^{136}Xe(d,t) 1966Sc13,1968Mo21

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh, Alexander A. Rodionov And Yuri L. Khazov	NDS 109, 517 (2008)	22-Jan-2008

1966Sc13: E=15 MeV. Measured $\sigma(\theta)$, comparisons with DWBA calculations. FWHM=80 keV. Magnetic spectrograph.
1968Mo21: E=13 MeV. Measured $\sigma(\theta)$, comparisons with DWBA calculations. Magnetic spectrograph. Uncertainty In cross sections=6%. First three levels are reported.
Relative $d\sigma/d\Omega(60°)$ are given by 1966Sc13.

^{135}Xe Levels

E(level)[†]	J^π[‡]	L[†]	S[@]	Comments
0	$3/2^+$	2	3.96	$d\sigma/d\Omega$=1.30 (60°) (1966Sc13), 3.45 mb/sr (30°) (1968Mo21).
290 *20*	$1/2^+$	0	1.86	$d\sigma/d\Omega$=1.10 (60°) (1966Sc13), 3.33 mb/sr (30°) (1968Mo21).
530 *20*	$11/2^-$	5	9.83	$d\sigma/d\Omega$=0.31 (60°) (1966Sc13), 0.82 mb/sr (30°) (1968Mo21).
1280 *20*	$(5/2^+)$	(2)		$d\sigma/d\Omega$=0.26 (60°) (1966Sc13).
1470 *30*	$(5/2^+)$	(2)		$d\sigma/d\Omega$=0.31 (60°) (1966Sc13).
1530?[#] *30*		(0+4)		$d\sigma/d\Omega$=0.16 (60°) (1966Sc13). J^π: 1966Sc13 suggest $(1/2^+,7/2^+)$.
1830 *30*	$(5/2^+)$	2		$d\sigma/d\Omega$=0.24 (60°) (1966Sc13).
2100 *30*	$(5/2^+)$	2		$d\sigma/d\Omega$=0.21 (60°) (1966Sc13).

[†] From 1966Sc13, energy uncertainty assigned by the evaluators based on the statement by 1966Sc13 that it is 30 keV At 1.5 MeV and 50 keV At 3 MeV.
[‡] As proposed by 1966Sc13 from L-transfers.
[#] Probable doublet.
[@] From 1968Mo21.