

Adopted Levels, Gammas

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	S. Lalkovski, J. Timar and Z. Elekes		NDS 161, 1 (2019)	1-Apr-2019

$Q(\beta^-)=3644$ 35; $S(n)=-7858$ 43; $S(p)=-9229$ 36; $Q(\alpha)=-5824$ 36 **2017Wa10**

 ^{105}Tc LevelsCross Reference (XREF) Flags

A ^{105}Mo β^- decay (36.3 s)
B ^{252}Cf SF decay

E(level) [†]	J ^π	T _{1/2} [‡]	XREF	Comments
0.0 ^d	(3/2 ⁻)	7.64 min 6	AB	$\% \beta^- = 100$ J ^π : band head of rotational band; direct feeding to 3/2 ⁻ state in ^{105}Ru . T _{1/2} : weighted average of 7.6 min 1 (1976KaYO), 7.86 min 18 (1975RaZL), 7.6 min 1 (1975Su02), 7.7 min 3 (1972Tr08), 7.7 min 4 (1967Ka14), and 7.7 min 2 (1962Ki07). configuration: $\pi 3/2^- [301]$.
76.92 ^{&} 7	(5/2 ⁻)	0.93 ns 4	AB	J ^π : band head of rotational band; 76.5γ M1 to (3/2 ⁻). configuration: $\pi 5/2^- [303]$.
85.42 7	(5/2 ⁺)	20.8 ns 6	AB	J ^π : 85.4γ E1 to (3/2 ⁻); T _{1/2} : Other: 16 ns from FF-γ(t) in 1970Jo20. configuration: $\pi 7/2 [413]$.
147.54 ^d 7	(5/2 ⁻)		AB	J ^π : 71.1γ to (5/2 ⁻), 147.8γ to (3/2 ⁻); band member.
149.60 [@] 10	(7/2 ⁺)	1.09 ns 9	AB	J ^π : 64.1γ M1 to (5/2 ⁺); band head of rotational band. configuration: $\pi 7/2^+ [413]$.
235.99 ^a 7	(7/2 ⁻)		AB	J ^π : 160.5γ to (5/2 ⁻), 236.9γ to (3/2 ⁻); strong feeding from the (5/2 ⁻) in ^{105}Mo ; yrast state assumed, however (5/2 ⁻) can not be excluded. configuration: $\pi 5/2^- [303]$.
249.65 9	(3/2 ⁻ , 5/2, 7/2 ⁻)		A	J ^π : 173.1γ to (5/2 ⁻), 249.8γ to (3/2 ⁻); strong feeding from (5/2 ⁻) in ^{105}Mo .
278.61 [#] 11	(9/2 ⁺)		AB	J ^π : 129.0γ M1+E2 to (7/2 ⁺), 193.2γ to (5/2 ⁺); weak feeding from the (5/2 ⁻) in ^{105}Mo . configuration: $\pi 7/2^+ [413]$.
303.77 ^b 7	(3/2 ⁺)	6.8 ns 10	AB	J ^π : 156.0γ to (5/2 ⁻), 218.4γ to (5/2 ⁺), 303.8γ to (3/2 ⁻); band head of a 1/2 ⁺ rotational band. configuration: $\pi 1/2^+ [431]$.
322.16 ^c 8	(1/2 ⁺)	9.9 ns 11	AB	J ^π : 18.4 to (3/2 ⁺), 322.2γ to (3/2 ⁻); band member.
345.53 ^d 8	(7/2 ⁻)		AB	J ^π : 108.6γ to (7/2 ⁻), 269.1γ to (5/2 ⁻), 345.8γ to (3/2 ⁻); band member.
440.57 ^{&} 9	(9/2 ⁻)		AB	J ^π : 95.1γ to (7/2 ⁻), 364.3 γ to (5/2 ⁻); band member.
463.50 10	(3/2 ⁻ , 5/2 ⁻)		A	J ^π : 118.0γ to (7/2 ⁻), 315.8γ to (5/2 ⁻); strong feeding from (5/2 ⁻) in ^{105}Mo .
491.42 ^b 15	(7/2 ⁺)		AB	J ^π : 187.7γ to (3/2 ⁺), 341.8γ to (7/2 ⁺); band member.
523.47 9	(3/2 ⁻ , 5/2, 7/2 ⁻)		A	J ^π : 178.2γ to (7/2 ⁻), 376.0γ to (5/2 ⁻); observed only in ^{105}Mo β^- decay (35.6 s), strong feeding from (5/2 ⁻) in ^{105}Mo .
529.95 ^c 11	(5/2 ⁺)	0.175 ns 6	AB	J ^π : 207.8γ to (1/2 ⁺), 380.4γ to (7/2 ⁺); band member.
557.99 10	(5/2 ⁺ , 7/2 ⁺ , 9/2 ⁺)		A	J ^π : 321.7γ to (7/2 ⁺), 411.1γ to (5/2 ⁺); no decay branches to (1/2 ⁺) and (3/2 ⁺); weak feeding from the (5/2 ⁻) in ^{105}Mo .
563.76 16	(5/2 ⁺ , 7/2 ⁺ , 9/2 ⁺)		A	J ^π : 414.2γ to (7/2 ⁺), 478.3γ to (5/2 ⁺); no decay branches to (1/2 ⁺) and (3/2 ⁺); weak feeding from the (5/2 ⁻) in ^{105}Mo .
593.00 [@] 12	(11/2 ⁺)		B	J ^π : 314.34γ to (9/2 ⁺), 443.35γ to (7/2 ⁺); band member.

