^{96}Mo(t,d), (pol d,p)   1990Ha43

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

^{96}Mo(t,d): ET=14 MeV, FWHM=27 keV.
^{96}Mo(d,p): lamb-shift polarized d, ED=12 MeV, FWHM=14 keV.
Particle spectra observed in an Enge split-pole magnetic spectrograph with a counter telescope position-sensitive detector.
DWBA analysis with DWUCK 4 with N=5.06 for the (t,d) reaction and N=3.33 for the (pol d,p) reaction.

^{97}Mo Levels

E(level)[†]	J$^{\pi}$[‡]	L[#]	S[@]	Comments
0.0	5/2$^+$	2	0.20 4	
664 5	7/2$^+$[&]	4	0.17 3	
685 5	1/2$^+$	0	0.47 10	
727 5	3/2$^+$	2	0.170 14	
887?				
1041 5	7/2$^+$,9/2$^+$	4		S: 0.019 6 (J=7/2), 0.011 3 (J=9/2).
1131 5	7/2$^+$,9/2$^+$	4		S: 0.014 1 (J=7/2), 0.011 1 (J=9/2).
1280 5	3/2$^+$	2	0.20 1	
1300 5	5/2$^+$	2	0.011 1	
1450 5	11/2$^-$	5	0.17 4	E(level): probably the 1436.90-keV level observed by other reactions.
1532 5	3/2$^+$	2	0.0071 10	
1582 5	7/2$^-$	3	0.10 1	E(level): probably the 1556.6-keV level observed in (d,p) and (d,pγ) reactions.
1655 5	7/2$^+$,9/2$^+$	4		S: 0.016 1 (J=7/2), 0.140 1 (J=9/2).
1752 5	7/2$^+$,9/2$^+$	4		S: 0.030 10 (J=7/2), 0.024 11 (J=9/2).
1780 5	7/2$^+$,9/2$^+$	4		S: 0.016 6 (J=7/2), 0.013 4 (J=9/2).
1812 5	7/2$^+$,9/2$^+$	4		S: 0.019 6 (J=7/2), 0.014 4 (J=9/2).
1870 5	3/2$^-$	1	0.140 4	
2190				

[†] The agreement between the level energies in this experiment and the adopted energies of levels with corresponding L and J values is not good. It appears that there is an error in calibration in this experiment. In transferring the information from this data set to the Adopted Levels, the evaluator has included a calibration correction, based on the comparison of the energies of the odd-L levels and the well-established levels below 1 MeV.

[‡] From the L values obtained in ^{96}Mo(t,d) reaction and the vector-analyzing power from the ^{96}Mo(pol d,p) reaction, which can differ from adopted value (see Adopted Levels, Gammas dataset).

[#] From $\sigma(\theta)$ in ^{96}Mo(t,d) reaction.

[@] From $\sigma(\theta)$ in ^{96}Mo(t,d) reaction, and given J.

[&] From Adopted Levels.