^{196}Pt(pol t,α), (t,α) 1985Zh10,1983Ci01,1978Ya03

History

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

1985Zh10: experimental strengths of 1983Ci01 compared and analyzed with U(6/20) supersymmetry models.
1983Ci01: ^{196}Pt(pol t,α), E=17 MeV; σ(Eα,θ) and Ay(Eα,θ) measured with Q3D, FWHM=18 keV; analyzed with interacting boson fermion model, U(6/4) supersymmetry, and spin(6) symmetry.
1978Ya03: ^{193}Ir(t,α), E=15 MeV, FWHM≈13 keV; dσ/dΩ(Eα,θ), θ=20°−60°, measured with Q3D; and analyzed with DWBA, and Nilsson and rotation-vibration models.
See also 1984Ci07, 1981Ci02, 1981FlZW, and 1980BuZI.
All data are from 1983Ci01, except as noted.

^{195}Ir Levels

E(level)	Jπ†	L#	Slj‡	Comments
0.0&	3/2+		2.1	Ay(θ=30°)=−0.61 *3* (1983Ci01).
70a *5*	1/2+		0.75	Ay(θ=30°)=+0.03 *5* (1983Ci01).
100b *5*	11/2−		4.3	Ay(θ=30°)=+0.35 *3* (1983Ci01).
176& *5*	5/2+		0.12	Ay(θ=30°)=+0.38 *13* (1983Ci01).
234a *5*	(3/2+)		0.33	Ay(θ=30°)=−0.31 *8* (1983Ci01).
287 *5*	3/2+		0.49	Ay(θ=30°)=−0.62 *6* (1983Ci01). J=(7/2−) (1978Ya03).
394& *5*	(7/2+)@			Ay(θ=30°)=+0.26 *11* (1983Ci01).
413a *5*	(5/2+)@			Ay(θ=30°)=+0.22 *5* (1983Ci01).
500c *5*	5/2+		1.5	Ay(θ=30°)=+0.20 *4* (1983Ci01). J=(3/2+) (1978Ya03).
540 *5*	3/2+		0.24	Ay(θ=30°)=−0.66 *9* (1983Ci01).
583 *5*	5/2+		0.75	Ay(θ=30°)=+0.20 *5* (1983Ci01).
626 *5*				
720 *5*	11/2−		3.2	Ay(θ=30°)=+0.25 *4* (1983Ci01).
763 *5*	5/2+		0.58	Ay(θ=30°)=+0.31 *6* (1983Ci01).
878 *5*	5/2+		0.27	Ay(θ=30°)=+0.18 *9* (1983Ci01).
912 *5*				Ay(θ=30°)=−0.17 *20* (1983Ci01).
960 *5*				Ay(θ=30°)=+0.35 *16* (1983Ci01).
994 *5*	11/2−		1.9	Ay(θ=30°)=+0.17 *6* (1983Ci01).
1017 *5*	1/2+		0.74	Ay(θ=30°)=−0.13 *5* (1983Ci01).
1050 *5*	11/2−		1.8	Ay(θ=30°)=+0.30 *6* (1983Ci01).
1107 *5*				Ay(θ=30°)=−0.55 *23* (1983Ci01).
1165 *5*	3/2+		0.34	Ay(θ=30°)=−0.49 *8* (1983Ci01).
1229 *5*				Jπ: J=L+1/2 (1983Ci01). Ay(θ=30°)=+0.44 *16* (1983Ci01).
1365 *5*				Jπ: J=L−1/2 (1983Ci01). Ay(θ=30°)=−0.44 *16* (1983Ci01).
1413 *5*				Ay(θ=30°)=+0.01 *8* (1983Ci01).
1438 *5*				Ay(θ=30°)=+0.37 *13* (1983Ci01).
1510 *5*				Jπ: J=L+1/2 (1983Ci01). Ay(θ=30°)=+0.12 *6* (1983Ci01).
1562 *5*	(11/2−)		1.1	L≥4 (1983Ci01). Ay(θ=30°)=+0.17 *9* (1983Ci01). Jπ: J=L+1/2 (1983Ci01).
1601 *5*	11/2−		1.3	Ay(θ=30°)=−0.03 *8* (1983Ci01).
1640 *5*				Ay(θ=30°)=−0.03 *12* (1983Ci01).
1708 *5*	(3/2+,5/2+)	(2)		Ay(θ=30°)=+0.14 *6* (1983Ci01).
1760 *5*				Ay(θ=30°)=+0.33 *9* (1983Ci01).
1785 *5*				Ay(θ=30°)=−0.06 *10* (1983Ci01).
1835 *5*				Ay(θ=30°)=+0.43 *9* (1983Ci01).

