1 H(46 Ar,X γ) **2006Ga31**

History									
Туре	Author	Citation	Literature Cutoff Date						
Full Evaluation	Balraj Singh and Jun Chen [#]	NDS 126, 1 (2015)	31-Mar-2015						

2006Ga31: E=76.4 MeV/nucleon ⁴⁶Ar was produced at the Coupled Cyclotron facility of the NSCL at MSU via projectile fragmentation of a 110 MeV/nucleon ⁴⁸Ca primary beam on a 376 mg/cm² ⁹Be target located at the mid target position of the A1900 fragment separator. Target of a 191 mg/cm² polypropylene [(C₃H₆)_n] foil. The fragments were separated by A1900 fragment separator B ρ - Δ E-B ρ method and identified using the S800 spectrograph. Prompt γ -rays were detected by SeGA γ -detector array of 32-fold segmented HPGe detectors.

The level scheme is taken from ${}^{9}\text{Be}({}^{48}\text{Ca},X\gamma)$ in 2004So30.

⁴³Cl Levels

E(level) [†]	$J^{\pi \dagger}$	Comments		
0	$(1/2^+)$			
329 4	$(3/2^+)$			
945 7	$(5/2^+)$			
1342 7	$(5/2^+)$	E(level): level not included in Adopted Levels due to revised placement of 1342γ .		
1833 [‡] 9	$(7/2^+)$	E(level): level not included in Adopted Levels.		

 † From level scheme proposed by 2004So30.

[‡] A tentative 1509 10 γ from this level reported by 2004So30 is not seen by 2006Ga31.

γ ⁽⁴³Cl)

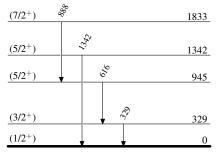
Eγ	E _i (level)	\mathbf{J}_i^{π}	E_f	J_f^π	Comments
x256 [†] 5					
329 4	329	$(3/2^+)$	0	$(1/2^+)$	
616 5	945	$(5/2^+)$	329	$(3/2^+)$	
888 6	1833	$(7/2^+)$	945	$(5/2^+)$	Note that this γ was not observed in coin with 330 γ or 614 γ in 2012St12, thus
					its placement from 1833 level is suspect.
1342 7	1342	$(5/2^+)$	0	$(1/2^+)$	

[†] This γ not reported by 2004So30.

 $x \gamma$ ray not placed in level scheme.

$\frac{1}{1}$ **H**(⁴⁶**Ar**,**X** γ) **2006Ga31**

Level Scheme



 $^{43}_{17}\text{Cl}_{26}$