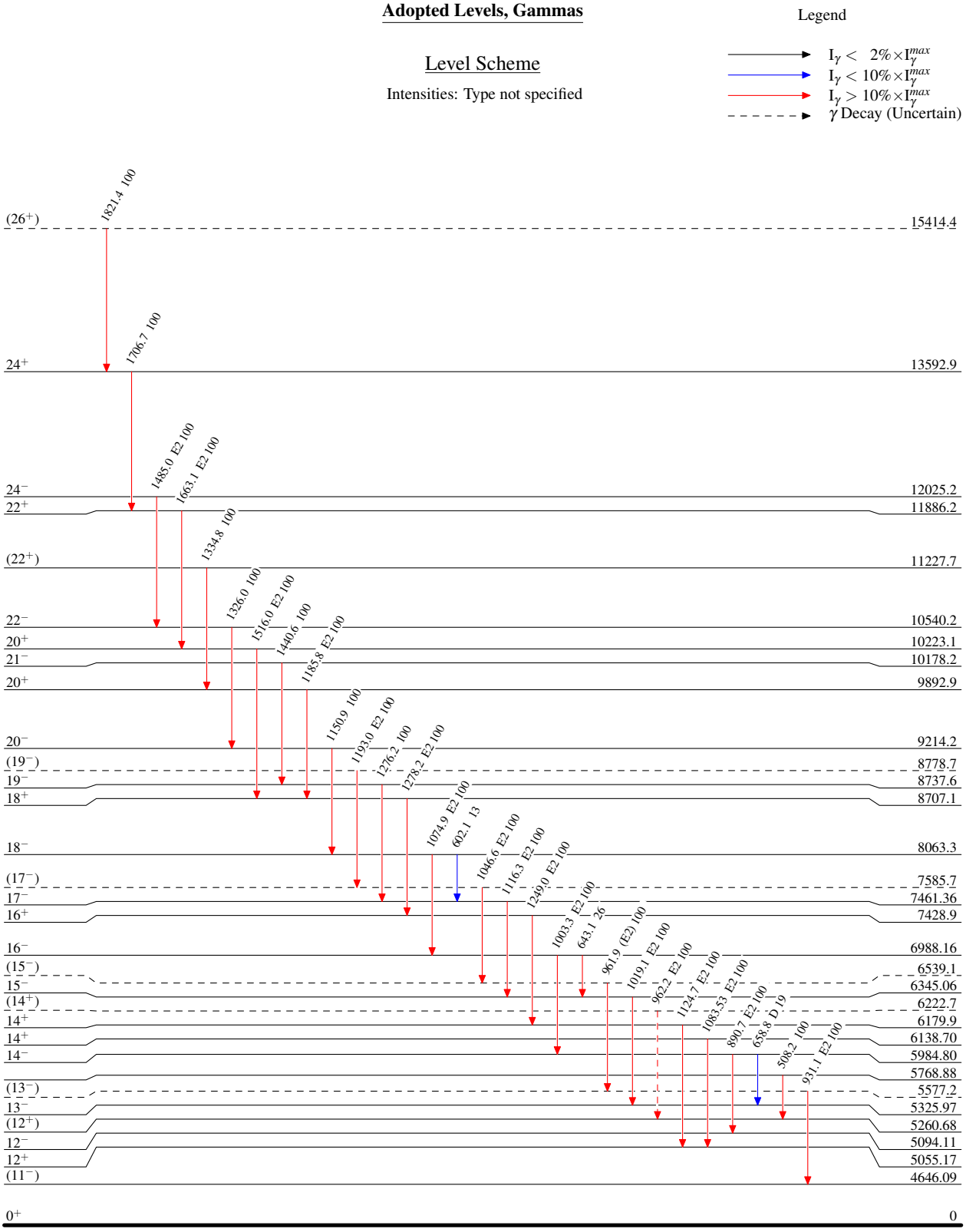
[†] Unless noted otherwise, from a weighted average of decay, ^{99}Ru(α,nγ),^{100}Ru(α,2nγ) and (HI,xnγ) data if available.
[‡] Normally from γ(θ) and γ(linear pol) (1981Pi02) but for levels above 7461 keV, only observed by 1996Je02, stretched Q were assumed E2.
[#] Unless noted otherwise, from ^{92}Zr(^{13}C,3nγ) (1976Gr12): weighted average of values from directional correlation of oriented nuclei (R(DCO)) and angular distribution results.
[@] From ^{92}Zr(^{13}C,3nγ) (1981Pi02).
[&] Placement of transition in the level scheme is uncertain.

