

Adopted Levels, Gammas

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	G. Gürdal and F. G. Kondev		NDS 113,1315 (2012)	1-Aug-2011

Q(β^-)=-873.8 14; S(n)=8796.2 13; S(p)=10621 4; Q(α)=-4434 6 [2012Wa38](#)
 Note: Current evaluation has used the following Q record -891 78816 710627 5 -4453 9 [2011AuZZ](#).

¹¹⁰Pd Levels

Cross Reference (XREF) Flags

A	¹¹⁰ Rh β^- decay (3.35 s)	F	¹¹⁰ Pd(e,e')	K	Coulomb excitation
B	¹¹⁰ Rh β^- decay (28.0 s)	G	¹¹⁰ Pd(π^- ,X)	L	¹⁷⁶ Yb(³¹ P,X γ)
C	¹¹⁰ Ag ϵ decay (24.56 s)	H	¹¹⁰ Pd(n,n' γ)	M	²³⁸ U(¹² C,F γ)
D	¹⁰⁸ Pd(t,p)	I	¹¹⁰ Pd(p,p'),(d,d'),(pol d,d')		
E	¹¹⁰ Pd(α,α')	J	¹¹⁰ Pd(p,p' γ)		

E(level) [†]	J ^π [‡]	T _{1/2}	XREF	Comments
0.0 [#]	0 ⁺	stable	ABCDEFGHIJKLM	
373.80 [#] 7	2 ⁺	44.0 ps 7	ABCDEF HIJKLM	<p>μ=+0.62 6 Q=-0.72 14 B(E2)\uparrow=0.876 16 J^π: 373.80γ E2 to 0⁺; L(t,p), L(α,α')=2. T_{1/2}: Weighted average of 45.5 ps 17 (from recoil-distance technique in 1989Ko40), 43.6 ps 8 (from adopted B(E2)\uparrow=0.876 16) and 46 ps 6 (from recoil distance Doppler-shift technique in 2008De30). μ: using dynamical field technique in 1980Br01. Others: +0.6 4 using time integral perturbed angular correlations in 2005Sm08 and 2004Sm04 (T_{1/2}=46.6 ps 14 was used), +0.70 6 using transient field technique in 1985ThZX, 0.74 6 using recoil into gas in 1979LaZL, 0.68 8 (in Fe host) and 0.72 8 (in alloy host) using transient field implantation perturbed-angular-correlation technique in 1974Hu01. Q: using reorientation precession technique in 1976Ha21 (-0.60 14 for destructive interference). Others: -0.47 3 from (e,e') in 1991We15, -0.28 3 from (e,e') in 1973PeYX, -0.55 8 or -0.35 8 from Coulomb excitation in 1972Lu08, -0.72 8 or -0.45 8 from Coulomb excitation in 1971Ha08, -0.48 5 or -0.23 5 from Coulomb excitation in 1970Be45. B(E2)\uparrow: Weighted average of 0.87 3 (1991We15), 0.80 7 (1976Li19) in ¹¹⁰Pd(e,e'), 0.82 5 (symmetrized from 0.85 +2-7 in 1989SvZZ), 0.88 6 (1971Bo08), 0.82 8 (1971Ha08), 0.91 6 (1969Ro05), 0.91 3 (weighted average of 0.92 6, 0.90 6, 0.91 6 and 0.91 6 in 1962Ec01), 0.94 8 (1962Ga10) and 0.86 6 (1958St32). Others: 0.78 in 1962Er05 and 0.91 in 1962Ri09. J^π: 439.76γ E2+M1 to 2⁺ and 813.7γ to 0⁺; L(t,p)=2. T_{1/2}: From 1989Ko40 using the recoil-distance technique. Others: 18.6 +5-9 (1989SvZZ) and 14.0 18 from 1969Ro05.</p>
813.59 [@] 7	2 ⁺	17.7 ps 8	AB DEF HIJKL	<p>XREF: E(923). J^π: 547.04γ E2 to 2⁺; member of the g.s. band; L(t,p)=4. T_{1/2}: From 1989Ko40 using the recoil-distance technique. Others: 4.5 ps +3-1 (1989SvZZ) and 3.8 ps 6 (1969Ro05). B(E4)=91\times10⁻⁴ 14 from (e,e') in 1991We15.</p>
920.78 [#] 10	4 ⁺	4.1 ps 3	B DEF HIJKLM	<p>XREF: J(945). J^π: L(t,p)=0; 572.89γ to 2⁺; non-observation of γ-ray transition to g.s (J^π=0⁺); assignment in ¹¹⁰Pd(p,p'),(d,d'),(pol d,d'). T_{1/2}: From 1989Ko40 using the recoil-distance technique. Others: 10.6 ps</p>
946.74 ^{&} 11	0 ⁺	7.9 ps 7	A D HIJK	

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Adopted Levels, Gammas (continued) ^{110}Pd Levels (continued)

E(level) [†]	J^π [‡]	$T_{1/2}$	XREF	Comments
1170.65 ^a 11	0 ⁺		A D HIJK	+4-8 (1989SvZZ) and 8.0 ps 14 (1969Ro05). XREF: D(1175)J(1168). J^π : L(t,p)=0; 796.83 γ to 2 ⁺ ; non-observation of γ -ray transition to g.s. ($J^\pi=0^+$); assignment in $^{110}\text{Pd}(p,p'),(d,d'),(\text{pol } d,d')$.
1212.12 [@] 13	(3 ⁺)		B Hi jKL	XREF: i(1213)j(1212). J^π : 291.6 γ to 4 ⁺ , 838.2 γ to 2 ⁺ ; band member.
1214.48 ^{&} 15	2 ⁺	9.1 ps 6	A D F Hi jK	XREF: i(1213)j(1212). J^π : L(t,p)=(2); 267.4 γ to 0 ⁺ , 840.9 γ to 2 ⁺ ; band member. $T_{1/2}$: From recoil-distance technique in 1989Ko40. Others: 12.1 ps +10-17 (1989SvZZ) and <16 ps (1969Ro05), both from Coulomb excitation.
1398.31 [@] 13	4 ⁺	5.1 ps 6	B F HIJKL	XREF: J(1401). J^π : 477.8 γ to 4 ⁺ , 584.6 γ to 2 ⁺ ; band member. $T_{1/2}$: From recoil-distance technique in 1989Ko40. Other: 5.4 ps +5-4 from Coulomb excitation in 1989SvZZ. B(E4) \approx 0.001 from (e,e') in 1991We15.
1470.06 ^a 10	2 ⁺		FGHIJK	XREF: J(1472). J^π : 1096.29 γ to 2 ⁺ , 1470.2 γ to 0 ⁺ ; band member.
1573.99 [#] 17	6 ⁺	1.40 ps 14	B HIJKLM	XREF: J(1576). J^π : 653.1 γ to 4 ⁺ ; member of the g.s. band. $T_{1/2}$: From 1989Ko40 using the recoil-distance technique. Other: 1.46 ps +14-7 in Coulomb excitation (1989SvZZ).
1584 ^f 1			I	
1641?	(0 ⁺)		G	E(level), J^π : From 1979Du06 in $^{110}\text{Pd}(\pi^-,X)$.
1716.6 ^g 11	2 ⁺		Ij	XREF: j(1713). J^π : From $^{110}\text{Pd}(p,p'),(d,d'),(\text{pol } d,d')$.
1718.86 ^{&} 15	4 ⁺	2.2 ps 3	HI jK	XREF: j(1713). J^π : 905.2 γ to 2 ⁺ ; 144 γ to 6 ⁺ ; band member; assignment in $^{110}\text{Pd}(p,p'),(d,d'),(\text{pol } d,d')$. $T_{1/2}$: From 1989Ko40 using recoil-distance technique. Other: 1.9 ps 4 in Coulomb excitation (1989SvZZ).
1759.3 [@] 4	(5 ⁺)		L	J^π : 547.2 γ to (3 ⁺); band member.
1864 ^f 1	(2 ⁺) ^h		I	
1889.78 19	2 ⁺		D HI K	XREF: D(1891)I(1891). J^π : L(t,p)=(2); 941.5 γ to 0 ⁺ , 1515.9 γ to 2 ⁺ ; assignment in $^{110}\text{Pd}(p,p'),(d,d'),(\text{pol } d,d')$.
1900.04 15	(4 ⁺)		B L	J^π : 501.9 γ to 4 ⁺ , 1086.5 γ to 2 ⁺ , 890.5 γ from (6 ⁺).
1900.5 3	(2 ⁺)		HI	J^π : 729.9 γ to 0 ⁺ ; assignment in $^{110}\text{Pd}(p,p'),(d,d'),(\text{pol } d,d')$.
1934.60 ^a 18	4 ⁺		DEF HIJK	XREF: K(1936). J^π : L(t,p)=(4); 463.9 γ to 2 ⁺ , 1014 γ to 4 ⁺ ; band member. B(E4)= 56×10^{-4} 13 from $^{110}\text{Pd}(e,e')$ (1991We15).
1956 ^g 2	(4 ⁺)		I	J^π : From $^{110}\text{Pd}(p,p'),(d,d'),(\text{pol } d,d')$.
1987.22 [@] 17	(6 ⁺)		B L	J^π : 588.8 γ to (4 ⁺); band member.
1991 ^g 2	(4 ⁺) ^h		I	
2037.67 18	3 ⁻		DEF HIJK	XREF: K(2015). J^π : L(t,p), L(α,α')=3; assignment in $^{110}\text{Pd}(p,p'),(d,d'),(\text{pol } d,d')$. ϵ B(E3) \uparrow =0.086 12 in 1969Ro05, weighted average of 0.083 15 and 0.093 21. $\beta_3=0.140$ 11, deduced from B(E3), assuming $\epsilon=1$ (3 ⁻ state decays entirely to first 2 ⁺ state).
2061.0 4	(5,6 ⁺)		K	J^π : 487 γ to 6 ⁺ , 1140 γ to 4 ⁺ . Note, that this level was assigned as the 6 ⁺ member of the g.s. band in Coulomb excitation, but this was contradicted in $^{176}\text{Yb}(^{31}\text{P},X\gamma)$.

