

$^{238}\text{Pu}(\text{d,p})$ 1973Gr26

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli	NDS 122, 293 (2014)		30-Jun-2013

E(d)=12.1, 13.1 MeV; measured scattered protons, $\sigma(90^\circ, 125^\circ, 150^\circ)$. Detector: magnetic spectrograph, FWHM=13 keV.

[Additional information 1.](#)

 ^{239}Pu Levels

E(level) [‡]	J π [†]	E(level) [‡]	J π [†]	E(level) [‡]	J π [†]	E(level) [‡]	J π [†]
0 [#]	1/2 ⁺	488 [@]	(3/2 ⁻)	885		1261 ^d	(5/2 ⁺)
8 [#]	3/2 ⁺	488 ^a	(11/2 ⁻)	901		1261 ^f	(3/2 ⁺)
75 [#]	7/2 ⁺	507 [@]	(5/2 ⁻)	990 ^c	(3/2 ⁻)	1289 ^f	(5/2 ⁺)
163 [#]	9/2 ⁺	507 ^b	(7/2 ⁺)	1017 ^c	(1/2 ⁻)	1311 ^d	(7/2 ⁺)
191 [#]	11/2 ⁺	538		1038 ^c	(7/2 ⁻)	1342 ^f	(7/2 ⁺)
284 ^{&}	5/2 ⁺	565 ^b	9/2 ⁺	1100 ^c	(5/2 ⁻)	1359 ^d	(9/2 ⁺)
326 ^{&}	(7/2 ⁺)	620 ^a	(15/2 ⁻)	1137 ^c	(11/2 ⁻)	1390	
386 ^{&}	9/2 ⁺	634 ^b	11/2 ⁺	1174		1409 ^f	(9/2 ⁺)
464 [@]	(1/2 ⁻)	658		1214 ^d	(1/2 ⁺)	1437	
464 ^{&}	(11/2 ⁺)	716		1233 ^d	(3/2 ⁺)	1465	
		749		1233 ^e	(9/2 ⁻)	1488	
		780					

[†] Based on angular distributions and cross-section fingerprints.

[‡] FWHM= 13 keV (1973Gr26).

[#] Band(A): 1/2[631].

[@] Band(B): 1/2[631]×0⁻.

[&] Band(C): 5/2[622].

^a Band(D): 7/2[743] ?

^b Band(E): 7/2[624].

^c Band(F): 1/2[761].

^d Band(G): 1/2[620].

^e Band(H): 7/2[613] ?

^f Band(I): 3/2[622] ?

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				Band(F): 1/2[761]	
				(11/2 ⁻)	1137
				(5/2 ⁻)	1100
				(7/2 ⁻)	1038
				(1/2 ⁻)	1017
				(3/2 ⁻)	990
				Band(E): 7/2[624]	
				11/2 ⁺	634
				Band(D): 7/2[743] ?	
				(15/2 ⁻)	620
				9/2 ⁺	565
				Band(B): 1/2[631] × 0 ⁻	
				(5/2 ⁻)	507
				(3/2 ⁻)	488
				(1/2 ⁻)	464
				Band(C): 5/2[622]	
				(11/2 ⁻)	488
				(11/2 ⁺)	464
				9/2 ⁺	386
				(7/2 ⁺)	326
				5/2 ⁺	284
				Band(A): 1/2[631]	
				11/2 ⁺	191
				9/2 ⁺	163
				7/2 ⁺	75
				3/2 ⁺	8
				1/2 ⁺	0

²³⁸Pu(d,p) 1973Gr26 (continued)

Band(I): 3/2[622] ?

(9/2⁺) 1409

Band(G): 1/2[620]

(9/2⁺) 1359

(7/2⁺) 1342

(7/2⁺) 1311

(5/2⁺) 1289

(5/2⁺) 1261

(3/2⁺) 1261

Band(H): 7/2[613] ?

(3/2⁺) 1233

(9/2⁻) 1233

(1/2⁺) 1214

²³⁹Pu₁₄₅