$^{102}_{46}Pd_{56}$-8

Adopted Levels, Gammas

Level Scheme

Intensities: Type not specified

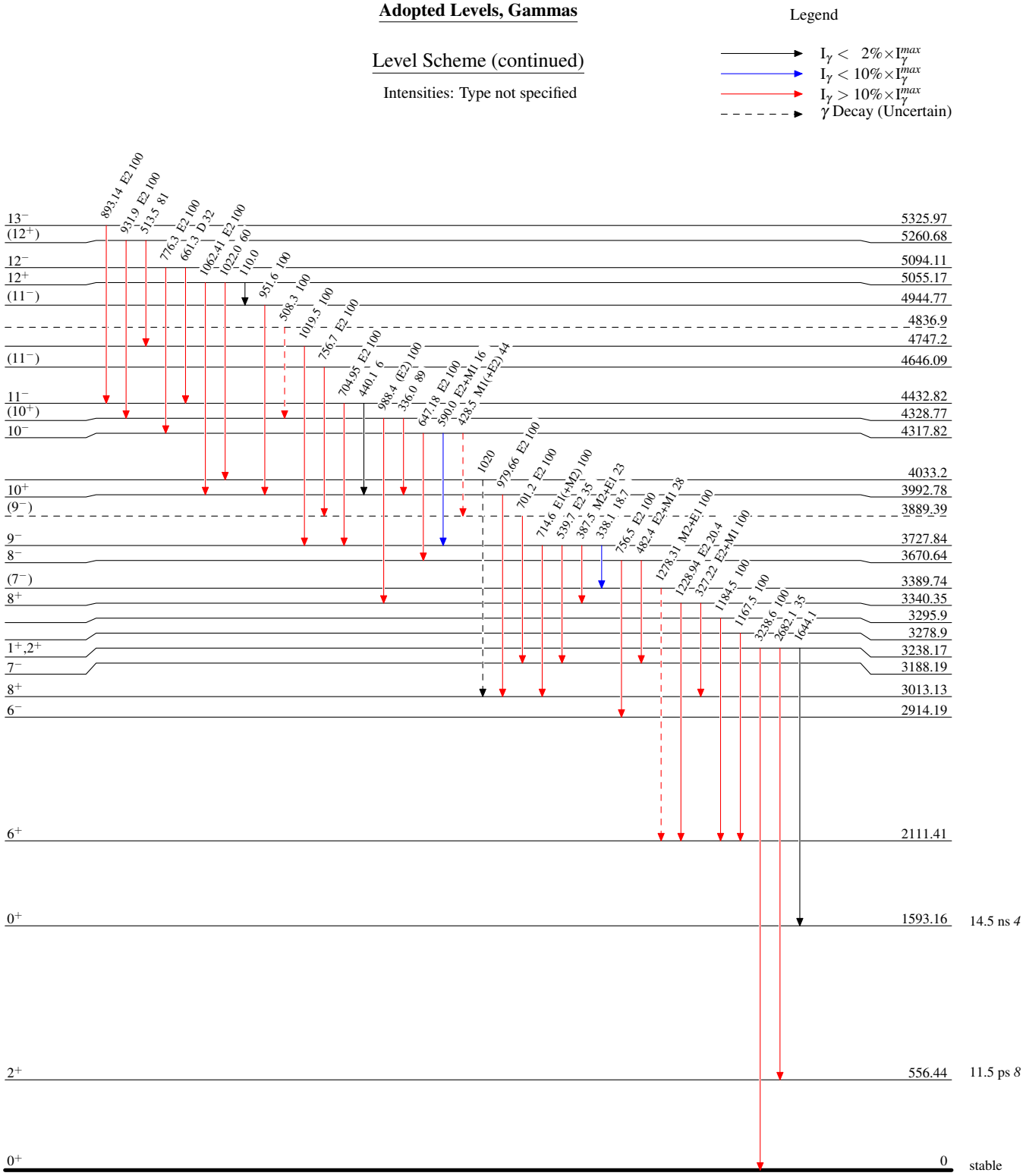


$^{102}_{46}Pd_{56}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

