

Adopted Levels, Gammas

Type	Author	History	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 113,1871 (2012)	15-Jun-2012

$Q(\beta^-) = -3516$ 16; $S(n) = 8662$ 4; $S(p) = 6870.3$ 24; $Q(\alpha) = 2422$ 3 [2012Wa38](#)

Note: Current evaluation has used the following Q record -3516 16 8662 3 6870.3 24 2422.2 26 [2003Au03](#), [2011AuZZ](#).

$S(n)$, $S(p)$, $Q(\alpha)$ from [2011AuZZ](#) (cf. 8666 3, 6875.4 19, 2418.6 22 from [2003Au03](#)).

Other Reactions:

$^{196}\text{Pt}(n,5\gamma)$ ([2001Ta31](#)): $E(n)=1-250$ MeV from spallation n source; observed known 317γ , 468γ , 581γ and 589γ ; measured prompt γ production cross sections.

$^{180}\text{Hf}(^{12}\text{C},X)$, $E=65$ MeV ([2009Ma24](#), [2011Ma12](#)): sum spin spectrometer in 4π configuration; measured high-energy GDR γ spectrum (4-6 fold gated using spin spectrometer) and γ anisotropy ($\theta(\text{lab})=135^\circ$, 90°); searched for shape-phase transition; data analysis is ongoing.

See, e.g., [1987Ne09](#), [1988Bo31](#), [1988Le22](#), and [1990Hi08](#) for hfs and isotope shift data.

Theory (partial list only):

Interacting boson model calculation of ^{192}Pt level scheme: [2011No01](#), [2009Ga15](#).

Calculation of β and γ band energies using Bohr Hamiltonian with Morse potential: [2010Bo25](#).

Relativistic energy density functional calculation of low-lying level energies and $B(E2)$ values ([2011Ni07](#)).

Density-dependent cluster model calculation of α decay $T_{1/2}$ (9×10^{22} y; [2011Qi12](#)).

Interacting-boson-model calculation of collective structural evolution: [2011No15](#).

 ^{192}Pt Levels**Cross Reference (XREF) Flags**

A	^{192}Ir β^- decay (73.829 d)	E	$^{192}\text{Pt}(\alpha,\alpha')$	I	$^{186}\text{W}(^{11}\text{B},p4\gamma)$
B	^{192}Ir β^- decay (1.45 min)	F	Coulomb excitation	J	$^{198}\text{Pt}(^{136}\text{Xe},X\gamma)$
C	^{192}Au ε decay	G	$^{193}\text{Ir}(p,2n\gamma)$	K	$^{192}\text{Os}(^{82}\text{Se},X\gamma)$
D	$^{190}\text{Os}(\alpha,2n\gamma)$, $^{192}\text{Os}(\alpha,4n\gamma)$	H	$^{194}\text{Pt}(p,t)$		

E(level) [†]	J^π [‡]	$T_{1/2}$	XREF	Comments
0.0&	0^+ #	stable	ABCDEFGHIJK	$T_{1/2}(\alpha) > 6 \times 10^{16}$ y (specific activity measurements, 1966Ka23). $T_{1/2}(\alpha) > 1.3 \times 10^{17}$ to $^{188}\text{Os}(2^+, 155)$ and $T_{1/2}(\alpha) > 2.6 \times 10^{17}$ to $^{188}\text{Os}(4^+, 478)$ (2011Be08). Others: 1956Po16 , 1961Pe23 , 1963Gr08 . Calculated value: 9.05×10^{22} y (2011Qi12 ; density-dependent cluster model). $\langle r^2 \rangle^{1/2}(\text{charge}) = 5.418$ 9 (2004An14).
316.50645& 15	2^+ #	43.7 ps 9	ABCDEFGHIJK	$\mu = +0.590$ 18; $Q = +0.55$ 21 μ : Weighted average of following data after adjustment for consistency with adopted $T_{1/2}$: +0.559 45 if $T_{1/2} = 43.0$ ps (IPAC; 1989Ra17 , from 1975Ka42), +0.574 34 if $T_{1/2} = 44.4$ ps (IPAC, 1992Al21 and 1992Bo20), +0.636 34 if $T_{1/2} = 43.0$ ps (transient field IPAC, 1992Br03), +0.594 34 if $T_{1/2} = 43.0$ ps (transient field IPAC, 1995An15). Additional information 1. Q: Coulomb excitation reorientation (1989Ra17 , from 1987Gy01). Other value: +0.62 6 (Coulomb excitation reorientation, 1989Ra17 from unpublished report referenced in 1987Gy01). J^π : $E2$ γ to 0^+ . $T_{1/2}$: deduced from $B(E2)$ in Coulomb excitation and adopted γ -ray properties. Other value (Coulomb excitation): 48.5 ps 5 (Doppler-shift recoil-distance measurements, 1977Jo05). Other values (^{192}Ir β^- decay (73.829 d)): 27 ps 4 ($\gamma\gamma(t)$, 1962De14), 35 ps 3 ($\gamma\gamma(t)$, 1966Sc06), 34 ps 5 ($\gamma ce(t)$, 1970Be08), 42.8 ps 15 ($\beta\gamma\gamma(t)$, 1973Sm01), 33 ps 4 ($cece(t)$, 1976Bu20). Other: 1965Bu06 (<29 ps).

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Adopted Levels, Gammas (continued) **^{192}Pt Levels (continued)**

E(level) [†]	J ^π [‡]	T _{1/2}	XREF	Comments
612.46318 ^a 18	2 ⁺ [@]	26.5 ps 15	A B C D E F G H	$\mu=+0.61\ 8$ μ : weighted average of +0.72 14 (IPAC, 1989Ra17 from 1975Ka42) and +0.56 9 (transient field IPAC, 1992Br03). J^π : E2 γ to 0 ⁺ . $T_{1/2}$: $\beta\gamma\gamma(t)$ in ^{192}Ir β^- decay (73.829 d) (1973Sm01). Other values (^{192}Ir β^- decay (73.829 d)): 24 ps 13 (cece(t), 1965Bu06), 20.1 ps 21 ($\gamma\text{ce}(t)$, 1970Be08), 26.0 ps 26 (cece(t), 1976Bu20). Other value (Coulomb excitation): 31 ps 6 (deduced from B(E2)). $\mu=+0.61\ 12$ μ : From transient field IPAC (1992Br03; relative to $^{194}\text{Pt}(328)$ or $^{196}\text{Pt}(356)$). Other: +1.6 11 (IPAC, 1989Ra17; datum of 1969Ke11 recalculated for consistency with adopted $T_{1/2}$). $B(E4)=0.041$ from (α, α') . J^π : E2 468 γ to 2 ⁺ ; g.s. band member. $T_{1/2}$: Doppler-shift recoil-distance measurements in Coulomb excitation (1977Jo05). Other values (^{192}Ir β^- decay (73.829 d)): 11.8 ps 21 ($\beta\gamma(t)$ and $\beta\gamma\gamma(t)$, 1966Sc06), 5 ps 4 (cece(t), 1975Aw01), 13 ps 10 (cece(t) and $\beta\text{ce}(t)$, 1976Bu20), 6.0 ps 17 ($\beta\text{ce}(t)$, 1978Bu02).
784.5759 ^{&} 4	4 ⁺ [#]	4.2 ps 2	A C D E F G H I J K	$\mu=+1.12\ 12$ μ : From transient field IPAC (1992Br03; relative to $^{194}\text{Pt}(328)$ or $^{196}\text{Pt}(356)$). Other: +1.6 11 (IPAC, 1989Ra17; datum of 1969Ke11 recalculated for consistency with adopted $T_{1/2}$). $B(E4)=0.041$ from (α, α') . J^π : E2 468 γ to 2 ⁺ ; g.s. band member. $T_{1/2}$: Doppler-shift recoil-distance measurements in Coulomb excitation (1977Jo05). Other values (^{192}Ir β^- decay (73.829 d)): 11.8 ps 21 ($\beta\gamma(t)$ and $\beta\gamma\gamma(t)$, 1966Sc06), 5 ps 4 (cece(t), 1975Aw01), 13 ps 10 (cece(t) and $\beta\text{ce}(t)$, 1976Bu20), 6.0 ps 17 ($\beta\text{ce}(t)$, 1978Bu02).
920.91852 ^a 22	3 ⁺ [@]	21.3 ps 21	A C D F G	J^π : M1+E2 136 γ to 4 ⁺ 785; M1+E2 208 γ to 2 ⁺ 612. $T_{1/2}$: $\beta\text{ce}(t)$ in ^{192}Ir β^- decay (73.829 d) (1978Bu02) (if $T_{1/2}(612.5$ level)=26.5 ps 15). Other values (^{192}Ir β^- decay (73.829 d)): 26 ps 4 (cece(t) and $\beta\text{ce}(t)$, 1976Bu20), <24 ps (cece(t), 1965Bu06). J^π : E0 transition to 0 ⁺ . $B(E4)\approx 0.1$ from (α, α') . J^π : M1+E2 416 γ to 4 ⁺ 785; E2 intraband 589 γ to 2 ⁺ 612.
1195.169 18	0 ⁺		C H	J^π : E0 transition to 0 ⁺ .
1201.0452 ^a 5	4 ⁺ [@]		A C D E F G H	$B(E4)\approx 0.1$ from (α, α') . J^π : M1+E2 416 γ to 4 ⁺ 785; E2 intraband 589 γ to 2 ⁺ 612.
1365.40 ^{&} 6	6 ⁺ [#]	1.8 ps 7	D F G H I J K	J^π : E2 581 γ to 4 ⁺ 785; g.s. band member. $T_{1/2}$: Doppler-shift recoil-distance measurements in Coulomb excitation (1977Jo05).
1378.046 18	3 ⁻	41 ps 9	A C D E F G H	XREF: E(1390). J^π : E1+M2 593 γ to 4 ⁺ 785; E1(+M2) 1062 γ to 2 ⁺ 316. $T_{1/2}$: deduced from B(E3) in Coulomb excitation and adopted γ -ray properties.
1383.95 ^d 7	(5) ⁻		A C D G H J	J^π : E1 599 γ to 4 ⁺ 785; J=5 from band assignment.
1406.35 4	3 ⁺		A C D G H J	J^π : M1+E2 1090 γ to 2 ⁺ 317; 485 γ to 3 ⁺ 921; log ft=8.8 from 4 ⁺ .
1439.263 20	2 ⁺		C G H	J^π : M1+E2+E0 827 γ to 2 ⁺ 612; 1439 γ to 0 ⁺ g.s.; 655 γ to 4 ⁺ 785.
1481.78 ^a 8	5 ⁺ [@]		D F G	J^π : E2 561 γ to 3 ⁺ 921; band assignment.
1518.35 ^d 8	(7) ⁻	1.85 ns 17	D G H J	$\mu=+3.4\ 8$ (2006Le06) J^π : E2 134 γ to (5) ⁻ 1384; band assignment. $T_{1/2}$: $\gamma\gamma(t)$ in $^{190}\text{Os}(\alpha, 2\eta\gamma)$, $^{192}\text{Os}(\alpha, 4\eta\gamma)$ (average value). μ : Based on g-factor=+0.48 12 in $(\alpha, 2\eta\gamma)$ from IPAD.
1546.93 4	(0 ⁺)		C H	J^π : L(p,t)=(0);
1576.368 17	2 ⁺		C G H	J^π : E2 1576 γ to 0 ⁺ g.s.; M1+E2+E0 1260 γ to 2 ⁺ 317.
1629.30 6	0 ⁺		C H	J^π : L(p,t)=0. Consistent with E2 1313 γ to 2 ⁺ 317; however $\alpha(K)\exp$ for 1017 γ to 2 ⁺ 612 exceeds $\alpha(K)(M1)$.
1666.63 5	(2,3,4)		C D G	J^π : 746 γ to 3 ⁺ 921; 289 γ to 3 ⁻ 1378; log ft=9.4 from 1 ⁻ .
1739.431 15	(1) ⁻		C G	J^π : E1 1423 γ to 2 ⁺ 317; 1739 γ to 0 ⁺ g.s.
1746.41 ^c 11	(6) ⁻		D G	J^π : M1+E2 γ to (5) ⁻ 1384; band assignment.
1766.09 4	(2,3) ⁺		C	J^π : E2(+M1) 1450 γ to 2 ⁺ 317; 565 γ to 4 ⁺ 1201; log ft=9.0 from 1 ⁻ .
1793.503 24	(2) ⁺		C H	XREF: H(1792.3). J^π : M1+E2+E0 1477 γ to 2 ⁺ 317.
1800.3 1			H	

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Adopted Levels, Gammas (continued) **^{192}Pt Levels (continued)**

E(level) [†]	J ^π [‡]	T _{1/2}	XREF	Comments
1857.4 <i>I</i>			H	
1869 ^a	6 ⁺ @		F	J ^π : assignment to γ band.
1880.02 4	3 ⁺		C H	XREF: H(1878.6).
1881.5 3	0 ⁺		H	J ^π : M1 1564 γ to 2 ⁺ 317; M1+E2 1095 γ to 4 ⁺ 785.
1894.478 20	(2,3) ⁻		C	J ^π : L(p,t)=0.
1897.7 <i>I</i>			H	J ^π : E1 1282 γ to 2 ⁺ 612; 974 γ to 3 ⁺ 921; log ft=8.4 from 1 ⁻ .
1934.7 <i>I</i>	(4 ⁺)		H	J ^π : L(p,t)=3,4; analogy with ¹⁹⁴ Pt and ¹⁹⁶ Pt.
1964.51 ^c 13	(8) ⁻		D G J	J ^π : M1+E2 446 γ to (7) ⁻ 1518; band assignment.
1972.5 <i>I</i>			H	
1976.25 4	(2) ⁺		C	J ^π : M1 1660 γ to 2 ⁺ 317; L(p,t)=(2).
1981.5 <i>I</i>			H	
2017.0 2			H	
2018.37 ^{&} 13	8 ⁺ #		D FG I K	J ^π : E2 653 γ to 6 ⁺ 1365; g.s. band member.
2041.81 3	(2 ⁻ ,3 ⁻)		C H	J ^π : 1429 γ to 2 ⁺ 612; 1257 γ to 4 ⁺ 785; log ft=9.1 from 1 ⁻ . M1 1114 γ from $\pi=-$ 3155; M1 917 γ from $\pi=-$ 2958. However, $\alpha(K)\exp$ favors E2 for 1257 γ to $\pi=+$ 612.
2047.89 4	(2) ⁺		C	J ^π : M1 1731 γ to 2 ⁺ 317; 2048 γ to 0 ⁺ g.s.; 1263 γ to 4 ⁺ .
2068.4 3			H	
2073.95 4	2 ⁺		C H	J ^π : E2 2074 γ to 0 ⁺ g.s.
2096.9 3			H	
2103.22 ^d 11	(9) ⁻		D G	J ^π : E2 585 γ to (7) ⁻ 1518; band assignment.
2110.9 <i>I</i>	0 ⁺		H	J ^π : L(p,t)=0.
2113.20 ^a 20	7 ⁺ @		D FG	
2120.21 5	(2 ⁺)		C	J ^π : 2120 γ to 0 ⁺ g.s.; 1199 γ to 3 ⁺ 921; 742 γ to 3 ⁻ 1378.
2129.52 3	(1 ⁻)		C H	XREF: H(2128.9). J ^π : E1 2130 γ to 0 ⁺ g.s.; 752 γ to 3 ⁻ 1378. However, multipolarities of 1517 γ and 1813 γ may not be consistent with that of 2130 γ .
2136.2 <i>I</i>			H	
2142.96 4	(3) ⁻		C	J ^π : M1 765 γ to 3 ⁻ 1378; 1530 γ to 2 ⁺ 612; 1358 γ to 4 ⁺ 785. log ft=9.1 from 1 ⁻ .
2149.385 23	1 ⁺		C H	XREF: H(2149.7). J ^π : M1 2149 γ to 0 ⁺ g.s.; M1 1833 γ to 2 ⁺ 317.
2161.64 4			C	J ^π : 1549 γ to 2 ⁺ 612, 2141 γ to 3 ⁺ 921 so J ^π =(1 ^{+,2,3,4}).
2162.7 <i>I</i>			H	
2171.36 4	2 ⁺		C	J ^π : M1+E2+E0 1855 γ to 2 ⁺ 317; E2 1388 γ to 4 ⁺ 785; M1(+E2) 1250 γ to 3 ⁺ 921.
2172.37 ^f 13	(10) ⁻	272 ns 23	D J	$\mu=-0.012$ 10 (2006Le06) J ^π : M1 γ to (9) ⁻ 2103; bandhead assignment, with probable configuration ν 9/2[505]+ ν 11/2[615], consistent with measured g-factor and analogous structure in ¹⁹⁰ Os (2006Le06). T _{1/2} : weighted average of 250 ns 30 (1976Cu02) and 310 ns 30 (1976Hj01) from $\gamma\gamma(t)$ in ¹⁹⁰ Os($\alpha,2n\gamma$), ¹⁹² Os($\alpha,4n\gamma$) and 235 ns 47 from fragment- $\gamma\gamma(t)$ in ¹⁹⁸ Pt(¹³⁶ Xe,X γ) using 317 γ -468 γ pair as double γ -ray gate (2004Va03 , 2004Re11). μ : Based on g-factor=-0.0012 10 in ($\alpha,2n\gamma$) from IPAD. Other: 0.10 6 from g-factor=0.010 6 from 2001Ko41 .
2183.2 2			H	
2191.30 4	(2 ^{+,3-})		C	J ^π : 1406 γ to 4 ⁺ 785; 452 γ to (1) ⁻ 1739.
2199.3 <i>I</i>			H	
2208.7 3			H	
2217.12 6	(2) ⁺		C	J ^π : M1 1605 γ to 2 ⁺ 612; 1433 γ to 4 ⁺ 785; 478 γ to (1) ⁻ 1739.
2236.82 3	(1,2) ⁺		C	J ^π : M1 1624 γ to 2 ⁺ 612; 1296 γ to (0 ⁺) 1547.
2237.52 4	(2) ⁺		C	J ^π : M1 1921 γ to 2 ⁺ 317; M1+E2 1317 γ to 3 ⁺ 921; 2237 γ to 0 ⁺ g.s.;

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Adopted Levels, Gammas (continued) **^{192}Pt Levels (continued)**

