^{196}Pt(^{3}He,α) 1985Th02

History

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

E=50 MeV.

Measured σ(Eα,θ) with QMG/2 magnetic spectrograph (FWHM=35 keV) in steps of 2.5°, θ=5-45°. Compared with current quasiparticle-core coupling models. σ(Eα,θ) DWBA calculations.

See also 1983ThZY.

^{195}Pt Levels

E(level)[#]	J$^{\pi}$[@]	L[†]	C^{2}S[‡]	Comments
131 *10*	5/2$^-$	3	1.21	C^{2}S: dσ/dΩ(θ=20°)=299 μb/sr.
259 *10*	13/2$^+$	6	5.49	C^{2}S: dσ/dΩ(θ=20°)=1577 μb/sr.
432 *10*				C^{2}S: dσ/dΩ(θ=20°)=34 μb/sr. J=(17/2$^+$).
506 *10*	(5/2)$^-$	3	0.46	
558 *10*		5,6	0.19	C^{2}S: assuming J=13/2$^+$. dσ/dΩ(θ=20°)=47 μb/sr.
614 *10*		3,4	0.62	C^{2}S: assuming J=7/2$^-$. dσ/dΩ(θ=20°)=145 μb/sr.
789 *10*		6	2.79	C^{2}S: assuming J=13/2$^+$. dσ/dΩ(θ=20°)=763 μb/sr.
893 *10*		4,5	0.33	C^{2}S: assuming J=9/2$^+$. dσ/dΩ(θ=20°)=141 μb/sr.
960 *10*	(7/2)$^-$	3,4	0.36	C^{2}S: assuming J=7/2$^-$. dσ/dΩ(θ=20°)=134 μb/sr.
1043 *10*		5,6	2.21	C^{2}S: assuming J=9/2$^-$. dσ/dΩ(θ=20°)=265 μb/sr.
1107 *10*				C^{2}S: dσ/dΩ(θ=20°)=72 μb/sr.
1306 *10*		5,6	0.59	C^{2}S: assuming J=13/2$^+$. dσ/dΩ(θ=20°)=153 μb/sr.
1378 *10*		6	1.58	C^{2}S: assuming J=13/2$^+$. dσ/dΩ(θ=20°)=428 μb/sr.
1505 *10*				C^{2}S: dσ/dΩ(θ=20°)=100 μb/sr.
1683 *10*		6	0.27	C^{2}S: assuming J=13/2$^+$. dσ/dΩ(θ=20°)=65 μb/sr.
1785 *10*		3,4	0.41	C^{2}S: assuming J=5/2$^-$. dσ/dΩ(θ=20°)=122 μb/sr.
1911 *10*		3,4	0.41	C^{2}S: assuming J=9/2$^+$. dσ/dΩ(θ=20°)=199 μb/sr.
2128 *10*		6	1.43	C^{2}S: assuming J=13/2$^+$. dσ/dΩ(θ=20°)=369 μb/sr.
2291 *10*				C^{2}S: dσ/dΩ(θ=20°)=329 μb/sr.
2437 *10*				C^{2}S: dσ/dΩ(θ=20°)=253 μb/sr.

[†] From σ(Eα,θ) DWBA fits.

[‡] From σ(Eα,θ) DWBA calculations. Comparing the S values in (d,t) reactions.

[#] Energies normalized to known 259 level.

[@] From S extractions and L-transfer value.