^{130}Te(t,α) 1973Co33

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Janos Timar and Zoltan Elekes, Balraj Singh	NDS 121, 143 (2014)	31-May-2014

1973Co33: E=12 MeV; measured α spectra and $\sigma(\theta)$ using a magnetic spectrograph, θ=12.5-175°; deduced spectroscopic factors; enriched target. FWHM=30 keV. DWBA analysis.

1980Sh03: E=16 MeV; measured α spectra and $\sigma(\theta)$ using Enge split-pole magnetic spectrograph. FWHM=30 keV. DWBA analysis.

^{129}Sb Levels

E(level)	L[#]	C^{2}S[†]	Comments
0	4	1.75	C^{2}S: if 1g$_{7/2}$. Other: 1.85 (1980Sh03).
640 *10*	2	0.20	C^{2}S: if 2d$_{5/2}$. Other: 0.06 (1980Sh03).
913 *10*	2	0.05	E(level): other: 910 (1980Sh03). C^{2}S: if 2d$_{3/2}$.
1450[‡] *30*			
2710 *10*	4	2.72	C^{2}S: if 1g$_{9/2}$.
3071 *10*	1	0.82	C^{2}S: if 2p$_{1/2}$.
3110 *10*			
3291 *10*			
3410 *10*	1	0.40	C^{2}S: if 2p$_{1/2}$, 0.32 if 2p$_{3/2}$.
3484 *10*	3	1.42	C^{2}S: if 1f$_{5/2}$.

[†] C^{2}S are relative values, normalized to Σ C^{2}S=2 for the low-lying levels with the assumption that ^{130}Te can be represented by two protons outside Z=50 core distributed among the 1g$_{7/2}$, 2d$_{5/2}$, 2d$_{3/2}$, 3s$_{1/2}$ and 1h$_{11/2}$ orbitals.

[‡] From 1980Sh03.

[#] From DWBA in 1973Co33.