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Adopted Levels, Gammas (continued) ^{105}Tc Levels (continued)

E(level) [†]	J ^π	XREF	Comments
610.26 15	(3/2 ⁺ to 9/2 ⁺)	A	J ^π : 460.7γ to (7/2 ⁺), 524.9γ to (5/2 ⁺).
671.81 ^a 12	(11/2 ⁻)	B	J ^π : 231.24γ to (9/2 ⁻), 435.7γ to (7/2 ⁻); band member.
750.01 [#] 14	(13/2 ⁺)	B	J ^π : 157.04γ M1(+E2) to (11/2 ⁺), 471.2γ to (9/2 ⁺); band member.
810.14 13		AB	
838.57 ^d 13	(11/2 ⁻)	B	J ^π : 493.04γ to (7/2 ⁻); band member.
841.47 ^b 18	(11/2 ⁺)	B	J ^π : 350.05γ to (7/2 ⁺); band member.
868.87 20	(7/2 ⁺ , 9/2 ⁺)	A	J ^π : 590.4γ to (9/2 ⁺), 719.2γ to (7/2 ⁺); weak feeding from (5/2 ⁻) in ^{105}Mo .
880.69 16		A	
891.47 ^c 20	(9/2 ⁺)	AB	J ^π : 361.5γ to (5/2 ⁺), 400.1γ to (7/2 ⁺); band member.
940.29 14		A	
950.96 ^{&} 12	(13/2 ⁻)	B	J ^π : 279.14γ to (11/2 ⁻), 510.4γ to (9/2 ⁻); band member.
1043.32 11	(5/2 ⁺)	A	J ^π : 697.7γ to (7/2 ⁻), 893.8γ to (7/2 ⁺), 895.7γ to (5/2 ⁻), 957.7γ to (5/2 ⁺), 1043.2γ to (3/2 ⁻), weak feeding from (5/2 ⁻) in ^{105}Mo .
1089.26 14		B	
1172.12 16	(3/2 ⁺ , 5/2, 7/2 ⁺)	A	J ^π : 868.4γ to (3/2 ⁺), 1022.4γ to (7/2 ⁺).
1177.20 [@] 14	(15/2 ⁺)	B	J ^π : 427.16γ to (13/2 ⁺), 584.19γ to (11/2 ⁺); band member.
1235.50 ^a 13	(15/2 ⁻)	B	J ^π : 284.48γ to (13/2 ⁻), 563.69γ to (11/2 ⁻); band member.
1348.75 ^b 21	(15/2 ⁺)	B	J ^π : 507.28γ to (11/2 ⁺); band member.
1373.42 [#] 15	(17/2 ⁺)	B	J ^π : 196.20γ to (15/2 ⁺), 623.43γ to (13/2 ⁺); band member.
1396.93 ^c 22	(13/2 ⁺)	B	J ^π : 505.46γ to (9/2 ⁺); band member.
1415.09 18	(1/2 ⁺ to 7/2 ⁺)	A	J ^π : 885.4γ to (5/2 ⁺), 1111.2γ to (3/2 ⁺).
1476.10 16	(5/2 ⁺)	A	J ^π : 946.2γ to (5/2 ⁺), 1154.4γ to (1/2 ⁺), 1239.5γ to (7/2 ⁻); weak feeding from (5/2 ⁻) in ^{105}Mo .
1576.09 ^{&} 14	(17/2 ⁻)	B	J ^π : 340.56γ to (15/2 ⁻), 625.18γ to (13/2 ⁻); band member.
1819.74 17	(5/2 ⁺ , 7/2)	A	J ^π : 776.1γ to (5/2 ⁺), 1474.2γ to (7/2 ⁻), 1541.1γ to (9/2 ⁺), 1672.1γ to (5/2 ⁻).
1868.56 [@] 16	(19/2 ⁺)	B	J ^π : 495.11γ to (17/2 ⁺), 691.35γ to (15/2 ⁺); band member.
1891.12 8	(3/2 ⁻ , 5/2 ⁻ , 7/2 ⁻)	A	J ^π : 1805.4γ to (5/2 ⁺), 1814.20γ to (5/2 ⁻); direct feeding from (5/2 ⁻) in ^{105}Mo .
1897.96 ^a 15	(19/2 ⁻)	B	J ^π : 321.94γ to (17/2 ⁻), 662.41γ to (15/2 ⁻); band member.
2002.30 ^b 23	(19/2 ⁺)	B	J ^π : 653.54γ to (15/2 ⁺); band member.
2118.34 [#] 16	(21/2 ⁺)	B	J ^π : 249.78γ to (19/2 ⁺), 744.95γ to (17/2 ⁺); band member.
2194.8 3		A	
2211.96 25	(5/2 ⁺ , 7/2 ⁺ , 9/2 ⁺)	A	J ^π : 1933.3γ to (9/2 ⁺), 2126.5γ to (5/2 ⁺); weak feeding from (5/2 ⁻) in ^{105}Mo .
2282.37 ^{&} 15	(21/2 ⁻)	B	J ^π : 384.40γ to (19/2 ⁻), 706.25γ to (17/2 ⁻); band member.
2621.59 [@] 17	(23/2 ⁺)	B	J ^π : 503.27γ to (21/2 ⁺), 753.01γ to (19/2 ⁺); band member.
2630.15 ^a 16	(23/2 ⁻)	B	J ^π : 347.74γ to (21/2 ⁻), 732.24γ to (19/2 ⁻); band member.
2758.98 ^b 25	(23/2 ⁺)	B	J ^π : 756.68γ to (19/2 ⁺); band member.
2766.24 24	(5/2 ⁻ , 7/2 ⁻)	A	J ^π : 2325.4γ to (9/2 ⁻), 2618.5γ to (5/2 ⁻), 2681.2γ to (5/2 ⁺); direct feeding from (5/2 ⁻) in ^{105}Mo .
2931.33 [#] 18	(25/2 ⁺)	B	J ^π : 309.72γ to (23/2 ⁺), 812.99γ to (21/2 ⁺); band member.
3251.36 ^a 19	(27/2 ⁻)	B	J ^π : 621.20γ to (23/2 ⁻); band member.
3347.64 [@] 18	(27/2 ⁺)	B	J ^π : 416.3γ to (25/2 ⁺), 726.05γ to (23/2 ⁻); band member.
3715.73 [#] 20	(29/2 ⁺)	B	J ^π : 784.4γ to (25/2 ⁺); band member.

[†] From a least-squares fit to Eγ.[‡] From β-γ-γ(t) coinc in ^{105}Mo β⁻ decay (36.3 s), unless otherwise noted.[#] Band(A): π7/2⁺[413], α=+1/2.[@] Band(a): π7/2⁺[413], α=-1/2.

