^{106}Pd(d,p) 1967Co24

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 109, 1383 (2008)	1-Mar-2008

E(d)=12 MeV.
Magnetic spectrograph resolution: FWHM≈7 keV.
Others: 1963Cu02, 1968Co32, 1969Di05, 1970Di05.

^{107}Pd Levels

ΔE: Uncertainties not given; ±7 keV assumed.
S is defined by dσ/dΩ=1.5(2J+1)S(dσ/dΩ)(DWBA) obtained if J=11/2 for L=5, J=7/2 for L=4 or 3, J=3/2 for L=1, and J=3/2 for L=2, unless otherwise noted. Pairs of values correspond to J=L−1/2,L+1/2, respectively.

E(level)[@]	L[‡]	S[&]	Comments
0.0	2	0.21[#]	
115	0	0.39	
214	5	2.9	
302	2	0.10[#]	
311	4	0.26	
364	4	0.45	
380	2	0.29	
412	0	0.041	
469	2	0.141	
566	2	0.058[#]	
670	2		E(level): from 1970Di05 (reanalysis of data of 1967Co24).
685		0.0072	L: tentative L=3.
698	0	0.059	
759	2	0.040	
781	1	0.011	E(level): value of 791 given by 1967Co24 is a misprint (1970Di05).
806	1,(2)	0.0039,0.016[#]	E(level): probably corresponds to L=2 (d,t) excitation at 809 keV.
889	0	0.018	
1023	2	0.024	E(level): probably corresponds to 1029 via (d,t).
1071	2	0.019[#]	
1113	2	0.018	
1160	2	0.059	
1214		0.022	L: tentative L=2; corresponds to L=2 (d,t) peak at 1218 keV.
1221	4	0.072	
1347	4	0.080	
1353	2	0.043	
1402			
1451			
1473	1	0.0025	
1509	0	0.028	
1532	1	0.0090	
1539	2	0.024	
1572	3,(4)	0.0090,0.066	
1615	2	0.042	
1670	0	0.0077	
1702	(3)	0.012	
1790	1	0.010	
1866	2	0.026	
1879	2	0.024	
1954	1,(2)	0.010,0.036	
1987	(3)	0.011	

Continued on next page (footnotes at end of table)

^{106}Pd(d,p) 1967Co24 (continued)

^{107}Pd Levels (continued)

E(level)[@]	L[‡]	S[&]	E(level)[@]	L[‡]	S[&]	E(level)[@]	L[‡]	S[&]
2006	3	≈0.038	2283	2	0.028	2729	1	0.0070
2014	0	≈0.022	2323	3	0.018	2751	1	0.0052
2072	2,(3)	0.019,0.014	2336	(3)	0.013	2776	1	0.0055
2119	0	0.018	2377	1	0.0040	2799	3	0.0080
2173	2,(3)	0.016,0.011	2412	(3)	≈0.0080	2812	3	0.0170
2220	3	0.011	2491			2832	1	0.0054
2257	1	0.017	2516	1	0.0062	2875	3	0.013
2276	0	0.0080	2678	1	0.024			

† Uncertainties not given; ±7 keV assumed.

‡ Deduced from proton angular distribution at 6 angles (θ=10°−45°) compared with DWBA calc and characteristic shapes.

J=5/2 inferred from S(d,t)/S(d,p)=6.6-36 (see 1970Di05), ^{107}Rh decay log *ft* values and γ to 1/2$^+$.

@ For 29 other (d,p) states >1.7 MeV, see 1967Co24.

& Defined by dσ/dΩ=1.5(2J+1)S(dσ/dΩ)(DWBA). Obtained if J=11/2 for L=5, J=7/2 for L=4 or 3, J=3/2 for L=1 and J=3/2 for L=2, unless indicated otherwise. Pairs of values correspond to J=L−1/2,L+1/2, respectively.