

$^{94}\text{Mo}(p,\gamma)$ E=res: av 1973CI03

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	S. K. Basu, G. Mukherjee, A. A. Sonzogni		NDS 111, 2555 (2010)	30-Jun-2009

E=2.4-3.0 MeV, three-crystal pair spectrometer, Ge(Li)-NaI.

The decay scheme of low-lying levels is based on coincidence measurements.

 ^{95}Tc Levels

E(level)	J^π^\dagger	E(level)	J^π^\dagger	E(level)	J^π^\dagger	E(level)	J^π^\dagger
0.0	9/2 ⁺	646 1	3/2 ^{-‡}	1434 3	5/2 ⁺ , 7/2 ⁺	2238 2	≥5/2
38.9 10	1/2 ^{-‡}	667 2	5/2 ^{-‡}	1619 2	3/2 ⁺ , 5/2 ⁻	2324 2	5/2 ⁺ , 7/2, 9/2 ⁺
336 2	7/2 ⁺	928 2	5/2, 3/2 ⁺	1748 3	5/2 ⁺ , 7/2 ⁺	2556? 3	≥5/2
626 3	5/2 ⁺	1278 2	3/2 ⁺	1977 2	3/2 ⁺ , 5/2 ⁻		

[†] Spins and parities were determined by 1973CI03 by comparing theoretical and measured average yields of γ -rays leading from excited resonances to low-lying final states and by the observed deexcitation patterns.

[‡] Used to normalize theory to measured data. Values are consistent with adopted values.

 $\gamma(^{95}\text{Tc})$

E_γ^\dagger	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. [‡]	$\alpha(\text{K})\text{exp}^\#$
336.4 [#]	336	7/2 ⁺	0.0	9/2 ⁺	M1	0.0093 18
358	1977	3/2 ⁺ , 5/2 ⁻	1619	3/2 ⁺ , 5/2 ⁻		
592	928	5/2, 3/2 ⁺	336	7/2 ⁺		
607	646	3/2 ⁻	38.9	1/2 ⁻		
626	626	5/2 ⁺	0.0	9/2 ⁺		
628	667	5/2 ⁻	38.9	1/2 ⁻		
889	928	5/2, 3/2 ⁺	38.9	1/2 ⁻		
942	1278	3/2 ⁺	336	7/2 ⁺		
952	1619	3/2 ⁺ , 5/2 ⁻	667	5/2 ⁻		
973	1619	3/2 ⁺ , 5/2 ⁻	646	3/2 ⁻		
1098	1434	5/2 ⁺ , 7/2 ⁺	336	7/2 ⁺		
1122 [@]	1748	5/2 ⁺ , 7/2 ⁺	626	5/2 ⁺		
1239	1278	3/2 ⁺	38.9	1/2 ⁻		
1351	1977	3/2 ⁺ , 5/2 ⁻	626	5/2 ⁺		
1412	1748	5/2 ⁺ , 7/2 ⁺	336	7/2 ⁺		
1580	1619	3/2 ⁺ , 5/2 ⁻	38.9	1/2 ⁻		
1612	2238	≥5/2	626	5/2 ⁺		
1698	2324	5/2 ⁺ , 7/2, 9/2 ⁺	626	5/2 ⁺		
1977	1977	3/2 ⁺ , 5/2 ⁻	0.0	9/2 ⁺		
1988	2324	5/2 ⁺ , 7/2, 9/2 ⁺	336	7/2 ⁺		
2324	2324	5/2 ⁺ , 7/2, 9/2 ⁺	0.0	9/2 ⁺		
2556 [@]	2556?	≥5/2	0.0	9/2 ⁺		

[†] Calculated by 1983Lu03 from excitation energies given by 1973CI03, except as noted.

[‡] From $\alpha(\text{K})\text{exp}$.

[#] From 1979Mi08 (E=4.4 MeV; Ge(Li), minorange spect. ^{241}Am , ^{109}Cd , ^{139}Ge , ^{57}Co , and ^{137}Cs sources for γ -efficiency calibration; ^{133}Ba , ^{207}Bi , ^{109}Cd , and ^{137}Cs sources for ce-efficiency calibration).

[@] Placement of transition in the level scheme is uncertain.

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Legend

Level Scheme-----► γ Decay (Uncertain)