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Adopted Levels, Gammas (continued)

 ^{105}Tc Levels (continued)

- $^{\&}$ Band(B): $\pi 5/2^- [303]$, $\alpha=+1/2$.
 a Band(b): $\pi 5/2^- [303]$, $\alpha=-1/2$.
 b Band(C): $\pi 1/2^+ [431]$, $\alpha=-1/2$.
 c Band(c): $\pi 1/2^+ [431]$, $\alpha=+1/2$.
 d Band(D): $\pi 3/2^- [301]$, g.s. band.

Adopted Levels, Gammas (continued)

E _i (level)	J _i ^π	<u>γ(¹⁰⁵Tc)</u>						Comments
		E _γ [†]	I _γ [†]	E _f	J _f ^π	Mult. [‡]	α [@]	
76.92	(5/2 ⁻)	76.5 1	100	0.0	(3/2 ⁻)	M1	0.594	α(K)=0.518 8; α(L)=0.0625 9; α(M)=0.01136 17; α(N+..)=0.00192 3 α(N)=0.00180 3; α(O)=0.0001176 17 B(M1)(W.u.)=0.0332 15
85.42	(5/2 ⁺)	85.4 1	100	0.0	(3/2 ⁻)	E1	0.209	Mult.: α(K)exp=0.68 17 in ¹⁰⁵ Mo β ⁻ decay (35.6 s) (1989RuZU). α(K)=0.183 3; α(L)=0.0216 4; α(M)=0.00388 6; α(N+..)=0.000639 10 α(N)=0.000604 9; α(O)=3.49×10 ⁻⁵ 5 B(E1)(W.u.)=1.94×10 ⁻⁵ 6 Mult.: α(K)exp=0.22 6 in ¹⁰⁵ Mo β ⁻ decay (35.6 s) (1989RuZU) and α(exp)=0.22 8 in ²⁵² Cf SF decay (2004Lu20).
147.54	(5/2 ⁻)	71.1 2	4.4 7	76.92 (5/2 ⁻)				
149.60	(7/2 ⁺)	147.8 1	100	0.0 (3/2 ⁻)				
		64.1 2	100	85.42 (5/2 ⁺)	M1	0.986 17		α(K)=0.860 15; α(L)=0.1039 18; α(M)=0.0189 4; α(N+..)=0.00319 6 α(N)=0.00299 5; α(O)=0.000195 4 B(M1)(W.u.)=0.039 4 Mult.: α(K)exp=1.08 24 in ¹⁰⁵ Mo β ⁻ decay (35.6 s) (1989RuZU) and α(exp)=1.13 10 in ²⁵² Cf SF decay (2004Lu20).
235.99	(7/2 ⁻)	89.0 1	16 5	147.54 (5/2 ⁻)				
		159.029 12	100	76.92 (5/2 ⁻)				
		236.9 5	21 11	0.0 (3/2 ⁻)				
249.65	(3/2 ⁻ ,5/2,7/2 ⁻)	101.6 2	7.6 22	147.54 (5/2 ⁻)				
		173.1 1	24 3	76.92 (5/2 ⁻)				
		249.8 2	100	0.0 (3/2 ⁻)				
278.61	(9/2 ⁺)	129.0 1	100	149.60 (7/2 ⁺)	M1+E2	0.32 19		α(K)=0.27 15; α(L)=0.04 3; α(M)=0.008 6; α(N+..)=0.0012 8 α(N)=0.0012 8; α(O)=5.2×10 ⁻⁵ 25 Mult.: α(exp)=0.26 9 in ²⁵² Cf SF decay (2004Lu20).
303.77	(3/2 ⁺)	193.2 2	5 3	85.42 (5/2 ⁺)				
		156.0 2	4.6 20	147.54 (5/2 ⁻)	[E1]	0.0366		α(K)=0.0321 5; α(L)=0.00370 6; α(M)=0.000667 10; α(N+..)=0.0001113 17 α(N)=0.0001048 16; α(O)=6.48×10 ⁻⁶ 10 B(E1)(W.u.)=3.4×10 ⁻⁷ 16
		218.4 1	100	85.42 (5/2 ⁺)	[M1]	0.0336		α(K)=0.0294 5; α(L)=0.00345 5; α(M)=0.000627 9; α(N+..)=0.0001063 15 α(N)=9.97×10 ⁻⁵ 14; α(O)=6.63×10 ⁻⁶ 10 B(M1)(W.u.)=0.00019 4
		303.8 1	53 12	0.0 (3/2 ⁻)	[E1]	0.00565 8		α=0.00565 8; α(K)=0.00496 7; α(L)=0.000565 8; α(M)=0.0001019 15; α(N+..)=1.716×10 ⁻⁵ 24 α(N)=1.612×10 ⁻⁵ 23; α(O)=1.043×10 ⁻⁶ 15 B(E1)(W.u.)=5.2×10 ⁻⁷ 15
322.16	(1/2 ⁺)	18.4 1	≤12	303.77 (3/2 ⁺)	[M1]	4.97 11		α(L)=4.10 9; α(M)=0.745 16; α(N+..)=0.125 3 α(N)=0.118 3; α(O)=0.00757 17 B(M1)(W.u.)<0.029
		322.2 1	100	0.0 (3/2 ⁻)	[E1]	0.00482 7		α=0.00482 7; α(K)=0.00424 6; α(L)=0.000482 7; α(M)=8.70×10 ⁻⁵

Adopted Levels, Gammas (continued)

$\gamma(^{105}\text{Tc})$ (continued)

