

$^{136}\text{Ba}(\text{d},\text{d}')(\alpha,\alpha')$ 1985Bu13,1968A104,1967MoZY

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	E. A. Mccutchan	NDS 152, 331 (2018)	1-Apr-2018

1967MoZY: E(d)=15 MeV. No details given.

1968A104: E α =31 MeV. FWHM=100-150 keV. No additional details given.

1985Bu13: E α =20 MeV. Measured $\sigma(\theta)$ for $\theta=25^\circ-115^\circ$ using Enge split-pole spectrograph and position sensitive proportional counter; analysis with Coupled-Channel Calculations (CCC).

See also Coulomb excitation.

 ^{136}Ba Levels

E(level) [†]	J π [‡]	L [#]	β_L [@]	Comments
0	0 ⁺			
820 & 5	2 ⁺	2	0.09	
1551 20	2 ⁺			
1579 20	0 ⁺			
1862 5	4 ⁺			
2049 5	4 ⁺			
2124 5	2 ⁺			
2149 20				
2315 20	0 ⁺			
2529 & 5	3 ⁻	3,4	0.07	L: 3 or 4 gives essential equal fits to d θ /d Ω (1985Bu13).
2800				
3100				
3500				
3650				

[†] From 1967MoZY ($\Delta E=20$), 1985Bu13 ($\Delta E=5$), and 1968A104 ($E \geq 2800$).

[‡] From the Adopted Levels.

[#] From coupled-channel calculations (1985Bu13).

[@] From 1985Bu13.

& Most strongly populated in (α,α') (1968A104,1985Bu13).