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Adopted Levels, Gammas (continued)

¹¹⁰Pd Levels (continued)

E(level) [†]	J ^π [‡]	XREF	Comments
2089.1 5	(4 ⁺)	K	J ^π : 1275γ to 2 ⁺ , 515γ to 6 ⁺ .
2095 ^f 1		I	
2125.3 3	(1 ⁻)	HI	J ^π : 1751.3γ to 2 ⁺ , 2125.3γ to 0 ⁺ ; assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').
2140.70 ^g 25	2 ⁺	D F HIJK	XREF: D(2135)F(2130)J(2131).
2193.0 3	(2 ⁺)	HIJ	J ^π : L(t,p)=2; 767γ to 2 ⁺ , 1220γ to 4 ⁺ ; assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d'). XREF: I(2190).
2194 ^f 1	(6 ⁺) ^h	I	J ^π : 1378.8γ to 2 ⁺ ; assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').
2260.67 19	(5 ⁺)	B I L	J ^π : 1048.5γ to (3 ⁺), 1340.0γ to 4 ⁺ ; direct feeding in ¹¹⁰ Rh β ⁻ decay (J ^π =(6 ⁺)).
2276.0 3	(3 ⁻)	HI	XREF: I(2274).
2293.3 3	(2 ⁺)	HIJ	J ^π : 1354.9γ to 4 ⁺ , 1462.5γ to 2 ⁺ ; assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d'). XREF: I(2295).
2295.5 ^c 3	(5 ⁻)	DE I L	J ^π : 1919.5γ to 2 ⁺ , 2309γ to 0 ⁺ . XREF: D(2283)E(2290).
2296.2 [#] 4	8 ⁺	KLM	J ^π : L(t,p)=5; 721.5 to 6 ⁺ , 1374.6γ to 4 ⁺ ; band member.
2322.08 25	2 ⁺	HI	J ^π : 722.2γ to 6 ⁺ ; member of the g.s. band.
2335.2 ^{&} 5	(6 ⁺)	I K	J ^π : 1375.3γ to 0 ⁺ , 1401.2γ to 4 ⁺ . XREF: I(2332).
2336 ^f 1		I	J ^π : 39γ to 8 ⁺ , 1414γ to 4 ⁺ .
2369.7 5	2 ⁺	HI	XREF: I(2373).
2422 ^g 2	(6 ⁺)	I	J ^π : 1449.5γ to 4 ⁺ , 2369.6γ to 0 ⁺ . J ^π : assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').
2428 ^f 2	4 ⁺	D I	XREF: D(2431).
2446.61 24	(2 ⁺)	B HIJ	J ^π : L(t,p)=4. J ^π : 1048.3γ to 4 ⁺ , 2094γ to 2 ⁺ and 2452γ to 0 ⁺ . Note, that assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d') favors 4 ⁺ .
2474.4 3	(2 ⁺)	E HI	XREF: E(2461).
2490 ^g 2	3 ⁻	D I	J ^π : 2474.4γ to 0 ⁺ , 1076.7γ to 4 ⁺ . Note that J ^π =1 ⁻ in ¹¹⁰ Pd(p,p'),(d,d') (1990Pi14 and 1992Pi08), but J ^π =(3 ⁻ ,4 ⁺) in ¹¹⁰ Pd(pol d,d') (1993He13).
2498.9 4	(2 ⁺)	HIJ	J ^π : L(t,p)=3. Note, that J ^π =(5 ⁻) in ¹¹⁰ Pd(pol d,d') (1993He13). XREF: I(2496)J(2499).
2511 ^g 5	(4 ⁺)	I	J ^π : 1286.7γ to (3 ⁺), 1577.3γ to 4 ⁺ ; assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').
2517 ^f 2	2 ⁺	D I	J ^π : assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').
2535 ^g 5	(2 ⁺)	D I	J ^π : L(t,p)=2; assignment in ¹¹⁰ Pd(pol d,d') (1993He13). XREF: D(2548).
2558 ^f 2		I	J ^π : L(t,p)=(2); assignment in ¹¹⁰ Pd(p,p'),(d,d') (1990Pi14, 1992Pi08).
2563.8 4	(3 ⁻) ^h	HI	
2575 ^g 5	(4 ⁺)	I	J ^π : assignment in ¹¹⁰ Pd(pol d,d') (1993He13).
2580 ^e 2		I	
2608 ^g 5	(1 ⁻)	I	J ^π : assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').
2615.3 4		L	
2617 ^f 2	(5 ⁻) ^h	I	
2637	(4 ⁺)	D	J ^π : L(t,p)=(4).
2644 ^e 2	(2 ⁺) ^h	I	
2649 ^e 2	(2 ⁺) ^h	I	
2650.7 [@] 4	(8 ⁺)	L	J ^π : 663.5γ to (6 ⁺); band member.
2663.1 5	(2 ⁺)	D I L	XREF: D(2658)I(2658). J ^π : L(t,p)=2. Other: (1 ⁻) in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').

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Adopted Levels, Gammas (continued)

¹¹⁰Pd Levels (continued)

E(level) [†]	J ^π [‡]	XREF	Comments
2672 ^g 5	(4 ⁺)	I	J ^π : assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').
2686.6 ^d 4	(2 ⁺) ^h	HI	
2691 ^g 5	(2 ⁺)	I	J ^π : assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').
2695 ^g 2	4 ⁺	D I	XREF: D(2693). J ^π : L(t,p)=4.
2714.6 9	(4 ⁺)	HI	XREF: I(2718). J ^π : 2341.0γ to 2 ⁺ ; assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').
2737 ^d 2		I	
2741 ^g 5	(5 ⁻)	D I	XREF: D(2744). J ^π : L(t,p)=(5,6); assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').
2745.5 ^b 3	(7 ⁻)	I L	J ^π : 450.0γ to (5 ⁻), 1171.5γ to 6 ⁺ ; band assignment.
2759 ^f 2	(3 ⁻) ^h	D I	XREF: D(2760).
2764 ^g 5	(1 ⁻)	I	J ^π : assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').
2775.1 6	5,6 ⁺	K	J ^π : 1201γ to 6 ⁺ , 1377γ to 4 ⁺ .
2777.1? 2	(2 ⁺)	H	J ^π : 1830.8γ to 0 ⁺ , 2402.8γ to 2 ⁺ .
2784 ^g 5	(4 ⁺)	I	J ^π : assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').
2784.5 ^c 4	(7 ⁻)	L	J ^π : 488.9γ to (5 ⁻), 1210.7γ to 6 ⁺ ; band member.
2790.64 17	(4 ⁺)	B L	J ^π : 1216.5γ to 6 ⁺ , 1392.1γ to 4 ⁺ ; 890.5γ to (2 ⁺). Note, that significant feeding in ¹¹⁰ Rh β ⁻ decay (28.0 s) (J ^π =(6 ⁺)) would suggest J ^π =5 ⁺ .
2792 ^f 2	(3 ⁻) ^h	I	
2805.03 15	(4 ⁺)	B HI L	XREF: I(2804). J ^π : 817.6γ to 6 ⁺ , 1593.6γ to (3 ⁺); 904.5γ to (2 ⁺). Note, that significant feeding in ¹¹⁰ Rh β ⁻ decay (28.0 s) (J ^π =(6 ⁺)) would suggest J ^π =5 ⁺ .
2807 ^e 2	(2 ⁺ ,6 ⁺ ,7 ⁻)	I	J ^π : assignment in ¹¹⁰ Pd(pol d,d') (1993He13).
2818 ^f 2	(2 ⁺)	F I	J ^π : assignments in (e,e') and ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').
2827 ^e 2	(2 ⁺ ,5 ⁻) ^h	I	
2845 ^g 5	(1 ⁻)	I	J ^π : assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').
2845.3 7		L	
2862 ^f 2	(2 ⁺) ^h	I	
2871 ^f 2	(2 ⁺) ^h	I	
2889 ^f 2	(2 ⁺) ^h	I	
2893 ^g 5	(3 ⁻)	I	J ^π : assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').
2903.2 10	(10 ⁺)	K	J ^π : 607γ to 8 ⁺ .
2908 ^f 2	(2 ⁺) ^h	I	
2912 ^g 5	(1 ⁻)	I	J ^π : assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').
2923.8 7		L	
2932 ^e 2	(2 ⁺) ^h	I	
2937 ^e 2		I	
2948 ^f 2	(4 ⁺) ^h	I	
2952 ^g 5	(2 ⁺)	I	J ^π : assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').
2972 ^g 5	(4 ⁺)	I	J ^π : assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').
2991.6 4	(8 ⁻)	L	J ^π : 207.2γ to (7 ⁻), 633γ from (10 ⁻).
2994 ^g 5	(3 ⁻)	I	J ^π : assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').
2998 ^e 2		I	
3002 ^e 2	(1,2 ⁺ ,5 ⁻) ^h	I	
3009 ^g 5		E I	XREF: E(3015).
3023 ^g 5	(4 ⁺)	I	J ^π : assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').
3036 ^g 5		I	
3050 ^f 2		I	

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Adopted Levels, Gammas (continued)

¹¹⁰Pd Levels (continued)

