

Inelastic scattering 1980Ha47,1971No01

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia		NDS 143, 1 (2017)	31-Mar-2017

(p,p'), (p,p): 1980Ha47: E(p)=50 MeV; measured E(p') (mag spect), σ , (p')(θ) (θ (lab) 15° to 51°), absolute σ ; compared results with transition rates predicted by the supersymmetry scheme.

(d,d'): 1971No01: ED=12.1 MeV; measured E(d), σ , d(θ) (θ =90°, 125°, 150°). Deduced band structure.

¹⁹³Ir Levels

Band structure from 1971No01.

B(E2) \uparrow : 1980Ha47 measured B(E2) \uparrow relative to the B(E2) \uparrow of ¹⁹⁴Pt(358.5 level). Evaluator has recalculated the B(E2) \uparrow 's using B(E2) \uparrow (¹⁹⁴Pt, 358.5 level)=1.649 15 (2006Si17).

E(level) \dagger	J π \ddagger	L $\#$	Comments
0.0 ^a	3/2 ⁺		
73 ^b	1/2 ⁺		B(E2) \uparrow ≤0.13 ((p,p') 1980Ha47). Level composed of 73.0 level (J π =1/2 ⁺), plus possible minor component from 80.2 level (J π =11/2 ⁻) ((p,p') 1980Ha47).
138.9 ^{@a}	5/2 ⁺	2	β_2 =0.183; B(E2) \uparrow =0.79 ((p,p') 1980Ha47).
180 ^b	3/2 ⁺		B(E2) \uparrow =0.12 ((p,p') 1980Ha47).
358 ^a	7/2 ⁺	2	β_2 =0.145; B(E2) \uparrow =0.66 ((p,p') 1980Ha47). Level composed of 357.7 (J π =7/2 ⁺) and possibly also 361.9 (J π =5/2 ⁺) levels ((p,p') 1980Ha47).
460			B(E2) \uparrow =0.031 ((p,p') 1980Ha47).
522 ^{&a}	9/2 ⁺		
596 ^{&}			
620 ^c	7/2 ⁺		B(E2) \uparrow =0.16 ((p,p') 1980Ha47).
693 ^{&}			
739 ^{&}			
857 ^{&a}	11/2 ⁺		
1126 ^{&}			
1193 ^{&}			
1347 ^{&}			
1510 ^{&}			

\dagger From 1971No01. Uncertainties range from 4 keV for levels near g.s. up to 8 keV for highest-lying levels. E(level)=138.9 was adopted by 1971No01 for calibration. Levels observed by both (p,p') and (d,d'), unless otherwise noted.

\ddagger From 1971No01. Based on magnitudes and angular dependence of cross sections; authors used combined analysis of their (d,d') and Coulomb excitation data.

$\#$ From 1980Ha47.

$@$ Calibration value.

$&$ Observed only in (d,d') experiment.

^a Band(A): 3/2[402] band.

^b Band(B): 1/2[400] band (partly of γ -vibrational in character).

^c Band(C): γ -vibrational band.

Inelastic scattering 1980Ha47,1971No01**Band(A): 3/2[402] band**11/2⁺ 857**Band(C): γ -vibrational
band**7/2⁺ 6209/2⁺ 5227/2⁺ 358**Band(B): 1/2[400] band
(partly of γ -vibrational
in character)**3/2⁺ 1805/2⁺ 138.91/2⁺ 733/2⁺ 0.0