

**Coulomb excitation 1967Af03,1962Ri09,1956Te26**

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	T. W. Burrows	NDS 108, 923 (2007)	20-Feb-2007

1956Te26: ( $\alpha, \alpha' \gamma$ ) E=3-7 MeV. Measured  $\gamma$ 's, B(E2); NaI.  
 1962Ri09: ( $^{20}\text{Ne}, ^{20}\text{Ne}' \gamma$ ) E=8-15 MeV. Measured B(E2),  $\gamma(0^\circ, 90^\circ)$ ; NaI.  
 1967Af03: ( $^{12}\text{C}, ^{12}\text{C}' \gamma$ ) E=36.8 MeV. Measured  $\gamma$ 's, B(E2); NaI.

<sup>47</sup>Ti Levels

E(level)	J <sup><math>\pi</math></sup> †	T <sub>1/2</sub>	Comments
0.0	5/2 <sup>-</sup>		
160	7/2 <sup>-</sup>	0.22 ns 7	B(E2) $\uparrow$ =0.034 6 T <sub>1/2</sub> : from 1961Ho05 (Ag(t); NaI. E $\leq$ 4 MeV). B(E2) $\uparrow$ : Unweighted av of 0.0281 42 (1962Ri09) and 0.040 6 (1956Te26).
1250?	9/2 <sup>-</sup>		B(E2) $\uparrow$ : 0.0062 12 (1967Af03) assuming no contamination of 1250 $\gamma$ from 1.44 to 0.16 MeV transition. Not adopted by evaluator due to problems associated with 1250 $\gamma$ (see Adopted Gammas).

† From the Adopted Levels.

$\gamma(^{47}\text{Ti})$

E <sub>i</sub> (level)	J <sup><math>\pi</math></sup> <sub>i</sub>	E $\gamma$ <sup>†</sup>	I $\gamma$ <sup>†</sup>	E <sub>f</sub>	J <sup><math>\pi</math></sup> <sub>f</sub>	Mult.	$\delta$	Comments
160	7/2 <sup>-</sup>	160 2	100 15	0.0	5/2 <sup>-</sup>	M1+E2	0.099 9	E $\gamma, I_\gamma$ : from 1956Te26. $\delta$ : from adopted T <sub>1/2</sub> =210 ps 6, E $\gamma$ =159.381, J <sub>i</sub> , J <sub>f</sub> , and B(E2) $\uparrow$ . See discussion in Adopted Gammas.
1250?	9/2 <sup>-</sup>	1090 1250 <sup>‡</sup>	49 2 52 2	160 0.0	7/2 <sup>-</sup> 5/2 <sup>-</sup>			I $\gamma$ : assuming no contamination from 1.44 to 0.16 MeV transition. Discrepant with other results. See discussion in Adopted Gammas.

† From 1967Af03, except as noted.

‡ Placement of transition in the level scheme is uncertain.

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Legend

Level Scheme

Intensities: % photon branching from each level

-----►  $\gamma$  Decay (Uncertain)