

${}^9\text{Be}({}^{46}\text{Ar}, {}^6\text{n}\gamma)$ 2005Id03

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	T. W. Burrows ^a	NDS 109, 1879 (2008)	14-Jul-2008

${}^{46}\text{Ar}$ beam produced by fragmentation of E=63 MeV/nucleon primary beam of ${}^{48}\text{Ca}$ on a ${}^9\text{Be}$ target. isotope separation following fragmentation achieved with an aluminum energy degrader At momentum-dispersive focal plane and reduced secondary beam energy to ≈ 30 MeV/nucleon. Particle identification of secondary beam performed by tof, (E- Δ E method). purity of ${}^{46}\text{Ar}$ beam=90%.

E=2-7 MeV/nucleon. measured E_γ , I_γ , $\gamma\gamma$ with the GRAPE system, consisting of 17 Ge detectors. two PPAC counters were used for Doppler correction.

 ${}^{49}\text{Ti}$ Levels

E(level) [†]	J^π [‡]
0	$7/2^-$
1543.0 10	$11/2^-$
2506.0 15	$15/2^-$
3291.0 18	$(17/2)^-$

[†] From least-squares fit to E_γ 's, assuming $\Delta E(\gamma)=1$ keV (evaluator).

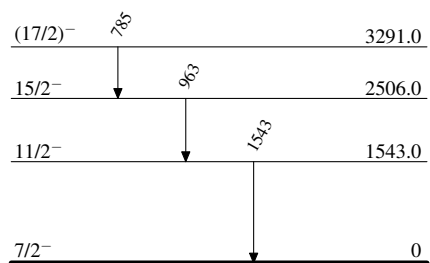
[‡] From the Adopted Levels.

 $\gamma({}^{49}\text{Ti})$

E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
785	3291.0	$(17/2)^-$	2506.0	$15/2^-$
963	2506.0	$15/2^-$	1543.0	$11/2^-$
1543	1543.0	$11/2^-$	0	$7/2^-$

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Level Scheme



${}^{49}_{22}\text{Ti}_{27}$