

$^{46}\text{Ti}(\alpha, \alpha'), (\alpha, \alpha' \gamma)$

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	S. -c. Wu	NDS 91, 1 (2000)	15-Jul-2000

E=104 MeV ([1974Re01](#)); 4 Si EDE counter telescopes; optical model analysis of angular distributions.

E=27.2 MeV ([1974Al10](#)); 5 Si(Li) detectors; DWBA analysis of angular distributions.

E not given ([1972RoZW](#)); no experimental details given; measured DSA in $(\alpha, \alpha' \gamma)$.

E=44 MeV ([1970Br07](#), [1966Br19](#)); Si(Li), Si EDE counter telescopes; Austern-Blair model analysis of angular distributions.

E=43 MeV ([1967Yn01](#)); Si EDE counter telescope; DWBA analysis of angular distributions.

Others: [1994Ra29](#), [1992Ra21](#).

 ^{46}Ti Levels

E(level) [†]	T _{1/2}	L	$\beta_{LR}^{\ddagger}$	Comments
0.0				
890		2	0.95	Q=-0.27 I; B(E2) $\uparrow$ =0.0874 56 Prolate deformation deduced by 1974Re01 . $\beta_2=0.24$ 2.
2009	3.2 ps +12-6	4		B(E4) $\uparrow$ =0.93 $\times 10^{-4}$ 10 (1974Re01) T _{1/2} : from DSA, presumably of 1121 γ , although E γ not stated (1972RoZW). E(level): probably corresponds to 3059 adopted level.
3010		3	0.27	E(level): probably corresponds to 3059 adopted level.
3240		5	0.27	J ^π : adopted 3236 level has J=2 ⁺ indicating possible doublet.
3540		3	0.30	E(level): probably corresponds to 3569, J=(4 ⁺ , 3 ⁻) adopted level.
3840		(5)		
4140		3	0.33	E(level): probably corresponds to 4178 adopted level.
4730				
5030		4	0.19	
5270		6	0.16	
5870		3	0.29	
6390				

[†] From [1970Br07](#); ΔE not given.

[‡] From [1970Br07](#).

 $\gamma(^{46}\text{Ti})$

E $_{\gamma}$	E $_i$ (level)	E $_f$	Comments
1121	2009	890	E $_{\gamma}$: from adopted γ 's.

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Level Scheme