E(level) [†]	J [‡]	XREF	Comments
2257.26 3	(2) ⁻	C	1037γ to 4 ⁺ 1201. J ^π : E1 1941 γ to 2 ⁺ 317; E1 1336 γ to 3 ⁺ 921; log ft=7.4 from 1 ⁻ . However, adopted J ^π implies M2 multipolarity for 2257 γ .
2264.9 1		H	
2287.3 2		H	
2296.06 4	(1,2) ⁺	C	J ^π : M1 1980 γ to 2 ⁺ 317; 1101 γ to 0 ⁺ 1195; log ft=7.8 (log f ^{Δu} t≤8.5) from 1 ⁻ .
2300.9 1		H	
2313.5 6	(8,9,10)	D	J ^π : D 210 γ to (9) ⁻ 2103.
2319.11 3	1 ⁺	C	J ^π : M1 2336 γ to 0 ⁺ g.s.; M1 1707 γ to 2 ⁺ 612.
2321.1 2		H	
2335.464 19	1 ⁺	C	J ^π : M1 2335.5 γ to 0 ⁺ g.s.
2343.1 3		H	
2349.5 1		H	
2366.4 3		H	
2375.392 25	(1,2) ⁺	C	J ^π : M1 2059 γ to 2 ⁺ 317; M1 225 γ to 1 ⁺ 2149.
2378.0 2		H	
2385.6 3		H	
2394.3 2		H	
2399.270 24	(1,2) ⁺	C	J ^π : M1 2083 γ to 2 ⁺ 317; M1 250 γ to 1 ⁺ 2149.
2402.6 2		H	
2408.34 3	(2) ⁺	C	J ^π : M1 2092 γ to 2 ⁺ 317; M1 1487 γ to 3 ⁺ 921; (E2) 2408 γ to 0 ⁺ g.s.
2415.4 2		H	
2420.3 2		H	
2422.78 4	(1,2) ⁺	C	J ^π : M1 2106 γ to 2 ⁺ 317; M1,E2 2423 γ to 0 ⁺ g.s.
2435.37 6	3 ⁺	C	J ^π : M1 1823 γ to 2 ⁺ 612; M1+E2+E0 1514 γ to 3 ⁺ 921. log f ^{Δu} t>8.5.
2453.43 8	2 ⁺	C	J ^π : M1+E2+E0 1840 γ to 2 ⁺ 612; M1 2137 γ to 2 ⁺ 317.
2456.1 1		H	
2469.5 2		H	
2472.27 5	2 ⁺	C	J ^π : M1 2156 γ to 2 ⁺ 317; M1+E2+E0 1860 γ to 2 ⁺ 612.
2477.9 1		H	
2483.64 5	≤3	C	J ^π : log ft=8.4 from 1 ⁻ . 2167 γ to 2 ⁺ 317 makes J ^π =0 ⁺ unlikely; log ft rules out 3 ⁻ .
2486.29 4	(2) ⁻	C	J ^π : M1 747 γ to (1) ⁻ 1739; M1 1108 γ to 3 ⁻ 1378.
2491.4 2	0 ⁺	H	J ^π : L(p,t)=0.
2500.2 3	0 ⁺	H	J ^π : L(p,t)=0.
2508.84 6	(2,3) ⁺	C	J ^π : M1 1588 γ to 3 ⁺ 921; log ft=8.2 (log f ^{Δu} t=8.7) from 1 ⁻ .
2511.75 ^g 23	(11) ⁻	D	J ^π : M1+E2 339 γ to (10) ⁻ 2172; band assignment.
2512.3 2		H	
2518.99 ^b 16	(10) ⁺	D F I K	J ^π : E2 501 γ to 8 ⁺ 2018; band assignment.
2523.37 16	(10 ⁺)	I	
2530.3 ^c 6	(10 ⁻)	D	
2532.46 5	1 ⁺	C	J ^π : M1 2533 γ to 0 ⁺ g.s.; M1 2216 γ to 2 ⁺ 317.
2537.5 1		H	
2546.5 2		H	
2549.42 7	(2) ⁺	C	J ^π : M1,E2 1937 γ to 2 ⁺ 612; 1171 γ to 3 ⁻ 1378; 810 γ to (1) ⁻ 1739.
2557.5 2		H	
2560.15 5	(1 ^{+,2})	C	J ^π : 1639 γ to 3 ⁺ 921; 821 γ to (1) ⁻ 1739; log ft=8.2 from 1 ⁻ .
2562.96 5	(2) ⁺	C	J ^π : M1 1950 γ to 2 ⁺ 612; 1778 γ to 4 ⁺ 785; log ft=7.6 log f ^{Δu} t<8.5) from 1 ⁻ .
2565.0 3		H	
2573.5 2		H	
2583.37 ^e 21	(10 ⁺)	D F	J ^π : M1 1664 γ to 3 ⁺ 921; 2585 γ to 0 ⁺ g.s.; 1800 γ to 4 ⁺ 785.
2585.23 5	(2) ⁺	C	XREF: H(2590.8).
2591 ^a 8 ⁺ @		F H	J ^π : band assignment in Coulomb excitation.
2602.97 4	(2) ⁺	C	J ^π : M1 2286 γ to 2 ⁺ 317; 2603 γ to 0 ⁺ g.s.; 1225 γ to 3 ⁻ 1378.
2604.76 4	(1,2) ⁻	C	J ^π : M1 865 γ to (1) ⁻ 1739; 1227 γ to 3 ⁻ 1378.

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Adopted Levels, Gammas (continued) **^{192}Pt Levels (continued)**

E(level) [†]	J ^π [‡]	T _{1/2}	XREF	Comments
2607.1 <i>I</i>			H	
2614.29 9	(2 ⁺)		C	J ^π : E2 2614 $γ$ to 0 ⁺ g.s.; M1 1693 $γ$ to 3 ⁺ 921.
2623.72 ^b 18	(12) ⁺	2.62 ns <i>I</i> 18	D F I K	$μ=-2.2$ <i>I</i> (2006Le06) J ^π : E2 105 $γ$ to (10) ⁺ 2519; band structure. T _{1/2} : in-beam direct timing of conversion electrons in ¹⁹⁰ Os($α$,2n $γ$), ¹⁹² Os($α$,4n $γ$) (1978Ti02). Other values from ($α$,xny): 3.5 ns 5 (1976Cu02), 2.6 ns 5 (1976Hj01). $μ$: From g-factor=-0.18 9 (2006Le06) in ($α$,2n $γ$) from IPAD.
2626.5 <i>I</i>			H	
2626.64 ^f 24	(12) ⁻		D	J ^π : E2 454 $γ$ to (10) ⁻ 2172; band assignment.
2629.24 4	2 ⁺		C	J ^π : M1+E2+E0 2017 $γ$ to 2 ⁺ 612; 2629 $γ$ to 0 ⁺ g.s.
2635.23 6	1 ⁺		C	J ^π : M1 2635 $γ$ to 0 ⁺ g.s.
2641.1 3	(12 ⁺)		I	
2645.4 2			H	
2647.32 6	(2) ⁻		C	J ^π : E1 2035 $γ$ to 2 ⁺ 612; 1726 $γ$ to 3 ⁺ 921; log ft=7.6 from 1 ⁻ .
2653.2 2			H	
2658.46 9	(1,2) ⁺		C	J ^π : Δπ=no 2658 $γ$ to 0 ⁺ g.s.; 2342 $γ$ to 2 ⁺ 317.
2674.2 2			H	
2683.9 <i>I</i>			H	
2703.3 2			H	
2709.1 ^d 3	(11) ⁻		D	J ^π : E2 606 $γ$ to (9) ⁻ 2103; band assignment.
2709.3 <i>I</i>			H	
2721.4 2			H	
2729.4 ^{&}	10 ⁺ #		F	
2730.73 6	(2) ⁻		C	J ^π : M1 1352 $γ$ to 3 ⁻ 1378; M1 991 $γ$ to (1) ⁻ 1739.
2732.2 2			H	
2743.0 <i>I</i>	(0 ⁺)		H	J ^π : L(p,t)=(0).
2757.4 2			H	
2764.0 2			H	
2770.7 ⁱ 7	(13 ⁺)		I	
2775.21 6			C	J ^π : 2459 $γ$ to 2 ⁺ 317; 1036 $γ$ to (1) ⁻ 1739; log ft=8.3 from 1 ⁻ .
2784.1 2			H	
2793.4 2			H	
2794.25 7	(≤2)		C	J ^π : 1054 $γ$ to (1) ⁻ 1739; 2182 $γ$ to 2 ⁺ 612; log ft=8.5 from 1 ⁻ .
2800.5 2			H	
2812.2 <i>I</i>			H	
2832.89 7	(1,2,3) ⁺		C	J ^π : M1 2220 $γ$ to 2 ⁺ 612; log ft=7.7 from 1 ⁻ .
2834.60 6	(2 ⁺)		C	J ^π : 1639 $γ$ to 0 ⁺ 1195; 1913 $γ$ to 3 ⁺ 921; 1634 $γ$ to 4 ⁺ 1201.
2841.7 2			H	
2856.13 5	(2) ⁻		C	J ^π : M1 1117 $γ$ to (1) ⁻ 1739; 2244 $γ$ to 2 ⁺ 612; log ft=7.7 from 1 ⁻ .
2857.07 5	(2 ⁻)		C	J ^π : E1 2541 $γ$ to 2 ⁺ 317; 1936 $γ$ to 3 ⁺ 921; log ft=7.6 from 1 ⁻ .
2890.93 4	(2) ⁻		C	J ^π : E1 2575 to 2 ⁺ 317; 1152 $γ$ to (1) ⁻ 1739; 1970 $γ$ to 3 ⁺ 921; log ft=7.4 from 1 ⁻ .
2933.03? 23	(12) ⁺		D	J ^π : E2 414 $γ$ to (10) ⁺ 2519.
2936.37 ^e 25	(12 ⁺)		D F	
2945.90 24	(11) ⁺		D	J ^π : M1+E2 427 $γ$ to (10) ⁺ 2519.
2947.00 5	(2 ⁻)		C	J ^π : M1 1053 $γ$ to (1) ⁻ 1894; 2026 $γ$ to 3 ⁺ 921.
2950.22? 4			D	
2950.43 9	(1,2 ⁺)		C	J ^π : E2 1511 $γ$ to (2 ⁺) 1439; 1755 $γ$ to 0 ⁺ 1195.
2958.75 4	(2,3) ⁻		C	J ^π : M1 1580 $γ$ to 3 ⁻ 1378; 1219 $γ$ to (1) ⁻ 1739; 2038 $γ$ to 3 ⁺ 921.
2998.24 ^b 21	(14) ⁺		D F I K	J ^π : E2 375 $γ$ to (12) ⁺ 2624; band assignment.
3022.26 ^g 25	(13) ⁻		D	
3027.38 5	(2,3) ⁻		C	J ^π : M1 1288 $γ$ to (1) ⁻ 1739; 2106 $γ$ to 3 ⁺ 921; 1649 $γ$ to 3 ⁻ 1378.
3031.00 7	(≤3)		C	J ^π : 1291 $γ$ to (1) ⁻ 1739.

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued) **^{192}Pt Levels (continued)**

E(level) [†]	J [‡]	XREF	Comments
3068.4 3	(14 ⁺)	I	
3080.1? 3	(14 ⁺)	D	
3082.4 ^c 6	(12 ⁻)	D	
3127.19 4	(1 ⁻ ,2 ⁻)	C	J^π : Q intraband 552γ to (1 ⁻) 2530.
3137.4 4	(12 ⁺)	I	J^π : M1 998 γ to (1 ⁻) 2130; 674 γ to 2 ⁺ 2453.
3155.74 4	(2,3) ⁻	C	J^π : M1,E2 1416 γ to (1) ⁻ 1739; E1 2543 γ to 2 ⁺ 612; 2235 γ to 3 ⁺ 921.
3184.7 ⁱ 9	(15 ⁺)	I	
3189.52 7	(2,3) ⁻	C	J^π : 2269 γ to 3 ⁺ 921; 1450 γ to (1) ⁻ 1739; 1811 γ to 3 ⁻ 1378.
3225.5 3	(13 ⁺)	D	
3357.5 ^d 6	(13 ⁻)	D	
3400.0? 5		D	J^π : possible 320 γ to (14 ⁺) 3080 suggests J=(12 to 16).
3504.7 ^h 7	(16 ⁺)	I	
3542.1 ^b 3	(16) ⁺	D F I K	J^π : E2 543 γ to (14) ⁺ 2998; band assignment.
3569.3? 4		D	
3673.8? 5		D	J^π : D+Q 274 γ to 3400.
3674.1 ⁱ 10	(17 ⁺)	I	
3695.3 ^g 3	(15) ⁻	D	J^π : E1 697 γ to (14) ⁺ 2998; band assignment.
3778.7 ^h 7	(18 ⁺)	I	
3883.3 4		D	J^π : D+Q 188 γ to (15) ⁻ 3695 so J=(14,15,16).
3923.6 ^g 3	(17 ⁻)	D	
4160.4 ^f 4		D	J^π : intraband 237 γ to (17 ⁻) 3923 is probably $\Delta J=1$. If so, $J^\pi=(18^-)$.
4199.7 ^h 8	(20 ⁺)	I	
4204.2 ^b 4	(18) ⁺	D F I K	J^π : E2 662 γ to (16) ⁺ 3542; band assignment.
4320.5? 4		D	
4950.7 ^b 6	(20 ⁺)	D F I K	

[†] From least-squares fit to adopted E γ for levels with known γ deexcitation; from cross referenced datasets otherwise.

[‡] From γ -ray multipolarities, coincidence data, and band structure in $^{190}\text{Os}(\alpha,2n\gamma)$, $^{192}\text{Os}(\alpha,4n\gamma)$ and Coulomb excitation, except where noted; continuing J^π patterns established.

Based on smooth progression of level energies and independently established J^π (g.s.) and mult(317 γ), definite J^π has been assigned to all members of the g.s. band.

@ Based on smooth progression of level energies and independently established J^π (612) and mult(308 γ), definite J^π has been assigned to all members of the γ vibration band.

& Band(A): $K^\pi=0^+$ g.s. band.

^a Band(B): $K^\pi=2^+$ quasi- γ vibration band.

^b Band(C): neutron superband ([1976Hj01](#),[1976Cu02](#)).

^c Band(D): $K^\pi=(5)^-$, $\alpha=1$ band ([1976Hj01](#),[1976Cu02](#)). Semidecoupled band; primarily a two-proton excitation including π h_{11/2} coupled with π d_{3/2} or π s_{1/2} ([2006Le06](#)).

^d Band(d): $K^\pi=(5)^-$, $\alpha=0$ band ([1976Hj01](#),[1976Cu02](#)). See comment on signature partner band.

^e Band(E): Aligned proton band ([1976Hj01](#),[1976Cu02](#)). Proton superband ([1981HuZV](#)).

^f Band(F): $K^\pi=(10)^-$, $\alpha=0$ band ([1976Hj01](#),[1976Cu02](#)). Built on 2172-keV 10⁻ isomer; probable configuration=((v 9/2[505])+(v 11/2[615]). ([2006Le06](#)).

^g Band(f): $K^\pi=(10)^-$, $\alpha=1$ band ([1976Hj01](#),[1976Cu02](#)). See comment on signature partner band.

^h Band(G): $\pi=+$, $\alpha=0$ band fragment. Built on (16⁺) 3505 level.

ⁱ Band(H): $\pi=+$, $\alpha=1$ band fragment. Built on (13⁺) 2271 level.

Adopted Levels, Gammas (continued)
 $\gamma(^{192}\text{Pt})$

$E_i(\text{level})$	J_i^π	E_γ^\dagger	I_γ^\ddagger	E_f	J_f^π	Mult.^\dagger	δ^\dagger	a^d	$I_{(\gamma+ce)}$	Comments
316.50645	2 ⁺	316.50618 [#] 17	100 [#]	0.0	0 ⁺	E2 [#]		0.0841		B(E2)(W.u.)=57.2 12
612.46318	2 ⁺	295.95650 15	100.00 23	316.50645	2 ⁺	M1+E2	+10.0 4	0.1047		B(M1)(W.u.)=2.45×10 ⁻⁴ 24; B(E2)(W.u.)=109 7
		612.4621 3	19.0 3	0.0	0 ⁺	E2		0.01536		I_γ : from β^- decay (73.829 d). Other δ : +6 2 in (α ,xn γ). B(E2)(W.u.)=0.55 4
784.5759	4 ⁺	468.0688 [#] 3	100 [#]	316.50645	2 ⁺	E2 [#]		0.0291		B(E2)(W.u.)=89 5
920.91852	3 ⁺	136.3 [#] 1	0.67 [#] 8	784.5759	4 ⁺	M1+E2 [#]	+3.5 [#] +39–16	1.53 19		B(M1)(W.u.)=0.00015 +31–15; B(E2)(W.u.)=38 10
		308.45507 [#] 17	100.00 [#] 22	612.46318	2 ⁺	M1+E2 [#]	+7.20 [#] 3	0.0943		Other I_γ : 0.52 13 from ε decay. B(M1)(W.u.)=4.8×10 ⁻⁴ 5; B(E2)(W.u.)=102 10
		604.41105 [#] 25	27.66 [#] 6	316.50645	2 ⁺	M1+E2 [#]	-1.48 [#] 2	0.0258		δ : other δ : ≥4.5 from $\alpha(K)\exp$ in ^{192}Au ε decay; 6.5 +10–7 from $\alpha(K)\exp$ (1974Vo13) in β^- decay; +7 2 in (α ,xn γ). B(M1)(W.u.)=2.9×10 ⁻⁴ 3; B(E2)(W.u.)=0.68 7
1195.169	0 ⁺	582.70 3	100.0 15	612.46318	2 ⁺	E2		0.01722		Other I_γ : 30.7 5 from ε decay.
		878.70 4	30.5 7	316.50645	2 ⁺	E2				
		1195.26 13		0.0	0 ⁺	E0			0.51 9	
1201.0452	4 ⁺	280.27 [#] 24	0.18 [#] 9	920.91852	3 ⁺	M1(+E2) [#]	≤5.4 [#]	0.25 12		Other I_γ : 14.0 13 in ε decay, 39 14 in (α ,xn γ), 8.0 15 in Coulomb excitation, 28 3 in (p ,2n γ). Other δ : +6 2 in (α ,xn γ), 3.9 +7–14 in β^- decay.
		416.4688 [#] 7	14.8 [#] 5	784.5759	4 ⁺	M1+E2 [#]	+2.9 [#] 10	0.049 10		
		588.5810 [#] 7	100.00 [#] 22	612.46318	2 ⁺	E2 [#]		0.01682		Other I_γ : 7.9 7 from ε decay, 6.6 16 from (p ,2n γ), 8 3 from (α ,xn γ).
		884.5365 [#] 7	6.45 [#] 15	316.50645	2 ⁺	E2 [#]				B(E2)(W.u.)=70 30
1365.40	6 ⁺	580.83 6	100	784.5759	4 ⁺	E2		0.01734		E_γ : weighted average of 580.80 8 from (p ,2n γ), 580.88 12 from (α ,2n γ) and 580.9 2 from (^{11}B ,p4n γ). Other E_γ : 585 in $^{198}\text{Pt}(^{136}\text{Xe},\text{X}\gamma)$.

