

$^{138}\text{Ba}(\text{}^3\text{He,d},(\alpha,\text{t}))$ 1971Wi04

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

1971Wi04: $E(^3\text{He})=40.3$ MeV. Measured $\sigma(\theta)$; FWHM=35. DWBA.

1973Na08: $E(^3\text{He})=22$ MeV; $E\alpha=27$ MeV. Measured $\sigma(\theta)$. Observed g.s., 166, and 1420.

 ^{139}La Levels

E(level)	J^π^\dagger	L	C^2S
0.0	$7/2^+$	4	0.54
166 2	$5/2^+$	2	0.90
1210 10	$1/2^+$	0	0.10
1420 12	$11/2^-$	5^\ddagger	0.71
1560 13	$3/2^+$	2	0.07
1780 15	$1/2^+, 3/2^+$	0+2	0.67, 0.83
1850 15	$3/2^+$	2	0.30
1960 16	$3/2^+$	2	0.19
2240 18	$3/2^+$	2	0.10
2310 19	$1/2^+$	0	0.13

† Assumed for extraction of C^2S .

‡ $\sigma(\text{t},45^\circ)/\sigma(\text{d},30^\circ)$ agrees with $L=5$ (1973Na08).