

$^{244}\text{Pu}(\text{d},\text{p})$ E=12 MeV 1975ErZX

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli	NDS 112, 447 (2011)	1-Jun-2010

Additional information 1.

 ^{245}Pu Levels

Spins and Nilsson assignments are based on (d,p) cross sections at 90°, 120°, and 150°, in comparison with relative cross sections from theory.

E(level) [†]	J ^π	E(level) [†]	J ^π	E(level) [†]	J ^π	E(level) [†]
0.0 [‡]	9/2 ⁻	428 [@] 5	(7/2 ⁺)	680 ^b 3	(7/2 ⁻)	1133 3
222 [‡]	15/2 ⁻	464 [@] 5	(9/2 ⁺)	728 ^a 3	(9/2 ⁺)	1284 3
251 [#] 4	(9/2 ⁺)	580 ^a 4	(3/2 ⁺)	743 3		1394 4
311 [@] 3	(1/2 ⁺)	618 ^a 4	(5/2 ⁺)	763 4		
330 ^{&} 2	(9/2 ⁺)	642 ^b 4	(3/2 ⁻)	807 ^c 2	(11/2 ⁺)	
360 [@] 3	(5/2 ⁺)	665 ^a 3	(7/2 ⁺)	1076 3		

[†] Energies are relative to 222 keV for the 15/2⁻, 9/2[734] level.

[‡] Band(A): 9/2⁻[734] rotational band.

[#] Band(B): 5/2⁺[622] rotational band.

[@] Band(C): 1/2⁺[620] rotational band.

[&] Band(D): 7/2⁺[613] rotational band.

^a Band(E): 3/2⁺[622] rotational band.

^b Band(F): 1/2⁻[750] rotational band.

^c Band(G): 9/2⁺[615] rotational band.

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		Band(E): 3/2⁺[622] rotational band				Band(F): 1/2⁻[750] rotational band	
		(9/2 ⁺)	728			(7/2 ⁻)	680
		(7/2 ⁺)	665			(3/2 ⁻)	642
		(5/2 ⁺)	618				
		(3/2 ⁺)	580				
		Band(C): 1/2⁺[620] rotational band					
		(9/2 ⁺)	464				
		(7/2 ⁺)	428				
		(5/2 ⁺)	360	Band(D): 7/2⁺[613] rotational band			
		(1/2 ⁺)	311	(9/2 ⁺)		330	
		Band(B): 5/2⁺[622] rotational band					
Band(A): 9/2⁻[734] rotational band		(9/2 ⁺)	251				
15/2 ⁻	222						
9/2 ⁻	0.0						

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Band(G): 9/2⁺[615]
rotational band

(11/2⁺) 807

²⁴⁵Pu₁₅₁