^{126}Te(γ,γ') 1997Sc15,1974Wo05

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	H. Iimura, J. Katakura, S. Ohya	NDS 180, 1 (2022)	1-Oct-2021

1974Wo05: E=6.4-7.9 MeV, γ source: Ti, Cu(n,γ); γ, FWHM=10 keV at 7 MeV, σ, $\gamma(\theta)$, ratio of nonresonant absorption/total absorption.
1997Sc15: E=4.5-5.5 MeV bremsstrahlung; enriched target (98.2%); γ, $\gamma(\theta)$.
Other: 1997Sc25.

^{126}Te Levels

E(level)[†]	J$^\pi$[‡]	Comments
0.0	0^+	
665.74 *20*	2^+	
1422.1 *15*	2^+	
2812.43 *20*	1	
2897.71 *18*	1^+	
2974.20 *19*	1	
3015.24 *20*	$1^-,2^+$	
3680.91? *22*	$1,2^+$	
3759.2 *3*	(1,2)	
3881.32 *24*	$(1^-,2^+)$	
7791.3[#] *10*		S: $\Gamma(\gamma_0)/\Gamma$=0.75 *9*.
7915.3[@] *10*	1^+	J$^\pi$: From $\gamma(\theta)$ and γ(pol) (1974Wo05). S: $\Gamma(\gamma_0)/\Gamma$=0.4 *1*.

[†] From 1997Sc15, unless otherwise noted.
[‡] From Adopted Levels, unless othrwise noted.
[#] From 1969ScZX.
[@] From 1974Wo05.

γ(^{126}Te)

E$_i$(level)	J$_i^\pi$	E$_\gamma$[†]	I$_\gamma$	E$_f$	J$_f^\pi$	Mult.[@]	Comments
2812.43	1	2812.4 *2*	100	0.0	0^+	D	
2897.71	1^+	2231.9 *3*	20 *4*	665.74	2^+	(D,Q)	
		2897.7 *2*	80 *4*	0.0	0^+	D	
2974.20	1	2308.7 *4*	19 *5*	665.74	2^+	(D,Q)	
		2974.4 *2*	81 *5*	0.0	0^+	D	
3015.24	$1^-,2^+$	3015.2[&] *2*	100[&]	0.0	0^+	(D,Q)	I$_\gamma$: Branching is only 40% in (n,γ).
3680.91?	$1,2^+$	3015.2[&a] *2*	59[&] *6*	665.74	2^+	(D,Q)	E$_\gamma$: 1997Sc15 proposed two possible placements of this γ. The placement from 3015 level is consistent with other datasets, but the placemen from a 3680 level is not.
		3680.7[a] *3*	41 *6*	0.0	0^+	(D,Q)	E$_\gamma$: There is no 3680.7γ seen in (n,γ).
3759.2	(1,2)	3759.1 *3*	100	0.0	0^+	(D,Q)	I$_\gamma$: From branching in (n,γ) the 3759γ is only 44%.
3881.32	$(1^-,2^+)$	3215.3 *3*	59 *8*	665.74	2^+	(D,Q)	
		3881.5 *3*	41 *8*	0.0	0^+	(D,Q)	
7791.3		6369[‡]		1422.1	2^+		
		7791[‡]		0.0	0^+		
7915.3	1^+	7915[#]		0.0	0^+	D	Mult.: from A$_2$=+0.46 *11* in $\gamma(\theta)$ (1974Wo05).

Continued on next page (footnotes at end of table)

^{126}Te(γ,γ') 1997Sc15,1974Wo05 (continued)

$\gamma(^{126}Te)$ (continued)

† From 1997Sc15.
‡ From 1969ScZX. No Iγ was given by authors.
# From 1974Wo05. No Iγ was given by authors.
@ From Iγ(90°)/Iγ(130°) (1997Sc15), unless otherwise noted.
& Multiply placed with intensity suitably divided.
a Placement of transition in the level scheme is uncertain.

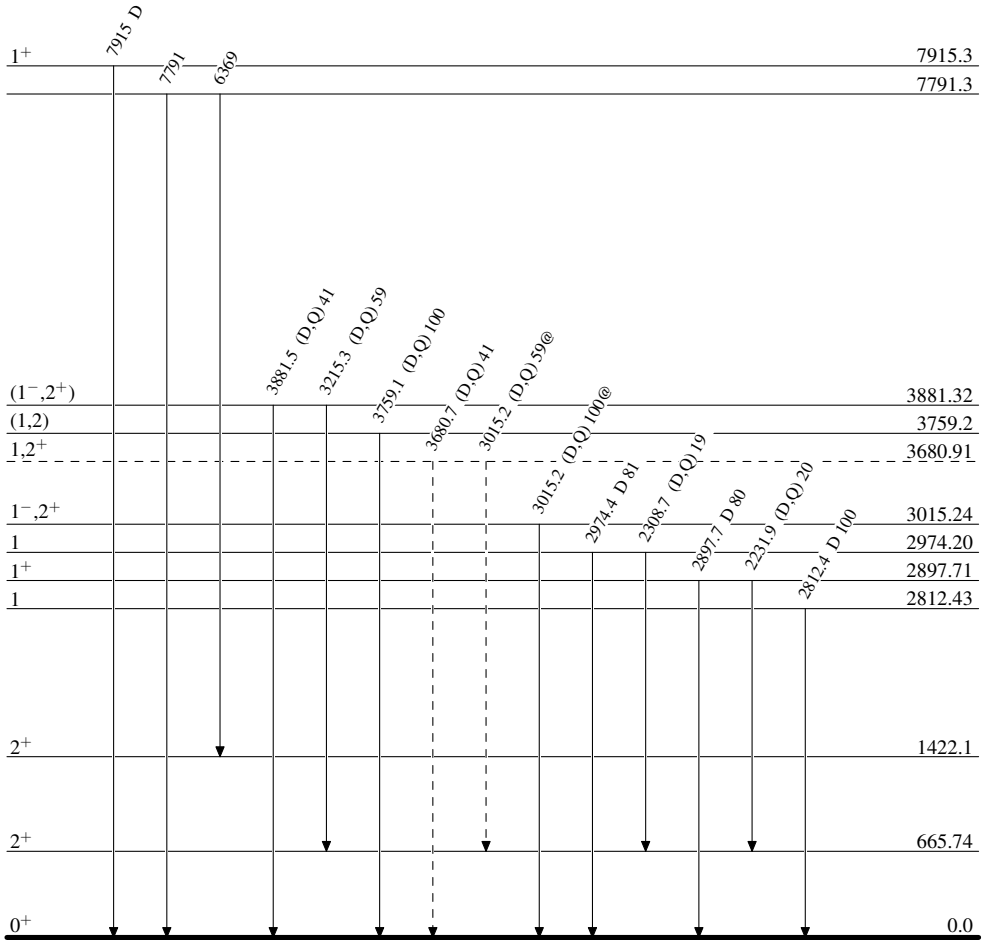
^{126}Te(γ,γ′) 1997Sc15,1974Wo05

Legend

Level Scheme

Intensities: % photon branching from each level
@ Multiply placed: intensity suitably divided

γ Decay (Uncertain)



$^{126}_{52}Te_{74}$