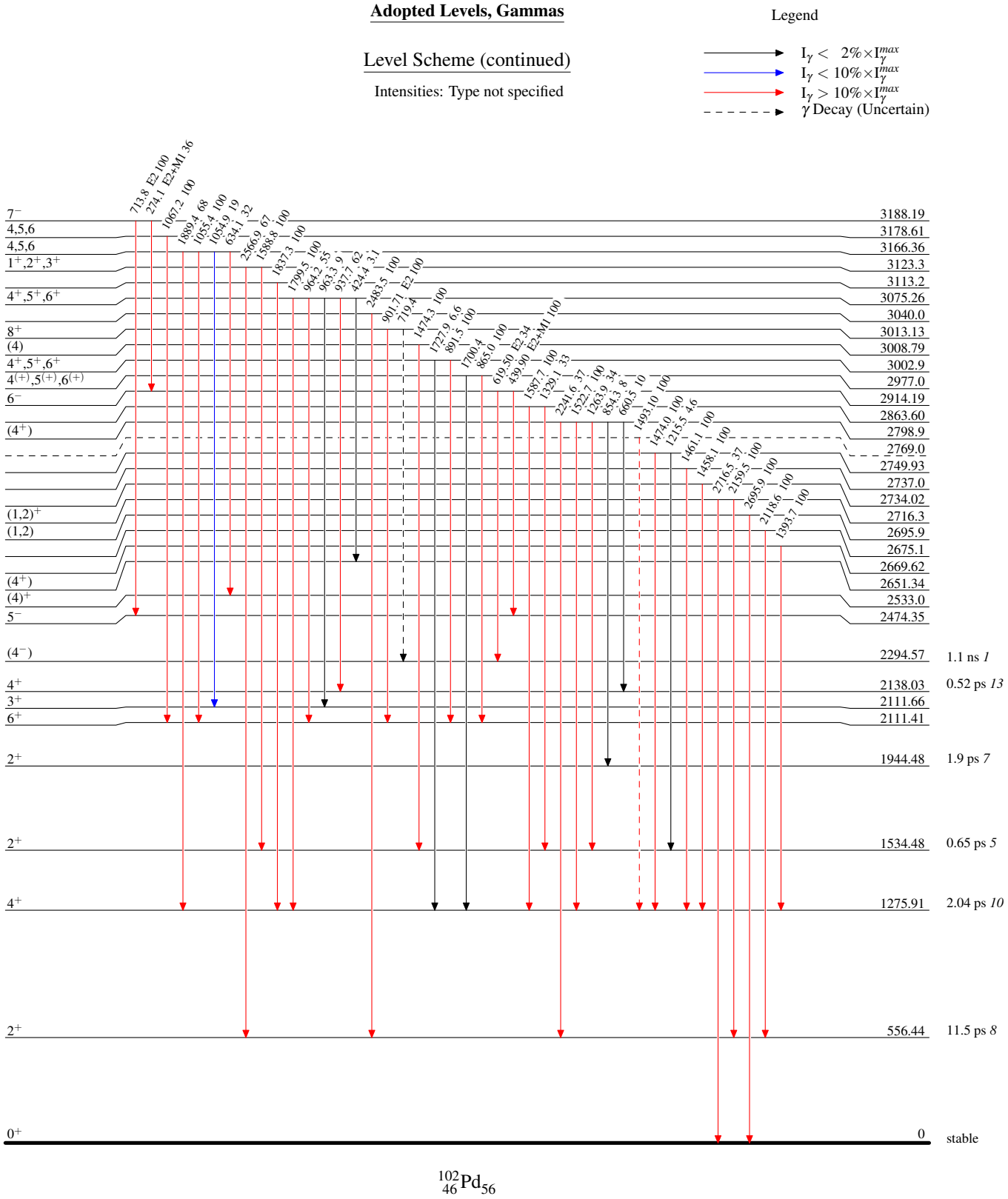


$^{102}_{46}Pd_{56}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

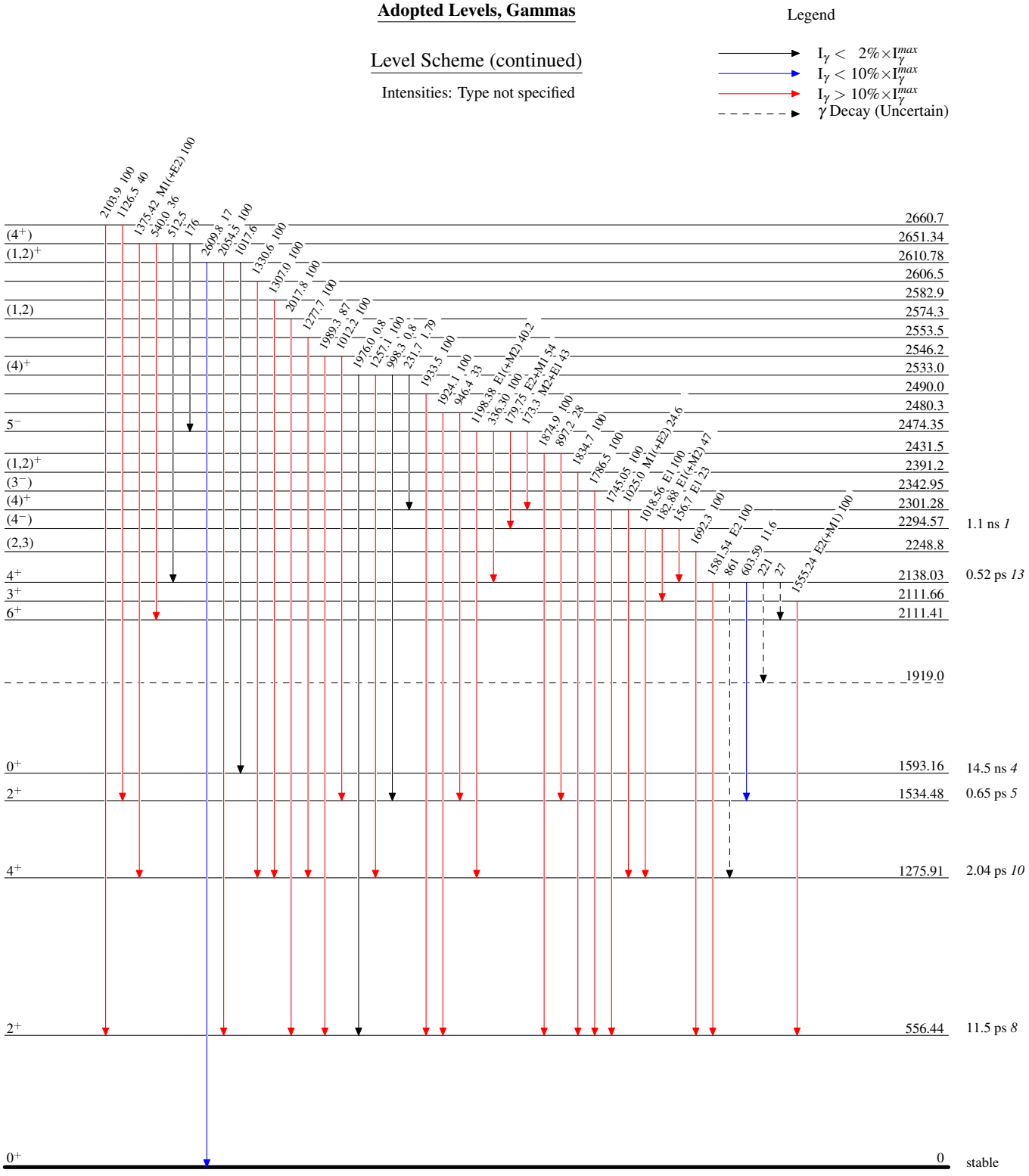


$^{102}_{46}Pd_{56}