E(level) [†]	J ^π [‡]	XREF	Comments
3058 ^g 5	(3 ⁻)	I	J ^π : assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').
3062 ^f 2		I	
3070.2 [#] 5	(10 ⁺)	LM	J ^π : 774.0γ to 8 ⁺ ; member of the g.s. band.
3071 ^g 5	(4 ⁺)	I	J ^π : assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').
3075 ^f 2		I	
3079 ^f 2	(2 ⁺) ^h	I	
3089 ^g 5	(4 ⁺)	I	J ^π : assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').
3097 ^f 2	(3 ⁻) ^h	I	
3102 ^g 5	(2 ⁺)	I	J ^π : assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').
3110 ^f 2	(2 ⁺ ,5 ⁻) ^h	I	
3119 ^g 5	(3 ⁻)	I	J ^π : assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').
3127 ^e 2		I	
3131.2 10	(10 ⁺)	K	
3152 ^g 5	(3 ⁻)	I	J ^π : assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').
3168 ^g 5	(1 ⁻)	I	J ^π : assignment in ¹¹⁰ Pd(p,p'),(d,d'), but (3 ⁻) in ¹¹⁰ Pd(pol d,d') (1993He13).
3181 ^g 2	(4 ⁺) ^h	I	
3191 5	(3 ⁻)	I	J ^π : assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').
3195.8 5	(10 ⁺)	L	J ^π : 899.6γ to (8 ⁺).
3232 ^f 2	(1,2 ⁺ ,3 ⁻) ^h	I	
3240 ^f 2	(1,2 ⁺ ,3 ⁻) ^h	I	
3246.1 ^c 4	(9 ⁻)	L	J ^π : 254.5γ to (8 ⁻), 461.6γ to (7 ⁻); band member.
3259 ^g 3	(3 ⁻)	I	J ^π : assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').
3266.3 7		L	
3271 ^f 2	(2 ⁺) ^h	I	
3280 ^g 5	(1 ⁻)	I	J ^π : assignment in ¹¹⁰ Pd(p,p'),(d,d'), but J ^π =(1,2 ⁺ ,3 ⁻) in ¹¹⁰ Pd(pol d,d') (1993He13).
3288 ^f 2	(2 ⁺ ,6 ⁺) ^h	I	
3301 ^g 5	(4 ⁺)	I	J ^π : assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').
3320 ^f 2	(4 ⁺) ^h	I	
3326.9 ^b 6	(9 ⁻)	L	J ^π : 581.4γ to (7 ⁻); band member.
3333 ^f 2	(4 ⁺) ^h	I	
3353 ^f 2	(2 ⁺ ,4 ⁺) ^h	I	
3368 ^f 2		I	
3374 ^g 5	(2 ⁺)	I	J ^π : assignment in ¹¹⁰ Pd(p,p'),(d,d'), but J ^π =(2 ⁺ ,4 ⁺) in ¹¹⁰ Pd(pol d,d') (1993He13).
3380 ^f 2		I	
3386 ^f 2	(2 ⁺) ^h	I	
3407 ^g 5	(4 ⁺)	I	J ^π : assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').
3413 ^f 2		I	
3419 ^f 2	(2 ⁺ ,5 ⁻) ^h	I	
3427 ^d 2		I	
3431 ^d 2		I	
3435 ^d 2		I	
3445 ^f 2	(2 ⁺ ,5 ⁻) ^h	I	
3455 ^e 2		I	
3458 ^e 2		I	
3471 ^f 2		I	
3484 ^g 5	(3 ⁻)	I	J ^π : assignment in ¹¹⁰ Pd(p,p'),(d,d'),(pol d,d').

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Adopted Levels, Gammas (continued) ^{110}Pd Levels (continued)

E(level) [†]	J^π [‡]	XREF	Comments
3489 ^f 2		I	
3501 ^f 2		I	
3511 ^g 5	(3 ⁻)	I	J^π : assignment in $^{110}\text{Pd}(p,p'),(d,d'),(\text{pol } d,d')$.
3514 ^f 2	(2 ⁺) ^h	I	
3525 ^f 2	(2 ⁺) ^h	I	
3535 ^f 2	(3 ⁻) ^h	I	
3561 ^f 2	(2 ⁺) ^h	I	
3570 ^f 2	(2,3,4,5,6) ^h	I	
3575 ^f 2	(4 ⁺) ^h	I	
3592 ^f 2	(1,2 ⁺ ,3 ⁻) ^h	I	
3607 ^f 2	(1,2 ⁺) ^h	I	
3614 ^g 5	(3 ⁻)	I	J^π : assignment in $^{110}\text{Pd}(p,p'),(d,d')$, but $J^\pi=(1,2^+,3^-)$ in $^{110}\text{Pd}(\text{pol } d,d')$ (1993He13).
3622 ^f 2		I	
3624.1 6	(10 ⁻)	L	J^π : 632.5 γ to (8 ⁻) in $^{176}\text{Yb}(^{31}\text{P},X\gamma)$.
3638 ^f 2		I	
3642 ^g 5	(4 ⁺)	I	J^π : assignment in $^{110}\text{Pd}(p,p'),(d,d'),(\text{pol } d,d')$.
3653 ^f 2	(2 ⁺) ^h	I	
3669 ^g 5	(4 ⁺)	I	J^π : assignment in $^{110}\text{Pd}(p,p'),(d,d'),(\text{pol } d,d')$.
3679 ^f 2	(4 ⁺) ^h	I	
3687 ^f 2		I	
3694 ^f 2	(2 ⁺ ,5 ⁻) ^h	I	
3700 ^g 5	(3 ⁻)	I	J^π : assignment in $^{110}\text{Pd}(p,p'),(d,d'),(\text{pol } d,d')$.
3718.1 [#] 5	(12 ⁺)	LM	J^π : 647.9 γ to (10 ⁺); member of the g.s. band.
3720 ^f 2		I	
3730 ^f 2		I	
3738 ^g 5	(4 ⁺)	I	J^π : assignment in $^{110}\text{Pd}(p,p'),(d,d'),(\text{pol } d,d')$.
3769 ^g 4	(3 ⁻)	I	J^π : assignment in $^{110}\text{Pd}(p,p'),(d,d'),(\text{pol } d,d')$.
3789 ^g 5	(3 ⁻)	I	J^π : assignment in $^{110}\text{Pd}(p,p'),(d,d'),(\text{pol } d,d')$.
3799 ^g 5	(3 ⁻)	I	J^π : assignment in $^{110}\text{Pd}(p,p'),(d,d'),(\text{pol } d,d')$.
3826 ^g 5	(3 ⁻)	I	J^π : assignment in $^{110}\text{Pd}(p,p'),(d,d'),(\text{pol } d,d')$.
3854 ^g 5	(3 ⁻)	I	J^π : assignment in $^{110}\text{Pd}(p,p'),(d,d'),(\text{pol } d,d')$.
3869 ^g 5	(3 ⁻)	I	J^π : assignment in $^{110}\text{Pd}(p,p'),(d,d'),(\text{pol } d,d')$.
3916 ^g 5	(3 ⁻)	I	J^π : assignment in $^{110}\text{Pd}(p,p'),(d,d'),(\text{pol } d,d')$.
3955 ^g 5	(3 ⁻)	I	J^π : assignment in $^{110}\text{Pd}(p,p'),(d,d'),(\text{pol } d,d')$.
4001 ^g 5	(4 ⁺)	I	J^π : assignment in $^{110}\text{Pd}(p,p'),(d,d'),(\text{pol } d,d')$.
4030.2 11	(12 ⁺)	K	J^π : 899 γ to (10 ⁺).
4031.1 ^b 7	(11 ⁻)	L	J^π : 704.2 γ to (9 ⁻); band member.
4037 ^g 5	(4 ⁺)	I	J^π : assignment in $^{110}\text{Pd}(p,p'),(d,d'),(\text{pol } d,d')$.
4065 ^g 5	(4 ⁺)	I	J^π : assignment in $^{110}\text{Pd}(p,p'),(d,d'),(\text{pol } d,d')$.
4154 ^g 5	(3 ⁻)	I	J^π : assignment in $^{110}\text{Pd}(p,p'),(d,d'),(\text{pol } d,d')$.
4239 ^g 5	(4 ⁺)	I	J^π : assignment in $^{110}\text{Pd}(p,p'),(d,d'),(\text{pol } d,d')$.
4484.1 [#] 7	(14 ⁺)	LM	J^π : 766.0 γ to (12 ⁺); member of the g.s. band.

[†] From least-squares fit to E_γ 's, unless otherwise stated.[‡] From comparison of experimental differential cross sections with coupled-channel calculations in $^{110}\text{Pd}(p,p')$ and $^{110}\text{Pd}(d,d')$

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued)

 ^{110}Pd Levels (continued)

- (1992Pi08,1990Pi14), unless otherwise stated.
- # Band(A): g.s. band.
 - @ Band(B): γ -band.
 - & Band(C): band based on 0^+ At 947-keV.
 - ^a Band(D): band based on 0^+ At 1171-keV.
 - ^b Band(E): Band based on (7^-) , 2745.5 keV. Based on the $\nu h_{11/2} \otimes \nu g_{7/2}$ or $\nu h_{11/2} \otimes \nu d_{5/2}$ configuration (2003La23).
 - ^c Band(F): Band based on (5^-) , 2295.5 keV. Based on the $\nu h_{11/2} \otimes \nu g_{7/2}$ or $\nu h_{11/2} \otimes \nu d_{5/2}$ configuration (2003La23).
 - ^d Unresolved multiplet in $^{110}\text{Pd}(\text{pol } d, d')$ (1993He13).
 - ^e Unresolved doublet in $^{110}\text{Pd}(\text{pol } d, d')$ (1993He13).
 - ^f From $^{110}\text{Pd}(\text{pol } d, d')$ (1993He13).
 - ^g From $^{110}\text{Pd}(d, d')$ or $^{110}\text{Pd}(p, p')$ (1992Pi08 and 1990Pi14).
 - ^h From $^{110}\text{Pd}(\text{pol } d, d')$ in 1993He13.

