

$^{138}\text{Ba}({}^7\text{Li}, {}^6\text{He})$ **1980Cl08**

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	P. K. Joshi, B. Singh, S. Singh, A. K. Jain		NDS 138, 1 (2016)	15-Oct-2016

E=52 MeV. Measured $\sigma(\theta)$; mag spect, pc. FWHM=70 keV. DWBA.

 ^{139}La Levels

E(level)	J^π [†]	L	C^2S	Comments
0.0	$7/2^+$	4	0.72 17	
166	$5/2^+ \ddagger$	2	1.03 15	
1.21×10^3	$1/2^+$	0	0.14 4	
1.42×10^3	$11/2^-$	5	1.19 22	
1.56×10^3	$5/2^+ \ddagger$	2	0.06 2	
1.77×10^3	$1/2^+, 3/2^+$	0+2	0.28+1.22	$C^2S: \Delta C^2S = 0.04, 0.18.$
1.85×10^3	$3/2^+ \ddagger$	2	0.43 8	
1.96×10^3	$3/2^+ \ddagger$	2	0.28 6	
2.24×10^3	$3/2^+, 7/2^+$	2+4	0.12+0.24	$C^2S: \Delta C^2S = 0.04, 0.08.$
2.31×10^3	$1/2^+$	0	0.15 5	
2.40×10^3	$11/2^-$	(5)	0.21 7	

[†] Assumed for extraction of C^2S , except as noted.

[‡] From comparison of $\sigma(\theta)$ to DWBA calculations. $\sigma(\theta)$ seems to distinguish between $d_{3/2}$ and $d_{5/2}$.