

$^{108}\text{Pd(d,t)}$ 1970Di05

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

$E(d)=17$ MeV.

Other (d,t): $E=15$ MeV ([1963Cu02](#)) s.

For study of deeply bound neutron-hole states via (d,t) $E=50$ MeV, see [1978ScZP](#).

Magnetic spectrograph resolution: FWHM=8-10 keV.

 $^{107}\text{Pd Levels}$

Spectroscopic factors extracted via (d,p),(d,t) reactions are compared with neighboring isotopes and isotones and with Nilsson-model predictions; see [1975Re07](#).

ΔE : Uncertainties not given.

E(level)	$L^{\dagger}$	$S^{\textcircled{a}}$	E(level)	$L^{\dagger}$	$S^{\textcircled{a}}$	E(level)	$L^{\dagger}$	$S^{\textcircled{a}}$
0.0	2	1.39 [#]	670	2	0.44 [#]	1218	2	0.097,0.07 ⁴
115	0	0.37	697	0	0.066	1267	2	0.041 [#]
214	5	1.67	759	2	0.02	1402 ^{&}	2	
301	2	0.16 [#]	781	1	0.038	1510 ^{&}	0	
312	(4)	2.78	809	2	0.15 [#]	1589 ^{&}	2	
367	(4)	1.82	892	0	0.044	1632 ^{&}	2	
381	2	0.57	1029	2	0.091,0.07	1689 ^{&}	0	
412	0	0.15	1074	2	0.20 [#]	1753 ^{&}		
471	2	0.39	1120	0	0.069			
567	2	0.32 [#]	1167	0	0.008			

[†] Uncertainties not given.

[‡] Deduced from triton angular distributions at 5 angles ($\theta=10^{\circ}-35^{\circ}$) compared with DWBA calc.

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

[@] S obtained if $J=11/2$ for $L=5$, $J=7/2$ for $L=4$, $J=1/2$ 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.

[&] (d,t) excitations >1.3 MeV are from [1963Cu02](#) with $\Delta E=100$.