Adopted Levels, Gammas (continued)

 $\gamma(^{192}\text{Pt})$ (continued)

E_i (level)	J_i^π	E_γ^{\dagger}	I_γ^{\ddagger}	E_f	J_f^π	Mult. ‡	δ^{\dagger}	α^d	Comments
1378.046	3^-	176.95 4	10.4 9	1201.0452	4^+	[E1]		0.0954	B(E1)(W.u.)= 4.8×10^{-5} 12 E_γ : weighted average of 176.98 4 from β^- decay (73.829 d), 176.84 8 from ε decay and 176.8 3 from (p,2n γ). I_γ : weighted average of 8.1 19 from β^- decay (73.829 d), 11.3 11 from ε decay and 10.2 from (p,2n γ). B(E1)(W.u.)= 9.6×10^{-6} 22; B(M2)(W.u.)=0.6 4 E_γ : unweighted average of 593.38 5, 594.0 3 and 593.5 3 from β^- decay (73.829 d), 593.46 4 from ε decay and 593.39 12 from (p,2n γ) (weighted average is 593.43 5). I_γ : weighted average of 79.1 19 from β^- decay (73.829 d), 81.7 27 from ε decay and 72.8 from (p,2n γ). Mult., δ : from $\gamma\gamma(\theta)$ and γ -ray linear polarization (oriented nuclei) in β^- decay (73.829 d) and $\alpha(K)\exp$ in Au ε decay. Other: 0.11 +5-11 from $\alpha(K)\exp$ in ε decay.
593.55	12	79.7 15		784.5759	4^+	E1+M2	-0.07 2		
765.67	15	2.26 27		612.46318	2^+	E1+M2	0.20 +10-12		$B(E1)(W.u.)=1.2 \times 10^{-7}$ 4; $B(M2)(W.u.)=0.04$ 4 E_γ : weighted average of 765.8 3 from β^- decay (73.829 d), 765.6 2 from ε decay and 765.7 3 from (p,2n γ). I_γ : from ε decay. Others: 2.5 11 from β^- decay (73.829 d) and 18.4 from (p,2n γ). Mult., δ : from β^- decay (73.829 d).
1061.55 ^c	5	100.0 ^b 22		316.50645	2^+	E1(+M2) [#]	+0.04 [#] +5-3		$B(E1)(W.u.)=2.1 \times 10^{-6}$ 5; $B(M2)(W.u.)=0.014$ +35-14 E_γ : weighted average of 1061.49 4 from β^- decay (73.829 d), 1061.62 4 from ε decay and 1061.46 15 from (p,2n γ).
1378.40	21	1.51 27		0.0	0^+	(E3)		0.00613	$B(E3)(W.u.)=11.1$ 20 $B(E3)(W.u.):$ from measured $B(E3)\uparrow=0.17$ 3 in Coulomb excitation. Other $B(E3)\uparrow$: 0.19 from (α, α'). E_γ : unweighted average of 1378.0 2, 1378.2 3, 1378.8 10, 1378.0 5, 1379.0 5 from β^- decay (73.829 d) and 1378.0 2 from ε decay (weighted average is 1378.16 15). Other I_γ : 2.3 6 from β^- decay (73.829 d). Mult.: K/L consistent with E3, but $\alpha(K)\exp$ favors E2 in ^{192}Ir β^- decay (73.829 d).
1383.95	$(5)^-$	182.92 14	3.0 [@] 4	1201.0452	4^+	D+Q			E_γ : weighted average from (α, xny) and (p,2n γ). Mult.: from $\gamma(\theta)$ in (α, xny).
		599.37 8	100 [@] 6	784.5759	4^+	E1			E_γ : weighted average from β^- decay (73.829 d), (α, xny), (p,2n γ). Mult.: from (α, xny).
1406.35	3^+	485.45 6	100 8	920.91852	3^+				
		1089.82 ^c 8	24.6 ^b 23	316.50645	2^+	M1+E2 [#]	1.8 [#] +14-6		

Adopted Levels, Gammas (continued)
 $\gamma(^{192}\text{Pt})$ (continued)

E _i (level)	J ^{<i>x</i>} _{<i>i</i>}	E _{<i>γ</i>} [†]	I _{<i>γ</i>} [‡]	E _{<i>f</i>}	J ^{<i>x</i>} _{<i>f</i>}	Mult. [†]	δ [†]	a ^{<i>d</i>}	I _(<i>γ+ce</i>)	Comments
1439.263	2 ⁺	244.05 8	2.9 3	1195.169	0 ⁺					
		518.28 10	28 4	920.91852	3 ⁺					
		654.68 9	3.4 4	784.5759	4 ⁺					
		826.79 8	3.6 3	612.46318	2 ⁺	M1+E2+E0	0.046 11			α: based on α(K)exp.
		1122.80 5	100.0 16	316.50645	2 ⁺	M1(+E2+E0)	0.0155 25			α: based on α(K)exp.
		1439.22 12	4.8 5	0.0	0 ⁺					
1481.78	5 ⁺	560.86 [@] 8	100	920.91852	3 ⁺	E2 ^{<i>a</i>}		0.0188		
1518.35	(7) ⁻	134.39 [@] 8	100 6	1383.95	(5) ⁻	E2 ^{<i>a</i>}		1.511		B(E2)(W.u.)=39 5
		152.96 [@] 10	16.5 15	1365.40	6 ⁺	(E1) ^{<i>a</i>}		0.1380		I _{<i>γ</i>} : from (α,xnγ).
										B(E1)(W.u.)=1.9×10 ⁻⁶ 3
1546.93	(0 ⁺)	934.41 8	100 3	612.46318	2 ⁺	[E2]				
		1230.45 6	8.3 8	316.50645	2 ⁺					
		1546.96 15		0.0	0 ⁺	(E0)			1.00 11	I _(<i>γ+ce</i>) : deduced from I _{ce} (K) in ε decay and theoretical K/L ratios for E0 transitions (1969Ha61).
1576.368	2 ⁺	375.26 8	0.34 7	1201.0452	4 ⁺					
		381.25 8	0.76 7	1195.169	0 ⁺					
		655.44 3	6.83 24	920.91852	3 ⁺	M1(+E2)	0.5 +5-6	0.033 8		
		791.6 2	0.24 3	784.5759	4 ⁺					
		963.93 5	20.0 10	612.46318	2 ⁺	M1(+E2+E0)	0.020 4			α: estimated from α(K)exp.
		1260.0 2	0.56 12	316.50645	2 ⁺	M1+E2+E0	0.31 10			α: estimated from α(K)exp.
1629.30	0 ⁺	1576.38 4	100.0 24	0.0	0 ⁺	E2				
		1016.81 7	8.9 11	612.46318	2 ⁺					
		1312.85 10	100 11	316.50645	2 ⁺	E2				
1666.63	(2,3,4)	288.59 5	100 9	1378.046	3 ⁻					
		745.67 10	23 5	920.91852	3 ⁺					Other I _{<i>γ</i>} : 72 11 from (p,2nγ).
1739.431	(1) ⁻	192.50 9	0.52 17	1546.93	(0 ⁺)					
		361.33 5	6.0 7	1378.046	3 ⁻					
		544.19 8	1.47 14	1195.169	0 ⁺					
		819 ^{<i>e</i>}	<0.03	920.91852	3 ⁺					
		1126.97 3	48.6 16	612.46318	2 ⁺	E1				
		1422.91 3	100.0 17	316.50645	2 ⁺	E1				
		1739.49 10	6.7 5	0.0	0 ⁺	(E1)				
1746.41	(6) ⁻	362.45 [@] 8	100	1383.95	(5) ⁻	M1+E2 ^{<i>a</i>}	+0.4 1	0.166 9		δ: from (α,xnγ).
1766.09	(2,3) ⁺	565.13 10	6.0 8	1201.0452	4 ⁺					
		1449.68 8	100 8	316.50645	2 ⁺	E2(+M1)				
1793.503	(2) ⁺	872.59 5	67 3	920.91852	3 ⁺	E2				
		1181.05 7	36 3	612.46318	2 ⁺	M1,E2				
		1477.00 10	100 6	316.50645	2 ⁺	M1+E2+E0				

Adopted Levels, Gammas (continued)
 $\gamma(^{192}\text{Pt})$ (continued)

E _i (level)	J ^π _i	E _γ [†]	I _γ [‡]	E _f	J ^π _f	Mult. [†]	δ [†]	a ^d	Comments
1869	6 ⁺	668	100	1201.0452	4 ⁺				
1880.02	3 ⁺	959.1 2	6.3 10	920.91852	3 ⁺				E _γ : From Coulomb excitation.
		1095.42 6	40.0 25	784.5759	4 ⁺	M1+E2			
		1267.52 10	48 5	612.46318	2 ⁺	M1			
		1563.74 19	100 30	316.50645	2 ⁺	M1			
1894.478	(2,3) ⁻	516.43 8	61 3	1378.046	3 ⁻				
		973.57 7	47 3	920.91852	3 ⁺				
		1281.99 4	100 4	612.46318	2 ⁺	E1			
		1577.95 5	61 4	316.50645	2 ⁺				
1964.51	(8) ⁻	446.20 @ 11	100	1518.35 (7) ⁻	M1+E2 ^a	+0.5 1	0.091 5	δ: from ($\alpha, xn\gamma$).	
1976.25	(2) ⁺	1055.3 2	12.5 21	920.91852	3 ⁺				
		1363.79 9	100 7	612.46318	2 ⁺	M1			
		1659.78 7	93 7	316.50645	2 ⁺	M1			
2018.37	8 ⁺	652.95 @ 12	100	1365.40	6 ⁺				
2041.81	(2 ⁻ ,3 ⁻)	663.73 19	5.3 16	1378.046	3 ⁻				
		1121.00 9	58 5	920.91852	3 ⁺				
		1257.22 6	74 5	784.5759	4 ⁺				
		1429.34 7	100 5	612.46318	2 ⁺				
		1724.95 21	6.3 16	316.50645	2 ⁺				
2047.89	(2) ⁺	669.77 10	2.64 25	1378.046	3 ⁻				
		1127.02 8	9.9 8	920.91852	3 ⁺				
		1263.31 6	6.3 7	784.5759	4 ⁺				
		1435.39 6	36.4 17	612.46318	2 ⁺	M1			
		1731.4 1	100 4	316.50645	2 ⁺	M1			
2073.95	2 ⁺	2047.8 3	1.2 3	0.0	0 ⁺				
		634.69 8	38 5	1439.263	2 ⁺				
		695.8 3	15 4	1378.046	3 ⁻				
		1153.02 7	21 4	920.91852	3 ⁺				
		1757.7 4	13 5	316.50645	2 ⁺				
		2073.7 3	100 10	0.0	0 ⁺	E2			
2103.22	(9) ⁻	584.85 @ 9	100	1518.35 (7) ⁻	E2 ^a		0.01707		
2113.20	7 ⁺	631.42 @ 18	100	1481.78	5 ⁺				
2120.21	(2 ⁺)	742.15 13	15 5	1378.046	3 ⁻				
		1199.29 8	71 10	920.91852	3 ⁺				
		1507.75 9	41 10	612.46318	2 ⁺				
		2120.1 2	100 10	0.0	0 ⁺				
2129.52	(1) ⁻	235.09 10	4.6 11	1894.478	(2,3) ⁻				
		335.97 9	4.9 11	1793.503	(2) ⁺				
		690.20 8	9.3 11	1439.263	2 ⁺				

Adopted Levels, Gammas (continued)

 $\gamma^{(192\text{Pt})}$ (continued)

E _i (level)	J ^π _i	E _γ [†]	I _γ [‡]	E _f	J ^π _f	Mult. [†]	δ [†]	α ^d	Comments
2129.52	(1) ⁻	751.50 9 934.35 7 1517.05 9 1813.00 7	9.9 11 58 6 46 4 100 4	1378.046 1195.169 612.46318 316.50645	3 ⁻ 0 ⁺ 2 ⁺ 2 ⁺				Mult.: $\alpha(K)(E1) < \alpha(K)\exp < \alpha(K)(E2)$ in ε decay. E2 inconsistent with mult(2130 γ) from same level. Mult.: $\alpha(K)\exp$ in ε decay favors E2 (inconsistent with mult(2130 γ)).
2142.96	(3) ⁻	2129.57 10 736.61 8 764.91 5 1222.10 7 1358.33 10 1530.4 1	63 6 36 5 100 10 45 6 27 3 49 6	0.0 1406.35 1378.046 920.91852 784.5759 612.46318	0 ⁺ 3 ⁺ 3 ⁻ 3 ⁺ 4 ⁺ 2 ⁺	E1 M1		0.0259	
2149.385	1 ⁺	355.93 10 573.05 10 1536.91 4 1832.83 4 2149.4 2	0.26 11 1.26 11 17.7 6 100 6 1.53 17	1793.503 1576.368 612.46318 316.50645 0.0	(2) ⁺ 2 ⁺ 2 ⁺ 2 ⁺ 0 ⁺	M1 M1 M1			
2161.64		1240.67 8 1549.24 8	44 4 100 12	920.91852 612.46318	3 ⁺ 2 ⁺				
2171.36	2 ⁺	1250.47 6 1386.75 5 1559.0 2 1855.0 3 2171.5 3	20.6 13 44.4 19 100 6 12.5 13 75 13	920.91852 784.5759 612.46318 316.50645 0.0	3 ⁺ 4 ⁺ 2 ⁺ 2 ⁺ 0 ⁺	M1(+E2) E2 E2(+M1) M1+E2+E0 [E2]	0.6 +5-6 ≤1.6	0.039 8	α : estimated from $\alpha(K)\exp$.
2172.37	(10) ⁻	69.12 ^a 10 207.93 ^a 15	80 7 100 9	2103.22 1964.51	(9) ⁻ (8) ⁻	M1 ^a (E2) ^a		3.47 0.315	B(M1)(W.u.)=4.0×10 ⁻⁵ 6 I _y : from (α ,xny). B(E2)(W.u.)=0.0166 24 I _y : from (α ,xny).
2191.30	(2 ^{+,3⁻)}	451.89 12 813.2 2 1270.33 6 1406.75 5	6.5 22 17.4 26 100 9 23.5 26	1739.431 1378.046 920.91852 784.5759	(1) ⁻ 3 ⁻ 3 ⁺ 4 ⁺				
2217.12	(2) ⁺	477.69 10 1296.0 3 1432.55 8 1604.67 13	17 4 51 8 66 7 100 10	1739.431 920.91852 784.5759 612.46318	(1) ⁻ 3 ⁺ 4 ⁺ 2 ⁺	M1			
2236.82	(1,2) ⁺	356.77 15 443.33 8 689.88 6 1624.35 3	0.39 12 0.61 9 10.3 3 100 3	1880.02 1793.503 1546.93 612.46318	3 ⁺ (2) ⁺ (0 ⁺) 2 ⁺				
2237.52	(2) ⁺	661.0 3	0.61 [@] 11	1576.368	2 ⁺				

Adopted Levels, Gammas (continued)

 $\gamma^{(192\text{Pt})}$ (continued)

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E _i (level)	J ^π _i	E _γ [†]	I _γ [‡]	E _f	J ^π _f	Mult. [†]	a ^d	Comments
2237.52	(2) ⁺	798.2 3	0.73 10	1439.263	2 ⁺			
		1036.5 1	0.94 11	1201.0452	4 ⁺			
		1042.2 2	0.43 8	1195.169	0 ⁺			
		1316.56 7	7.1 4	920.91852	3 ⁺	M1+E2		
		1921.05 6	58.8 25	316.50645	2 ⁺	M1		
		2237.3 2	100 6	0.0	0 ⁺			
		817.95 10	2.0 4	1439.263	2 ⁺			
2257.26	(2) ⁻	879.28 6	5.4 8	1378.046	3 ⁻			
		1336.31 4	37.5 17	920.91852	3 ⁺	E1		
		1644.77 6	42 4	612.46318	2 ⁺	E1		
		1940.80 10	100 8	316.50645	2 ⁺	E1		
		2257	2.5	0.0	0 ⁺			
2296.06	(1,2) ⁺	401.60 16	1.2 4	1894.478	(2,3) ⁻			
		556.59 8	4.9 6	1739.431	(1) ⁻			
		856.83 8	2.5 4	1439.263	2 ⁺			
		1100.94 9	2.2 5	1195.169	0 ⁺			
		1683.34 25	16.9 15	612.46318	2 ⁺	M1		
		1979.58 8	100 15	316.50645	2 ⁺	M1		
		210.3 ^a 5	100	2103.22	(9) ⁻	D		Mult.: from $\gamma(\theta)$ in $(\alpha, xn\gamma)$.
2313.5	(8,9,10)	879.96 8	1.7 5	1439.263	2 ⁺			
		1398.16 9	2.21 24	920.91852	3 ⁺	(E2)		Mult.: some M1 admixture allowed by $\alpha(K)\exp$ in ε decay but not permitted by level scheme.
2319.11	1 ⁺	1706.63 3	100 3	612.46318	2 ⁺	M1		
		2002.54 8	36 5	316.50645	2 ⁺			
		2319.35 25	64 6	0.0	0 ⁺	M1		
		186.1 1	0.43 8	2149.385	1 ⁺			
		261.50 5	0.67 12	2073.95	2 ⁺			
		359.23 8	0.62 10	1976.25	(2) ⁺			
		440.91 7	0.53 8	1894.478	(2,3) ⁻			
		759.10 5	47.5 8	1576.368	2 ⁺	M1	0.0264	
		896.20 6	7.5 5	1439.263	2 ⁺	M1	0.01728	
		1140.32 4	75.0 17	1195.169	0 ⁺	M1		
2335.464	1 ⁺	1414.49 5	8.5 7	920.91852	3 ⁺	E2		
		1723.00 4	100 5	612.46318	2 ⁺	M1		
		2018.8 2	40 5	316.50645	2 ⁺	M1		
		2335.5 2	42 5	0.0	0 ⁺	M1		
		225.97 8	22.3 8	2149.385	1 ⁺	M1	0.665	
		495.36 9	4.1 5	1880.02	3 ⁺			
		581.89 8	3.5 4	1793.503	(2) ⁺			
2375.392	(1,2) ⁺	799.05 7	10.8 8	1576.368	2 ⁺	M1+E2	0.016 8	
		936.14 5	53.9 23	1439.263	2 ⁺	E2		
		1762.90 4	100 15	612.46318	2 ⁺	E2(+M1)		

Adopted Levels, Gammas (continued)

 $\gamma(^{192}\text{Pt})$ (continued)