Adopted Levels, Gammas (continued)

$\gamma(^{110}\text{Pd})$									
$E_i(\text{level})$	J_i^π	E_γ^{\ddagger}	I_γ^{\ddagger}	E_f	J_f^π	Mult.	δ	α^\dagger	Comments
373.80	2 ⁺	373.80 8	100	0.0	0 ⁺	E2		0.01448	$\alpha(\text{K})=0.01245$ 18; $\alpha(\text{L})=0.001661$ 24; $\alpha(\text{M})=0.000314$ 5; $\alpha(\text{N}+..)=5.17\times 10^{-5}$ 8 $\alpha(\text{N})=5.17\times 10^{-5}$ 8 B(E2)(W.u.)=55.5 9 Mult.: $\alpha(\text{exp})$ in ^{110}Rh β^- decay (3.35 s) (1988Ay02), but the value was not given by the authors.
813.59	2 ⁺	439.76 8	100.0 13	373.80	2 ⁺	E2+M1	-4.6 +19-12	0.00870 15	$\alpha(\text{K})=0.00752$ 13; $\alpha(\text{L})=0.000970$ 20; $\alpha(\text{M})=0.000183$ 4; $\alpha(\text{N}+..)=3.03\times 10^{-5}$ 6 $\alpha(\text{N})=3.03\times 10^{-5}$ 6 B(M1)(W.u.)=0.0005 4; B(E2)(W.u.)=44 3 Mult.: $A_2=-0.214$ 37 using $\gamma(\theta)$ in 1969Ro05; $\gamma\gamma(\theta)$ in 1969Ro03. δ : From $\gamma\gamma(\theta)$ in 1969Ro03.
		813.52 10	35 4	0.0	0 ⁺	[E2]		1.63×10^{-3}	$\alpha(\text{K})=0.001423$ 20; $\alpha(\text{L})=0.0001707$ 24; $\alpha(\text{M})=3.20\times 10^{-5}$ 5; $\alpha(\text{N}+..)=5.37\times 10^{-6}$ 8 $\alpha(\text{N})=5.37\times 10^{-6}$ 8 B(E2)(W.u.)=0.74 10 I_γ : From ^{110}Rh β^- decay (28.0 s).
920.78	4 ⁺	(107&) 547.04 10	100	813.59 2 ⁺ 373.80 2 ⁺		E2		0.00462	$\alpha(\text{K})=0.00401$ 6; $\alpha(\text{L})=0.000503$ 7; $\alpha(\text{M})=9.46\times 10^{-5}$ 14; $\alpha(\text{N}+..)=1.575\times 10^{-5}$ 22 $\alpha(\text{N})=1.575\times 10^{-5}$ 22 B(E2)(W.u.)=90 7 Mult.: $A_2=0.36$ 7 and $A_4=-0.31$ 11 from $\gamma(\theta)$ in Coulomb excitation (1962Ec01).
946.74	0 ⁺	(133&) 572.89 10	100	813.59 2 ⁺ 373.80 2 ⁺		[E2]		0.00406	B(E2)(W.u.)=37 4 $\alpha(\text{K})=0.00352$ 5; $\alpha(\text{L})=0.000439$ 7; $\alpha(\text{M})=8.26\times 10^{-5}$ 12; $\alpha(\text{N}+..)=1.377\times 10^{-5}$ 20 $\alpha(\text{N})=1.377\times 10^{-5}$ 20 I_γ : Other: 32 9 in ^{110}Rh β^- decay (3.3 s).
1170.65	0 ⁺	356.9 2 796.83 10	47.8 22 100 7	813.59 2 ⁺ 373.80 2 ⁺					I_γ : Others: 10.4 8 in $^{110}\text{Pd}(n,n'\gamma)$, 8 4 in $^{176}\text{Yb}(^{31}\text{P},X\gamma)$.
1212.12	(3 ⁺)	291.6# 2 398.6# 2	8.4# 17 93# 5	920.78 4 ⁺ 813.59 2 ⁺					I_γ : Others: 100 10 in $^{110}\text{Pd}(n,n'\gamma)$, 64 4 in $^{176}\text{Yb}(^{31}\text{P},X\gamma)$.
		838.2# 3	100# 8	373.80 2 ⁺					I_γ : Others: 58 10 in $^{110}\text{Pd}(n,n'\gamma)$, 100 4 in $^{176}\text{Yb}(^{31}\text{P},X\gamma)$.

Adopted Levels, Gammas (continued)

$\gamma(^{110}\text{Pd})$ (continued)									
$E_i(\text{level})$	J_i^π	E_γ^{\ddagger}	I_γ^{\ddagger}	E_f	J_f^π	Mult.	α^\ddagger	Comments	
1214.48	2 ⁺	(44&) 267.4 3	24 4	1170.65 946.74	0 ⁺ 0 ⁺	[E2]	0.0435	$\alpha(\text{K})=0.0370$ 6; $\alpha(\text{L})=0.00534$ 8; $\alpha(\text{M})=0.001011$ 15; $\alpha(\text{N}+..)=0.0001651$ 24 $\alpha(\text{N})=0.0001651$ 24 $\text{B}(\text{E}2)(\text{W.u.})=1.6 \times 10^2$ 4	
		294& 401.0 7	28 12	920.78 813.59	4 ⁺ 2 ⁺	[M1]	0.00955	$\alpha(\text{K})=0.00834$ 13; $\alpha(\text{L})=0.000987$ 15; $\alpha(\text{M})=0.000185$ 3; $\alpha(\text{N}+..)=3.13 \times 10^{-5}$ 5 $\alpha(\text{N})=3.13 \times 10^{-5}$ 5 $\text{B}(\text{M}1)(\text{W.u.})=0.0048$ 22	
		840.9 7	64 16	373.80	2 ⁺	[M1]	1.66×10^{-3}	$\alpha(\text{K})=0.001454$ 21; $\alpha(\text{L})=0.0001684$ 24; $\alpha(\text{M})=3.16 \times 10^{-5}$ 5; $\alpha(\text{N}+..)=5.33 \times 10^{-6}$ 8 $\alpha(\text{N})=5.33 \times 10^{-6}$ 8 $\text{B}(\text{M}1)(\text{W.u.})=0.0012$ 4 I_γ : Other: 100 38 in ^{110}Rh β^- decay (3.3 s).	
		1214.5 2	100 6	0.0	0 ⁺	[E2]	6.68×10^{-4}	$\alpha(\text{K})=0.000577$ 8; $\alpha(\text{L})=6.72 \times 10^{-5}$ 10; $\alpha(\text{M})=1.258 \times 10^{-5}$ 18; $\alpha(\text{N}+..)=1.143 \times 10^{-5}$ 17 $\alpha(\text{N})=2.12 \times 10^{-6}$ 3; $\alpha(\text{IPF})=9.31 \times 10^{-6}$ 14 $\text{B}(\text{E}2)(\text{W.u.})=0.35$ 5 I_γ : Other: 69 31 in ^{110}Rh β^- decay (3.3 s).	
1398.31	4 ⁺	(183&) (186&) 477.8# 2	53# 4	1214.48 1212.12 920.78	2 ⁺ (3 ⁺) 4 ⁺	[E2+M1]	0.0065 4	$\alpha(\text{K})=0.00567$ 25; $\alpha(\text{L})=0.00070$ 6; $\alpha(\text{M})=0.000131$ 12; $\alpha(\text{N}+..)=2.19 \times 10^{-5}$ 17 $\alpha(\text{N})=2.19 \times 10^{-5}$ 17 I_γ : Other: 62 9 in $^{110}\text{Pd}(n,n'\gamma)$, 37 5 in $^{176}\text{Yb}(^{31}\text{P},\text{X}\gamma)$.	
		584.6# 2	100# 8	813.59	2 ⁺	[E2]	0.00384	$\alpha(\text{K})=0.00333$ 5; $\alpha(\text{L})=0.000415$ 6; $\alpha(\text{M})=7.80 \times 10^{-5}$ 11; $\alpha(\text{N}+..)=1.300 \times 10^{-5}$ 19 $\alpha(\text{N})=1.300 \times 10^{-5}$ 19 $\text{B}(\text{E}2)(\text{W.u.})=34$ 6	
1470.06	2 ⁺	1024& (72&) (255&) 298.8 3 (523&) (549&) 656.42 15	17 3 71 5	373.80 1398.31 1214.48 1170.65 946.74 920.78 813.59	2 ⁺ 4 ⁺ 2 ⁺ 0 ⁺ 0 ⁺ 4 ⁺ 2 ⁺				

Adopted Levels, Gammas (continued)

$\gamma(^{110}\text{Pd})$ (continued)									
$E_i(\text{level})$	J_i^π	E_γ^{\ddagger}	I_γ^{\ddagger}	E_f	J_f^π	Mult.	α^\dagger	Comments	
1470.06	2 ⁺	1096.29 13 1470.2 2	100 7 31 3	373.80 0.0	2 ⁺ 0 ⁺				
1573.99	6 ⁺	(176&) 653.1 2	100	1398.31 920.78	4 ⁺ 4 ⁺	[E2]	0.00285	$\alpha(\text{K})=0.00248$ 4; $\alpha(\text{L})=0.000304$ 5; $\alpha(\text{M})=5.71\times 10^{-5}$ 8; $\alpha(\text{N+..})=9.54\times 10^{-6}$ 14 $\alpha(\text{N})=9.54\times 10^{-6}$ 14 $\text{B}(\text{E2})(\text{W.u.})=108$ 11	
1718.86	4 ⁺	(144&) (248&) (320&) 503& 797&	25	1573.99 1470.06 1398.31 1214.48 920.78	6 ⁺ 2 ⁺ 4 ⁺ 2 ⁺ 4 ⁺	[M1]	0.00187	$\alpha(\text{K})=0.001642$ 23; $\alpha(\text{L})=0.000190$ 3; $\alpha(\text{M})=3.57\times 10^{-5}$ 5; $\alpha(\text{N+..})=6.02\times 10^{-6}$ 9 $\alpha(\text{N})=6.02\times 10^{-6}$ 9 $\text{B}(\text{M1})(\text{W.u.})=0.0032$ 5 I_γ : From Coulomb excitation.	
		905.2 2	100 7	813.59	2 ⁺	[E2]	1.26×10^{-3}	$\alpha(\text{K})=0.001105$ 16; $\alpha(\text{L})=0.0001313$ 19; $\alpha(\text{M})=2.46\times 10^{-5}$ 4; $\alpha(\text{N+..})=4.13\times 10^{-6}$ 6 $\alpha(\text{N})=4.13\times 10^{-6}$ 6 $\text{B}(\text{E2})(\text{W.u.})=8.8$ 15	
		1345.5 2	28.1 24	373.80	2 ⁺	[E2]	5.68×10^{-4}	$\alpha(\text{K})=0.000467$ 7; $\alpha(\text{L})=5.41\times 10^{-5}$ 8; $\alpha(\text{M})=1.012\times 10^{-5}$ 15; $\alpha(\text{N+..})=3.67\times 10^{-5}$ 6 $\alpha(\text{N})=1.704\times 10^{-6}$ 24; $\alpha(\text{IPF})=3.50\times 10^{-5}$ 5 $\text{B}(\text{E2})(\text{W.u.})=0.34$ 6	
1759.3	(5 ⁺)	547.2@ 3	100@	1212.12	(3 ⁺)				
1889.78	2 ⁺	(172&) (420&) (492&) (719&) 941.5 12 (969&) 1076.7 8 1515.9 2 (1890&)	3.4 15 5.1 16 100 9	1718.86 1470.06 1398.31 1170.65 946.74 920.78 813.59 373.80 0.0	4 ⁺ 2 ⁺ 4 ⁺ 0 ⁺ 0 ⁺ 4 ⁺ 2 ⁺ 2 ⁺ 0 ⁺				
1900.04	(4 ⁺)	501.9# 2 687.7# 2	11# 3 100# 7	1398.31 1212.12	4 ⁺ (3 ⁺)			I_γ : Other: 13 5 in $^{176}\text{Yb}(^{31}\text{P},\text{X}\gamma)$. I_γ : Other: 94 12 in $^{110}\text{Pd}(\text{n},\text{n}'\gamma)$.	