$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	Mult. [‡]	$\alpha^@$	Comments
								$13; \alpha(\text{N}+..)=1.466 \times 10^{-5} \ 21$ $\alpha(\text{N})=1.377 \times 10^{-5} \ 20; \alpha(\text{O})=8.93 \times 10^{-7} \ 13$ $\text{B}(\text{E}1)(\text{W.u.})=6.8 \times 10^{-7} \ 20$
345.53	(7/2 ⁻)	108.6 2	12 5	235.99 (7/2 ⁻)				
		197.9 1	81 23	147.54 (5/2 ⁻)				
		269.1 1	100	76.92 (5/2 ⁻)				
		345.8 3	5.8 23	0.0 (3/2 ⁻)				
440.57	(9/2 ⁻)	95.1 2	5 3	345.53 (7/2 ⁻)				
		203.9 1	68 12	235.99 (7/2 ⁻)				
		364.3 1	100	76.92 (5/2 ⁻)				
463.50	(3/2 ⁻ , 5/2 ⁻)	118.0 2	4.9 25	345.53 (7/2 ⁻)				
		214.0 1	100 9	249.65 (3/2 ⁻ , 5/2, 7/2 ⁻)				
		226.7 2	28 7	235.99 (7/2 ⁻)				
		315.8 2	23 7	147.54 (5/2 ⁻)				
		387.0 2	51 8	76.92 (5/2 ⁻)				
491.42	(7/2 ⁺)	187.7 2	100	303.77 (3/2 ⁺)				
		341.8 2	37 9	149.60 (7/2 ⁺)				
523.47	(3/2 ⁻ , 5/2, 7/2 ⁻)	178.2 2	15 7	345.53 (7/2 ⁻)				
		274.3 2	38 5	249.65 (3/2 ⁻ , 5/2, 7/2 ⁻)				
		286.7 1	66 10	235.99 (7/2 ⁻)				
		376.0 2	21 7	147.54 (5/2 ⁻)				
		447.1 1	100	76.92 (5/2 ⁻)				
529.95	(5/2 ⁺)	207.8 2	100	322.16 (1/2 ⁺)		[E2]	0.0908	$\alpha(\text{K})=0.0773 \ 12; \alpha(\text{L})=0.01110 \ 16; \alpha(\text{M})=0.00203 \ 3;$ $\alpha(\text{N}+..)=0.000326 \ 5$ $\alpha(\text{N})=0.000310 \ 5; \alpha(\text{O})=1.534 \times 10^{-5} \ 22$ $\text{B}(\text{E}2)(\text{W.u.})=120 \ 11$
		226.3 2	55 13	303.77 (3/2 ⁺)		[M1]	0.0307	$\alpha(\text{K})=0.0268 \ 4; \alpha(\text{L})=0.00315 \ 5; \alpha(\text{M})=0.000571 \ 9;$ $\alpha(\text{N}+..)=9.68 \times 10^{-5} \ 14$ $\alpha(\text{N})=9.08 \times 10^{-5} \ 13; \alpha(\text{O})=6.04 \times 10^{-6} \ 9$ $\text{B}(\text{M}1)(\text{W.u.})=0.0025 \ 7$
		380.4 2	43 13	149.60 (7/2 ⁺)		[M1]	0.00823 12	$\alpha=0.00823 \ 12; \alpha(\text{K})=0.00722 \ 11; \alpha(\text{L})=0.000832 \ 12;$ $\alpha(\text{M})=0.0001508 \ 22; \alpha(\text{N}+..)=2.56 \times 10^{-5}$ $\alpha(\text{N})=2.40 \times 10^{-5} \ 4; \alpha(\text{O})=1.614 \times 10^{-6} \ 23$ $\text{B}(\text{M}1)(\text{W.u.})=0.00042 \ 13$
		444.5 2	28 4	85.42 (5/2 ⁺)		[M1]	0.00563 8	$\alpha=0.00563 \ 8; \alpha(\text{K})=0.00494 \ 7; \alpha(\text{L})=0.000567 \ 8;$ $\alpha(\text{M})=0.0001027 \ 15; \alpha(\text{N}+..)=1.746 \times 10^{-5} \ 25$ $\alpha(\text{N})=1.636 \times 10^{-5} \ 23; \alpha(\text{O})=1.103 \times 10^{-6} \ 16$ $\text{B}(\text{M}1)(\text{W.u.})=0.00017 \ 3$
557.99	(5/2 ⁺ , 7/2 ⁺ , 9/2 ⁺)	213.0 2	32 19	345.53 (7/2 ⁻)				
		321.7 1	100	235.99 (7/2 ⁻)				
		411.1 2	51 15	147.54 (5/2 ⁻)				
563.76	(5/2 ⁺ , 7/2 ⁺ , 9/2 ⁺)	414.2 2	100 14	149.60 (7/2 ⁺)				
		478.3 2	25 5	85.42 (5/2 ⁺)				

Adopted Levels, Gammas (continued)

$\gamma(^{105}\text{Tc})$ (continued)								
$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	Mult. [‡]	$\alpha^@$	Comments
593.00	(11/2 ⁺)	314.34 [#] 10	100 [#]	278.61	(9/2 ⁺)			
		443.35 [#] 10	11.49 [#]	149.60	(7/2 ⁺)			
610.26	(3/2 ⁺ to 9/2 ⁺)	460.7 2	18 3	149.60	(7/2 ⁺)			
		524.9 2	100 13	85.42	(5/2 ⁺)			
671.81	(11/2 ⁻)	231.24 [#] 10	39.72 [#]	440.57	(9/2 ⁻)			
		435.7 [#] 5	100 [#]	235.99	(7/2 ⁻)			
750.01	(13/2 ⁺)	157.04 [#] 10	51.22 [#] 16	593.00	(11/2 ⁺)	M1(+E2)	0.16 9	$\alpha(\text{K})=0.14$ 7; $\alpha(\text{L})=0.021$ 13; $\alpha(\text{M})=0.0038$ 23; $\alpha(\text{N}+..)=0.0006$ 4 $\alpha(\text{N})=0.0006$ 4; $\alpha(\text{O})=2.8\times 10^{-5}$ 12 Mult.: $\alpha(\text{exp})=0.09$ 4 (2004Lu20).
		471.2 [#] 3	100 [#]	278.61	(9/2 ⁺)			
810.14		531.8 2	85 23	278.61	(9/2 ⁺)			
		660.6 2	100	149.60	(7/2 ⁺)			
		724.9 2	92 23	85.42	(5/2 ⁺)			
838.57	(11/2 ⁻)	493.04 10	100	345.53	(7/2 ⁻)			
841.47	(11/2 ⁺)	350.05 10	100	491.42	(7/2 ⁺)			
868.87	(7/2 ⁺ , 9/2 ⁺)	590.4 3	15 5	278.61	(9/2 ⁺)			
		719.2 2	100	149.60	(7/2 ⁺)			
880.69		357.1 2	100	523.47	(3/2 ⁻ , 5/2, 7/2 ⁻)			
		417.3 2	45 13	463.50	(3/2 ⁻ , 5/2 ⁻)			
891.47	(9/2 ⁺)	361.5 2	100	529.95	(5/2 ⁺)			
		400.1 3	60 20	491.42	(7/2 ⁺)			
940.29		703.3 3	58 25	235.99	(7/2 ⁻)			
		792.7 2	100	147.54	(5/2 ⁻)			
		863.8 2	75 33	76.92	(5/2 ⁻)			
950.96	(13/2 ⁻)	279.14 [#] 10	100 [#]	671.81	(11/2 ⁻)			
		510.4 [#] 1		440.57	(9/2 ⁻)			
1043.32	(5/2 ⁺)	697.7 3	9 6	345.53	(7/2 ⁻)			
		893.8 3	17 4	149.60	(7/2 ⁺)			
		895.7 2	24 9	147.54	(5/2 ⁻)			
		957.7 2	27 4	85.42	(5/2 ⁺)			
		966.6 2	31 7	76.92	(5/2 ⁻)			
		1043.2 5	100	0.0	(3/2 ⁻)			
1089.26		279.24 [#] 10	100 [#]	810.14				
		496.13 [#] 10		593.00	(11/2 ⁺)			
1172.12	(3/2 ⁺ , 5/2, 7/2 ⁺)	868.4 2	100	303.77	(3/2 ⁺)			
		1022.4 3	28 9	149.60	(7/2 ⁺)			
		1086.7 3	28 6	85.42	(5/2 ⁺)			
1177.20	(15/2 ⁺)	427.16 [#] 10	100 [#]	750.01	(13/2 ⁺)			
		584.19 [#] 10	27.91 [#]	593.00	(11/2 ⁺)			