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

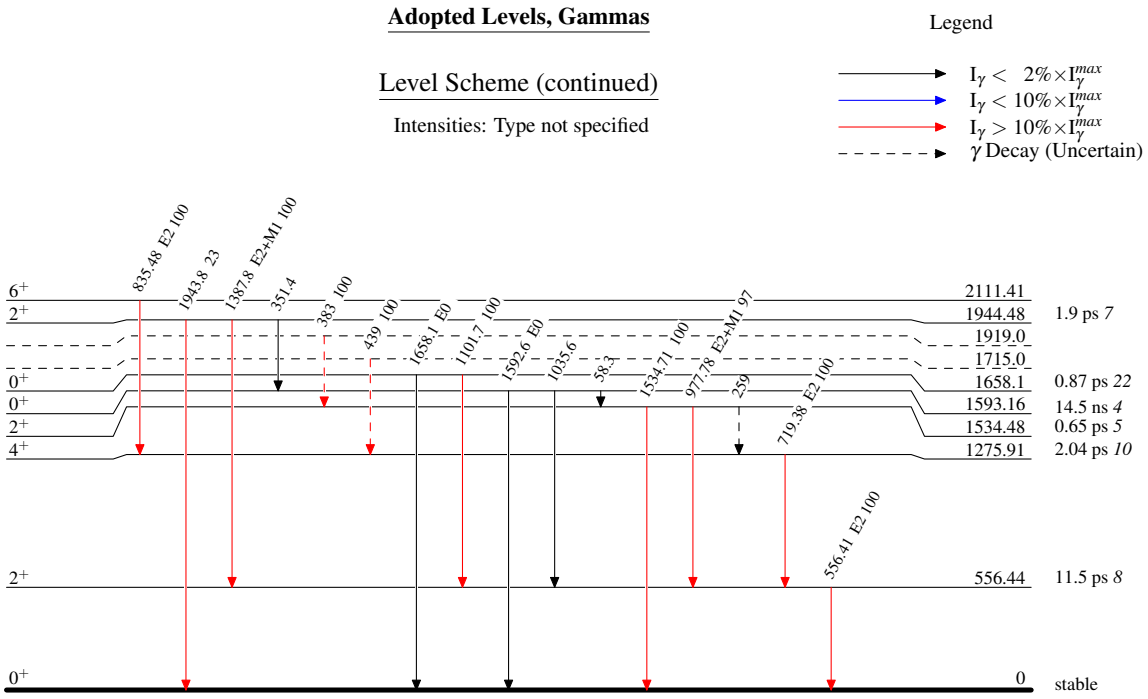


$^{102}_{46}Pd_{56}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified



$^{102}_{46}Pd_{56}$

Adopted Levels, Gammas