^{141}Pr(d,d′),(α,α′) 1971Ba15

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 187,1 (2023)	12-Oct-2022

(d,d′): E=45 MeV (1971Ba15), 12 MeV (1969El09); others: 1962Jo05, 1961Co07.
(α,α′): E=45 MeV (1971Ba15). Measured: σ(E,θ), DWBA analysis.
For giant quadrupole resonances at E=115 MeV see 1976Yo02.

^{141}Pr Levels

E(level)[#]	Jπ[‡]	L[†]	β_L in (α,α′)	Comments
0.0	5/2+			
145 *10*	7/2+		≤0.014	
1125 *10*		2+3		E(level),β_L in (α,α′): unresolved levels 1118 and 1127 with J^π=11/2−, β_L=0.031 and J^π=3/2+, β_L=0.026.
1295 *10*	1/2+	2	0.027	
1437[@] *10*				
1456 *10*	+	2	0.022	
1498[@]				
1523 *10*	9/2+	2	0.032	
1584[@] *10*				
1609[@] *10*				
1650 *10*		2	0.022	
1760 *20*				
1799[@] *10*				
1817[@] *10*				
1850 *20*				
2002 *10*	(9/2)−	3	0.030	
2078 *10*	5/2−[&]	3		Jπ: adopted value is (5/2+).
2106 *10*	7/2−[&]	3		Jπ: adopted value is (5/2−). β_L(2078+2106)=0.023.
2178 *10*	5/2−	3	0.026	
2256 *10*	+			
2320 *10*	5/2−[&]	3	0.035	Jπ: adopted value is (5/2,7/2).
2368 *10*	5/2−	3		
2388 *10*	11/2−[&]	3		Jπ: adopted value is (9/2−). β_L(2368+2388)=0.044.
2570 *20*				
2585[@] *10*				
2609 *10*	+	2	0.029	
2684 *10*	−	3	0.026	
2730?[@] *10*				
2820 *10*				
2843[@] *10*				
2876 *10*				
2940 *10*				
2986 *10*	+	2	0.022	
3135 *10*				
3200 *20*				
3330 *20*				
3430 *20*				
3590 *20*				

Continued on next page (footnotes at end of table)

^{141}Pr(d,d′),(α,α′) 1971Ba15 (continued)

^{141}Pr Levels (continued)

† From $\sigma(\theta)$ in (α,α′).
‡ Adopted values, π from L, except whether noted otherwise.
# From 1971Ba15. For levels ≤3135, E and ΔE are from (d,d′); from (α,α′) for others.
@ From (d,d′) (1969El09).
& J^{π} value based on arguments of this dataset that is different from adopted value.