Adopted Levels, Gammas (continued) $\gamma(^{105}\text{Tc})$ (continued)

$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π
1235.50	(15/2 ⁻)	284.48 [#] 10	36.11 [#]	950.96	(13/2 ⁻)
		563.69 [#] 10	100 [#]	671.81	(11/2 ⁻)
1348.75	(15/2 ⁺)	507.28 [#] 10	100 [#]	841.47	(11/2 ⁺)
1373.42	(17/2 ⁺)	196.20 [#] 10	47 [#] 27	1177.20	(15/2 ⁺)
		623.43 [#] 10	100 [#]	750.01	(13/2 ⁺)
1396.93	(13/2 ⁺)	505.46 [#] 10	100 [#]	891.47	(9/2 ⁺)
1415.09	(1/2 ⁺ to 7/2 ⁺)	885.4 3	5 4	529.95	(5/2 ⁺)
		1111.2 2	100	303.77	(3/2 ⁺)
1476.10	(5/2 ⁺)	946.2 2	65 27	529.95	(5/2 ⁺)
		1154.4 3	100	322.16	(1/2 ⁺)
		1239.5 3	46 19	235.99	(7/2 ⁻)
1576.09	(17/2 ⁻)	340.56 10	52.17	1235.50	(15/2 ⁻)
		625.18 10	100	950.96	(13/2 ⁻)
1819.74	(5/2 ⁺ , 7/2)	776.1 4	71 33	1043.32	(5/2 ⁺)
		1209.7 3	100	610.26	(3/2 ⁺ to 9/2 ⁺)
		1474.2 3	47 24	345.53	(7/2 ⁻)
		1541.1 3	16 6	278.61	(9/2 ⁺)
		1672.1 5	37 12	147.54	(5/2 ⁻)
1868.56	(19/2 ⁺)	495.11 [#] 10	100 [#]	1373.42	(17/2 ⁺)
		691.35 [#] 10	57.14 [#]	1177.20	(15/2 ⁺)
1891.12	(3/2 ⁻ , 5/2 ⁻ , 7/2 ⁻)	1805.4 2	100	85.42	(5/2 ⁺)
		1814.20 5	49 10	76.92	(5/2 ⁻)
1897.96	(19/2 ⁻)	321.94 [#] 10	39.53 [#]	1576.09	(17/2 ⁻)
		662.41 [#] 10	100 [#]	1235.50	(15/2 ⁻)
2002.30	(19/2 ⁺)	653.54 10	100	1348.75	(15/2 ⁺)
2118.34	(21/2 ⁺)	249.78 [#] 10	32.14 [#]	1868.56	(19/2 ⁺)
		744.95 [#] 10	100 [#]	1373.42	(17/2 ⁺)
2194.8		1254.4 3	53 47	940.29	
		2047.4 4	100	147.54	(5/2 ⁻)
2211.96	(5/2 ⁺ , 7/2 ⁺ , 9/2 ⁺)	1933.3 4	100 23	278.61	(9/2 ⁺)
		2062.4 4	100 23	149.60	(7/2 ⁺)
		2126.5 4	100 23	85.42	(5/2 ⁺)
2282.37	(21/2 ⁻)	384.40 [#] 10	85.71 [#]	1897.96	(19/2 ⁻)
		706.25 [#] 10	100 [#]	1576.09	(17/2 ⁻)
2621.59	(23/2 ⁺)	503.27 [#] 10	100 [#]	2118.34	(21/2 ⁺)
		753.01 [#] 10	60 [#]	1868.56	(19/2 ⁺)
2630.15	(23/2 ⁻)	347.74 [#] 10	37.5 [#]	2282.37	(21/2 ⁻)
		732.24 [#] 10	100 [#]	1897.96	(19/2 ⁻)
2758.98	(23/2 ⁺)	756.68 [#] 10	100 [#]	2002.30	(19/2 ⁺)

Adopted Levels, Gammas (continued)

$\gamma(^{105}\text{Tc})$ (continued)

$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π	$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	J_f^π
2766.24	(5/2 ⁻ , 7/2 ⁻)	2325.4 4	100 26	440.57	(9/2 ⁻)	3251.36	(27/2 ⁻)	621.20 [#] 10	100 [#]	2630.15	(23/2 ⁻)
		2618.5 4	46 16	147.54	(5/2 ⁻)	3347.64	(27/2 ⁺)	416.3 [#] 1		2931.33	(25/2 ⁺)
		2681.2 4	18 4	85.42	(5/2 ⁺)			726.05 [#] 10	100 [#]	2621.59	(23/2 ⁺)
2931.33	(25/2 ⁺)	309.72 [#] 10	37.5 [#]	2621.59	(23/2 ⁺)	3715.73	(29/2 ⁺)	784.4 [#] 1	100 [#]	2931.33	(25/2 ⁺)
		812.99 [#] 10	100 [#]	2118.34	(21/2 ⁺)						

[†] From ^{105}Mo β^- decay (36.3 s), unless otherwise noted.