Adopted Levels, Gammas (continued) $\gamma(^{110}\text{Pd})$ (continued)

$E_i(\text{level})$	J_i^π	E_{γ^\ddagger}	I_{γ^\ddagger}	E_f	J_f^π	Comments
1900.04	(4 ⁺)	979.2 [#] 3	9.8 [#] 18	920.78	4 ⁺	I _γ : Other: 46 9 in ¹¹⁰ Pd(n,n'γ) and 15 5 in ¹⁷⁶ Yb(³¹ P,Xγ).
		1086.5 [#] 3	22 [#] 7	813.59	2 ⁺	
1900.5	(2 ⁺)	729.9 10	41 12	1170.65	0 ⁺	
		1526.7 4	100 12	373.80	2 ⁺	
1934.60	4 ⁺	(218&)		1716.6	2 ⁺	
		(362&)		1573.99	6 ⁺	
		463.9 4	100 11	1470.06	2 ⁺	
		(538&)		1398.31	4 ⁺	
		(721&)		1214.48	2 ⁺	
		722.5 4	61 8	1212.12	(3 ⁺)	
		1014.0 5	67 17	920.78	4 ⁺	
		1120.8 3	61 11	813.59	2 ⁺	
		1560.8 4	78 11	373.80	2 ⁺	
1987.22	(6 ⁺)	588.8 [#] 2	100 [#]	1398.31	4 ⁺	
2037.67	3 ⁻	1224.2 3	20.0 18	813.59	2 ⁺	
		1663.8 2	100 10	373.80	2 ⁺	
2061.0	(5,6 ⁺)	(125&)		1934.60	4 ⁺	
		(343&)		1718.86	4 ⁺	
		(487&)		1573.99	6 ⁺	
		663&		1398.31	4 ⁺	
		(1140&)		920.78	4 ⁺	
2089.1	(4 ⁺)	(371&)		1718.86	4 ⁺	
		(515&)		1573.99	6 ⁺	
		691&		1398.31	4 ⁺	
		1168&		920.78	4 ⁺	
		1275&		813.59	2 ⁺	
		1715&		373.80	2 ⁺	
2125.3	(1 ⁻)	1751.3 5	15 3	373.80	2 ⁺	
		2125.3 3	100 10	0.0	0 ⁺	
2140.70	2 ⁺	(423&)		1718.86	4 ⁺	
		(567&)		1573.99	6 ⁺	
		(671&)		1470.06	2 ⁺	
		(743&)		1398.31	4 ⁺	
		(926&)		1214.48	2 ⁺	
		929.2 ^a 3	100 14	1212.12	(3 ⁺)	

Adopted Levels, Gammas (continued)

γ(¹¹⁰Pd) (continued)

<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_γ[‡]</u>	<u>I_γ[‡]</u>	<u>E_f</u>	<u>J_f^π</u>	<u>Comments</u>
2140.70	2 ⁺	1221.0 ^a 4 (1327 ^{&})	90 10	920.78	4 ⁺	I _γ : Other: I _γ =47 in Coulomb excitation (1989SvZZ).
		1766.7 3	100 10	813.59	2 ⁺	
2193.0	(2 ⁺)	1378.8 4	100 16	373.80	2 ⁺	
		1819.8 4	59 7	813.59	2 ⁺	
2260.67	(5 ⁺)	1048.5 [#] 3	100 [#] 21	373.80	2 ⁺	
		1340.0 [#] 3	36 [#] 8	1212.12	(3 ⁺)	
2276.0	(3 ⁻)	1354.9 7	21 5	920.78	4 ⁺	
		1462.5 3	100 10	920.78	4 ⁺	
2293.3	(2 ⁺)	1354 20		813.59	2 ⁺	E _γ : From ¹¹⁰ Pd(p,p'γ).
		1919.5 3	100	920.78	4 ⁺	
		2309 20	13 3	373.80	2 ⁺	E _γ ,I _γ : From ¹¹⁰ Pd(p,p'γ).
2295.5	(5 ⁻)	721.5 [@] 5	33 [@] 7	0.0	0 ⁺	
		1374.7 [@] 5	100 [@] 7	1573.99	6 ⁺	
2296.2	8 ⁺	(235 ^{&})		920.78	4 ⁺	
		722.2 [@] 4	100 [@]	2061.0	(5,6 ⁺)	
2322.08	2 ⁺	1375.3 3	100 11	1573.99	6 ⁺	
		1401.2 4	14 3	946.74	0 ⁺	
		1948.7 11	6 3	920.78	4 ⁺	
		2322.6 10	6.3 19	373.80	2 ⁺	
				0.0	0 ⁺	
2335.2	(6 ⁺)	(39 ^{&})		2296.2	8 ⁺	
		(274 ^{&})		2061.0	(5,6 ⁺)	
		617 ^{&}		1718.86	4 ⁺	
		761 ^{&}		1573.99	6 ⁺	
		(937 ^{&})		1398.31	4 ⁺	
		1414 ^{&}		920.78	4 ⁺	
2369.7	2 ⁺	1449.5 20	27 13	920.78	4 ⁺	
		1556.3 10	79 21	813.59	2 ⁺	
		2369.6 6	100 23	0.0	0 ⁺	
2446.61	(2 ⁺)	1048.3 2	100	1398.31	4 ⁺	
		2094 ^a 20	30 7	373.80	2 ⁺	E _γ ,I _γ : From ¹¹⁰ Pd(p,p'γ).
		2452 ^a 20	19 11	0.0	0 ⁺	E _γ ,I _γ : From ¹¹⁰ Pd(p,p'γ).
2474.4	(2 ⁺)	1076.7 8	34 11	1398.31	4 ⁺	
		2100.0 6	57 14	373.80	2 ⁺	
		2474.4 4	100 14	0.0	0 ⁺	
2498.9	(2 ⁺)	1286.7 ^a 4	100 18	1212.12	(3 ⁺)	
		1577.3 ^a 7	64 18	920.78	4 ⁺	

Adopted Levels, Gammas (continued)

$\gamma(^{110}\text{Pd})$ (continued)						
$E_i(\text{level})$	J_i^π	E_γ^{\ddagger}	I_γ^{\ddagger}	E_f	J_f^π	Comments
2563.8	(3 ⁻)	2190.0 4	100	373.80	2 ⁺	
2615.3		714.8 @ 3	100 @	1900.04	(4 ⁺)	
2650.7	(8 ⁺)	663.5 @ 3	100 @	1987.22	(6 ⁺)	
2663.1	(2 ⁺)	762.6 @ 4	100 @	1900.04	(4 ⁺)	
2686.6	(2 ⁺)	1873.2 5	53 16	813.59	2 ⁺	
		2312.7 4	100 11	373.80	2 ⁺	
2714.6	(4 ⁺)	1900.2 20	56 26	813.59	2 ⁺	
		2341.0 10	100 31	373.80	2 ⁺	
2745.5	(7 ⁻)	450.0 @ 6	<7.7 @	2295.5	(5 ⁻)	
		1171.5 @ 3	100 @ 8	1573.99	6 ⁺	
2775.1	5,6 ⁺	714 &		2061.0	(5,6 ⁺)	
		1201 &		1573.99	6 ⁺	
		1377 &		1398.31	4 ⁺	
2777.1?	(2 ⁺)	1830.8 ^a 11	100 35	946.74	0 ⁺	
		2402.8 ^a 10	88 28	373.80	2 ⁺	
2784.5	(7 ⁻)	488.9 3	100 14	2295.5	(5 ⁻)	
		1210.7 5	29 14	1573.99	6 ⁺	
2790.64	(4 ⁺)	803.5 [#] 2	11 [#] 3	1987.22	(6 ⁺)	
		890.5 [#] 3	100 [#] 12	1900.04	(4 ⁺)	
		1216.5 [#] 3	22 [#] 6	1573.99	6 ⁺	
		1392.1 [#] 3	93 [#] 10	1398.31	4 ⁺	
		1579.2 [#] 4	11 [#] 5	1212.12	(3 ⁺)	
		1869.5 [#] 5	20 [#] 4	920.78	4 ⁺	
2805.03	(4 ⁺)	544.4 [#] 2	35 [#] 6	2260.67	(5 ⁺)	
		817.6 [#] 2	10 [#] 3	1987.22	(6 ⁺)	
		904.5 [#] 3	100 [#] 10	1900.04	(4 ⁺)	
		1230.9 [#] 3	42 [#] 8	1573.99	6 ⁺	I_γ : Other: 83 17 in $^{176}\text{Yb}(^{31}\text{P},\text{X}\gamma)$.
		1406.6 [#] 3	24 [#] 4	1398.31	4 ⁺	I_γ : Other: 14 5 in $^{110}\text{Pd}(n,n'\gamma)$.
		1593.6 [#] 3	21 [#] 5	1212.12	(3 ⁺)	I_γ : Other: 100 12 in $^{110}\text{Pd}(n,n'\gamma)$.
		1884.1 [#] 4	26 [#] 5	920.78	4 ⁺	
2845.3		1271.3 @ 6	100 @	1573.99	6 ⁺	
2903.2	(10 ⁺)	607 1	100	2296.2	8 ⁺	
2923.8		1349.8 @ 6	100 @	1573.99	6 ⁺	
2991.6	(8 ⁻)	207.2 @ 4	100 @ 20	2784.5	(7 ⁻)	
		246.1 @ 5	60 @ 20	2745.5	(7 ⁻)	

Adopted Levels, Gammas (continued)