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E _i (level)	J ^π _i	E _γ [†]	I _γ [‡]	E _f	J ^π _f	Mult. [†]	δ [†]	a ^d	Comments
2375.392	(1,2) ⁺	2058.9 1 2375.71 25	29 6 0.0	316.50645	2 ⁺ 0 ⁺	M1			Observed only in ce spectrum in ε decay.
2399.270	(1,2) ⁺	249.83 7 519.25 9 822.90 5 960.02 6 1204.8 ^e 5 1786.79 4 2082.79 6 2399.74 ^e 25	27.6 14 8.3 7 55 3 24.8 21 1195.169 100 8 83 7 0.0	2149.385 1880.02 1576.368 1439.263 612.46318 316.50645 0.0	1 ⁺ 3 ⁺ 2 ⁺ 2 ⁺ (E2) M1	M1	0.504 ≥1.8		E _γ : reported in ce spectrum only in ε decay.
2408.34	(2) ⁺	668.91 5 968.93 15 1001.96 8 1207.28 9 1487.38 8 1795.75 20 2091.90 7 2408.4 2	100 11 32 5 16 4 100 11 72 11 33 5 100 11 100 17	1739.431 1439.263 1406.35 1201.0452 920.91852 612.46318 316.50645 0.0	(1) ⁻ 2 ⁺ 3 ⁺ 4 ⁺ 3 ⁺ 2 ⁺ 2 ⁺ 0 ⁺	M1	0.01418		E _γ : reported in ce spectrum only in ε decay.
2422.78	(1,2) ⁺	683.32 8 1227.6 1 1810.39 9 2106.25 5 2422.9 3	6.1 6 1.7 4 4.2 4 72 11 100 11	1739.431 1195.169 612.46318 316.50645 0.0	(1) ⁻ 0 ⁺ 2 ⁺ 2 ⁺ 0 ⁺	M1			
2435.37	3 ⁺	1057.3 2 1514.44 11 1822.90 8 2118.9 2	10.9 19 9.1 25 100 6 26 3	1378.046 920.91852 612.46318 316.50645	3 ⁻ 3 ⁺ 2 ⁺ 2 ⁺	M1+E2+E0 M1			
2453.43	2 ⁺	1840.94 10 2137.0 3	37 7 100 10	612.46318 316.50645	2 ⁺ 2 ⁺	M1+E2+E0 M1			
2472.27	2 ⁺	1551.39 8 1687.61 9 1859.82 9 2155.74 10	9 3 9.6 22 37 4 100 13	920.91852 784.5759 612.46318 316.50645	3 ⁺ 4 ⁺ 2 ⁺ 2 ⁺	M1+E2+E0 M1			
2483.64	≤3	1871.10 10 2167.15 11	61 9 100 9	612.46318 316.50645	2 ⁺ 2 ⁺				
2486.29	(2) ⁻	591.75 9 692.84 9 746.85 6 1108.26 8 1565.39 7 2169.6 2	52 4 4.4 6 100 4 14.6 15 94 4 42 6	1894.478 1793.503 (2) ⁺ 1739.431 1378.046 920.91852 316.50645	(2,3) ⁻ (2) ⁺ (1) ⁻ M1 3 ⁻ 3 ⁺ 2 ⁺	M1	0.0275 0.01010		

Adopted Levels, Gammas (continued)
 $\gamma(^{192}\text{Pt})$ (continued)

E _i (level)	J ^π _i	E _γ [†]	I _γ [‡]	E _f	J ^π _f	Mult. [†]	δ [†]	α ^d	Comments
2486.29	(2) ⁻	2486.4 3	18.3 2I	0.0	0 ⁺				
2508.84	(2,3) ⁺	1307.8 2	7.4 1I	1201.0452	4 ⁺				
		1587.86 9	100 6	920.91852	3 ⁺	M1			
		1896.40 8	34 3	612.46318	2 ⁺				
2511.75	(11) ⁻	339.37 ^a 20	100	2172.37	(10) ⁻	M1+E2 ^a	-0.4 I	0.198 I0	δ: from (α, xny).
2518.99	(10) ⁺	500.62 ^a 10	100	2018.37	8 ⁺	E2 ^a		0.0247	
2523.37	(10 ⁺)	505.0 ^{&} 1	100	2018.37	8 ⁺				
2530.3	(10 ⁻)	565.8 ^a 5	100	1964.51	(8) ⁻	[E2]		0.0184	Mult.: E2 for doublet of comparable strength gammas in (α, xny).
2532.46	1 ⁺	382.9 3	2.3 I0	2149.385	1 ⁺				
		1093.1 1	11.1 13	1439.263	2 ⁺				
		1337.35 8	7.1 7	1195.169	0 ⁺				
		1919.95 8	24 3	612.46318	2 ⁺				
		2216.05 15	100 6	316.50645	2 ⁺	M1			
		2532.8 5	26 4	0.0	0 ⁺	M1			
2549.42	(2) ⁺	809.99 11	15.8 26	1739.431	(1) ⁻				
		1171.44 12	12.6 26	1378.046	3 ⁻				
		1936.9 1	100 5	612.46318	2 ⁺	M1,E2			
2560.15	(1 ^{+,2})	665.73 8	24 3	1894.478	(2,3) ⁻				
		680.06 13	4.4 22	1880.02	3 ⁺				
		820.71 6	18.7 26	1739.431	(1) ⁻				
		1639.2 2	25 3	920.91852	3 ⁺				
		2243.5 2	100 17	316.50645	2 ⁺				
2562.96	(2) ⁺	769.45 8	6.1 8	1793.503	(2) ⁺	M1+E2+E0			
		1184.9 3	6.6 9	1378.046	3 ⁻				
		1641.91 16	11.4 12	920.91852	3 ⁺				
		1778.39 6	18.6 12	784.5759	4 ⁺				
		1950.46 13	100.0 23	612.46318	2 ⁺	M1			
		2246.55 15	28 5	316.50645	2 ⁺				
2583.37	(10 ⁺)	411.03 ^a 20	73 8	2172.37	(10) ⁻	[E1]			I _γ : from (α, xny).
		564.9 ^a 4	100 30	2018.37	8 ⁺	[E2]		0.0185	I _γ : from (α, xny).
									Mult.: E2 for doublet of comparable strength gammas in (α, xny).
2585.23	(2) ⁺	1008.85 15	6.3 1I	1576.368	2 ⁺	E2			
		1207.22 10	2.1 7	1378.046	3 ⁻				
		1384.00 15	8.3 12	1201.0452	4 ⁺				
		1664.2 1	15.4 16	920.91852	3 ⁺	M1			
		1800.68 7	6.1 9	784.5759	4 ⁺				
		1972.85 15	100 12	612.46318	2 ⁺	M1			
		2268.8 3	10.0 16	316.50645	2 ⁺				
		2585.3 2	11.4 16	0.0	0 ⁺				

Adopted Levels, Gammas (continued)
 $\gamma(^{192}\text{Pt})$ (continued)

E_i (level)	J^π_i	E_γ^\dagger	I_γ^\ddagger	E_f	J^π_f	Mult. [†]	a^d	Comments
2591	8 ⁺	722	100	1869	6 ⁺			
2602.97	(2) ⁺	809.46 7	16 3	1793.503	(2) ⁺			E_γ : From Coulomb excitation.
		836.88 10	28 4	1766.09	(2,3) ⁺			
		1224.9 2	27 6	1378.046	3 ⁻			
		1682.09 9	64 7	920.91852	3 ⁺			
		2286.43 7	100 14	316.50645	2 ⁺	M1		
		2602.8 3	61 7	0.0	0 ⁺			
2604.76	(1,2) ⁻	347.45 15	38 13	2257.26	(2) ⁻			
		443.19 10	14.4 25	2161.64				
		484.53 9	23 3	2120.21	(2 ⁺)			
		710.27 6	88 6	1894.478	(2,3) ⁻	M1	0.0313	
		865.33 6	100 6	1739.431	(1) ⁻	M1	0.0189	
		1226.8 2	15.6 25	1378.046	3 ⁻			
		1992.25 9	100 6	612.46318	2 ⁺			
2614.29	(2 ⁺)	1419.2 2	7.6 11	1195.169	0 ⁺			
		1693.29 24	25.3 27	920.91852	3 ⁺	M1		
		2001.75 15	25.3 27	612.46318	2 ⁺			
		2297.8 2	44.0 13	316.50645	2 ⁺	M1		
		2614.3 2	100 13	0.0	0 ⁺	E2		
2623.72	(12) ⁺	(40.4)	<0.0020	2583.37	(10 ⁺)	[E2]	329	B(E2)(W.u.)≤0.13 I_γ : from $(\alpha,2n\gamma)$, $(\alpha,4n\gamma)$. E_γ : 40.4 3 from level energy difference. B(E2)(W.u.)=52 7 I_γ : from $(\alpha,xn\gamma)$.
		104.73 ^a 10	100 8	2518.99	(10) ⁺	E2 ^a	4.05	
2626.64	(12) ⁻	454.32 ^a 25	100	2172.37	(10) ⁻	E2 ^a	0.0314	
2629.24	2 ⁺	479.84 8	3.0 8	2149.385	1 ⁺			
		653.02 8	3.8 6	1976.25	(2) ⁺			
		734.67 15	4.1 6	1894.478	(2,3) ⁻			
		749.24 7	8.8 8	1880.02	3 ⁺			
		889.77 9	21.9 16	1739.431	(1) ⁻			
		2016.81 15	17.2 16	612.46318	2 ⁺	M1+E2+E0		
		2312.8 3	100 5	316.50645	2 ⁺	M1,E2		
		2629.4 4	63 16	0.0	0 ⁺			
2635.23	1 ⁺	841.70 10	2.1 6	1793.503	(2) ⁺			
		1088.35 9	10.6 14	1546.93	(0 ⁺)			
		1440.03 17	3.9 6	1195.169	0 ⁺			
		2318.67 11	23 3	316.50645	2 ⁺			
		2635.1 3	100 17	0.0	0 ⁺	M1		
2641.1	(12 ⁺)	122.1 ^{&} 2	100	2518.99	(10) ⁺			
2647.32	(2) ⁻	1726.35 10	21.7 25	920.91852	3 ⁺			
		2034.87 7	100 17	612.46318	2 ⁺	E1		

Adopted Levels, Gammas (continued)

 $\gamma(^{192}\text{Pt})$ (continued)

E _i (level)	J _i ^π	E _γ [†]	I _γ [‡]	E _f	J _f ^π	Mult. [†]	a ^d	Comments
2658.46	(1,2) ⁺	2341.94 9	100 7	316.50645	2 ⁺			
		2658.4 3	55 6	0.0	0 ⁺	M1,E2		
2709.1	(11) ⁻	605.92 ^a 25	100	2103.22	(9) ⁻	E2 ^a	0.01574	
2729.4	10 ⁺	711	100	2018.37	8 ⁺			E _γ : from Coulomb excitation.
2730.73	(2) ⁻	688.88 10	13 3	2041.81	(2 ⁻ ,3 ⁻)			
		991.35 8	80 7	1739.431	(1) ⁻	M1	0.01338	
		1352.60 9	65 6	1378.046	3 ⁻	M1		
		2414.4 2	100 13	316.50645	2 ⁺			
2770.7	(13 ⁺)	147.0 ^{&} 5	100	2623.72	(12) ⁺			
2775.21		880.73 12	15 4	1894.478	(2,3) ⁻			
		895.19 10	19 4	1880.02	3 ⁺			
		1035.75 10	33 5	1739.431	(1) ⁻			
		2458.75 15	100 9	316.50645	2 ⁺			
2794.25	(≤2)	899.70 13	24 6	1894.478	(2,3) ⁻			
		1054.84 7	100 12	1739.431	(1) ⁻			
		2181.8 3	53 7	612.46318	2 ⁺			
2832.89	(1,2,3) ⁺	671.15 15	4.7 12	2161.64				
		1256.7 3	31 6	1576.368	2 ⁺			
		1393.67 14	10.6 19	1439.263	2 ⁺			
		2220.41 10	38 3	612.46318	2 ⁺	M1		
		2516.4 3	100 6	316.50645	2 ⁺			
2834.60	(2 ⁺)	1068.4 2	8.2 14	1766.09	(2,3) ⁺			
		1428.32 14	3.6 7	1406.35	3 ⁺			
		1633.56 8	13.6 21	1201.0452	4 ⁺			
		1639.43 9	9.6 14	1195.169	0 ⁺			
		1913.6 2	19.3 25	920.91852	3 ⁺			
		2518.0 3	100 18	316.50645	2 ⁺			
2856.13	(2) ⁻	961.65 10	28.2 26	1894.478	(2,3) ⁻	M1	0.01445	
		1090.54 15	4.4 10	1766.09	(2,3) ⁺			
		1116.60 6	100 5	1739.431	(1) ⁻	M1		
		2243.74 20	19.5 21	612.46318	2 ⁺			
2857.07	(2) ⁻	727.60 13	4.6 13	2129.52	(1) ⁻	M1	0.0294	
		1479.03 5	62 5	1378.046	3 ⁻			
		1936.07 8	8.0 10	920.91852	3 ⁺			
		2541.0 10	100 5	316.50645	2 ⁺	E1		
2890.93	(2) ⁻	761.35 13	5.8 13	2129.52	(1) ⁻			
		849.12 9	11.8 21	2041.81	(2 ⁻ ,3 ⁻)			
		996.6 2	31.6 26	1894.478	(2,3) ⁻	M1	0.01320	
		1097.6 2	6.1 16	1793.503	(2) ⁺			
		1151.51 8	21.1 24	1739.431	(1) ⁻			
		1512.75 13	24 4	1378.046	3 ⁻			

Adopted Levels, Gammas (continued)

 $\gamma(^{192}\text{Pt})$ (continued)

E _i (level)	J _i ^π	E _γ [†]	I _γ [‡]	E _f	J _f ^π	Mult. [†]	δ [†]	α ^d	Comments
2890.93	(2) ⁻	1969.99 8 2278.4 2 2574.8 4	29.0 26 17.4 21 100 16	920.91852 612.46318 316.50645	3 ⁺ 2 ⁺ 2 ⁺				
2933.03?	(12) ⁺	414.04 ^{ae} 16	100	2518.99	(10) ⁺	E1			
2936.37	(12) ⁺	353.00 ^a 12	100	2583.37	(10 ⁺)	E2 ^a	0.0399		
2945.90	(11) ⁺	426.91 ^b 18	100	2518.99	(10) ⁺	E2 ^a	0.0616		
2947.00	(2) ⁻	905.2 2 1052.55 9 1153.42 16 1180.96 10 1207.50 10	14.2 23 77 8 5.8 15 10.0 15 6.9 15	2041.81 1894.478 1793.503 1766.09 1739.431	(2 ⁻ ,3 ⁻) (2,3) ⁻ (2) ⁺ (2,3) ⁺ (1) ⁻	M1+E2 ^a	+0.5 I	0.102 6	δ: from (α ,xn γ).
						M1		0.01150	
2950.2?		438.5 ^{ae} 3	100	2511.75	(11) ⁻				
2950.43	(1,2) ⁺	902.52 11 1511.11 20	7.9 17 23 4	2047.89 1439.263	(2) ⁺ 2 ⁺	E2			
		1755.4 3	8.0 13	1195.169	0 ⁺				
2958.75	(2,3) ⁻	2634.0 3 701.47 9 797.09 11	100 25 3.1 6 2.0 6	316.50645 2257.26 2161.64	2 ⁺ (2) ⁻				
		815.79 8 917.01 9 982.49 11 1192.49 15 1219.4 1 1519.43 12 1580.64 8 2037.86 12 2346.4 2	22 3 12.5 16 1.1 3 2.8 6 8.0 13 6.7 11 100 5 4.4 8 28 3	2142.96 2041.81 1976.25 1766.09 1739.431 1439.263 1378.046 920.91852 612.46318	(3) ⁻ (2 ⁻ ,3 ⁻) (2) ⁺ (2,3) ⁺ (1) ⁻ 2 ⁺ 3 ⁻ 3 ⁺ 2 ⁺	M1 M1	0.0220 0.01630		
2998.24	(14) ⁺	227.5 ^{&} 3 374.51 ^a 12	29 4 100 8	2770.7 2623.72	(13 ⁺) (12) ⁺	E2 ^a	0.0523	I _γ : from (^ ¹¹ B,p4n γ).	
3022.26	(13) ⁻	395.64 ^a 20 510.4 ^a 5	27 4 100 26	2626.64 2511.75	(12) ⁻ (11) ⁻	(M1+E2) ^a	0.09 5	I _γ : from (^ ¹¹ B,p4n γ).	
3027.38	(2,3) ⁻	985.65 15 1132.93 10 1233.95 15 1261.3 2 1287.7 2 1649.32 8 2106.42 9 2415.1 3	16 3 19 3 12.0 24 6.0 16 60 4 100 12 52 4 56 4	2041.81 1894.478 1793.503 1766.09 1739.431 1378.046 920.91852 612.46318	(2 ⁻ ,3 ⁻) (2,3) ⁻ (2) ⁺ (2,3) ⁺ (1) ⁻ 3 ⁻ 3 ⁺ 2 ⁺	M1		I _γ : from (α ,xn γ). I _γ : from (α ,xn γ). I _γ : from (α ,xn γ). I _γ : from (α ,xn γ).	

Adopted Levels, Gammas (continued)
 $\gamma^{(192\text{Pt})}$ (continued)

E_i (level)	J_i^π	E_γ^\dagger	I_γ^\ddagger	E_f	J_f^π	Mult. [†]	a^d	Comments
3031.00	(≤3)	547.32 8	25 4	2483.64	≤3			
		901.5 2	31 4	2129.52	(1 ⁻)			
		1291.60 9	100 7	1739.431	(1) ⁻			
3068.4	(14 ⁺)	427.3 & 1	100	2641.1	(12 ⁺)			
3080.1?	(14 ⁺)	147.07 ae 12	100	2933.03?	(12) ⁺	(E2) ^a	1.075	
3082.4	(12 ⁻)	552.1 a 3	100	2530.3	(10 ⁻)	Q		Mult.: from $\gamma(\theta)$ in (α, xny) .
3127.19	(1 ⁻ ,2 ⁻)	643.56 8	14.0 20	2483.64	≤3			
		673.76 11	9.5 20	2453.43	2 ⁺			
		704.4 1	10.5 25	2422.78	(1,2) ⁺			
		791.65 8	17.0 25	2335.464	1 ⁺			
		831.18 9	14.0 25	2296.06	(1,2) ⁺			
		997.68 5	100 10	2129.52	(1 ⁻)	M1	0.01317	
		1387.78 9	39 5	1739.431	(1) ⁻			
3137.4	(12 ⁺)	614.0 & 3	100	2523.37	(10 ⁺)			
3155.74	(2,3) ⁻	994.10 10	4.7 9	2161.64				
		1113.93 8	18.1 19	2041.81	(2 ⁻ ,3 ⁻)	M1		
		1261.1 2	4.0 8	1894.478	(2,3) ⁻			
		1362.22 10	6.6 9	1793.503	(2) ⁺			
		1389.68 9	8.3 9	1766.09	(2,3) ⁺			
		1416.29 8	36 4	1739.431	(1) ⁻	M1,E2		
		1579.2 3	47 4	1576.368	2 ⁺			
		1777.8 2	3.6 8	1378.046	3 ⁻			
		2234.84 7	100 6	920.91852	3 ⁺			
		2543.1 2	57 15	612.46318	2 ⁺	E1		
3184.7	(15 ⁺)	414.0 & 5	100	2770.7	(13 ⁺)			
3189.52	(2,3) ⁻	1147.65 17	24 6	2041.81	(2 ⁻ ,3 ⁻)			
		1295.00 10	49 9	1894.478	(2,3) ⁻			
		1450.0 2	100 13	1739.431	(1) ⁻			
		1811.57 15	55 7	1378.046	3 ⁻			
		2268.7 2	64 7	920.91852	3 ⁺			
3225.5	(13 ⁺)	279.57 ae 18	100	2945.90	(11) ⁺	(E2) ^a	0.1218	
3357.5	(13 ⁻)	648.4 a 5	100	2709.1	(11) ⁻			
3400.0?		319.9 ae 4	100	3080.1?	(14 ⁺)			
3504.7	(16 ⁺)	320.0 & 2	100	3184.7	(15 ⁺)			
3542.1	(16) ⁺	543.85 a 20	100	2998.24	(14) ⁺	E2 ^a	0.0202	
3569.3?		489.2 ae 3	100	3080.1?	(14 ⁺)	D+Q ^a		
3673.8?		273.83 ae 18	100	3400.0?		D+Q		Mult.: from $\gamma(\theta)$ in (α, xny) .
3674.1	(17 ⁺)	489.4 & 8	100	3184.7	(15 ⁺)			
3695.3	(15) ⁻	673.01 a 25	100 10	3022.26	(13 ⁻)	E2 ^a	0.01245	I_γ : from (α, xny) .

