

¹⁹⁴Pt(d,p) 1976Ya07

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Huang Xiaolong and Kang Mengxiao		NDS 121, 395 (2014)	1-Mar-2014

E(d)=12 MeV; measured $\sigma(E(p),\theta)$ with spectrograph (FWHM=13-17 keV). Rotation-vibration model and DWBA analysis.
Others: 1965Mu05, E(d)=15 MeV; 1972MoZA, E(d)=17 MeV.

¹⁹⁵Pt Levels

Nilsson orbital assignments assume oblate ¹⁹⁵Pt ($\beta=-0.13$).

E(level)	J π^{\ddagger}	L [@]	S ^a	E(level)	J π^{\ddagger}	L [@]	S ^a
0.0 ^e	1/2 ⁻	1	0.27	930	1	1	0.03
99.1 ^f 4	3/2 ⁻	1	0.34	1100	1	1	0.04
129.7 ^g 5	5/2 ⁻	3	0.76	1159	1	(3,4)	
199 ^h 1	3/2 ⁻	&	0.02	1294	1	1	0.03
213 ^e 2	3/2 ⁻	&	0.09	1337	2		
241 ^e 4	5/2 ⁻ #		0.04	1420	2	(1)	
260 ⁱ 1	13/2 ⁺	(6)	0.85	1445	3		
433 ⁱ 3	9/2 ⁺ #		0.04	1577	2	1	0.01
507 ^h 1	5/2 ⁻ ,7/2 ⁻ #	3	0.16 ^b	1681	3		
524	1	1	0.04	1766	2	(1)	
539	3			1840	2	1	0.04
548	3			1872	2	(3)	
563 [†]				1899 ^{jk} 1	(9/2 ⁺)	(3,4)	0.85 ^d
614 ^f 1	5/2 ⁻ ,7/2 ⁻	3	0.10 ^c	1972	3	1	0.02
816 ^e 1							

[†] Weak peak in (d,p). Energy is rounded-off value from Adopted Levels.

[‡] From S and L and prediction of Nilsson model, except as noted.

From Adopted Levels.

@ From $\sigma(E(p),\theta)$ DWBA fits.

& L=1 for th unresolved 199+213 levels.

^a From $\sigma(E(p),\theta)$ DWBA analysis.

^b If J=5/2⁻.

^c If J=7/2⁻.

^d If J=9/2.

^e Band(A): K π =1/2⁻ band. configuration=1/2⁻[530]. Band members: 1/2⁻ to 7/2⁻.

^f Band(B): K π =3/2⁻ band. configuration=3/2⁻[532]. Band members: 3/2⁻ to 9/2⁻. The other states are assigned at 389(5/2) and 931(9/2) from ¹⁹⁵Ir decay (3.8 h).

^g Band(C): K π =5/2⁻ band. configuration=5/2⁻[532]. Band members: 5/2⁻.

^h Band(D): K π =3/2⁻? band. configuration=3/2⁻[541]?. Band members: 3/2⁻?.

ⁱ Band(E): K π =1/2⁺ decoupled band. configuration=1/2⁺[600]. Band members: 13/2⁺.

^j Band(F): K π =9/2⁺ band. configuration=9/2⁺[615]?. Band members: 9/2⁺.

^k Probably corresponds with L=4, \approx 1907 state (1972MoZA).

$^{194}\text{Pt}(\text{d,p})$ 1976Ya07Band(F): $K^\pi=9/2^+$ band(9/2⁺) 1899Band(A): $K^\pi=1/2^-$ band816Band(B): $K^\pi=3/2^-$ band5/2⁻, 7/2⁻ 614Band(D): $K^\pi=3/2^-?$ band5/2⁻, 7/2⁻ 507Band(E): $K^\pi=1/2^+$
decoupled band9/2⁺ 43313/2⁺ 2605/2⁻ 2413/2⁻ 2133/2⁻ 199Band(C): $K^\pi=5/2^-$ band5/2⁻ 129.73/2⁻ 99.11/2⁻ 0.0