$\gamma(^{110}\text{Pd})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ^\ddagger	I_γ^\ddagger	E_f	J_f^π	$E_i(\text{level})$	J_i^π	E_γ^\ddagger	I_γ^\ddagger	E_f	J_f^π
3070.2	(10 ⁺)	774.0 [@] 3	100 [@]	2296.2	8 ⁺	3624.1	(10 ⁻)	632.5 [@] 4	100 [@]	2991.6	(8 ⁻)
3131.2	(10 ⁺)	835 ^{&}		2296.2	8 ⁺	3718.1	(12 ⁺)	522.3 [@] 4	36 [@] 9	3195.8	(10 ⁺)
3195.8	(10 ⁺)	899.6 [@] 3	100 [@]	2296.2	8 ⁺			647.9 [@] 3	100 [@] 9	3070.2	(10 ⁺)
3246.1	(9 ⁻)	254.5 [@] 6	<20 [@]	2991.6	(8 ⁻)	4030.2	(12 ⁺)	899		3131.2	(10 ⁺)
		461.6 [@] 5	40 [@] 20	2784.5	(7 ⁻)			1127		2903.2	(10 ⁺)
		500.5 [@] 4	100 [@] 20	2745.5	(7 ⁻)	4031.1	(11 ⁻)	704.2 [@] 3	100 [@]	3326.9	(9 ⁻)
3266.3		651.0 [@] 5	100 [@]	2615.3		4484.1	(14 ⁺)	766.0 [@] 4	100 [@]	3718.1	(12 ⁺)
3326.9	(9 ⁻)	581.4 [@] 5	100 [@]	2745.5	(7 ⁻)						

[†] Additional information 1.

[‡] From ¹¹⁰Pd(n,n' γ), unless otherwise stated.

[#] From ¹¹⁰Rh β^- decay (28.0 s).

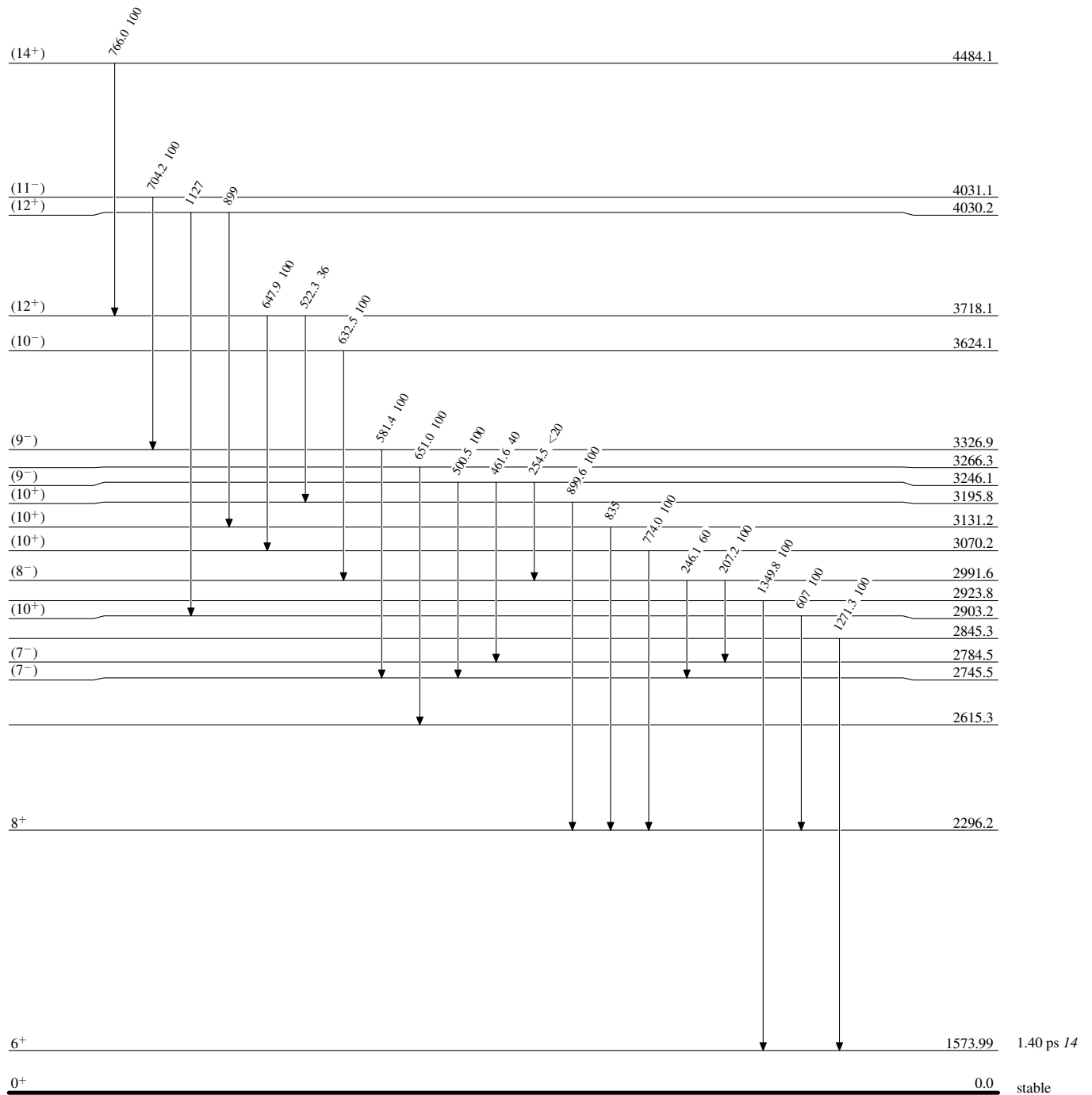
[@] From ¹⁷⁶Yb(³¹P,X γ) (2003La23).

[&] From Coulomb excitation.

^a Placement of transition in the level scheme is uncertain.

Adopted Levels, GammasLevel Scheme

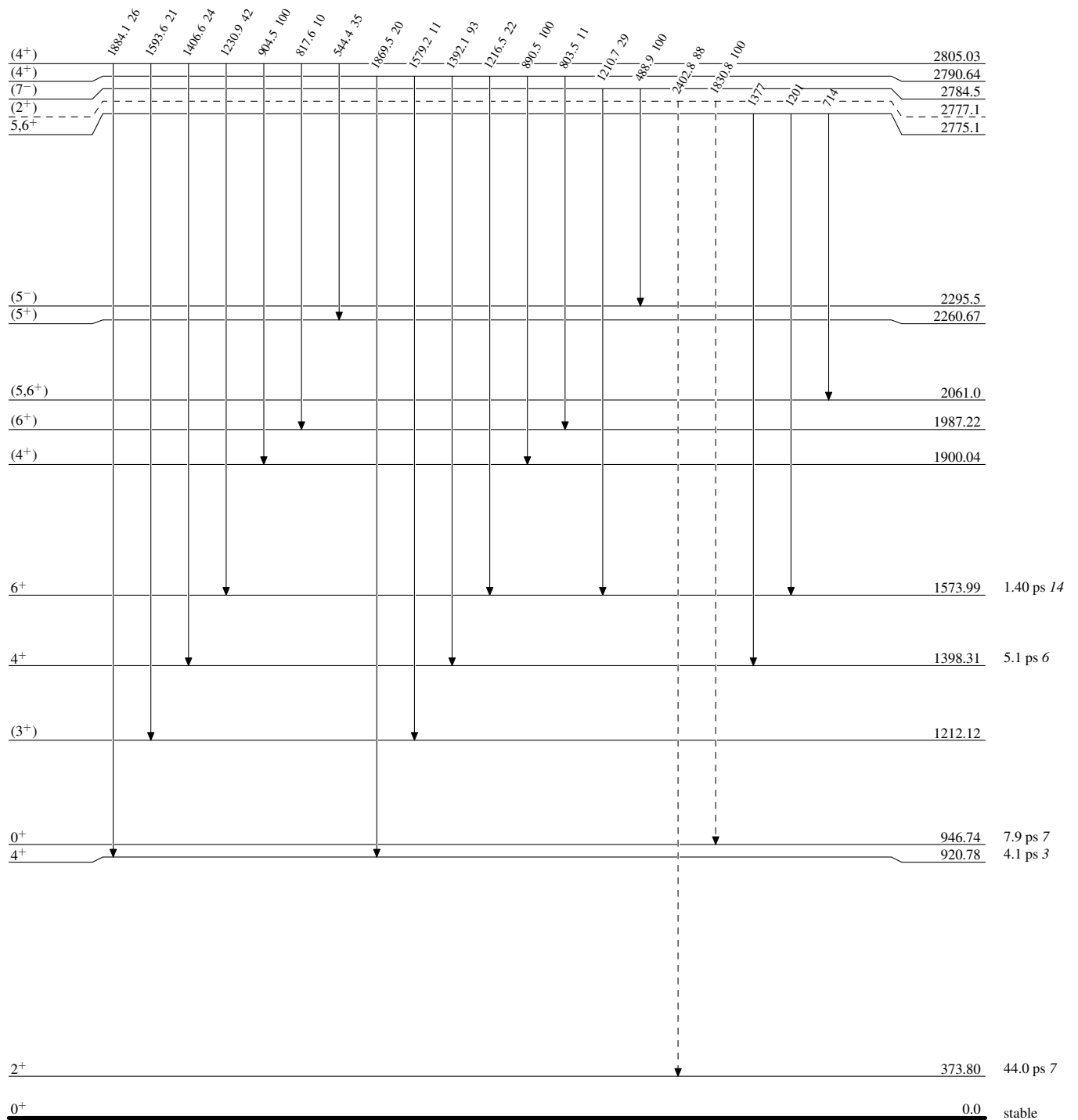
Intensities: Relative photon branching from each level