Adopted Levels, Gammas (continued)

 $\gamma(^{192}\text{Pt})$ (continued)

E _i (level)	J _i ^π	E _γ [†]	I _γ [‡]	E _f	J _f ^π	Mult. [†]	a ^d	Comments
3695.3	(15) ⁻	697.0 ^a 3	57 7	2998.24	(14) ⁺	E1 ^a		I _γ : from (α ,xn γ).
3778.7	(18) ⁺	274.0 ^{&} 3	100	3504.7	(16) ⁺			
3883.3		188.03 ^a 20	100	3695.3	(15) ⁻	D+Q		Mult.: from $\gamma(\theta)$ in (α ,xn γ).
3923.6	(17) ⁻	228.34 ^a 15	100 9	3695.3	(15) ⁻	(E2) ^a	0.231	I _γ : from (α ,xn γ). I _γ : from (α ,xn γ).
		381.5 ^a 3	24 9	3542.1	(16) ⁺			Mult.: from $\gamma(\theta)$ in (α ,xn γ).
4160.4		236.84 ^a 16	100	3923.6	(17) ⁻	D+Q		
4199.7	(20) ⁺	421.0 ^{&} 3	100	3778.7	(18) ⁺			
4204.2	(18) ⁺	662.1 ^a 3	100	3542.1	(16) ⁺	E2 ^a	0.01291	
4320.5?		160.10 ^{ae} 20	100	4160.4				
4950.7	(20) ⁺	746.5 ^a 4	100	4204.2	(18) ⁺			

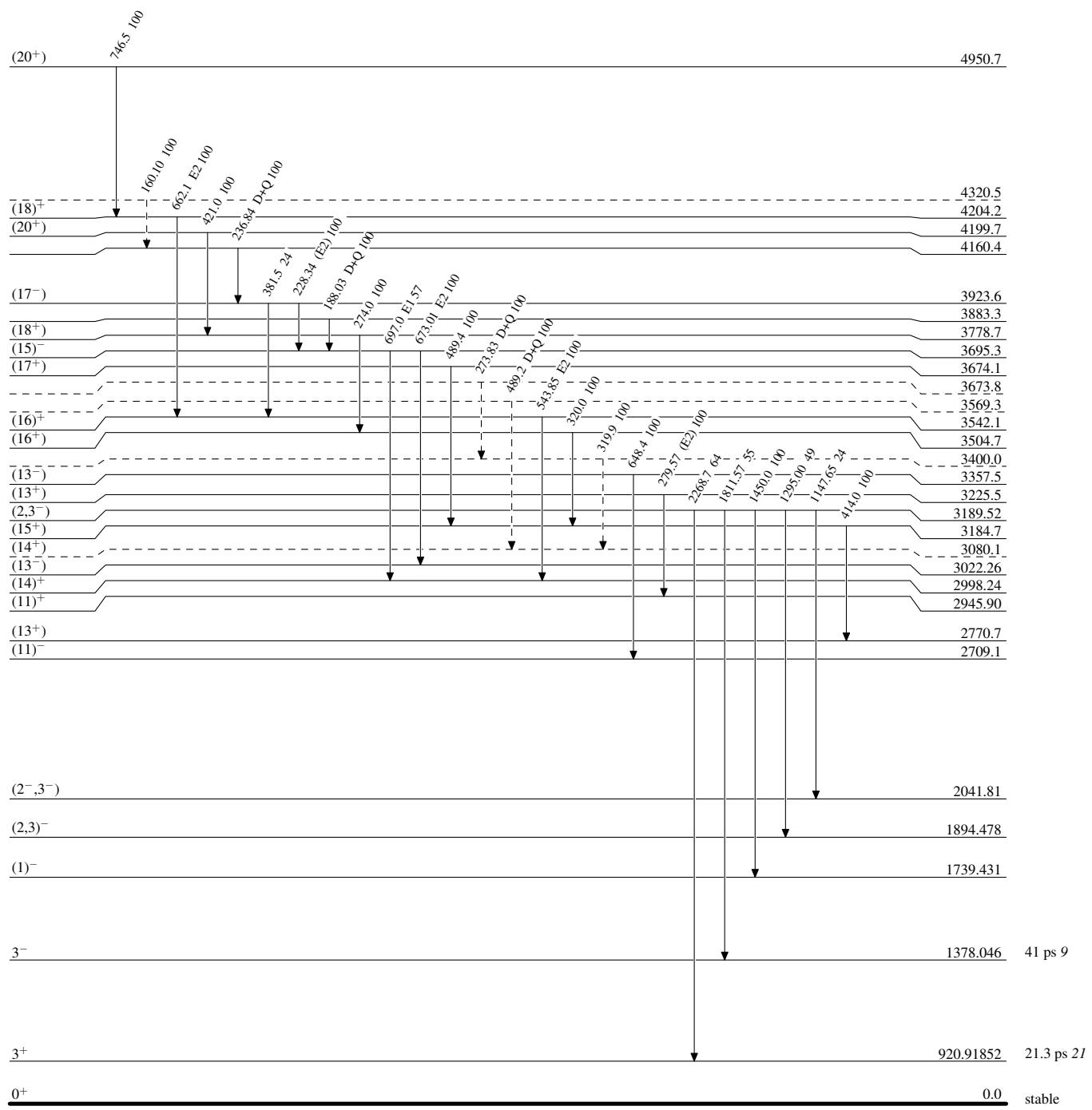
[†] From ¹⁹²Au ε decay, except where noted.[‡] Relative photon branching from each level; values are from ¹⁹²Au ε decay, except where noted.[#] From ¹⁹²Ir β^- decay (73.829 d).[@] Weighted average from ¹⁹⁰Os(α ,2n γ), ¹⁹²Os(α ,4n γ) and ¹⁹³Ir(p,2n γ).[&] From (¹¹B,p4n γ).^a From ¹⁹⁰Os(α ,2n γ), ¹⁹²Os(α ,4n γ).^b Weighted average from ¹⁹²Ir β^- decay (73.829 d), ¹⁹²Au ε decay, and ¹⁹³Ir(p,2n γ).^c Weighted average from ¹⁹²Ir β^- decay (73.829 d), ¹⁹²Au Au ε decay, (α ,xn γ), ¹⁹³Ir(p,2n γ).^d Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ -ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.^e Placement of transition in the level scheme is uncertain.

Adopted Levels, Gammas

Legend

Level Scheme

Intensities: Relative photon branching from each level

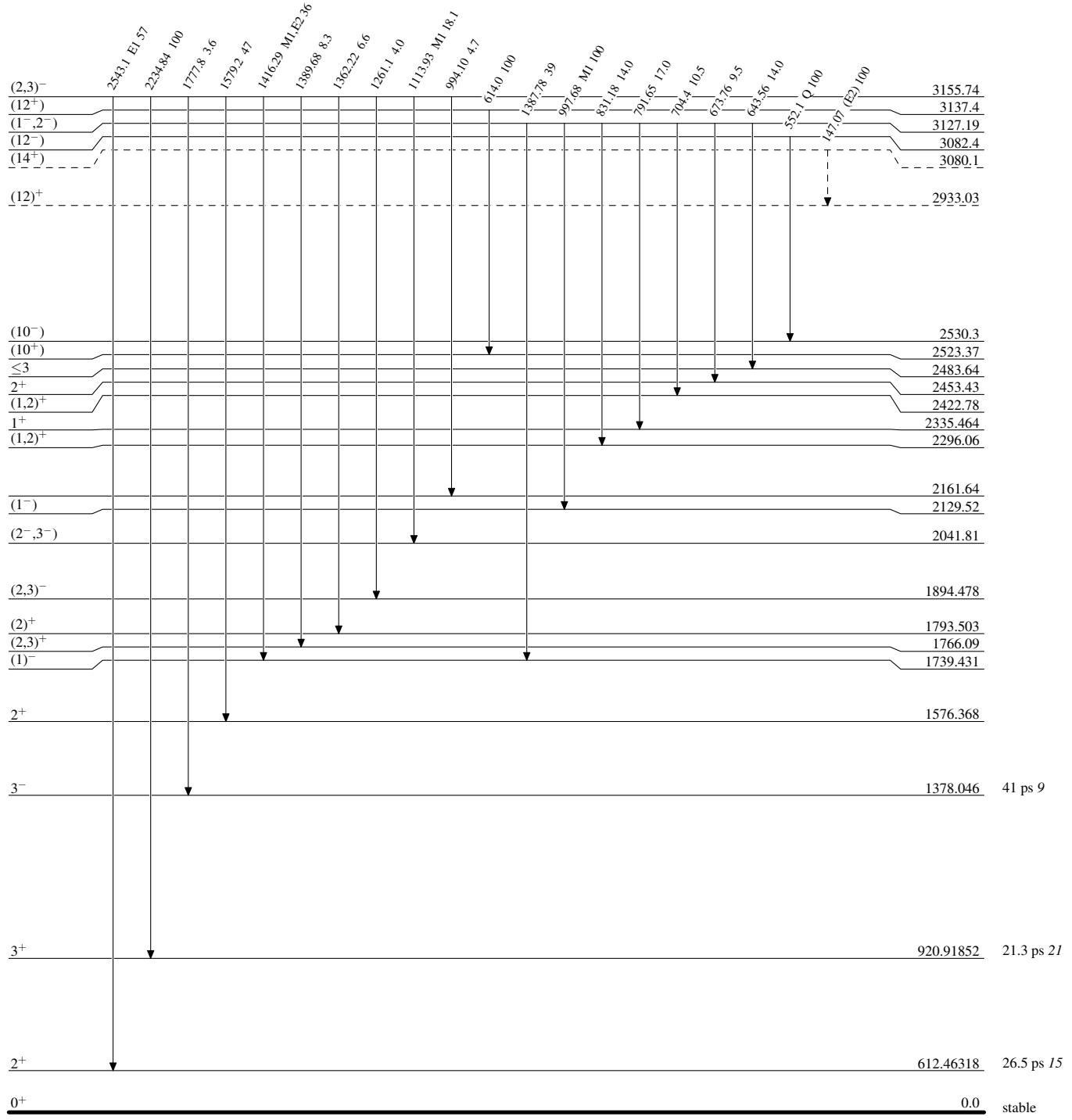
- - - - - ► γ Decay (Uncertain)

Adopted Levels, Gammas

Legend

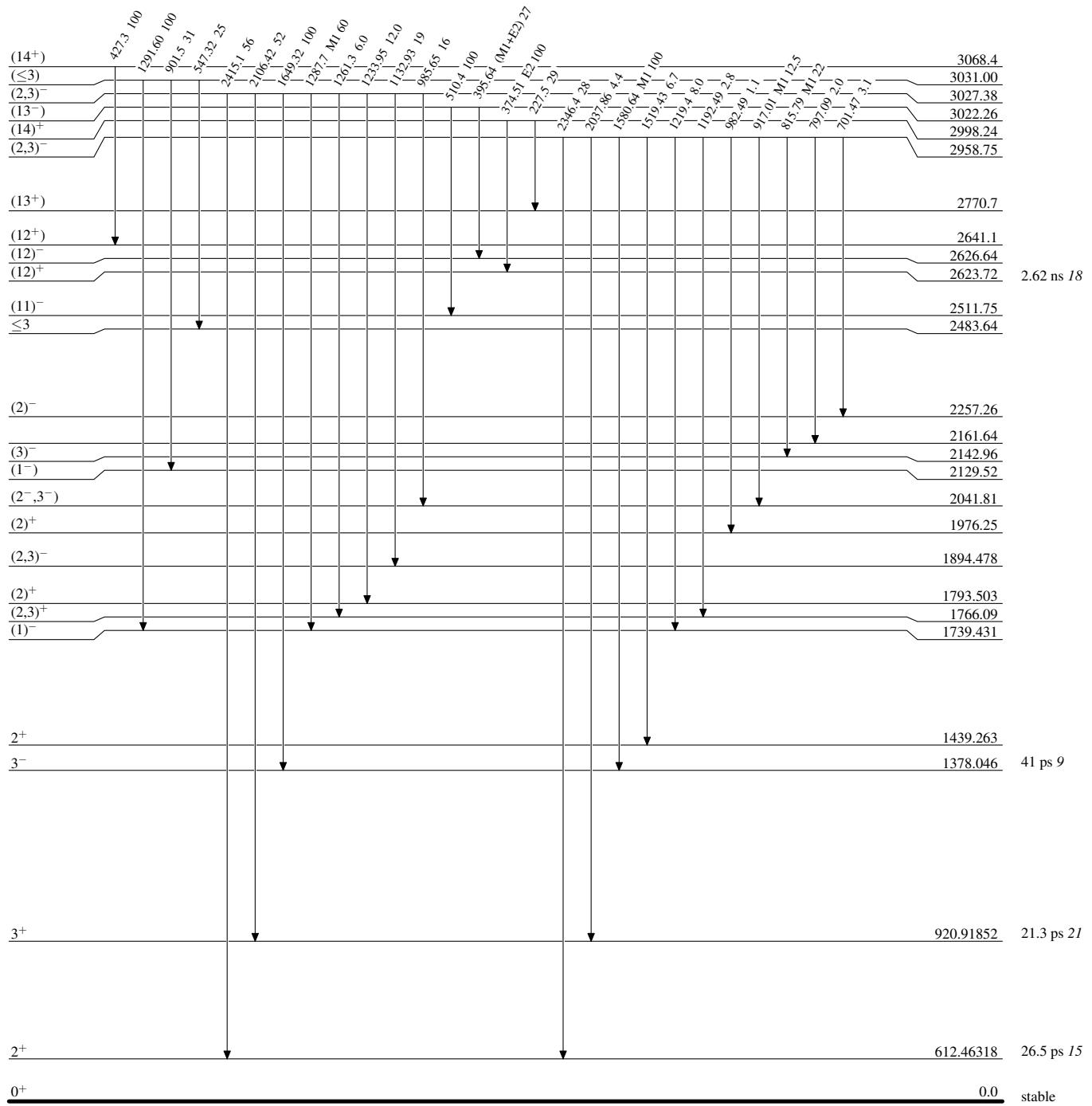
Level Scheme (continued)

Intensities: Relative photon branching from each level

- - - - - ► γ Decay (Uncertain)

Adopted Levels, GammasLevel Scheme (continued)

