

$^{50}\text{Cr}(^3\text{He},^6\text{He})$ 1977Mu03

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

E=70 MeV. Measured Q values at 6° and 10° , $\sigma(6^\circ \leq \theta < 30^\circ)$; magnetic spectrograph, proportional counters and scintillator, tof.

 ^{47}Cr Levels

E(level)	J^π [†]	Comments
0.0	$3/2^-$	J^π : from analogy to g.s., $3/2^-$, state in ^{47}V . Additional information 1.
102 10	$(5/2^-)$	J^π : from analogy to 87.5, $5/2^-$, state in ^{47}V .
182 7	$(7/2^-)$	J^π : from analogy to 146, $7/2^-$, state in ^{47}V ($\Delta E(\text{Coul})=8262$ 10) and similarity of $\sigma(\theta)$ to the ($^3\text{He},^6\text{He}$) $\sigma(\theta)$ to 2.79-MeV, $7/2^-$, state in ^{39}Ca . Additional information 2.
478 7	$(3/2^+)$	J^π : from analogy to 259, $3/2^+$, state in ^{47}V ($\Delta E(\text{Coul})=8442$ 13) and similarity of $\sigma(\theta)$ to the ($^3\text{He},^6\text{He}$) $\sigma(\theta)$ to g.s., $3/2^+$, state in ^{39}Ca .
890 20		
1355 8		
1451 9		
1541 15		
1831 8	$(1/2^+)$	J^π : from analogy to 1661, $1/2^+$, state in ^{47}V ($\Delta E(\text{Coul})=8397$ 13) and similarity of $\sigma(\theta)$ to the ($^3\text{He},^6\text{He}$) $\sigma(\theta)$ to 2.47-MeV, $1/2^+$, state in ^{39}Ca .
2131 9		
2406 10		
2557 10		
2609 10		
2661 10		
2848 10		
3430 10		
3504 11		
3747 11		
4169 12		
4295 12		
5409 15		

[†] Parentheses added by the evaluator. $^{42}\text{Ca}(^3\text{He},^6\text{He})$ data of [1976Na21](#) used for comparison. $\sigma(\theta)$ to $7/2^-$, $3/2^+$, and $1/2^+$ states are quite similar for ($^3\text{He},^6\text{He}$) reaction on ^{42}Ca , ^{46}Ti , ^{50}Cr , ^{54}Fe , and ^{58}Ni targets.