[‡] From $\alpha(\text{K})\text{exp}$ in ^{105}Mo β^- decay (36.3 s), unless otherwise noted.

[#] From ^{252}Cf SF decay.

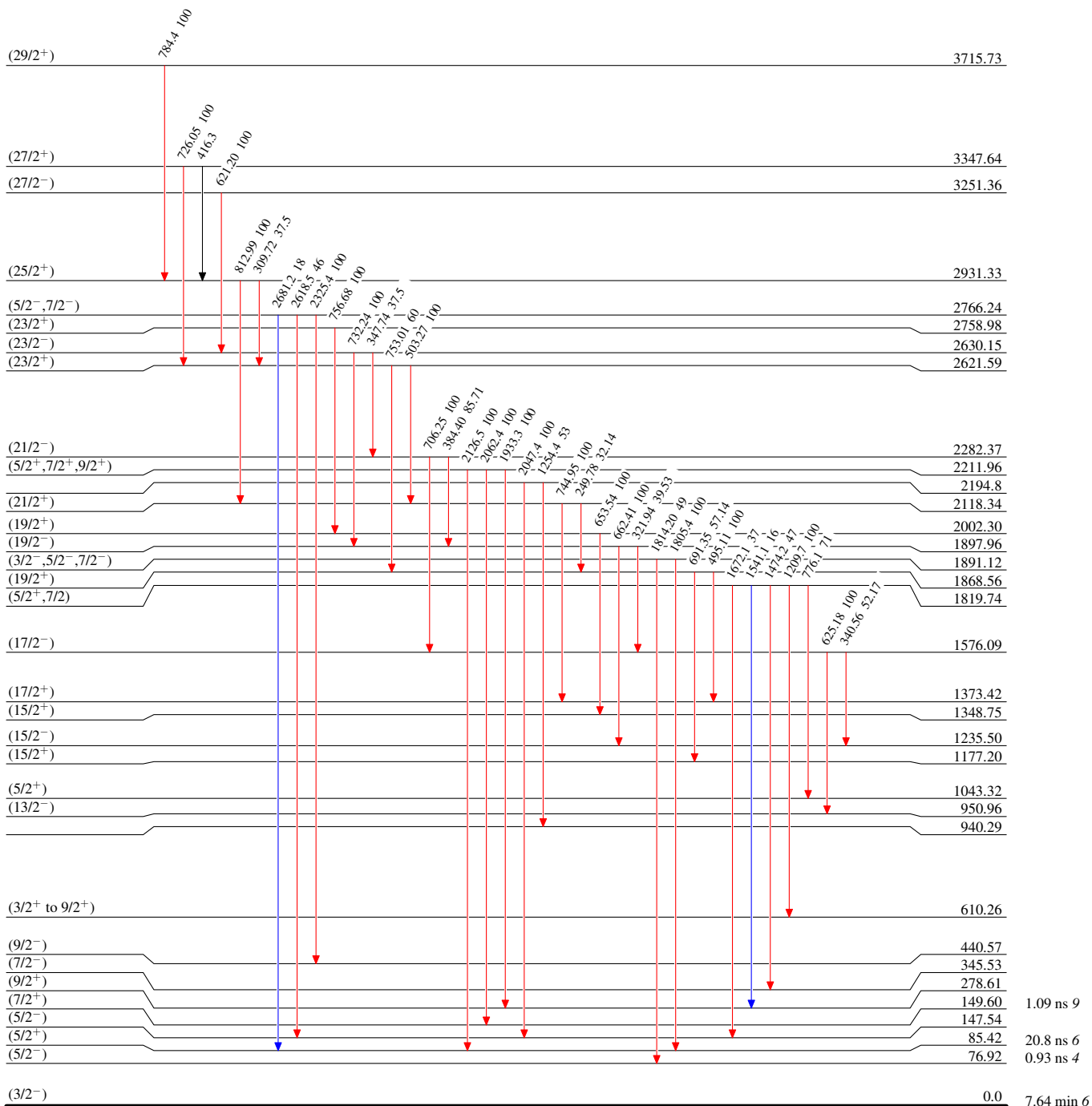
@ Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ -ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.

Adopted Levels, Gammas**Level Scheme**

Intensities: Type not specified

Legend

-  $I_\gamma < 2\% \times I_\gamma^{\max}$
 $I_\gamma < 10\% \times I_\gamma^{\max}$
 $I_\gamma > 10\% \times I_\gamma^{\max}$

