^{233}U(d,p) 1968Bj05

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli	NDS 108, 681 (2007)	1-Jun-2006

Additional information 1.
E(d)=13 MeV (1968Bj05).
Q(d,p)=4656 *15* (1968Bj05).
Other measurements: 1961Ho12.

^{234}U Levels

E(level)‡	Jπ†	Comments
(0.0@)	0+	
43.9@	2+	
145.4@	4+	
300.0@	6+	
496.5@	8+	
≈793.3#&	1−	
855.7#&	3−	
927.6a	2+	
970.5a	3+	
1023.9a	4+	
1089.9a	5+	
1126.2b	2+	
1167.8a	6+	Level assumed doublet (6+ and 3+).
1167.8b	3+	Level assumed doublet (3+ and 6+).
1214.0b	4+	
1275.9b	5+	
1354.0b	6+	
1473		
1493.9c	3+	
1535.4c	4+	
1555.7d	5+	
1587.1c	5+	
1614.4d	6+	
1653.9c	6+	
1690.5d	7+	
1717.5e	7−	
1736.5c	7+	
1749.6		
1780.2d	8+	
1807.2		
1849.7c	(8+)	
1891.3d	(9+)	
1932.1		
1955.8		
2033.8		
2097.4		

† Jπ and configuration assignments of 1968Bj05 are based on spectroscopic factors (ratio of observed to calculated cross sections) at θ=90° and 125°. See 1968Bj05 for the optical-model parameters used in DWBA calculations. Assignments given to various

Continued on next page (footnotes at end of table)

^{233}U(d,p) 1968Bj05 (continued)

^{234}U Levels (continued)

bands are from the contributing two-neutron configurations: odd neutron in ^{233}U + added neutron state. Squared amplitudes of these configurations in collective states are given when they were deduced experimentally. For theoretical amplitudes and pairing factors see 1965So04, 1968Bj05, 1975Iv03.

‡ About 14 keV overall energy resolution.

Line is broader than expected for a single level.

@ Band(A): K=0: *νν* 5/2[633],5/2[633].

& Band(B): K=0: *νν* 5/2[633],5/2[752].

a Band(C): K=2: *νν* 5/2[633],1/2[631]. Experimental amplitude square=37% 7.

b Band(D): K=2: *νν* 5/2[633],1/2[631]. experimental amplitude square=30% 7.

c Band(E): K=3: *νν* 5/2[633],1/2[631].

d Band(F): K=5: *νν* 5/2[633],5/2[622].

e Band(G): K=1: *νν* 5/2[633],7/2[743].

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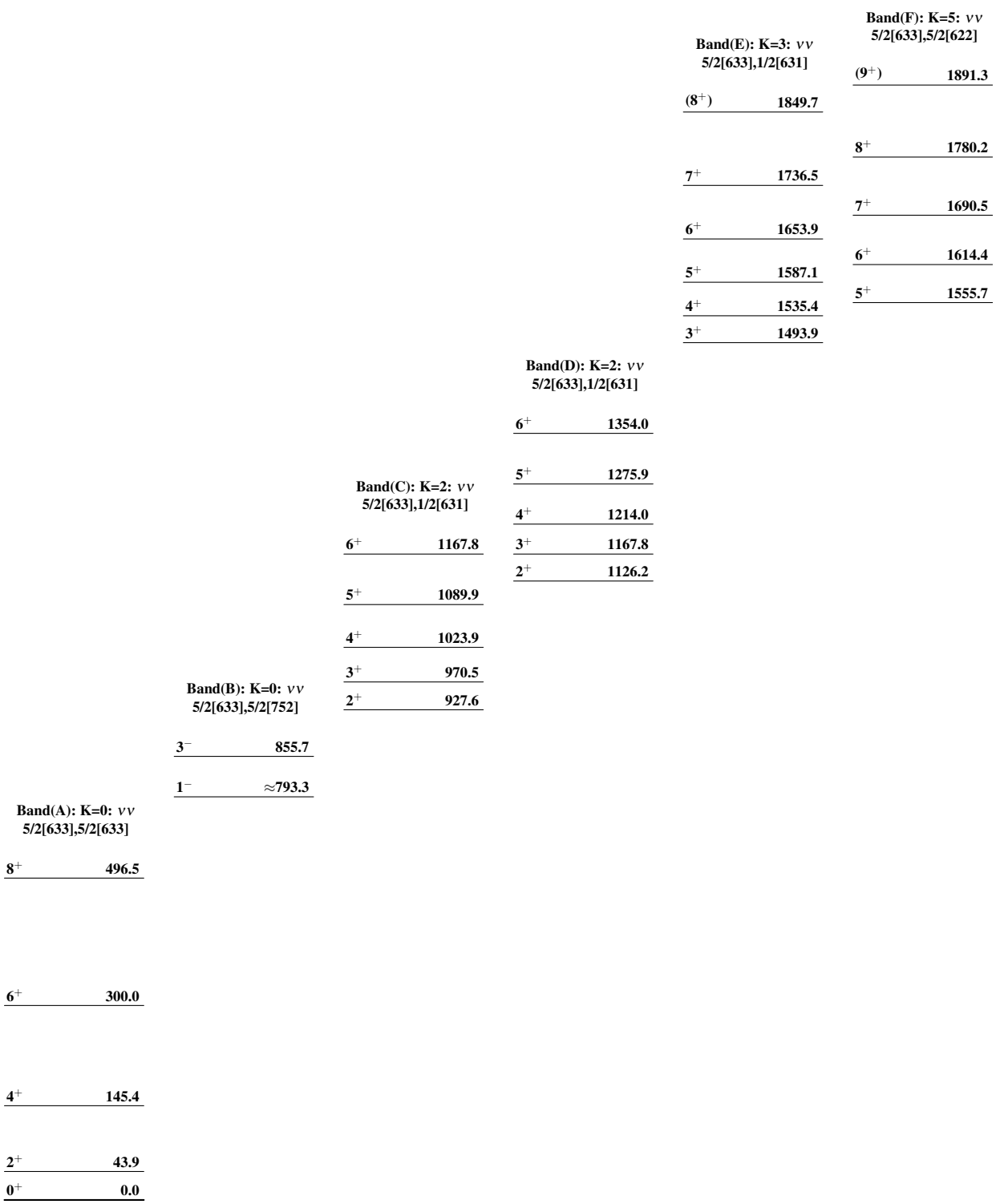

$^{234}_{92}U_{142}$

^{233}U(d,p) 1968Bj05 (continued)

Band(G): K=1: *νν*
5/2[633],7/2[743]

7^- 1717.5

$^{234}_{92}U_{142}$