

${}^{46}\text{Ti}({}^3\text{He,p}\gamma)$ 1973Sm12

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jun Chen	NDS 179, 1 (2022)	30-Nov-2021

1973Sm12: E=17 MeV ${}^3\text{He}$ beam was produced from the Argonne tandem Van de Graaff. Target was 1 mg/cm² ${}^{46}\text{Ti}$ metal (83.6% enriched) on a gold foil. γ rays were detected with a Ge(Li) detector and protons were detected with a surface-barrier particle detector. Measured E_γ , E_p , γ p-coin. Deduced levels.

 ${}^{48}\text{V}$ Levels

E(level) [†]	Comments
0.0	
308 [‡]	Additional information 1.
421 [‡]	Additional information 2.
2289 6	
2408 5	
3019 6	
3702 6	
3866 5	
4698 [#]	
4798 [#]	

[†] From a least-squares fit to γ -ray energies, unless otherwise noted.

[‡] Rounded values in Adopted Levels.

[#] Taken by [1973Sm12](#) from their (${}^3\text{He,p}$) measurement, with uncertainty=15.

 $\gamma({}^{48}\text{V})$

E_γ [†]	$E_i(\text{level})$	E_f
1981 6	2289	308
1989 6	2408	421
2098 6	2408	308
2598 6	3019	421
3394 6	3702	308
3445 6	3866	421
3558 6	3866	308
4368 ^{‡#} 6	4698	308
4368 ^{‡#} 6	4798	421

[†] From [1973Sm12](#).

[‡] Multiply placed.

[#] Placement of transition in the level scheme is uncertain.

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Legend

Level Scheme-----> γ Decay (Uncertain)