 $^{105}_{43}\text{Tc}_{62}$

1.09 ns 9

20.8 ns 6

0.93 ns 4

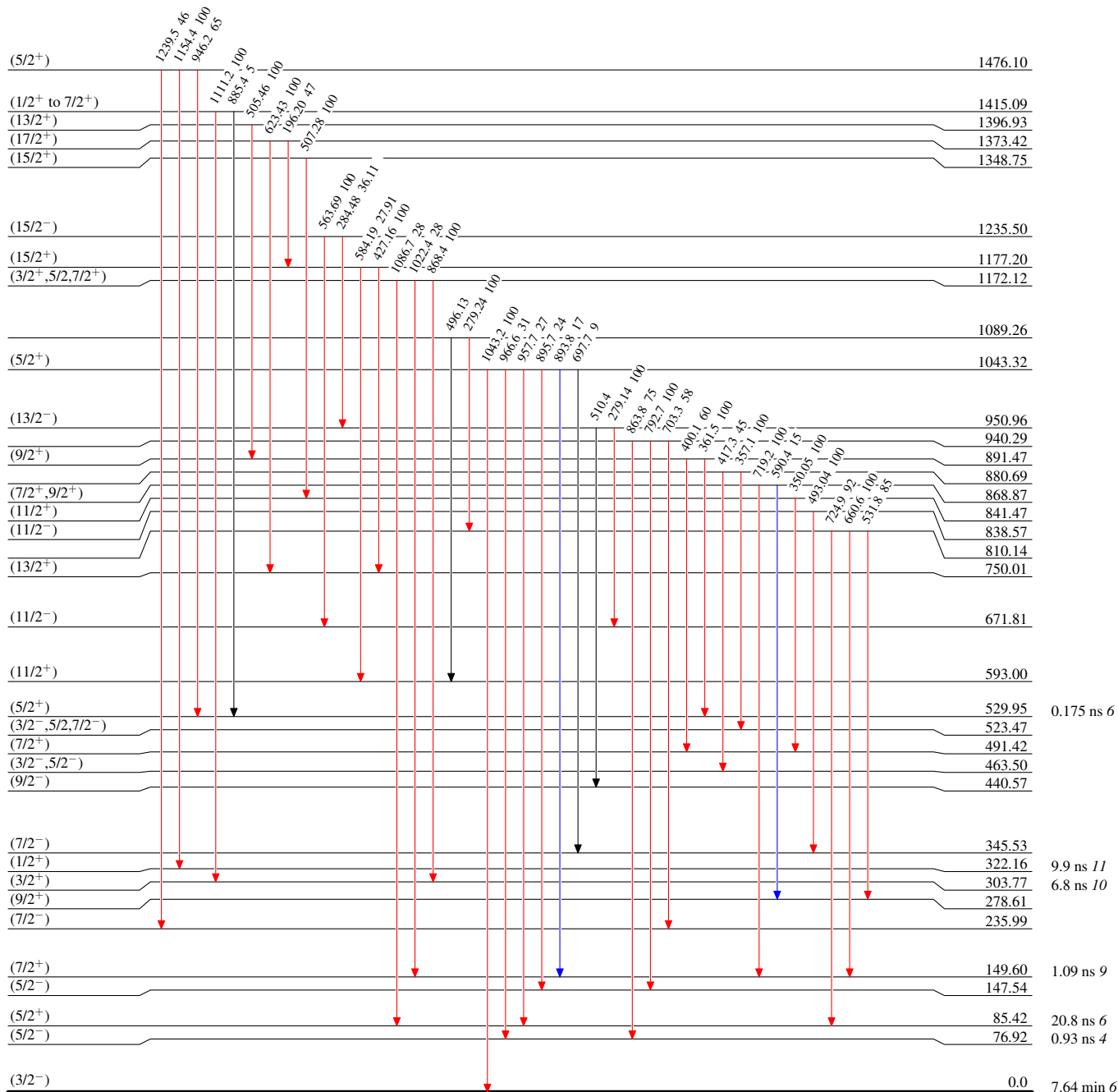
7.64 min 6

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

Intensities: Type not specified

Legend

-  $I_\gamma < 2\% \times I_\gamma^{\max}$
 $I_\gamma < 10\% \times I_\gamma^{\max}$
 $I_\gamma > 10\% \times I_\gamma^{\max}$

 $^{105}_{43}\text{Tc}_{62}$

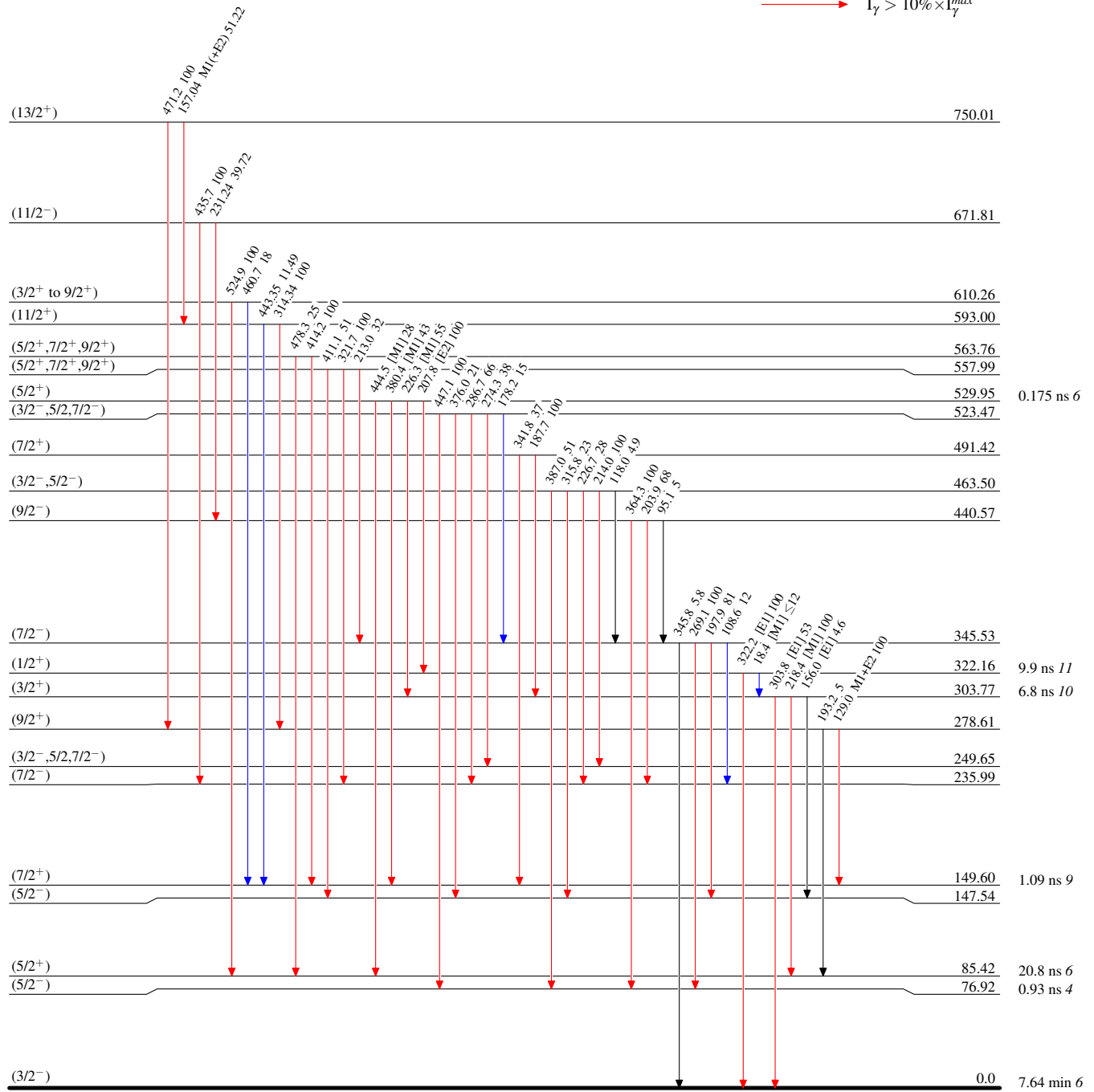
Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Type not specified