 $^{110}_{46}\text{Pd}_{64}$

Adopted Levels, Gammas**Level Scheme (continued)**

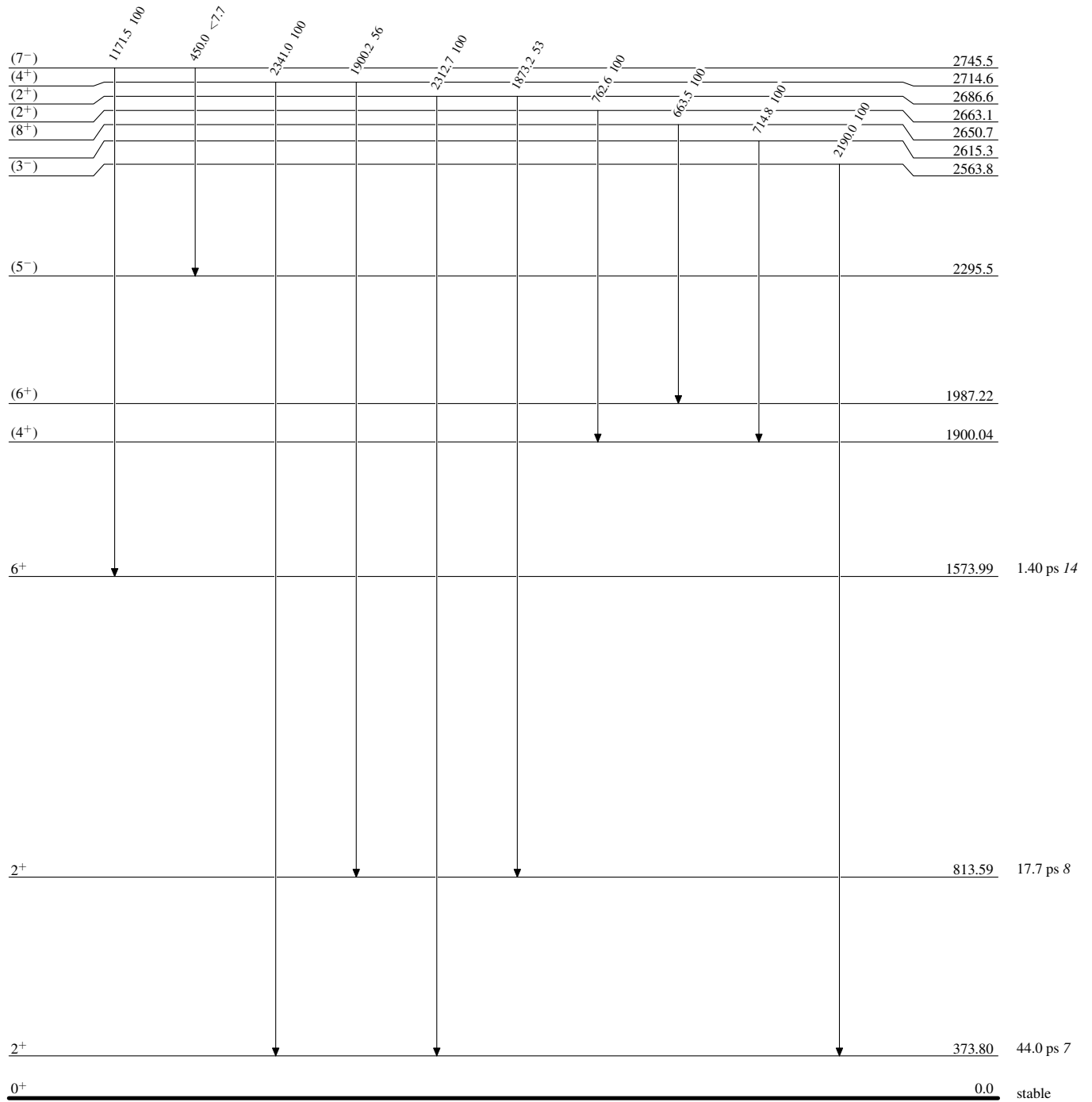
Legend

Intensities: Relative photon branching from each level

-----▶ γ Decay (Uncertain) $^{110}_{46}\text{Pd}_{64}$

Adopted Levels, GammasLevel Scheme (continued)

Intensities: Relative photon branching from each level

 $^{110}_{46}\text{Pd}_{64}$

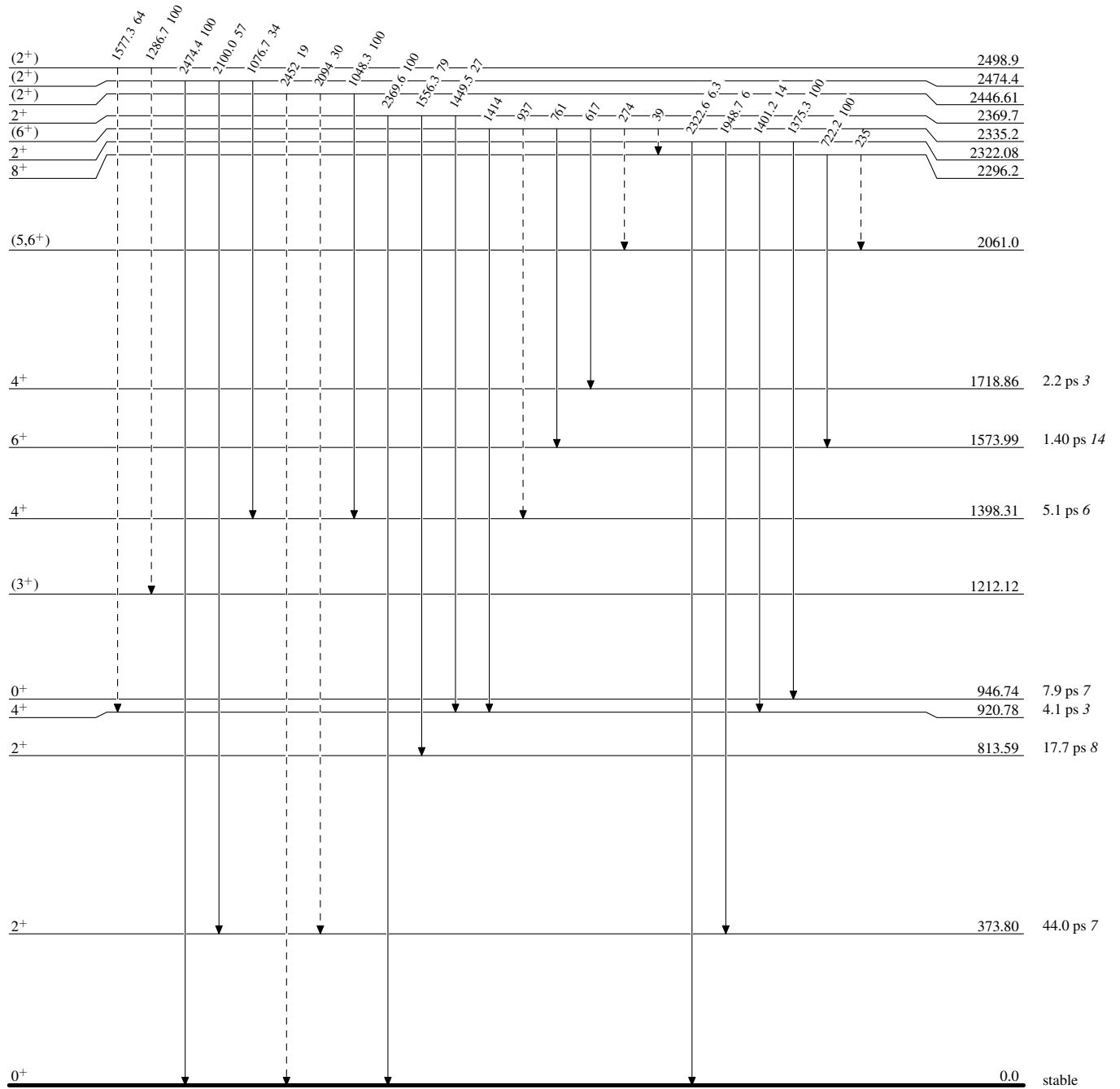
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

-----▶ γ Decay (Uncertain)



$^{110}_{46}\text{Pd}_{64}$

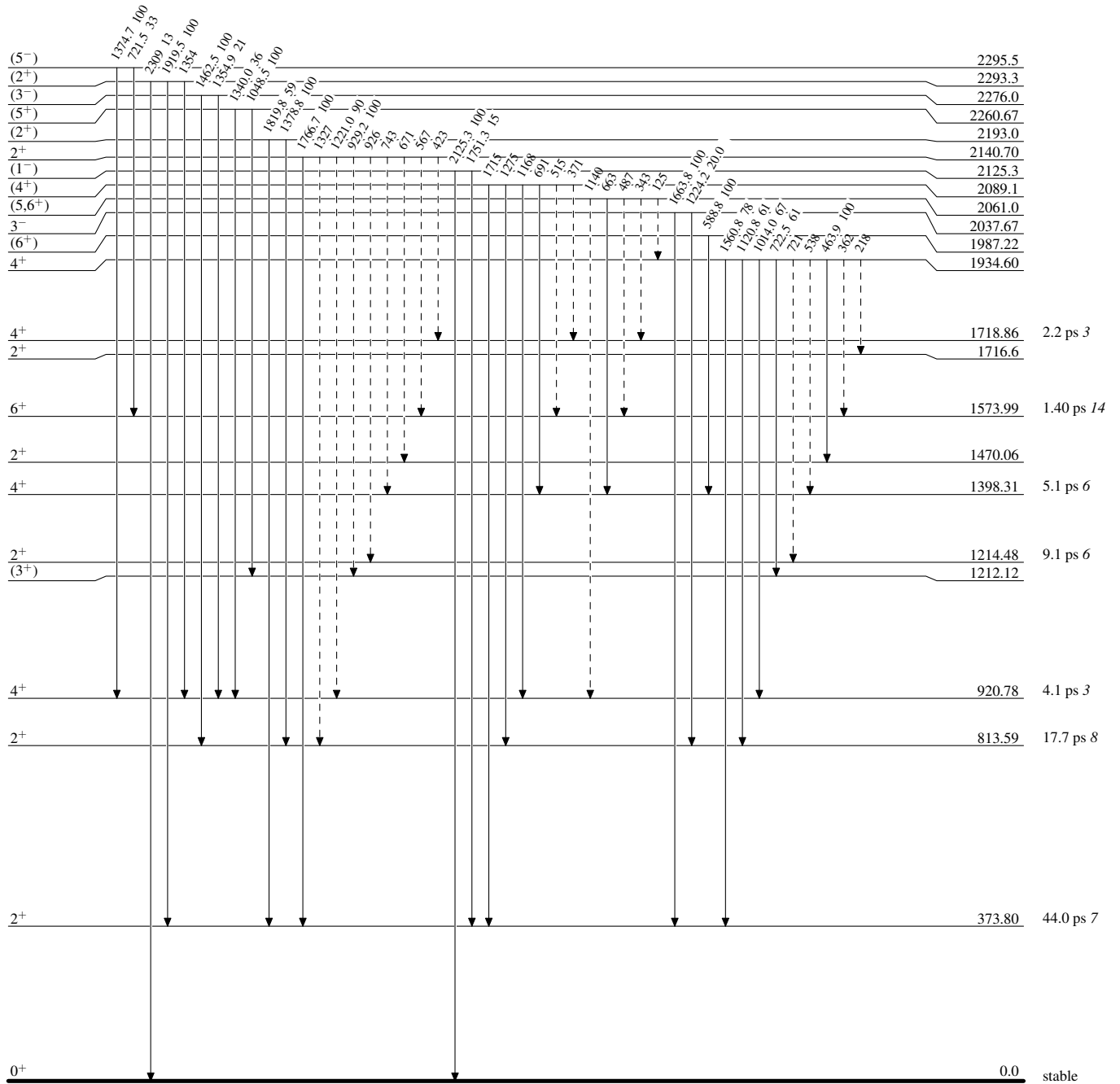
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

