

$^{96}\text{Mo}(\text{p},\gamma)$  E=res: av [1973CI03,1979Mi08](#)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 111, 525 (2010)	19-Nov-2009

All data are from [1973CI03](#), unless otherwise noted.

 $^{97}\text{Tc}$  Levels

[1973CI03](#): E(p)=2.4 to 3.0 MeV; measured av res I $\gamma$ , E $\gamma$ ,  $\gamma\gamma$ ;Ge(Li) detectors with FWHM=2.1 keV at 1330 keV. Deduced level scheme from  $\gamma\gamma$ .

[1979Mi08](#): E(p)=3.9 MeV; measured  $\alpha$ ; detectors  $\gamma$ :Ge(Li) with FWHM=0.5 keV at 50 keV, ce: M Si(Li) with FWHM=3.3 keV at 320 keV.

E(level)	J $\pi^\dagger$	E(level)	J $\pi^\dagger$	E(level)	J $\pi^\dagger$	E(level)	J $\pi^\dagger$
0.0	9/2 <sup>+</sup>	657 4	5/2 <sup>-</sup> ‡	994 3	3/2 <sup>+</sup> ‡	1517 3	1/2 <sup>-</sup> ,3/2 <sup>-</sup>
96.5 10	1/2 <sup>-</sup> ‡	785 2	5/2 <sup>+</sup>	1060 5	5/2,7/2 <sup>+</sup>	1573 3	3/2 <sup>+</sup> ,5/2
216 3	7/2 <sup>+</sup>	856 3	7/2 <sup>+</sup> ,5/2 <sup>+</sup>	1138 2	5/2	1676 3	3/2 <sup>+</sup> ,5/2
324 2	5/2 <sup>+</sup> ‡	948 2	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	1366 2	3/2 <sup>+</sup>		
578 3	3/2 <sup>-</sup> ‡	969 3	7/2 <sup>+</sup>	1387 4	3/2 <sup>+</sup> ,5/2		

† Deduced from av res I $\gamma$  ([1973CI03](#); can differ from values adopted In Adopted Levels, Gammas dataset).

‡ Assignment used to normalize data to theory.

 $\gamma(^{97}\text{Tc})$ 

E $\gamma$ <sup>†</sup>	E $_i$ (level)	J $_i^\pi$	E $_f$	J $_f^\pi$	Mult.	$\delta$	Comments
215.7‡	216	7/2 <sup>+</sup>	0.0	9/2 <sup>+</sup>	M1+E2‡	0.69 +15-19	$\delta$ : from $\alpha(\text{K})_{\text{exp}}=0.0428$ 40 ( <a href="#">1979Mi08</a> ). Adopted $\delta=+0.27$ 2.
324.5‡	324	5/2 <sup>+</sup>	0.0	9/2 <sup>+</sup>	E2‡		Mult.: from $\alpha(\text{K})_{\text{exp}}=0.0180$ 18 ( <a href="#">1979Mi08</a> ). (theory: $\alpha(\text{K})=0.0170$ ).
481	578	3/2 <sup>-</sup>	96.5	1/2 <sup>-</sup>			
559	1138	5/2	578	3/2 <sup>-</sup>			
560	657	5/2 <sup>-</sup>	96.5	1/2 <sup>-</sup>			
570	785	5/2 <sup>+</sup>	216	7/2 <sup>+</sup>			
581	1366	3/2 <sup>+</sup>	785	5/2 <sup>+</sup>			
616	1676	3/2 <sup>+</sup> ,5/2	1060	5/2,7/2 <sup>+</sup>			
645	969	7/2 <sup>+</sup>	324	5/2 <sup>+</sup>			
670	994	3/2 <sup>+</sup>	324	5/2 <sup>+</sup>			
753	969	7/2 <sup>+</sup>	216	7/2 <sup>+</sup>			
820	1676	3/2 <sup>+</sup> ,5/2	856	7/2 <sup>+</sup> ,5/2 <sup>+</sup>			
844	1060	5/2,7/2 <sup>+</sup>	216	7/2 <sup>+</sup>			
851	948	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	96.5	1/2 <sup>-</sup>			
856	856	7/2 <sup>+</sup> ,5/2 <sup>+</sup>	0.0	9/2 <sup>+</sup>			
939	1517	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	578	3/2 <sup>-</sup>			
1269	1366	3/2 <sup>+</sup>	96.5	1/2 <sup>-</sup>			

† Calculated by the evaluator from E(level) according to the level scheme shown in [1973CI03](#).

‡ From [1979Mi08](#).

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## Level Scheme

