^{191}Ir(d,p) 1994Ga05,1991Ke10

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 113, 1871 (2012)	15-Jun-2012

J^{π}(target)=3/2$^+$.

1991Ke10: E(d)=15, 22 MeV; 98.2% ^{191}Ir target, Q3d spectrograph with multiwire detector and scin; θ(lab)=45°, FWHM=6-8 keV; measured E(p), dσ/dΩ.

1994Ga05: E(d)=16 MeV; 94.66% and 96.19% ^{191}Ir targets, 30 or 40 μgm/cm^2 thick; magnetic spectrograph with photographic plates; θ(lab)=6-10° (2° steps), 12.5-20° (2.5° steps), 25-50° (5° steps), 60° and 70°; FWHM=8.9 keV; measured $\sigma(\theta)$. DWBA analysis.

^{192}Ir Levels

For band structure, supported by spectroscopic strengths in this and other transfer reactions, see Adopted Levels.

E(level)[†]	L[‡]	S[‡]	Comments
56.9 *6*	1	0.058 *3*	
66.3 *12*	3	<0.1	
72?[#] *2*			
85.2 *13*	5	<0.25	
104.8[#] *2*			Not observed by 1994Ga05; authors estimate S<0.04 if L=1.
115.6[#] *2*			E=116.3 *5*, L=1,3 (S=0.224 *14* for L=1, 0.27 *7* for L=3) for 116+119 doublet (1994Ga05).
118.8[#] *4*			E=116.3 *5*, L=1,3 (S=0.224 *14* for L=1, 0.27 *7* for L=3) for 116+119 doublet (1994Ga05).
122.5?[#] *10*			
127?[#] *2*			Not observed by 1994Ga05; authors estimate S<0.03 if L=1. Not resolved from tentative 131 level seen in (d,t) by 1991Ke10.
144.8 *11*	[1]	<0.02	E=143.8 *3* in 1991Ke10.
192.2 *5*	1	0.075 *3*	
198?[#] *2*			
212.4 *5*	1	0.109 *4*	
226.8 *6*	1	0.041 *2*	
239.9 *4*	1,3	0.073,0.21	
257.2 *5*	3	0.431 *15*	
266.4[#] *5*			
288.1[#] *3*			1994Ga05 report E=288.5, L=1,S=0.176 *6* for 288+294 doublet.
294[#] *2*			1994Ga05 report E=288.5, L=1,S=0.176 *6* for 288+294 doublet.
310.1[#] *3*			
318.6 *4*	1	0.178 *5*	
331.3 *4*	1	0.164 *6*	E(level),L,S: for doublet composed of the Adopted Levels at 331.1 and 331.8 (1994Ga05).
341?[#] *2*			
367.5 *6*	1	0.054 *2*	E(level),L,S: for doublet composed of the Adopted Levels at 366.7 and 368.4 (1994Ga05). E=366.4 *4* for this doublet in 1991Ke10.
390.3 *5*	1,3	0.024,0.165	E(level),L,S: for doublet composed of the Adopted Levels at 389.7 and 392.3 (1994Ga05).
407.3[#] *10*			
414.3 *6*	1	0.047 *2*	
438.0 *6*	1	0.034 *2*	
444.1[#] *8*			
450.5 *6*	1,3	0.022,0.072	
472.2 *6*	1	0.050 *3*	E(level): 470.6 *5* in 1991Ke10.
480.4[#] *9*			
489.8 *6*			
507.7 *6*	1	0.126 *5*	

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^{191}Ir(d,p) 1994Ga05,1991Ke10 (continued)

^{192}Ir Levels (continued)

E(level)[†]	L[‡]	S[‡]	Comments
517.6 *8*	1	0.066 *3*	
531.3 *8*	1	0.034 *2*	
537.3[#] *10*			
542.7 *8*	1	0.036 *2*	E(level): 543.4 *10* in 1991Ke10.
582.2 *8*	1	0.026 *2*	
614.4 *7*	1	0.035 *2*	
627.6 *8*	1	0.035 *2*	
643.7 *7*	1	0.018 *1*	
660.7 *8*	1	0.025 *2*	
686.6 *9*	1	0.021 *2*	
700.7 *9*	1	0.035 *2*	

[†] From 1994Ga05, except as noted. Uncertainties include systematic uncertainty arising from spectrograph calibration. Values are relative to E=288.5 for the 289 level.

[‡] From comparison of experimental $\sigma(\theta)$ with $\sigma(\theta)$(DWBA) (1994Ga05); normalization factor=1.55. See 1994Ga05 for uncertainties in S whenever two S values are listed.

[#] From 1991Ke10; average of authors′ data from (d,t) and (d,p).