-----▶ γ Decay (Uncertain)



¹¹⁰Pd₆₄

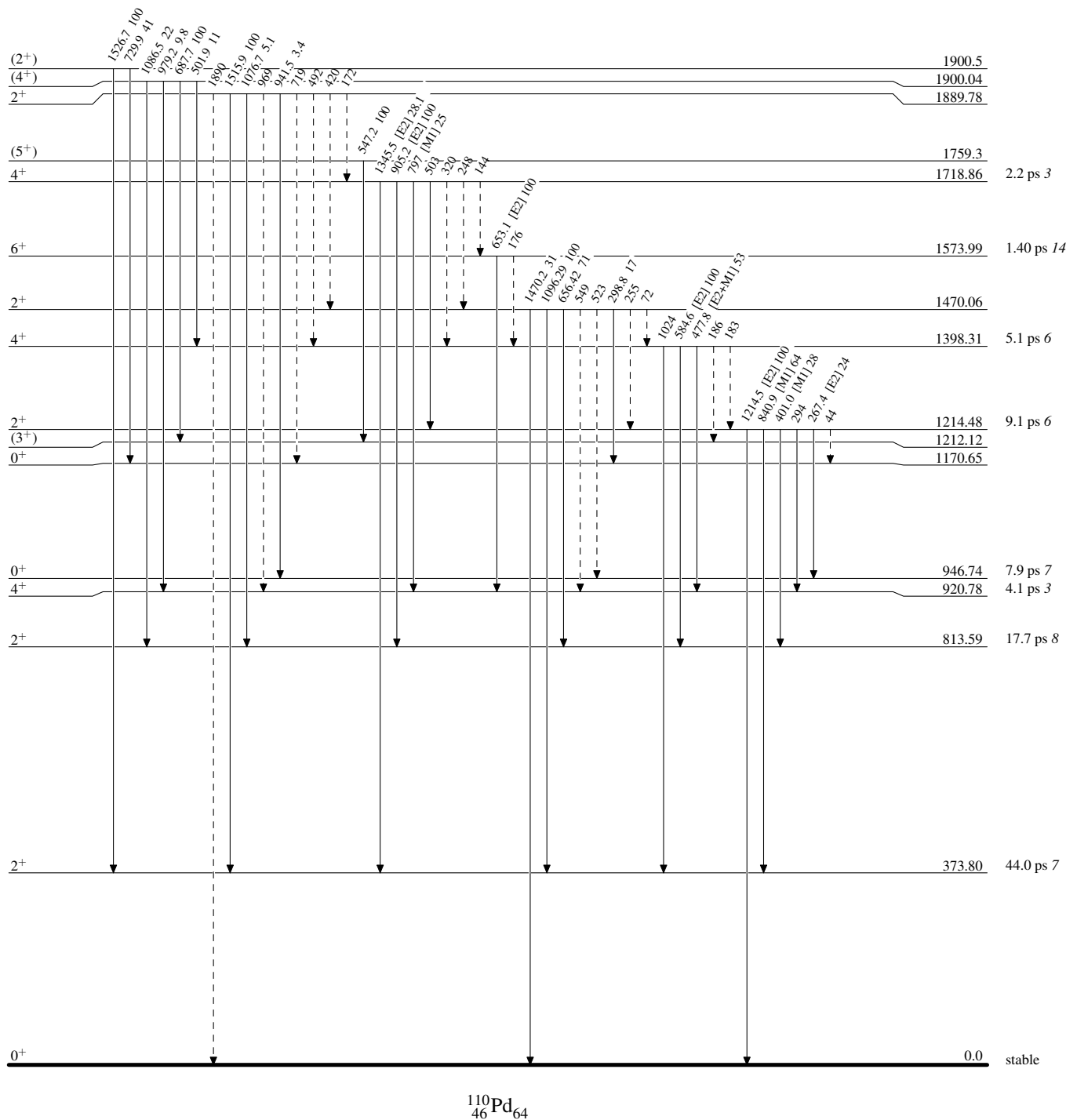
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

-----▶ γ Decay (Uncertain)

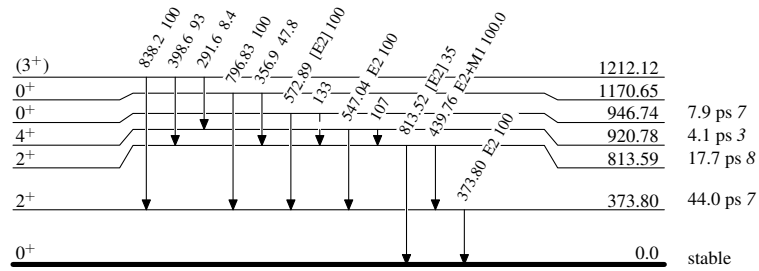


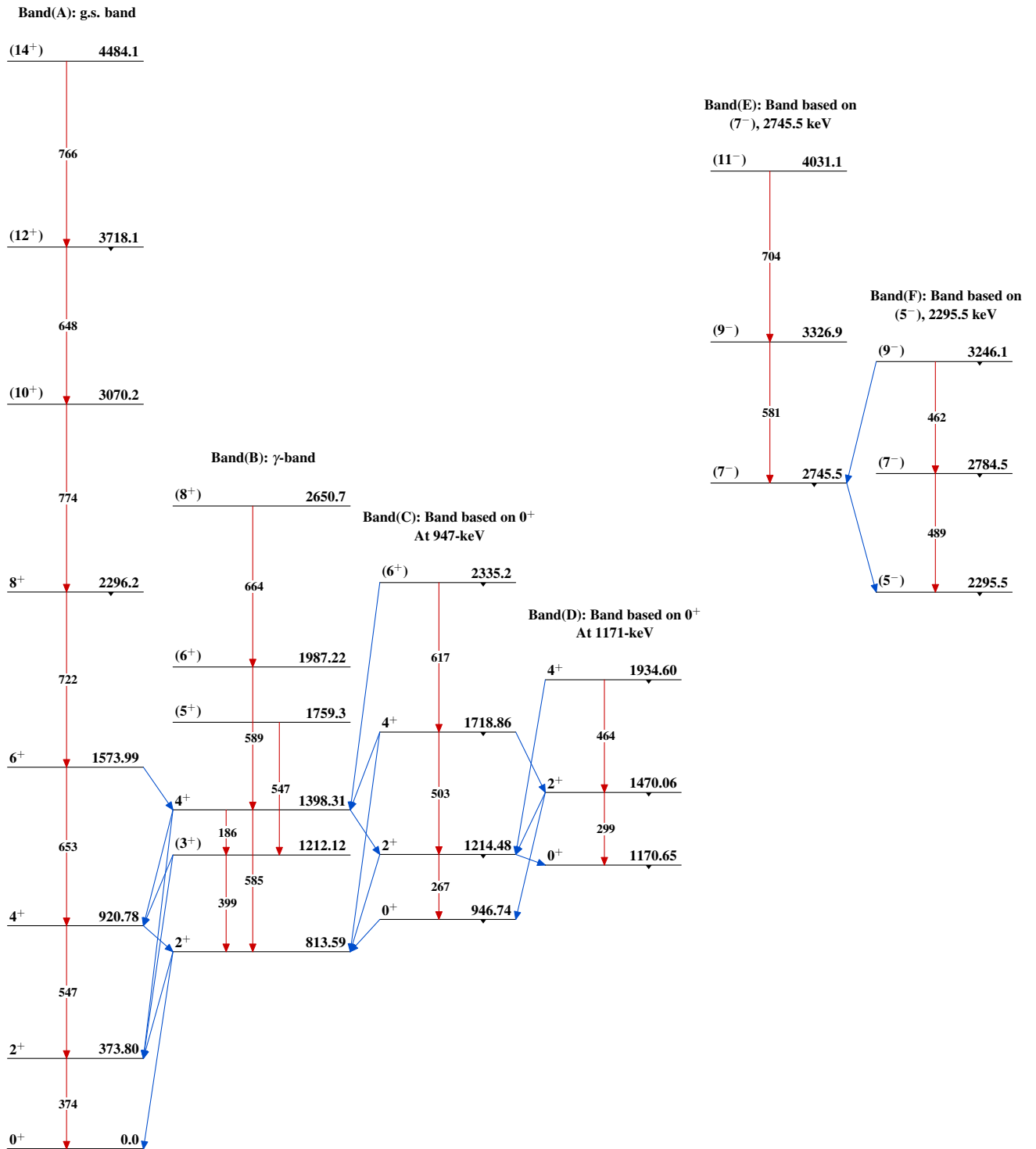
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

- - - - - \blacktriangleright γ Decay (Uncertain) $^{110}_{46}\text{Pd}_{64}$

Adopted Levels, Gammas $^{110}_{46}\text{Pd}_{64}$