Continued on next page (footnotes at end of table)

^{196}Pt(pol t,α), (t,α) 1985Zh10,1983Ci01,1978Ya03 (continued)

^{195}Ir Levels (continued)

† Based on $\sigma(\theta)$ DWBA analysis, analyzing power Ay(θ), and S extraction (1983Ci01); except as noted.
‡ From DWBA analysis.
# From $\sigma(\theta)$ DWBA analysis.
@ From Nilsson model and extrapolation of systematics. Configuration observed in ^{191}Ir and ^{193}Ir (1978Ya03).
& Band(A): $K^{\pi}=3/2^{+}$ band. configuration=[402] (1978Ya03).
a Band(B): $K^{\pi}=1/2^{+}$ band. configuration=[400] (1978Ya03).
b Band(C): $K^{\pi}=11/2^{-}$ band. configuration=[505] (1978Ya03).
c Band(D): $K^{\pi}=1/2^{+}$ band. configuration=[411] (1978Ya03).

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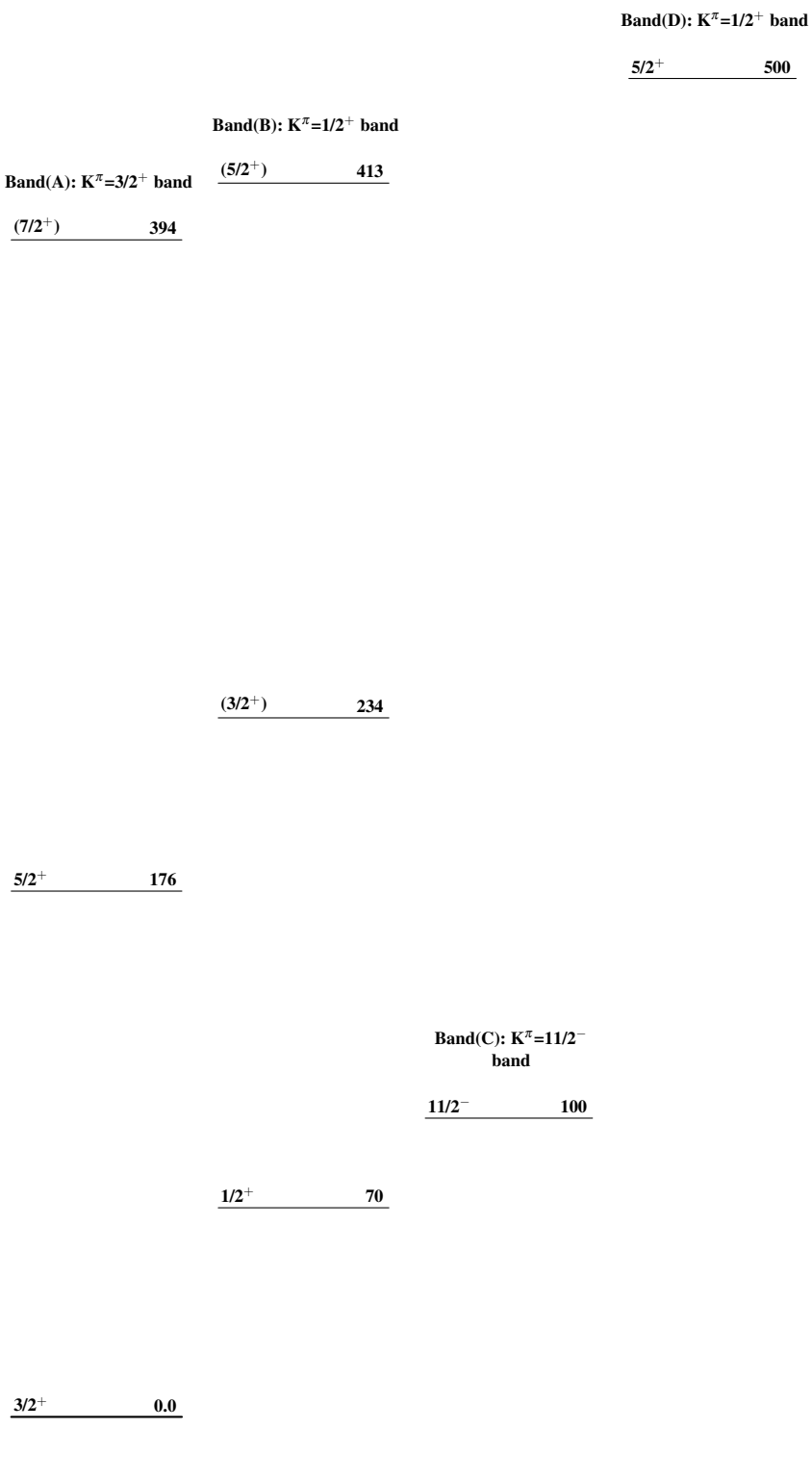

$^{195}_{77}Ir_{118}$