^{48}Ti(α,2p3nγ),(^{16}O,^{12}C2p3nγ) 1979Da07,1977Gi18

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

1977Gi18: Eα=21-35 MeV. Measured γ's and excitation functions.
1979Da07: E(^{12}C)=120 MeV. Measured γ's and ^{12}C-γ coincidences; Si telescope, Ge(Li). Reaction appears to go by emission of ^{12}C and then by 2p3n evaporation; little evidence for emission of high-energy α's.
Results of 1979Da07 and 1977Gi18 appear consistent. See also ^{10}B(^{40}Ca,3pγ), ^{36}S(^{14}C,3nγ),...

^{47}Ti Levels

E(level)[†]	J$^{\pi}$[‡]
0.	5/2$^-$
159	7/2$^-$
1252.5	9/2$^-$
1445	11/2$^-$
2682.7	11/2$^{(-)}$
2749.5	15/2$^-$
3289.0	13/2$^-$

[†] Nominal adopted excitation energies are given except for the 159 and 1445 states which are from 1979Da07.
[‡] From the Adopted Levels.

γ(^{47}Ti)

From figure 2 of 1977Gi18 and Adopted Gammas; not reported by 1979Da07, except for 159γ and 1445γ. Placed by evaluator on the basis of the adopted level scheme. Transitions coincident with ^{12}C are noted on the drawing.

E$_\gamma$	I$_\gamma$[†]	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$
159	15 *4*	159	7/2$^-$	0.	5/2$^-$
[x]695.0					
1304.9		2749.5	15/2$^-$	1445	11/2$^-$
1430.2		2682.7	11/2$^{(-)}$	1252.5	9/2$^-$
[x]1445	19 *6*				

[†] Relative photon intensity from 1979Da07.
[x] γ ray not placed in level scheme.

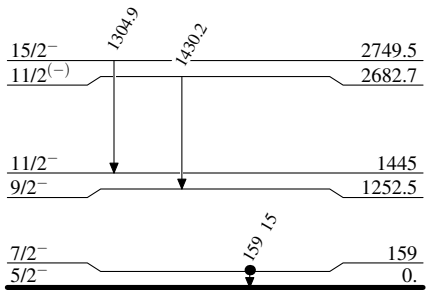
^{48}Ti(α,2p3nγ),(^{16}O,^{12}C2p3nγ) 1979Da07,1977Gi18

Legend

Level Scheme

Intensities: Relative I_γ

● Coincidence



$^{47}_{22}Ti_{25}$