Intensities: Relative photon branching from each level

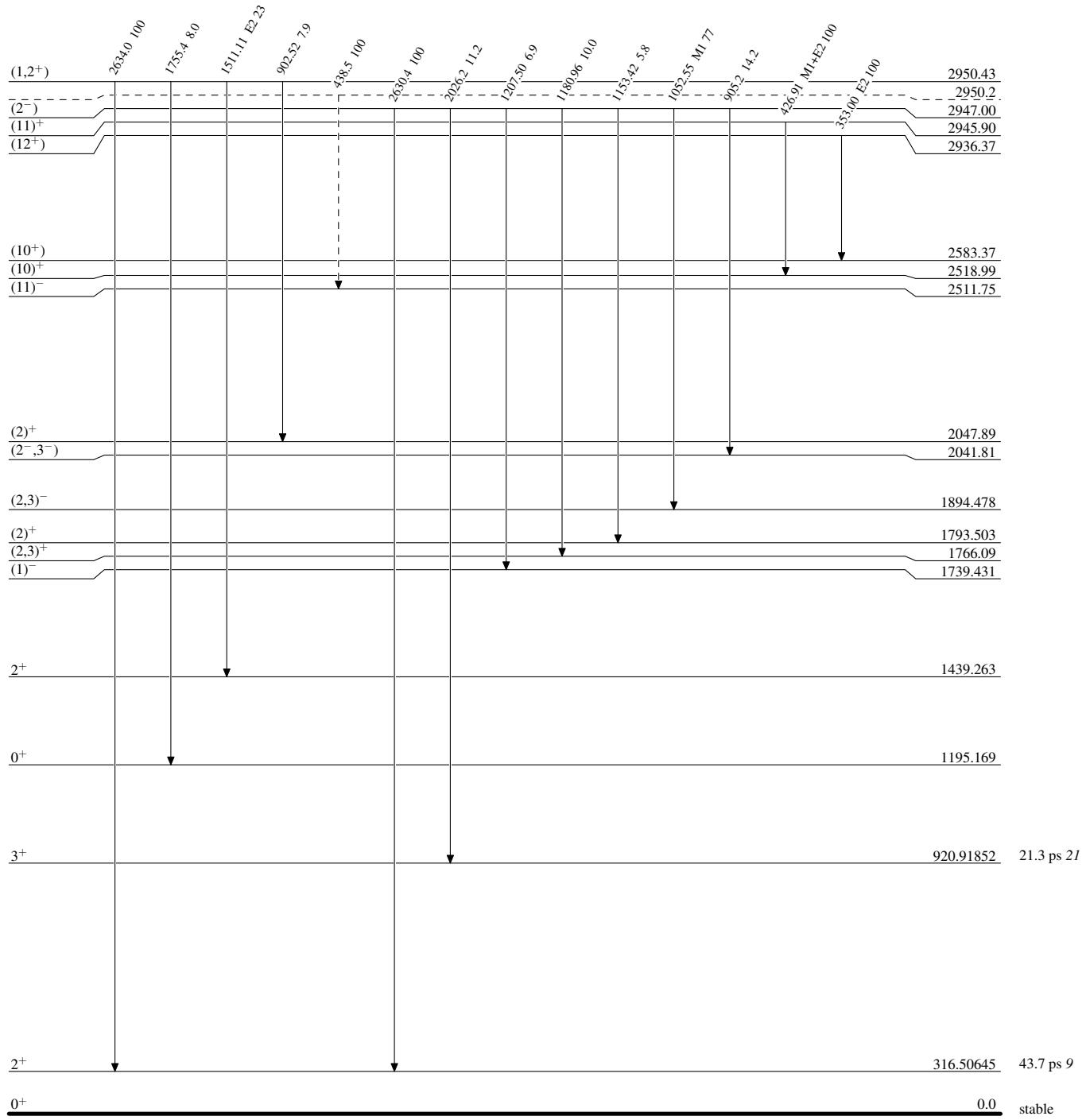


Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

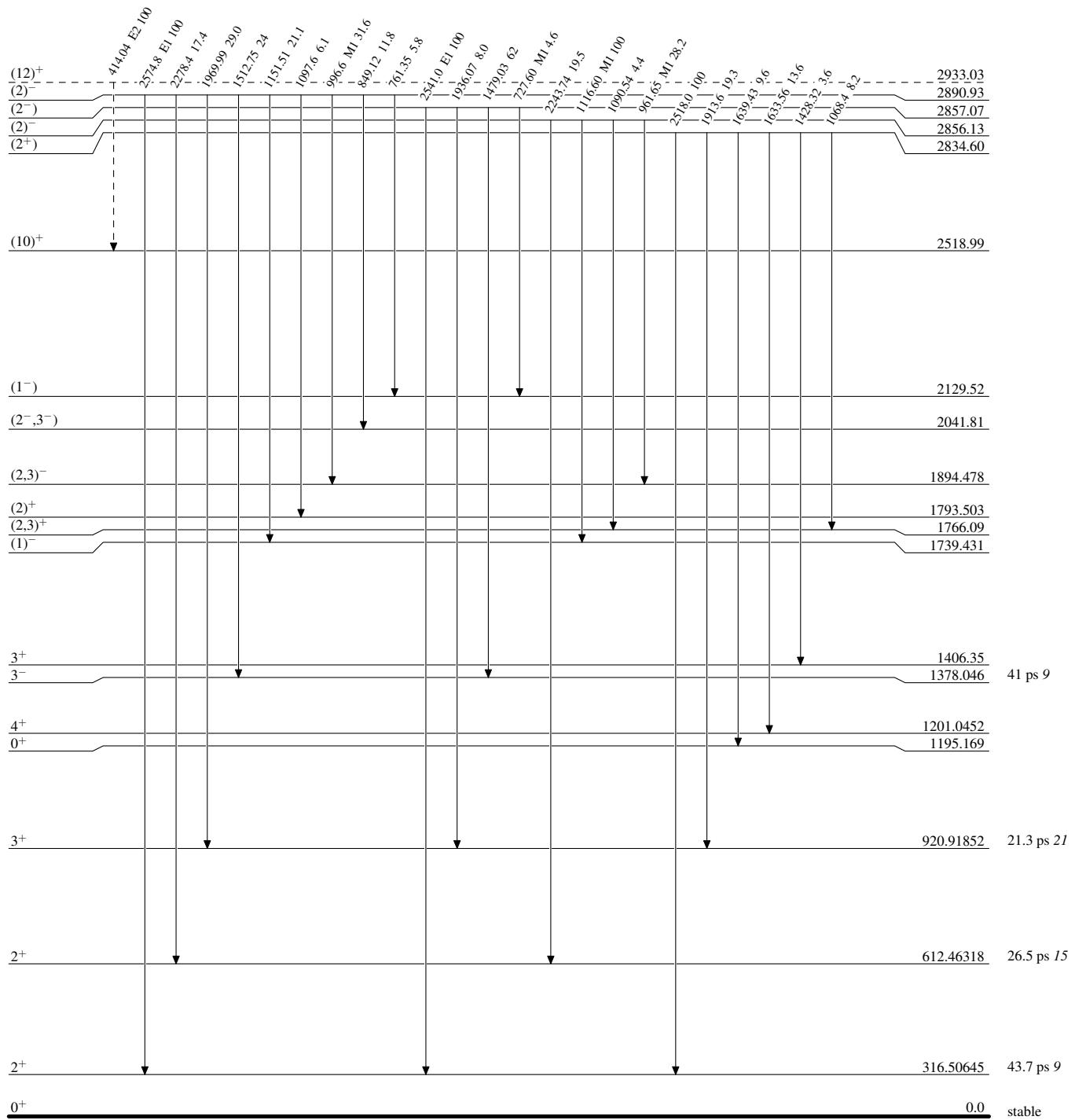
- - - - - ► γ Decay (Uncertain)

Adopted Levels, Gammas

Legend

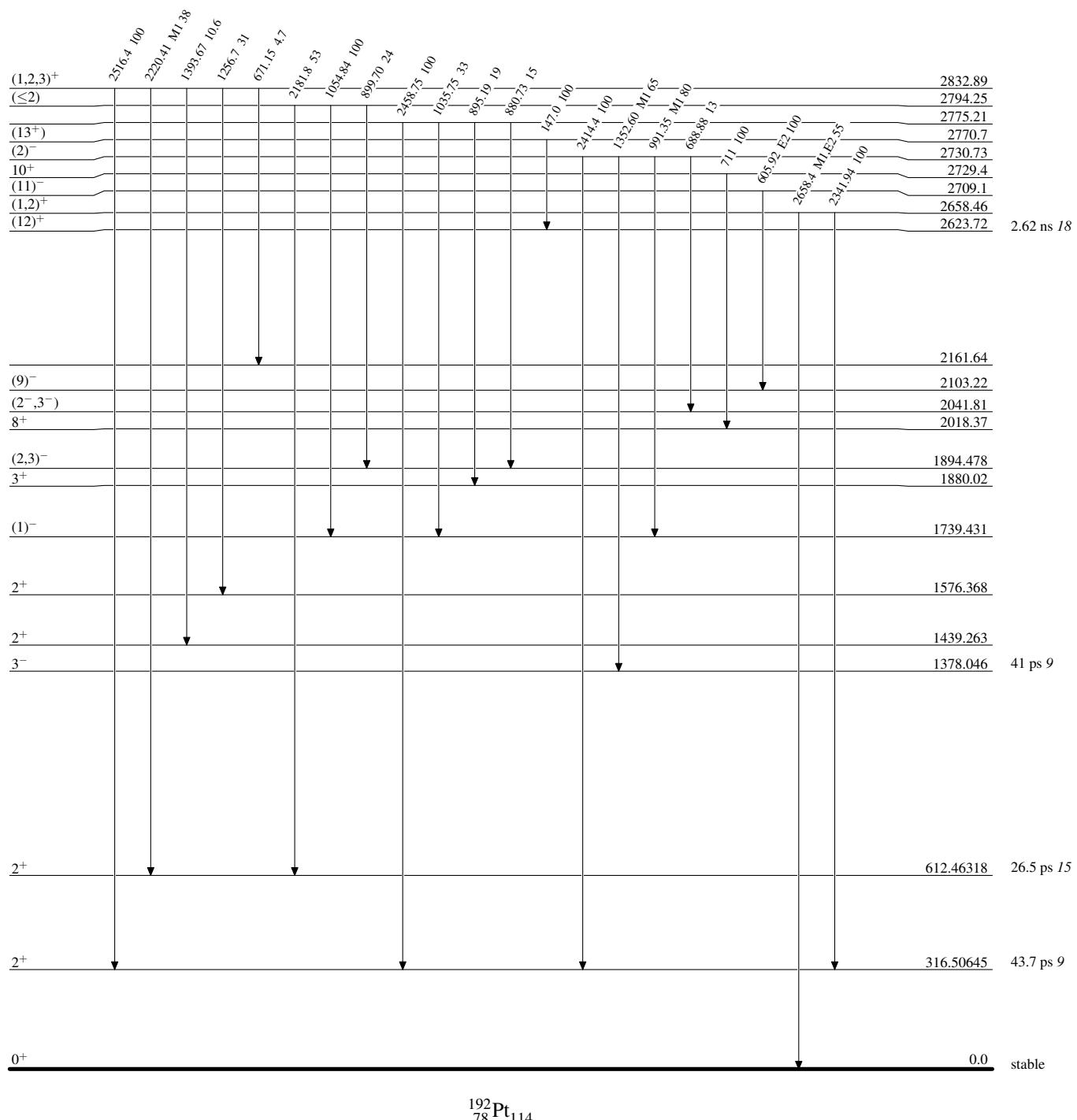
Level Scheme (continued)

Intensities: Relative photon branching from each level

- - - - - \rightarrow γ Decay (Uncertain)

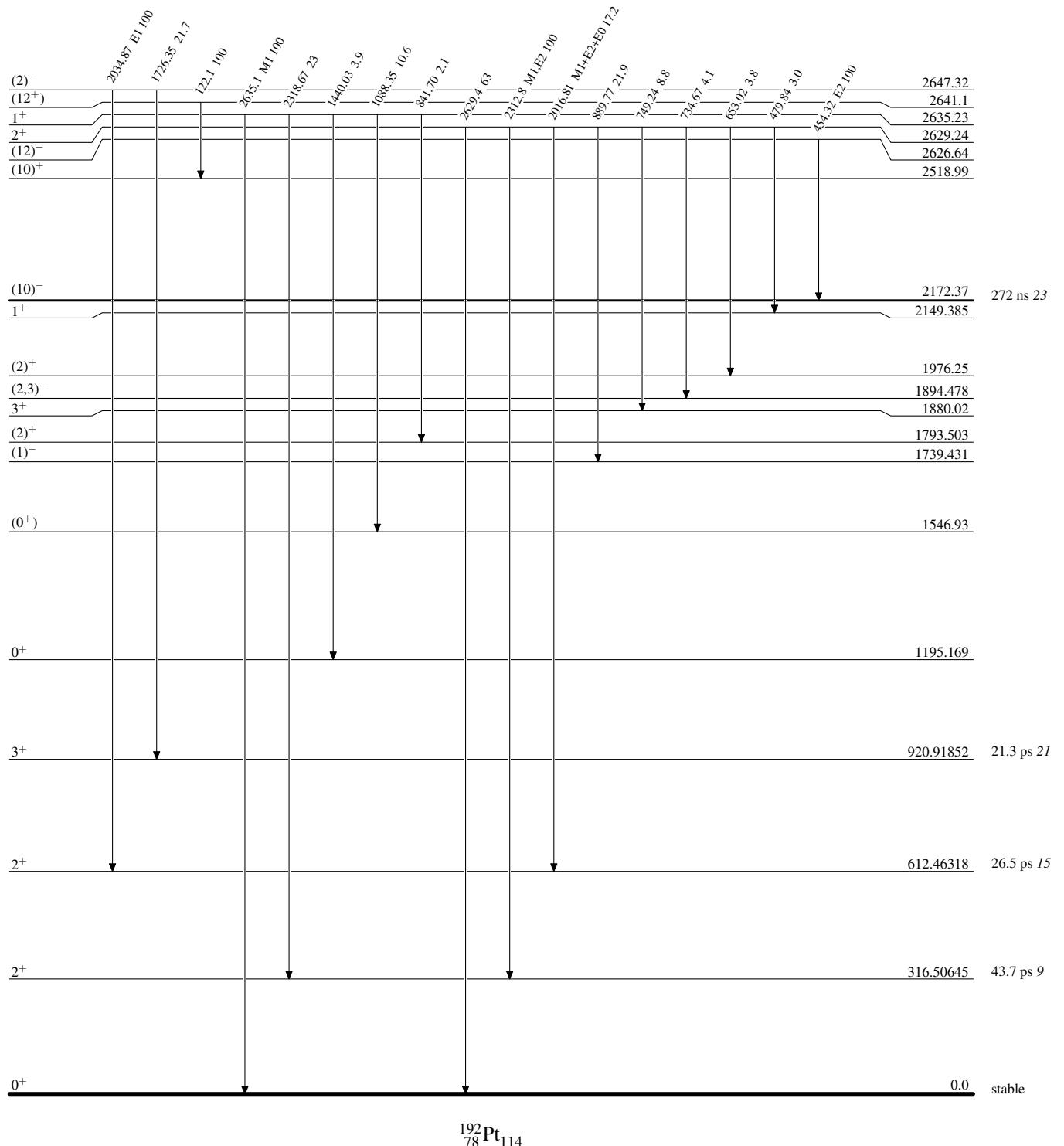
Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Relative photon branching from each level



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

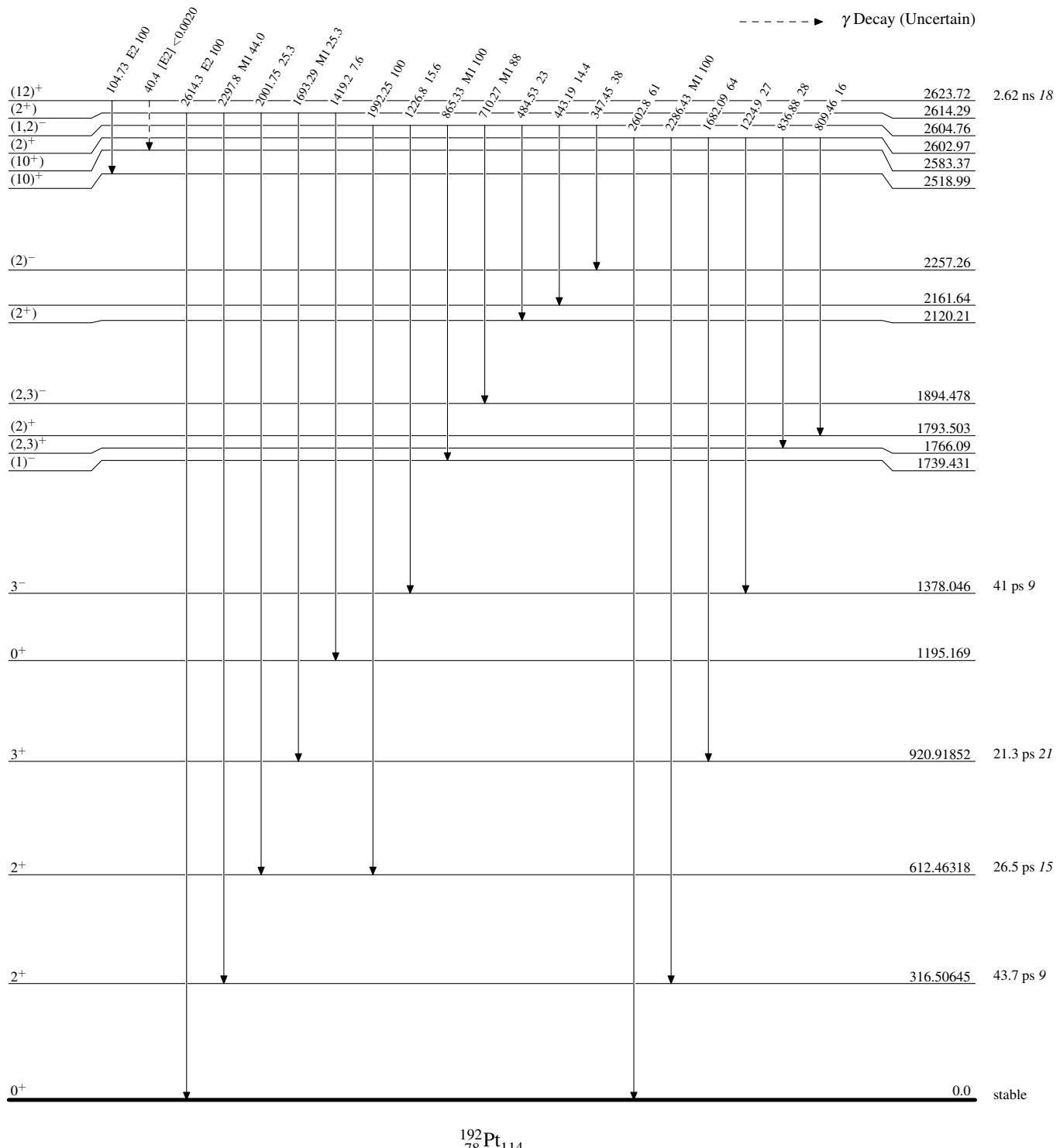
Intensities: Relative photon branching from each level



Adopted Levels, GammasLevel Scheme (continued)

