^{48}Ca(^{7}Li,p2nγ) 1976Br29

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Yang Dong, Huo Junde	NDS 128, 185 (2015)	10-Jul-2015

1976Br29: E=28 MeV, measured γ-spectra and recoil distance with a Ge(Li).

2009Fu17: ^{48}Ca(^{7}Li,t), E(^{7}Li)=26.0 MeV. 97.8% enriched target on Carbon foil. Tritons were detected by ΔE-E telescope of Si detectors with FWHM=70 keV. The α particles emitted from the excited states of ^{52}Ti were detected by eight silicon photodiode detectors. Measured triton spectra, αt coincidences, Search for Alpha cluster states. No α-cluster states were detected since the number of coincidence events was very small.

All data are from 1976Br29.

^{52}Ti Levels

E(level)	J$^{\pi}$[†]	$T_{1/2}$	Comments
0.0	0^+		
1050	2^+		
2317	4^+		
3027	(6^+)	25 ps *5*	$T_{1/2}$: based on RDM using the 1267-keV γ. The lifetime of the 2317-keV level was assumed too short to affect the result. The decay data obtained are consistent with this assumption.

[†] From Adopted Levels.

γ(^{52}Ti)

Approximate Eγ given only for those transitions relevant to $T_{1/2}$ measurement. No Iγ or uncertainties on Eγ reported.

E$_\gamma$	E$_i$(level)	J$^{\pi}_i$	E$_f$	J$^{\pi}_f$
710	3027	(6^+)	2317	4^+
1050	1050	2^+	0.0	0^+
1267	2317	4^+	1050	2^+

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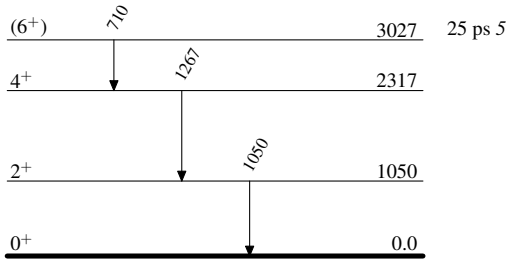
Level Scheme



$^{52}_{22}Ti_{30}$