

$^{108}\text{Pd}(n,\gamma)$ E=res: av 1980Ca02

Type	Author	History	Citation	Literature Cutoff Date
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1980Ca02: E=2 and 24 keV resonance neutrons were produced at the Brookhaven National Laboratory. Target is 7.7 g ^{108}Pd enriched to 98.11%. γ rays were detected with a three crystal pair spectrometer. Measured averaged primary γ -ray intensities. Deduced levels, J^π .

 ^{109}Pd Levels

E(level) [†]	J^π [‡]	E(level) [†]	J^π [‡]	E(level) [†]	J^π [‡]
0	5/2 ⁺	604.513	5/2 ⁻	1091.0	5/2 ⁺
113.400	1/2,3/2	623.482	1/2,3/2	1111.8	1/2,3/2
188.990	$\geq 7/2$	645.9	5/2 ⁻ ,7/2	1134.696	1/2,3/2
245.081	(5/2 ⁻),7/2	673.491	1/2,3/2,(5/2 ⁺)	1147.7	1/2,3/2
266.343	1/2,3/2	722.043	1/2,3/2,5/2 ⁺	1232.795	1/2,3/2,5/2 ⁺
276.290	$\geq 7/2$	791.426	1/2,3/2,5/2 ⁺	1243.9	1/2,3/2
287.250	$\geq 7/2$	810.595	1/2,3/2	1269.5	1/2,3/2,5/2 ⁺
291.434	1/2,3/2	846.1	5/2 ⁺	1328.4	5/2
325.285	5/2,5/2 ⁺ ,1/2,3/2	911.303	5/2	1347.7	1/2,3/2,5/2 ⁺
326.869	5/2,5/2 ⁺ ,1/2,3/2	941.100	1/2,3/2	1359.413	1/2,3/2
339.530	5/2 ⁻	944.967	1/2,3/2	1371.1	$\geq 5/2$
426.140	(5/2 ⁻),7/2	954.163	1/2,3/2	1378.1	1/2,3/2
433.562	1/2,3/2	981.755	5/2	1399.0	1/2,3/2
491.590	1/2,3/2	1053.628	1/2,3/2		
540.676	5/2 ⁺	1065.8	1/2,3/2		

[†] Level scheme is deduced by 1980Ca02 based on the primary γ -ray transitions seen in average resonance neutron capture.

[‡] From 1980Ca02 on the basis of differences in the averaged intensity of E1 and M1 primary transitions following s- and p-wave capture. See 1980Ca02 for their guidelines for J^π derivations using the I_γ/E_γ^5 values.