

$^{54}\text{Fe}(^3\text{He}, ^6\text{He}), ^{50}\text{Cr}(^3\text{He}, 2\text{n})$ 1977Mu03, 1984Ay01

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Wang Jimin and Huang Xiaolong		NDS 144, 1 (2017)	1-Mar-2016

1977Mu03: $^{54}\text{Fe}(^3\text{He}, ^6\text{He})$, E=70 MeV, FWHM \approx 50 keV estimated by the evaluator; measured Q, $\sigma(\theta)$. Q=-18.697 MeV 15, mass excess=-40.201 MeV 12 for ^{51}Fe .

1984Ay01: $^{50}\text{Cr}(^3\text{He}, 2\text{n})$, E=27 MeV, measured E γ , I γ , I β , and T $_{1/2}$.

 ^{51}Fe Levels

E(level)	J π [†]	T $_{1/2}$	Comments
0	5/2 ⁻	305 ms 5	J π : from the Adopted Levels.
262 6	(7/2 ⁻)		
1218 10			
1525 9			
1866 13			
2063 7	(3/2 ⁺)		
2489 8	(1/2 ⁺)		
3013 9			
3127 9			
3310 10			
3964 12			
4456 13			

E(level): doublet.

[†] From comparison of the T $_z$ =-1/2 with T $_z$ =1/2 levels, and comparison of the angular distribution of the states of interest with those from the $^{42}\text{Ca}(^3\text{He}, ^6\text{He})^{39}\text{Ca}$, except as noted.