

$^{232}\text{Th}(\text{d}, ^6\text{Li})$ 1984Va13

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Khalifeh Abusaleem	NDS 116, 163 (2014)		31-Dec-2012

1984Va13: E=45 MeV, FWHM \approx 40. Analysis also reported in 1984Va23.

1981Ja01: E=54.8 MeV, FWHM=80.

 ^{228}Ra Levels

E(level) [†]	L [‡]	S [#]	Comments
0	0	1.0	
64	2	1.0	
205	4	0.7	
412	6	<0.2	
474	1	<0.2	
538	3	<0.1	
656	5	<0.2	
721	0	0.6	L: L=0 confirmed in present experiment.
771	2	1.1	
846	2	0.8	
880	4	1.2	
967	(2,4)	0.4,0.4	
1050	(2,4)	0.3,0.3	L: not consistent with $J^\pi=0^+$ for a level in β^- decay at 1041.9.
1140	(4)	0.8	
1200	(2)	0.3	
1420	(2,4)	0.5,0.7	

[†] Rounded-off values from 1982Ru04 in β decay as adopted by 1984Va13 for E(level)<1000. Values for the higher levels are from 1984Va13.

[‡] Values are those adopted by 1984Va13, mainly on the basis of known J^π values, for the extraction of spectroscopic factors and reduced α widths.

[#] From 1984Va13 defined by $S=(d\sigma/d\Omega)_{\text{exp}}/(d\sigma/d\Omega)_{\text{DWBA5}}$. Values are given relative to that for the ground state ($S=0.024$).

The authors also give reduced α widths. Other: 1981Ja01. As pointed out by 1984Va13, the spectroscopic factors (and hence reduced α widths) depend on the choice of optical model parameters so the absolute values from their experiment and those of 1981Ja01 cannot be compared directly.