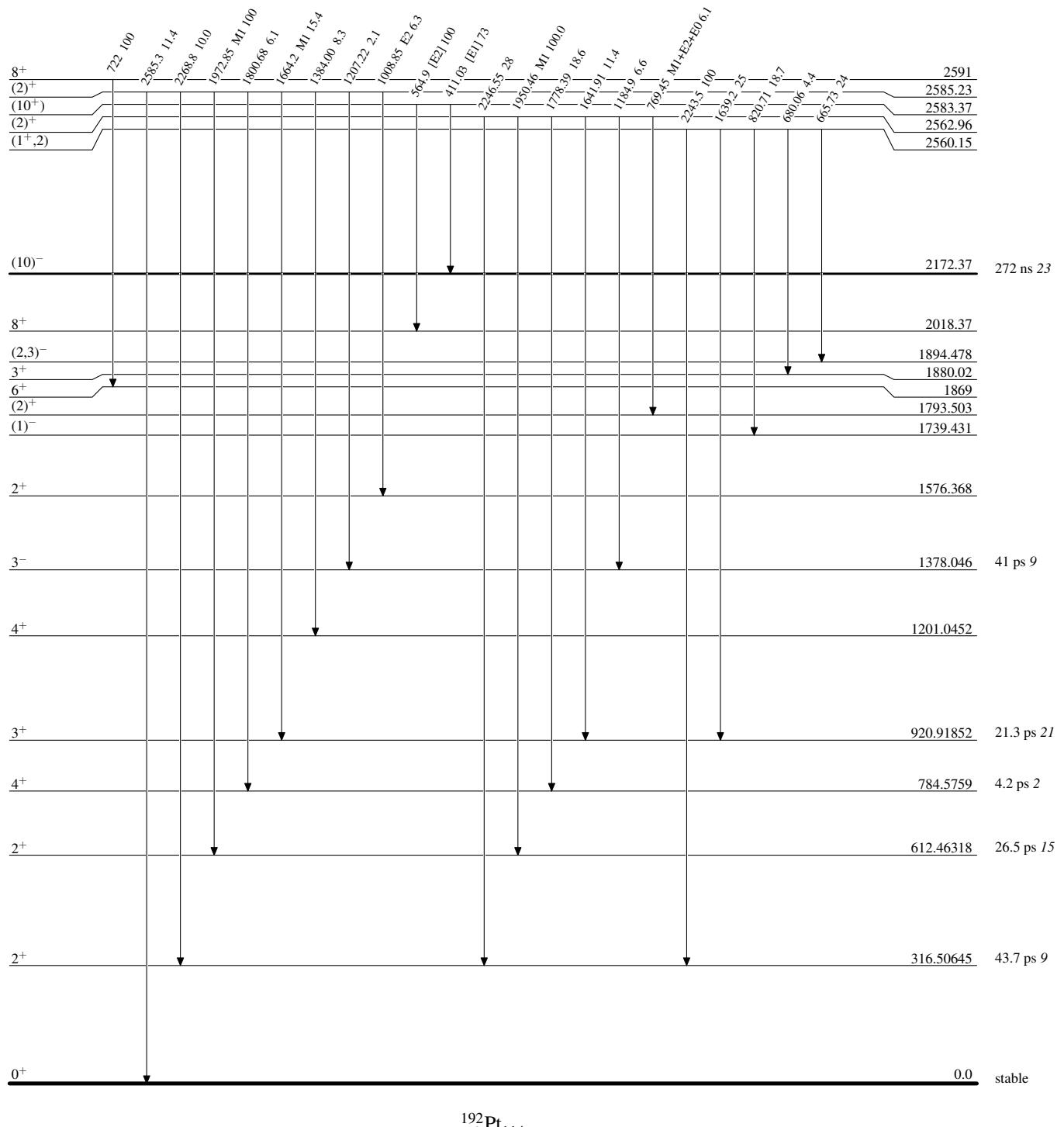
Legend

Intensities: Relative photon branching from each level



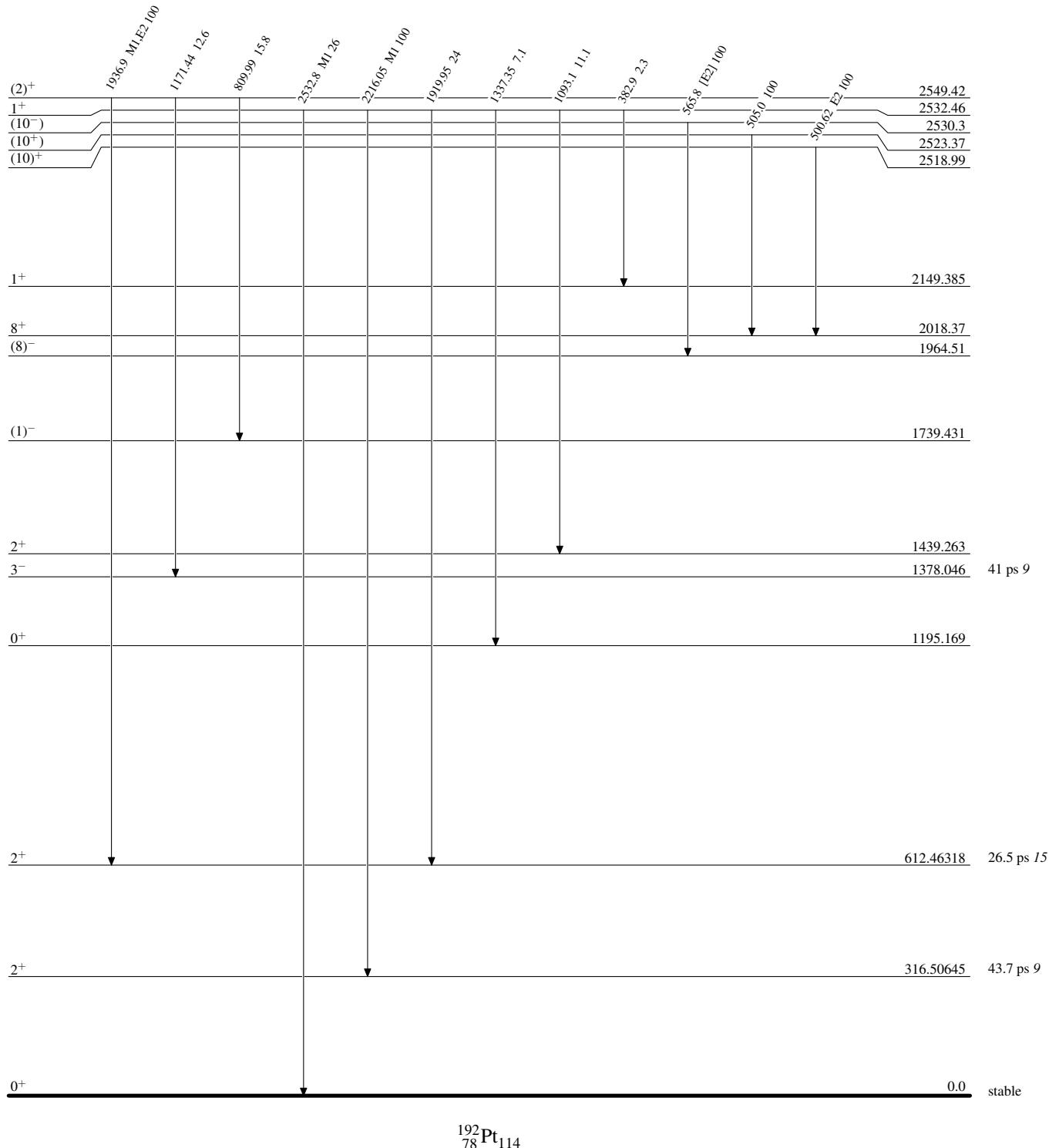
Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Relative photon branching from each level



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

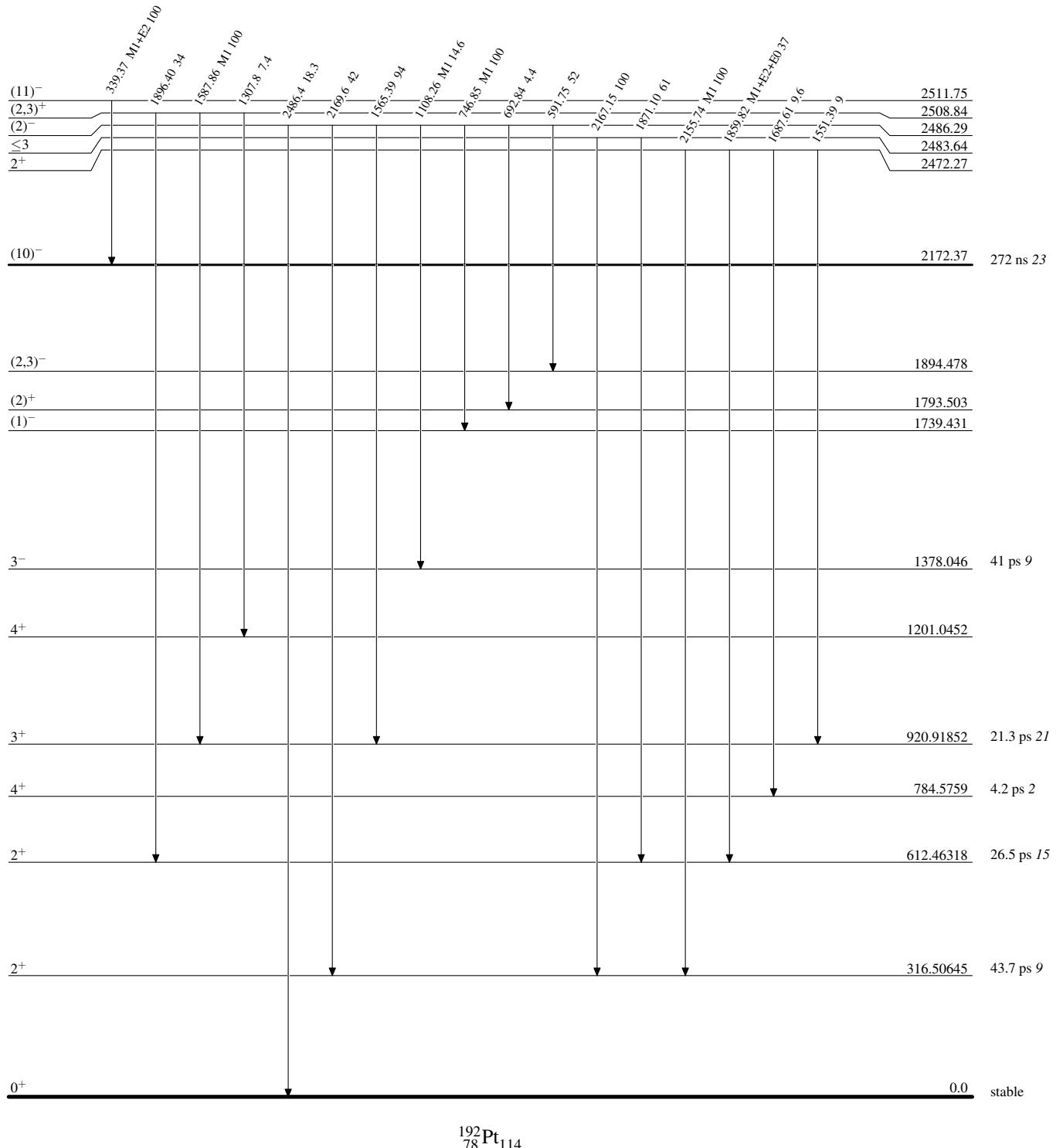
Intensities: Relative photon branching from each level



Adopted Levels, Gammas

Level Scheme (continued)

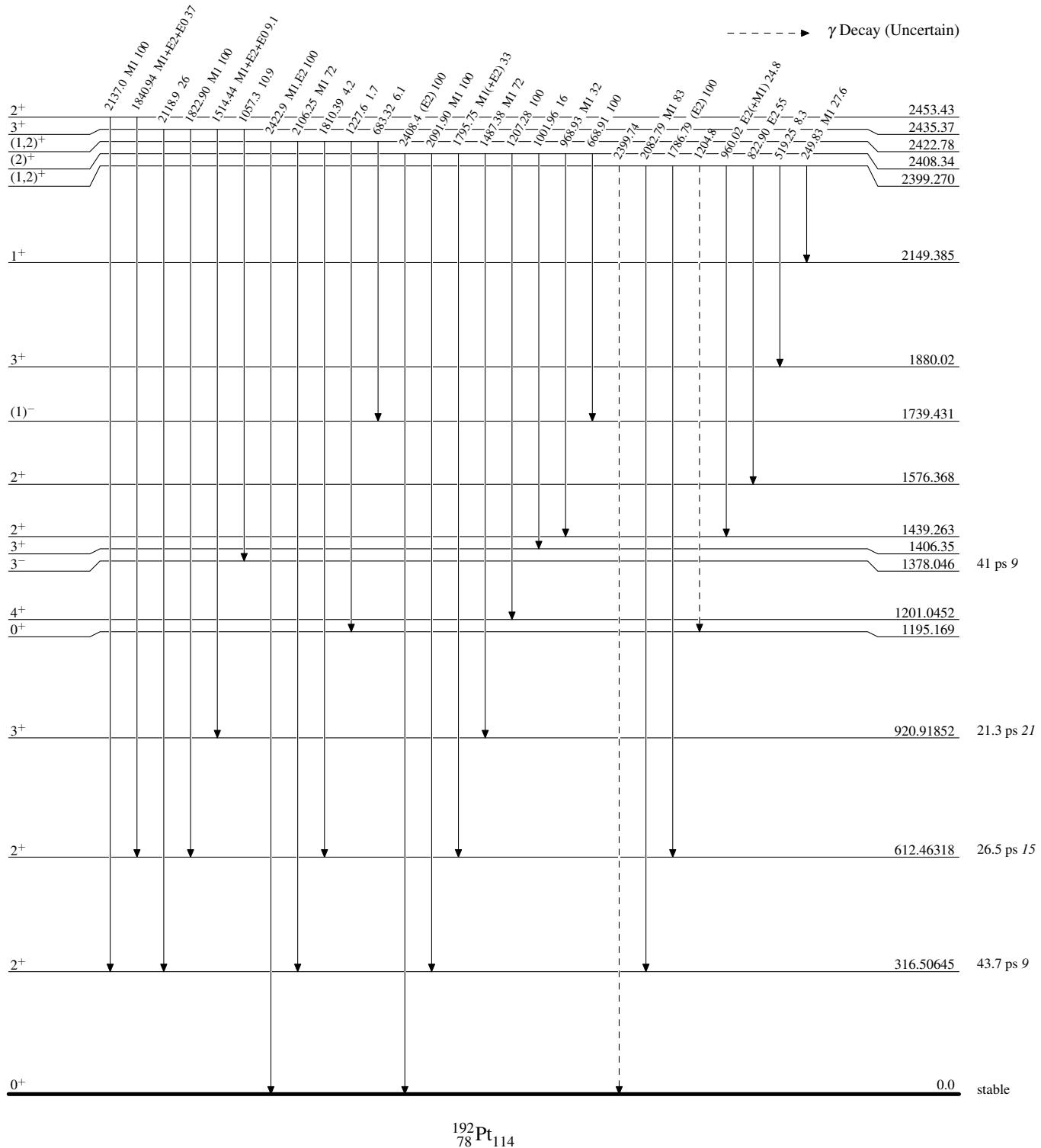
Intensities: Relative photon branching from each level



Adopted Levels, GammasLevel Scheme (continued)

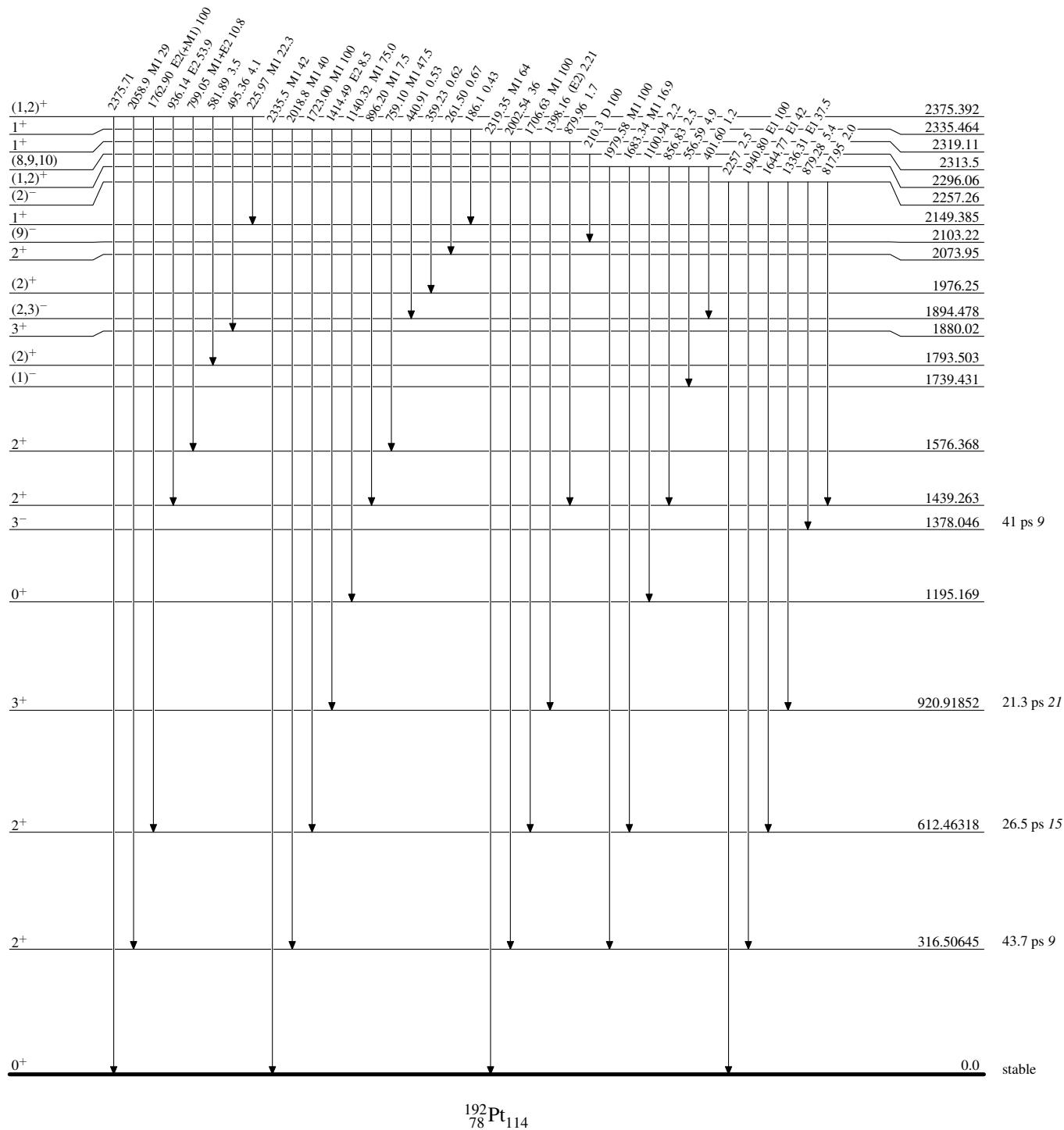
Legend

Intensities: Relative photon branching from each level



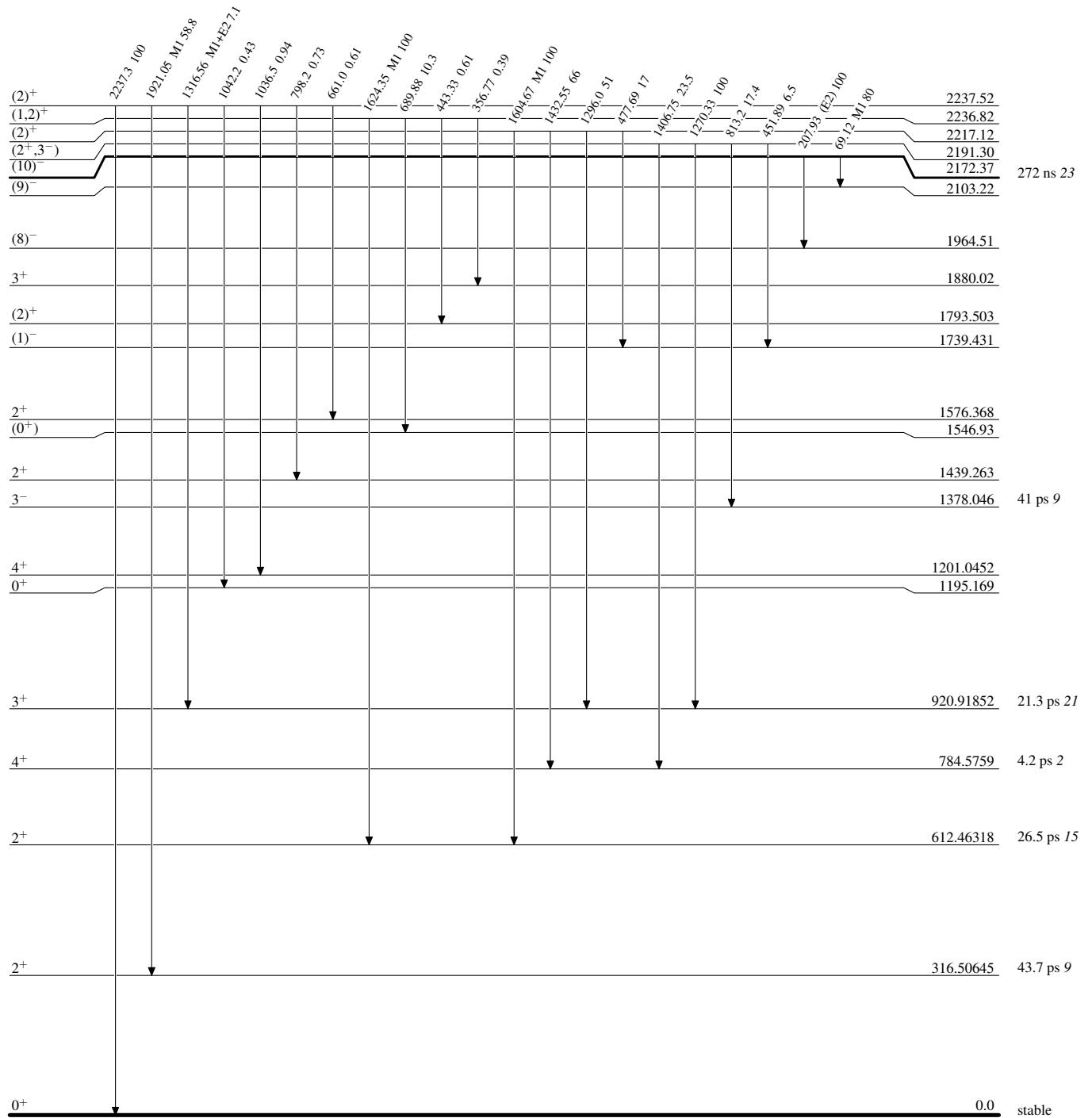
Adopted Levels, GammasLevel Scheme (continued)

