

$^{110}\text{Pd(d,p)}$ 1974MIZZ

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 110, 1239 (2009)	1-Feb-2008

E=12 MeV. Other: 1967Li15 E(d)=6.5 MeV.

Q(d,p)=3548 10 (1974MIZZ).

Magnetic-spectrograph resolution=12 keV FWHM.

 $^{111}\text{Pd Levels}$

1974MIZZ compare summed spectroscopic factors for ^{111}Pd , ^{109}Pd , ^{107}Pd via (d,p) reaction.

E(level)	$L^{\dagger\#}$	$S^{\ddagger}$	Comments
0.0	2	0.13	
72	0	0.36	
172	5	0.37	
192	0+2	0.14+0.38	E(level): doublet deduced from DWBA fits to angular distribution. No broadening was observed, so the energies of the individual components are the same to ≤ 3 keV. J^{π} : $3/2^{+}$ assigned to L=2 component in analogy with levels in ^{109}Pd (at 291) and ^{107}Pd (at 380).
229	4	0.14	
275	(2)	0.006,0.011	
383	2	0.05,0.10	
411	4	0.18	
449	3,1	0.021,0.020	S: $J=7/2^{-}$, $3/2^{-}$ respectively assumed for L values.
508	0	0.074	
534	3	0.026	
567	(4)	0.079	
587	1	0.026	
603			
670	2	0.028,0.055	
715	2	0.060,0.12	
740	2	0.078,0.15	
787?			
800?			
833?			
866			
887	(4)	0.084	
929	0	0.014	
956?			
1000	1	0.071	
1020			
1081?			
1117	(0)	0.036	
1133	3,1	0.025,0.019	S: $J=7/2^{-}$, $3/2^{-}$ respectively assumed for L values.
1213?			
1233?			
1307?			
1332?			
1356	(1)	0.013	
1400?			
1453	(3)	0.011	
1481?			
1493	0	0.049	
1521	1	0.041	
1541?			
1600	1	0.029	

Continued on next page (footnotes at end of table)

 $^{110}\text{Pd(d,p)}$ **1974MIZZ** (continued)

 ^{111}Pd Levels (continued)

<u>E(level)</u>	<u>L^{†#}</u>	<u>S[‡]</u>	<u>E(level)</u>	<u>L^{†#}</u>	<u>S[‡]</u>	<u>E(level)</u>	<u>L^{†#}</u>	<u>S[‡]</u>
1624	3	0.018	1734?			1870?		
1673	3	0.017	1765?			1928	(1)	0.010
1713	1	0.016	1808	3	0.018	2018	3	0.028

[†] Differential cross-section ($\mu\text{b/sr}$) max is given in **1974MIZZ**.

[‡] L=5 is assumed to be h11/2, L=4 g7/2, L=3 γ /72 and L=1 p3/2. L=2 is assumed to be d5/2 for the g.s. and d3/2 for the 192 level; otherwise the pair of values corresponds to d5/2,d3/2, respectively.

[#] Based on angular distributions at 11 angles 12°–95° compared with DWBA calc.