

$^{39}\text{K}(t,\alpha)$ 1963Ta06

<u>Type</u>	<u>Author</u>	<u>History Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	Jun Chen	NDS 152, 1 (2018)	30-Sep-2017

$J^\pi(^{39}\text{K g.s.})=3/2^+$.

1963Ta06: E=5.48 MeV triton beam was produced from the 6-MV Van de Graaff accelerator at Manchester University. Target was KI (99.9% in ^{39}K) on a carbon backing. Reaction products were momentum-analyzed with a broad-range magnetic spectrograph and detected in nuclear emulsions. Measured $\sigma(E(\alpha))$. Deduced levels.

 $^{38}\text{Ar Levels}$

<u>E(level)</u>	<u>$d\sigma/d\Omega$ (mb/sr)[†]</u>	<u>Comments</u>
0	0.09	
2163 6	0.21	$d\sigma/d\Omega$ (mb/sr): at 70°.
3854 10	0.05	
3961 10	0.18	
4563 8	0.35	
4886 15	0.05	
5164 10	0.25	
5376 15	0.04	
5560 15	0.55	
5725 30	0.12	
5846 30	0.04	
6062 30	0.04	

[†] At 30°, except where noted; uncertainty $\approx 50\%$.