Intensities: Relative photon branching from each level



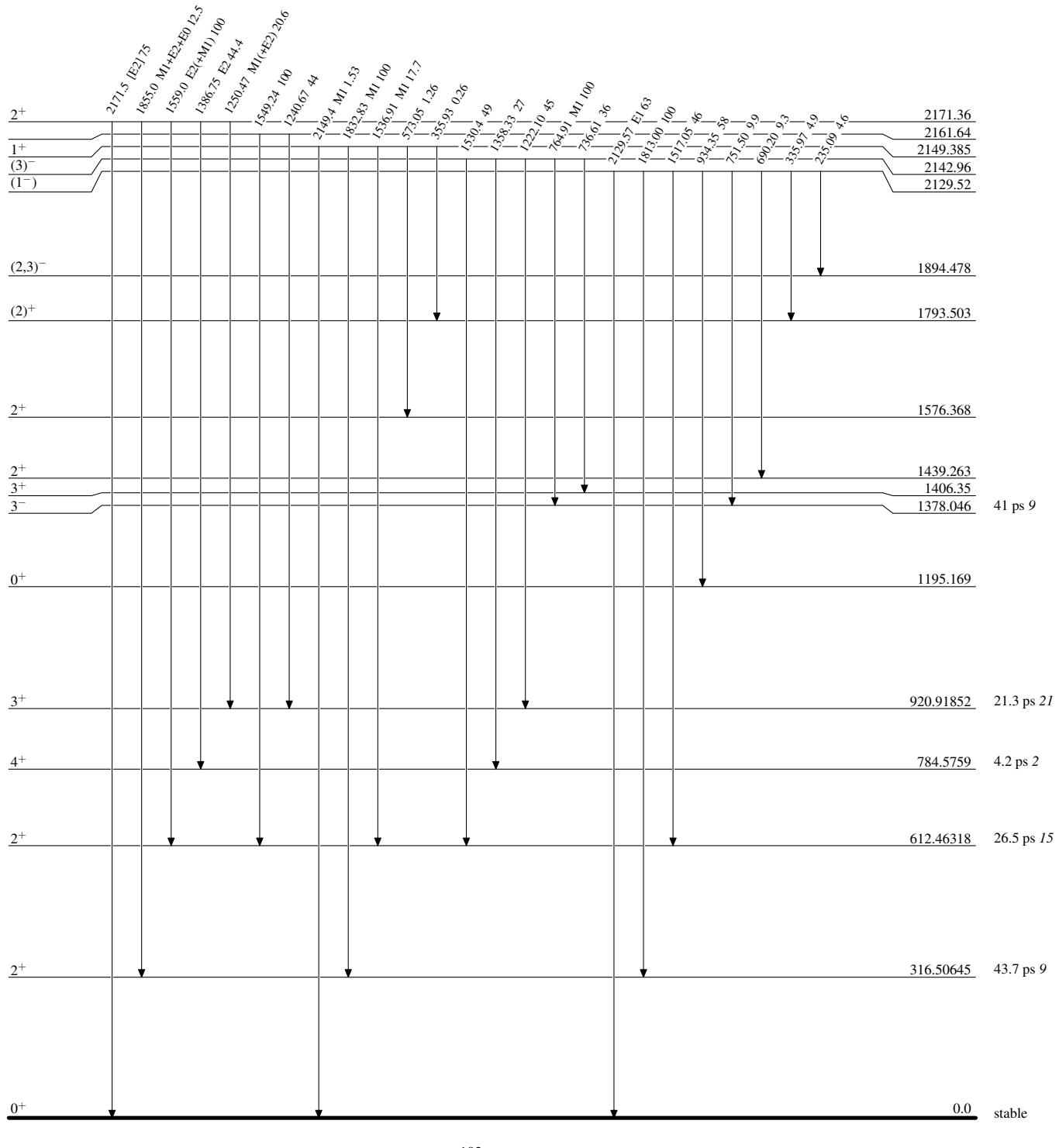
Adopted Levels, Gammas**Level Scheme (continued)**

Intensities: Relative photon branching from each level



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

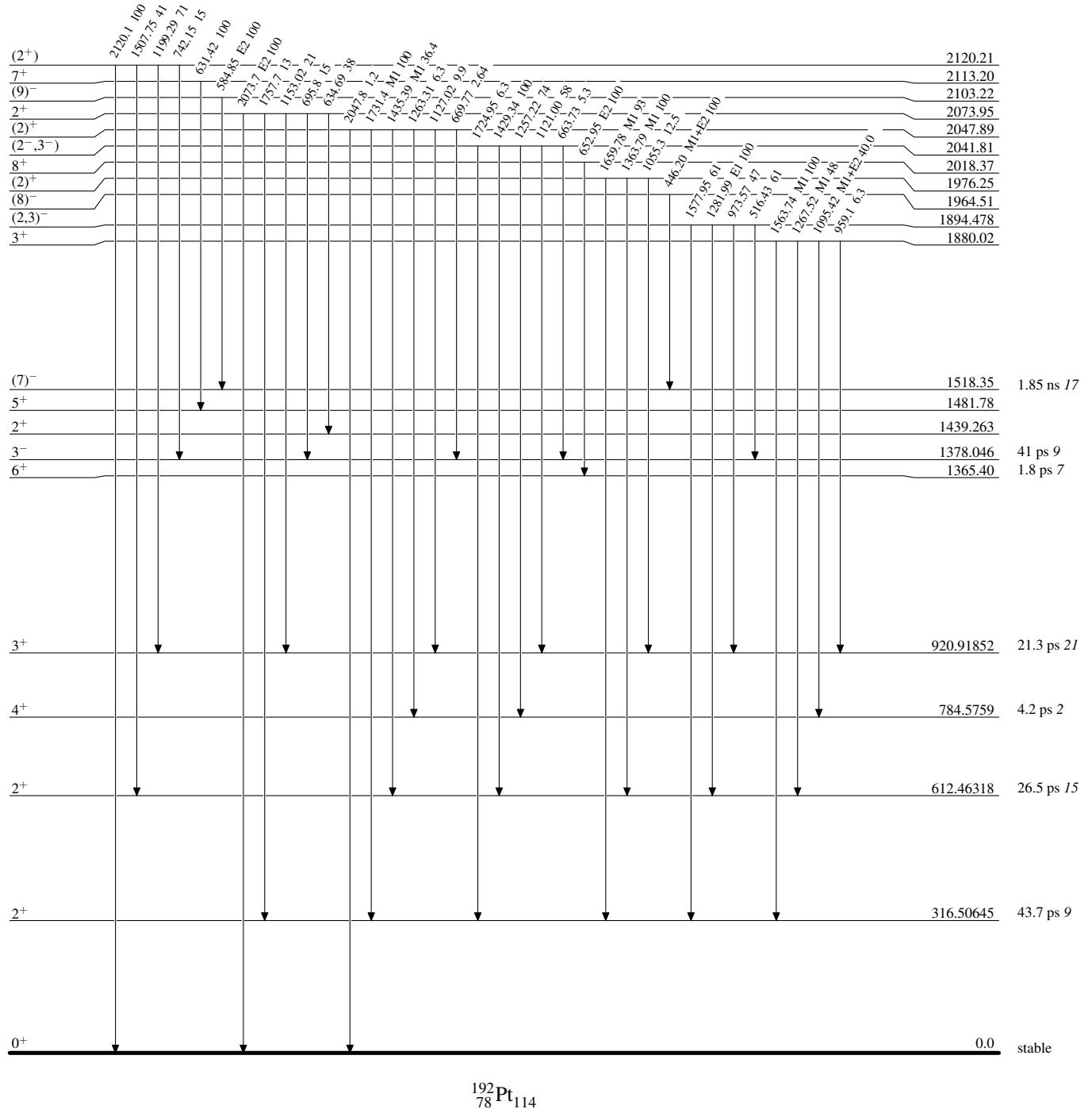
Intensities: Relative photon branching from each level



Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

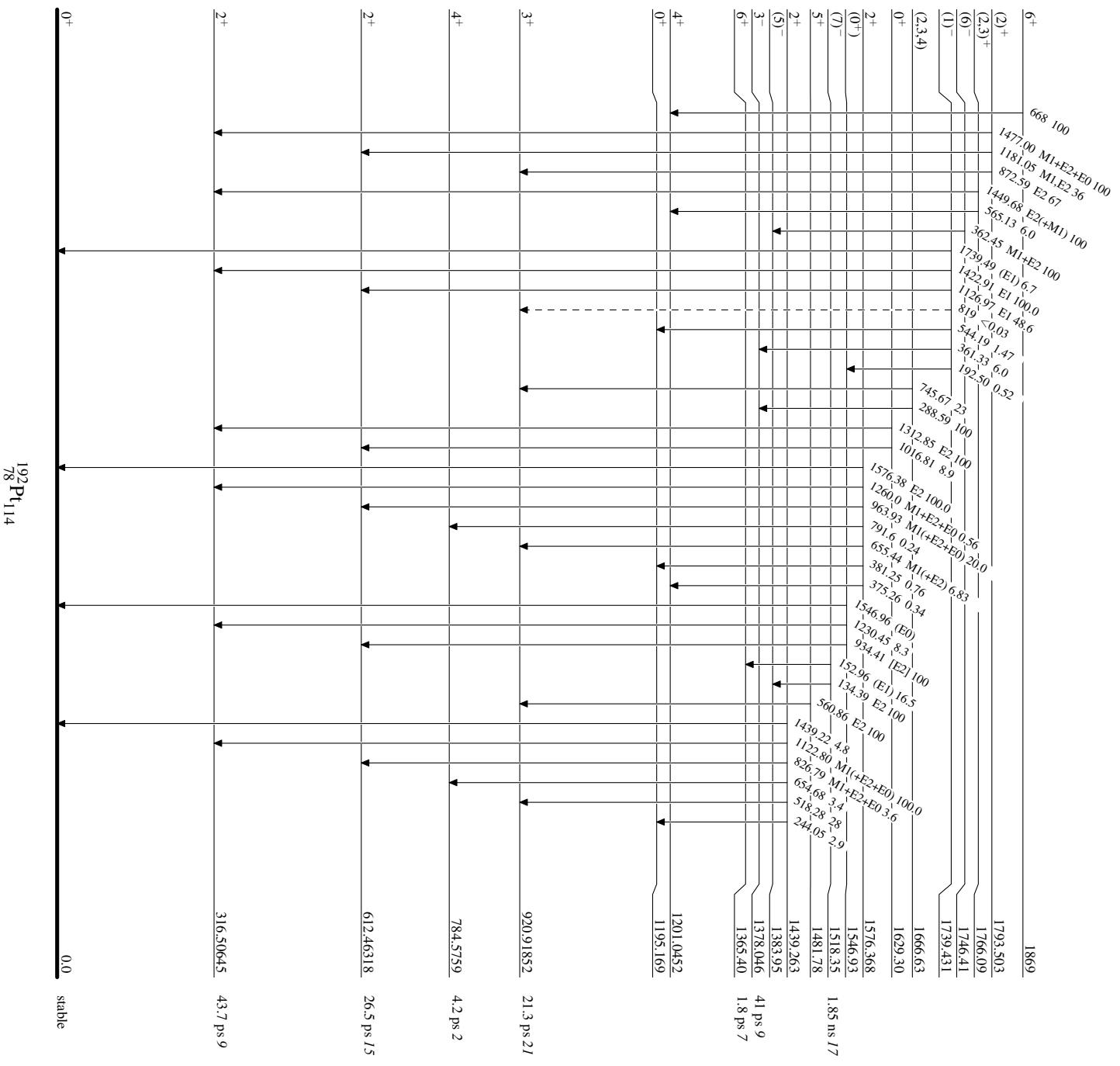


Adopted Levels, Gammas

Legend

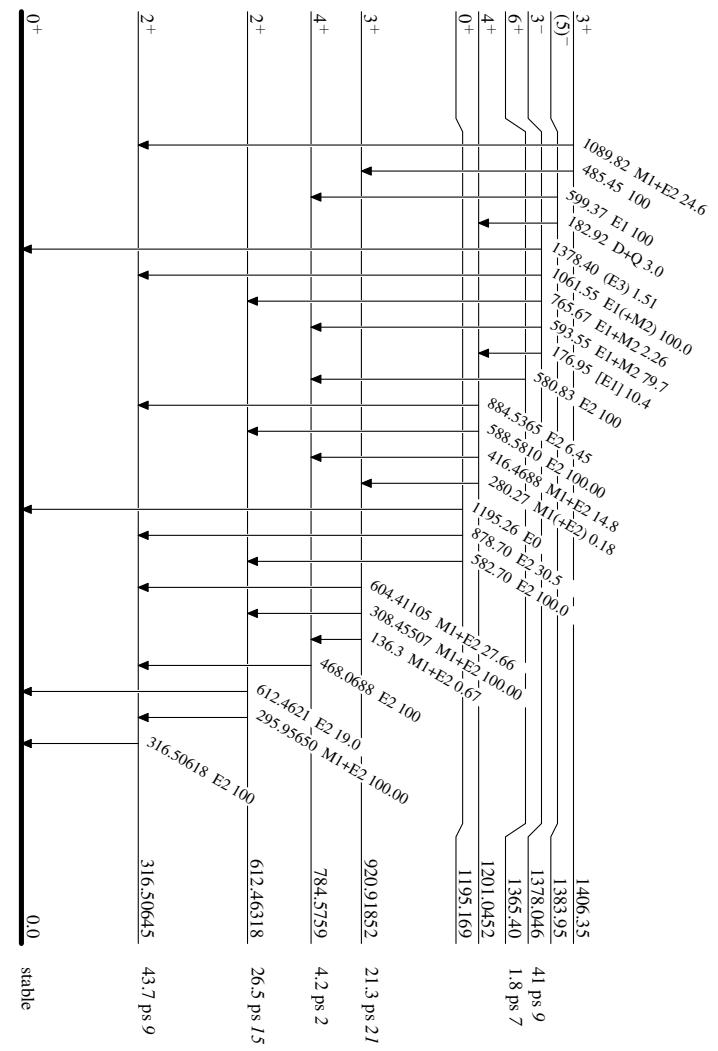
Level Scheme (continued)

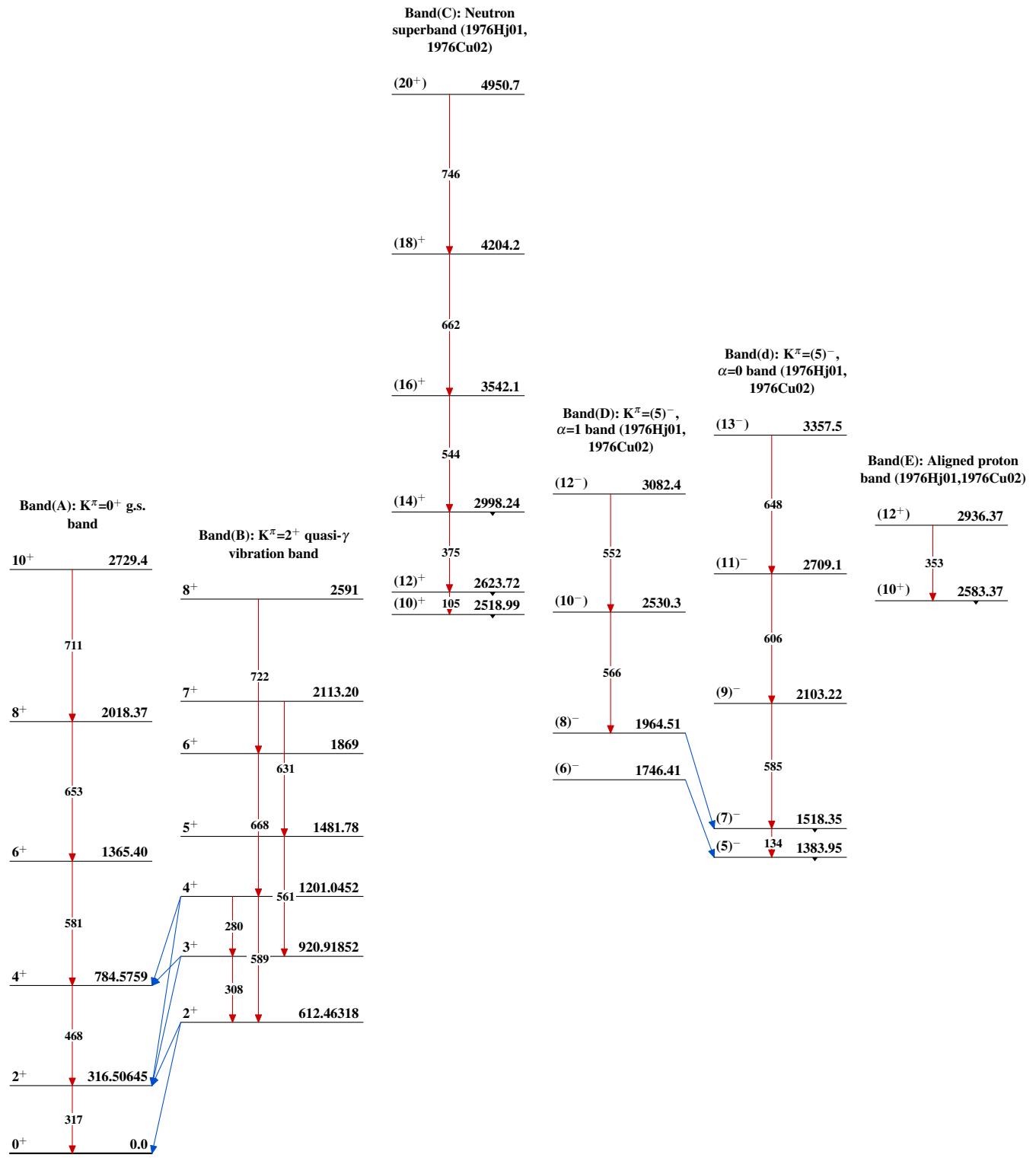
Intensities: Relative photon branching from each level

--- ▾ γ Decay (Uncertain)

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

Intensities: Relative photon branching from each level

 $^{192}_{78}\text{Pt}_{114}$

Adopted Levels, Gammas

Adopted Levels, Gammas (continued)