

⁹⁸Mo(p,d) 1975Bi10

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

⁹⁷Mo Levels

E(p)=38.6 MeV; silicon detector telescopes FWHM=50 keV; measured $\sigma(ED,\theta)$. Analysis with DWBA with DWUCK (S=2.54).
 Others: 1972Is03, 1973Is09: E(p)=52 MeV; measured $\sigma(ED,\theta)$.

E(level)	J ^{π}	L	C ² S	Comments
0.0	5/2 ⁺	2	2.6	
662 10	7/2 ⁺ , 1/2 ⁺	4+0	0.48+0.40	
716 10	5/2 ⁺	2	0.32	
878 7	1/2 ⁺	0	0.04	
1026 7	7/2 ⁺	4	0.20	
1116 7	9/2 ⁺	4(+2) [‡]	0.44 [‡]	
1278 8	3/2 ⁺ , 5/2 ⁺	2(+4) [‡]	0.47 [‡]	
1438 7	11/2 ⁻	5(+2) [‡]	0.3 [‡]	
1518 10	9/2 ⁺	4	0.14	
1560 10	3/2 ⁺ , (5/2 ⁻)	2(+3) [‡]	0.05 [‡]	J ^{π} : from 1975Bi10; probably the 1563-keV 3/2 ⁺ , 5/2 ⁺ plus 1556.6-keV 5/2 ⁻ , 7/2 ⁻ doublet.
1961 8	7/2 ⁺ , 3/2 ⁺	4+2	0.12+0.03	J ^{π} : from 1975Bi10; probably the 1961.6-keV 7/2 ⁺ plus 1958-keV 3/2 ⁺ , 5/2 ⁺ doublet.
2044 9	7/2 ⁺ , (1/2 ⁺)	4(+0)	0.61	J ^{π} : from 1975Bi10; may include the 2040.9-keV (9/2, 11/2), 2049.9-keV (7/2, 9/2), and 2033.7-keV 1/2 ⁺ levels.
2097 12	3/2 ⁻	1	0.035 [@]	
2162 9	3/2 ⁺ , 5/2 ⁺	2	0.08 ^{&}	
2267 12	1/2 ⁻ , 3/2 ⁻	1	0.08 [@]	
2320 12	(7/2 ⁺)	(4)	(0.12) [#]	
2387 9	1/2 ⁻ , 3/2 ⁻	1	0.39 [@]	
2512 10	9/2 ⁺	4	1.6	
2752 12	1/2 ⁻ , 3/2 ⁻	1	0.15 [@]	
2831 15	1/2 ⁻ , 3/2 ⁻	1	0.06 [@]	
2875 15	1/2 ⁻ , 3/2 ⁻	1	0.06 [@]	
3004 15	1/2 ⁻ , 3/2 ⁻	1	0.15 [@]	
3052 15	1/2 ⁻ , 3/2 ⁻	1	0.26 [@]	
3111 20	1/2 ⁻ , 3/2 ⁻	1	0.16 [@]	
3170 15		4+1	0.30+0.06	C ² S: if J ^{π} =9/2 ⁺ and 1/2 ⁻ .
3260 20	1/2 ⁻ , 3/2 ⁻	1	0.13 [@]	
3345 20	1/2 ⁻ , 3/2 ⁻	1	0.20 [@]	
3406 15	7/2 ⁺ , 9/2 ⁺	4	0.75 [#]	
3519 20	3/2 ⁺ , 5/2 ⁺	2	0.07 ^{&}	
3583 15	7/2 ⁺ , 9/2 ⁺	4	0.37 [#]	
3660 20	7/2 ⁺ , 9/2 ⁺	4	0.29 [#]	
3740 20	7/2 ⁺ , 9/2 ⁺	4	0.39 [#]	
3793 20		4+1	0.17+0.07	C ² S: if J ^{π} =9/2 ⁺ and 3/2 ⁻ .
3959 25	1/2 ⁻ , 3/2 ⁻	1	0.10 ^{&}	
4073 25	1/2 ⁻ , 3/2 ⁻	1	0.08 ^{&}	
4254 25	1/2 ⁻ , 3/2 ⁻	1	0.13 ^{&}	

Continued on next page (footnotes at end of table)

 $^{98}\text{Mo}(\text{p,d})$ **1975Bi10** (continued) ^{97}Mo Levels (continued)

<u>E(level)</u>	<u>J^π</u> [†]	<u>L</u>	<u>C²S</u>
4298 25	1/2 ⁻ ,3/2 ⁻	1	0.08&
4423 25	1/2 ⁻ ,3/2 ⁻	1	0.01&
4470 25	1/2 ⁻ ,3/2 ⁻	1	0.09&

[†] From Adopted Levels unless noted otherwise.

[‡] The data could be fitted by a single L transfer, although there may be a small contribution from the other L transfer.

If J=9/2.

@ If J=1/2.

& If J=3/2.