Legend

-  $I_\gamma < 2\% \times I_\gamma^{\max}$
 $I_\gamma < 10\% \times I_\gamma^{\max}$
 $I_\gamma > 10\% \times I_\gamma^{\max}$

 $^{105}_{43}\text{Tc}_{62}$

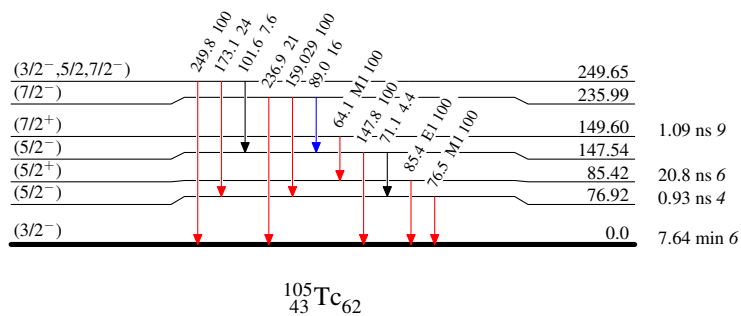
Adopted Levels, Gammas

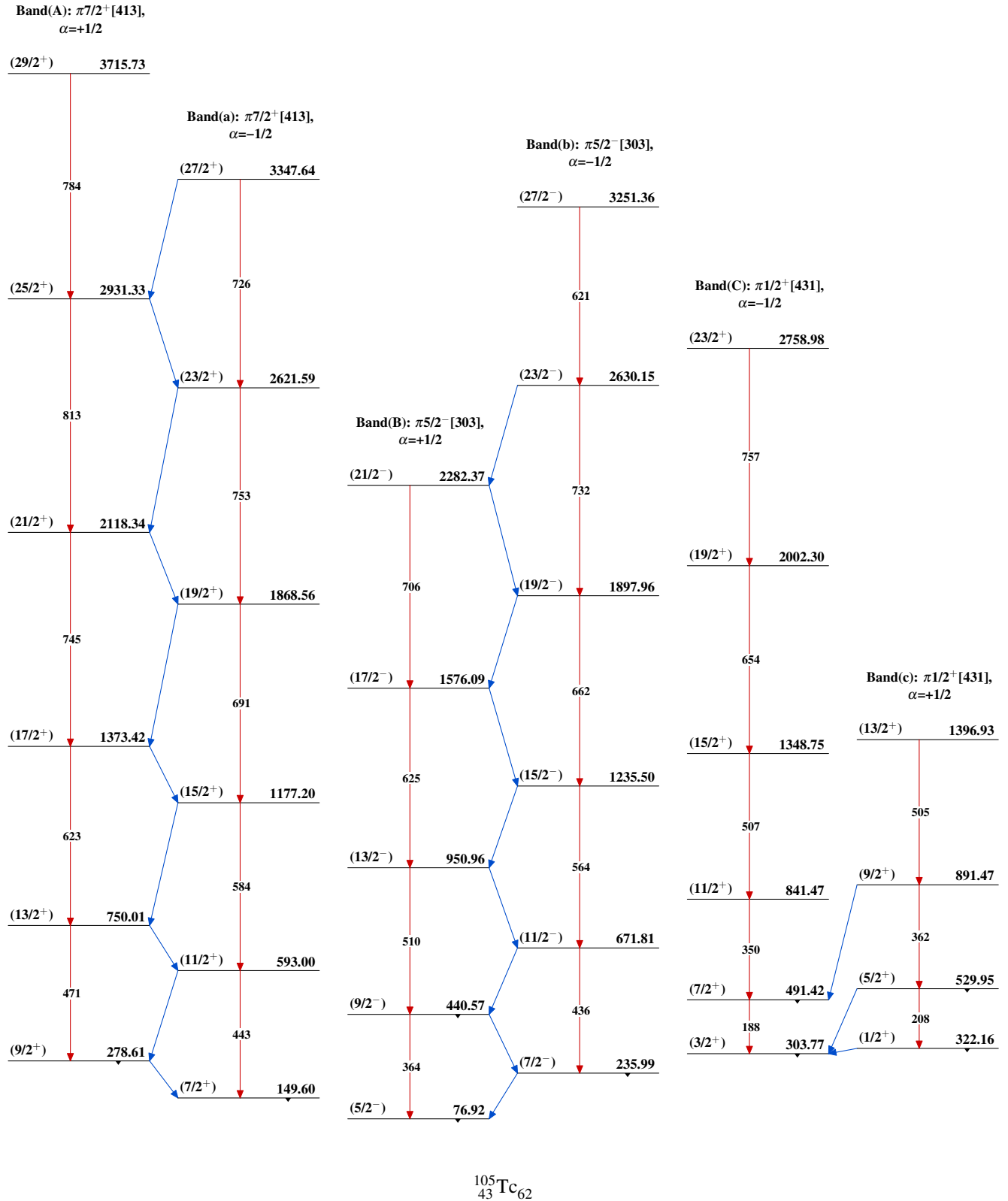
Level Scheme (continued)

Intensities: Type not specified

Legend

- $I_\gamma < 2\% \times I_\gamma^{\max}$
- $I_\gamma < 10\% \times I_\gamma^{\max}$
- $I_\gamma > 10\% \times I_\gamma^{\max}$



Adopted Levels, Gammas

Adopted Levels, Gammas (continued)

