

<sup>106</sup>Pd(p,p'),(d,d') 1989De17,1990Pi14,1992Pi08

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	D. De Frenne and A. Negret		NDS 109, 943 (2008)	1-May-2007

1989De17,1990Pi14,1992Pi08: E(p)=30.7 MeV. Measured:  $\sigma(E(p)',\theta)$ , E(d)=50.7 MeV. Measured:  $\sigma(E(d)',\theta)$ . Deduced: <sup>106</sup>Pd levels,  $J^\pi, \beta(\lambda)$ . Enriched target. Magnetic spectrometer.

Others: (p,p') E=6.9 MeV (1975Ye01), E=5.5-7.5 MeV (1973Gu21), E=6 MeV (1979An23), E=13 MeV (1966Ro04), E=52 MeV (1975Ko12) (d,d'): E(d)=15 MeV (1962Jo05),(1961Co07).

<sup>106</sup>Pd Levels

Resolution (FWHM) is 12 keV in (p,p') and 15 keV in (d,d').

B(E4): Calculated by the evaluators from B(E4)(W.u.) given by 1992Pi08.

E(level) <sup>†</sup>	J <sup>π‡</sup>	L	Comments
0.0	0 <sup>+</sup>	0	
511 2	2 <sup>+</sup>	2	
1128 2	2 <sup>+</sup>	2	
1229 2	4 <sup>+</sup>	4	B(E4)↑=0.0025 7
1560 2	2 <sup>+</sup>	2	
1704 2	0 <sup>+</sup>	0	
1910 2	2 <sup>+</sup>	2	
1932 2	4 <sup>+</sup>	4	B(E4)↑=0.0020 6
2000 2	0 <sup>+</sup>	0	
2085 2	3 <sup>-</sup>	3	
2242 2	2 <sup>+</sup>	2	
2284 2	4 <sup>+</sup>	4	B(E4)↑=0.0101 9
2400 2	(5 <sup>-</sup> )	(5)	
2495 2	1 <sup>-</sup>	1	
2580 5	(5 <sup>-</sup> )	5	
2648 5	4 <sup>+</sup>	4	B(E4)↑=0.0100 8
2712 5	(4 <sup>+</sup> )	(4)	B(E4)↑=0.0015 3
2746 5	4 <sup>+</sup>	4	B(E4)↑=0.0113 8
2779 5	2 <sup>+</sup>	2	
2823 5	2 <sup>+</sup>	2	
2847 5	(4 <sup>+</sup> )	(4)	B(E4)↑=0.0030 13
2879 5	(1 <sup>-</sup> )	(1)	
2911 5	(1 <sup>-</sup> )	(1)	
2930 5	4 <sup>+</sup>	4	B(E4)↑=0.0012 3
2973 5	3 <sup>-</sup>	3	
3044 5	4 <sup>+</sup>	4	B(E4)↑=0.0012 2
3069 5	2 <sup>+</sup>	2	
3093 5	(1 <sup>-</sup> ,2 <sup>+</sup> )	(1,2)	
3123 5	(6 <sup>+</sup> )	6	
3163 5	2 <sup>+</sup>	2	
3217 5	3 <sup>-</sup>	3	
3250 5	2 <sup>+</sup>	2	
3275 5	3 <sup>-</sup>	3	
3321 5	5 <sup>-</sup>	5	
3359 5	(6 <sup>+</sup> ,5 <sup>-</sup> )	(6,5)	
3397 5	4 <sup>+</sup>	4	B(E4)↑=0.0031 3
3414 5	3 <sup>-</sup>	3	
3449 5	2 <sup>+</sup>	2	
3490 5	2 <sup>+</sup>	2	
3532 5	(5 <sup>-</sup> )	(5)	

Continued on next page (footnotes at end of table)

$^{106}\text{Pd}(\text{p,p}'),(\text{d,d}')$  1989De17,1990Pi14,1992Pi08 (continued) $^{106}\text{Pd}$  Levels (continued)

<u>E(level)<sup>†</sup></u>	<u>J<sup>π</sup><sup>‡</sup></u>	<u>L</u>	<u>Comments</u>
3575 5	5 <sup>-</sup>	5	
3607 5	(3 <sup>-</sup> )	(3)	
3647 5	2 <sup>+</sup>	2	
3708 5	(5 <sup>-</sup> )	(5)	
3761 5	3 <sup>-</sup>	3	
3805 5	(3 <sup>-</sup> )	(3)	
3825 5	3 <sup>-</sup>	3	
3879 5	3 <sup>-</sup>	3	
3903 5	3 <sup>-</sup>	3	
3938 5	2 <sup>+</sup>	2	
3998 5	4 <sup>+</sup>	4	B(E4) <sup>†</sup> =0.00065 18
4042 5	4 <sup>+</sup>	4	B(E4) <sup>†</sup> =0.0016 4
4054 5	2 <sup>+</sup>	2	
4106 5	4 <sup>+</sup>	4	B(E4) <sup>†</sup> =0.00021 6
4134 5	3 <sup>-</sup>	3	
4156 5	3 <sup>-</sup>	3	
4193 5			
4224 5	4 <sup>+</sup>	4	B(E4) <sup>†</sup> =0.00033 7

<sup>†</sup> Uncertainties about 2 keV for states below 2.5 MeV and up to 5 keV for states at higher energies (1992Pi08).

<sup>‡</sup> Deduced from L values obtained from comparison with DWBA and coupled-channel calc. Agree with adopted values.